Measuring Up in Higher Education

How University Rankings and League Tables are Re-shaping Knowledge Production in the Global Era

Edited by
ANTHONY WELCH
JUN LI

palgrave
macmillan

Measuring Up in Higher Education

Anthony Welch · Jun Li
Editors

Measuring Up in Higher Education

How University Rankings and League
Tables are Re-shaping Knowledge Production
in the Global Era

Editors
Anthony Welch
University of Sydney
Sydney, NSW, Australia

Jun Li
Western University
London, ON, Canada

Contents

In League: The Brave New World of Higher Education

List of Figures

Global Research Productivity Rivalry: A Comparative Case Studies of Two Latin American Public Universities

Scientific Journals of Universities of Chile, Colombia, and Venezuela: Actors and Roles

List of Tables

The Paradox of Autonomy: Japan's Vernacular Scholarship and the Policy Pursuit of "Super Global"

The Shifting Sands of Academic Output: University of Cape Town Research Output in Education and Social Anthropology (1993–2013)

Audit Culture and Academic Production: Re-Shaping Australian Social Science Research Output (1993–2013)

Scientific Journals of Universities of Chile, Colombia, and Venezuela: Actors and Roles

The Global Ranking Regime
and the Redefined Mission of Higher
Education in the Post-Covid Era

The Global Ranking Regime and the Redefined Mission of Higher Education in the Post-Covid Era: An Introduction

Jun Li

The global landscape of higher education has been systematically reshaped and redefined by research assessment and ranking schemes in recent decades, whether they be termed "the global ranking regime" (Gonzales and Núñez 2014; Ishikawa 2014; Li 2016), "the SSCI Syndrome" (Chou 2014), "governing by numbers" (Ball 2018; Shore and Wright 2015), "the audit juggernaut" (Sampson 2015), or "evaluationism" (Li 2016). Through these exercises, the neo-managerial discourse on performance of higher education—largely driven and controlled by market and state— is reinforced and becomes pervasive, resulting in radical changes of the institutional mission of higher education worldwide.

The first, obvious change is the heightened research performance of higher education institutions (HEIs), often measured in sciento-metric ways on research outputs (Thomson Reuters 2008). These can be found widely in governmental or semigovernmental schemes, such as the Research Excellence Framework (REF) in the UK (reframed from the

J. Li (✉)
Western University, London, ON, Canada
e-mail: jun.li@uwo.ca

3

Research Assessment Exercise), the Excellence in Research for Australia (ERA) in Australia, the Institutional Thematic Assessments on Research Activities in Japan, and the Higher Education Quality Assurance Mechanism in China. The second and related change is seen widely in the rapid proliferation of institutional rankings of HEIs—no matter if their purpose is commercial or not, as manifest in the Shanghai Jiaotong University Academic Ranking of World Universities since 2003, the Times Higher Education World University Rankings since 2004, the QS World University Ranking since 2010, the US News and World Report Global University Ranking since 2013, and others.

The two radical changes have been intertwined and reinforced with each other, which have led to a third, more fundamental change of HEIs, i.e., the redefined mission of higher education. This change is pervasively observable in scientometric indicators of hiring and promotion practices of faculty members, institutional performance or accountability measured in similarly quantified ways for learning, teaching, knowledge mobilization, and community services, leaving other important dimensions of the institutional mission of HEIs unevaluated or under-evaluated. These dimensions and their functions are thus largely undermined, neglected, or totally ignored over time. As a corollary, the comprehensive, public-good university mission of knowledge production, mobilization and service is narrowed, distorted, and devalued.

LITERATURE

Literature on the above important issues emerged around two decades ago and started to flourish since the turn of the twenty-first century, paralleling the booming of research assessment and institutional ranking schemes. In the 1990s, Slaughter and Leslie (1997) painted a broad picture of academic capitalism that captured changes responding to global demand of neoliberalism by faculty and HEIs, in particular, public research universities. At the same time, HEIs expanded their managerial capacity with more market-oriented efforts to meet the demand of knowledge as product and of students as customers in a global economy (Slaughter and Rhoades 2004). On the other hand, Tierney (1998, 1999) illustrated many illnesses of HEIs under the constraint of fiscal shortfalls and heightened public accountability (that, to many working in universities, was experienced as a form of accountancy), rethinking

and redesigning workable managerial solutions more like that of baseball players contracted to a university team instead of being tenured, which is now often seen as a hindrance to productivity and efficiency in a scientometric, neoliberal era.

The beginning of the twenty-first century has witnessed a surge of literature specifically on research assessments and ranking schemes and their implications for the development of higher education around the globe. Shin et al. (2011) edited a pioneering volume on university rankings, exploring their theoretical bases, methodological issues, societal impact, and policy implications and underlining the unnecessary misunderstanding and misuses of global rankings by policymakers and institutional leaders alike. In a similar vein, Ellen Hazelkorn (2011, 2015) offered an updated version on institutional rankings from a global perspective. In a more recent effort led by her, covering ranking schemes for higher education systems in Europe, Asia, Africa, Russia, South America, India and North America, Hazelkorn (2017) included a detailed account of how global rankings have developed over time, how they have affected knowledge transfer and its geography, and their influence in shaping policymaking.

From a different perspective, van Vught and Ziegele (2012) introduced a new approach called Multidimensional Ranking or U-Multirank, based on a pilot project sponsored by the European Commission which holds that HEIs have different profiles and missions, that should be reflected in evaluation of their performance. In a concerted effort with Organization for Economic Co-operation and Development (OECD) and the World Bank, the UNESCO published its first volume of the series on *Education on the Move*, entitled *Rankings and Accountability in Higher Education: Uses and Misuses* (Marope et al. 2013). The authors showcased the views of rankers and researchers with concrete examples in varied contexts, and covered debates on global rankings' methodological considerations, merits and demerits, and complementary instruments, with critical concerns identified. Marope and Wells (2013) rightly pointed out that "Obsessing about joining and climbing a league table or becoming 'world-class' ignores the greater role, purpose and mission of higher learning institutions" (p. 18).

Building on but not limited to the earlier work, this new volume presented by the 22 authors offers the latest attempt to examine the global phenomenon of institutional rankings by combining the investigation of research assessments of HEIs, based on two special issues

published by *Educational Policy Analysis Archives* in 2014 on "The Future of Education Research Journals" edited by David Post, and *Higher Education Policy* in 2016 on "Measuring Up: Consequences of Global Competition and Metrics on Local Scholarship" edited by David Post and Chuing Prudence Chou. The second special issue, that examined nine systems of higher education by 13 researchers in the field,[1] was inspired by the first and was sponsored by the Worldwide University Networks (WUN) Research Development Fund.

Methodological Considerations

Compared with "hard sciences" such as physics, engineering, chemistry, or computing, education and humanities are often more bounded by local contexts, whose publications tend to be more sensitive in research assessments or institutional rankings in terms of international benchmarking. With the research project "World-class Universities, Publication and Research Assessment: Rethinking the Mission of Higher Education in the Global Age" funded by the Research Development Fund of Worldwide Universities Networks (RDF/WUN), we aimed to document trends in academic publication over two decades from 1993 to 2013, focusing on the pivotal period when national funding systems began to adopt similar schemes to assess research productivity in publicly financed universities. In each system, faculty journal publication rates were calculated for 1993, 2003, and 2013, and trends analyzed.

Collecting and analyzing this detailed documentation helped the team to understand how scholars in professional schools (such as Schools of Education) and in disciplinary departments focusing on local knowledge (such as Anthropology) have been incentivized—and disincentivized—to conduct certain types of research. If it is generally the case, for example, that research assessment criteria have elevated English-language journals, does this also imply a corresponding reduction in productivity

---

[1] The research project "World-class Universities, Publication and Research Assessment: Rethinking the Mission of Higher Education in the Global Age" was funded by the Research Development Fund of Worldwide Universities Networks (RDF/WUN Ref.: 4930217). This project was led by Dr. Jun Li, then at the Chinese University of Hong Kong and now at Western University (Canada), in collaboration with a group of 13 researchers in 9 higher education systems (Australia, Hong Kong, Japan, Mainland China, New Zealand, South Africa, Taiwan, the UK, and the US). Argentina and Mexico joined and New Zealand and the UK dropped out at a later stage.

in national or local journals in other languages, among researchers in Hong Kong, Mainland China, Taiwan, and Japan? And with what consequences for local knowledge and research, and how it is valued? Apart from counting the numbers of publications in English, Chinese, and Japanese by researchers at the institutions participating in this project, we also aimed to document possible shifts in the focus of these publications in order to understand whether authors increased their coverage of topics that interest international readerships, and whether there was any corresponding reduction of coverage of national or local topics.

In each country we therefore developed a content analysis of the abstracts of these publications. In addition, to help us interpret findings of the documentation, we adopted a case study approach by interviewing professors from each system to record empirical, personal accounts of how their research may have changed during the period. Finally, at the policy level, we described the attempts made in each system to adapt global indexes of productivity to local needs. We then showcased how research assessments in Australia, Hong Kong, Japan, Mainland China, South Africa, Taiwan, and the US, each responded—or did not—to needs for local relevance of their professional and social science faculty. With these uniquely consistent research methodological considerations, two further empirical chapters, on Mainland China, and on Argentina and Mexico, respectively, are included in this new volume, which make up a total of 12 contexts of global higher education, together with those covering Chile, Colombia and Venezuela from the first special issue by *EPAA*.

We acknowledge that there are limitations in the methodological assumptions, as introduced earlier. For example, the WUN project did not employ random sampling strategies, and biased interpretations were generated from participating HEIs in these contexts. The fields of education and anthropology are by no means of representation of all disciplinary areas in any sense. Additionally, no data intentionally collected from "hard sciences" potentially endanger the reliability or dependability of our findings, especially in a comparative term on both hard and soft sciences, although as indicated above, the focus on the fields of education and humanities was a deliberate strategy. The authors of this volume are mindful of these limitations and beyond, and it is anticipated that new research may overcome them in the future.

Structure of the Book

The volume is mainly divided into four sections, with six chapters in Part II focusing on the conceptualization and theory building of research assessment and global ranking and eight chapters in Part III that examine cases in varied systems with their implications, reflections, and conclusions.

Part I: The Global Ranking Regime and the Redefined Mission of Higher Education in the Post-Covid Era

"The Global Ranking Regime and the Redefined Mission of Higher Education in the Post-Covid Era: An Introduction" by Jun Li: The first part introduces the overall background and structure of the volume, with additional reflections demanded by the urgent call of the Post-Covid Era.

Part II: Conceptualization and Theory Building

"Rank Scholarship Today" by David Post, Amy Stambach, Mark Ginsburg, Emily Hannum and Aaron Benavot: The first chapter discusses the irreversible rationalization of expertise; the politics of higher education regulation and control; the pricing and finance of commercial scholarly publishing; and the increasingly staged drama that editors and their journals are expected to produce. It is specifically included as an alternative means to judge the quality of scholarly journals that could be used as a supplement to the impact factor metric alone, by considering articles as the by-products of scholarly communication. It is advocated that journals and readers attend to the intrinsic value of that communication as the most fundamental product.

"Local Knowledge When Ranking Journals: Reproductive Effects and Resistant Possibilities" by Suresh Canagarajah: This article is based on the engagement of a US-based scholar and faculty members in a non-Western university, during a mentoring exercise on publishing. It demonstrates how the "list" constructed in a particular academic department in the university for ranking relevant journals for publication has reproductive effects on knowledge construction. The ranking of journals shapes scholarly interactions both inside and outside the academic department, offering limited possibilities for developing local knowledge. A microlevel orientation to publishing is first adopted to bring out how rhetorical and textual choices are influenced by the list of ranked journals. Next,

a broad lens perspective is adopted to explore how academic interactions and communication among local scholars are also shaped by such productivity targets to reproduce dominant knowledge. In the final section, the article reports on the way mentoring was reconfigured to identify strategic textual spaces for representing local knowledge within existing publishing conventions.

"The Ranking Regime and the Production of Knowledge: Implications for Academia" by Leslie D. Gonzales and Anne-Marie Núñez: In this integrated review of literature, a powerful movement among interrelated organizations that we call the "ranking regime" is addressed. I argue that the ostensive purpose of this regime is to identify "world class" universities, and thus to organize post-secondary education into a competitive transnational market. Although extant research has addressed how rankings are reshaping the field of higher education, there is little work that addresses the influence of rankings on the evaluation of faculty work and the production of knowledge. Thus, we review existing studies that have focused on the intersection of this ranking regime, faculty work, and faculty evaluation in order to assess the implications of the ranking regime for the production of knowledge within academia and for faculty evaluation. We argue that the ranking regime affects the production and evaluation of knowledge by promoting individualism, standardization, commodification, and homogenization. We offer policy and practice implications as well as directions for future research.

"The Influence of Rankings and Incentive Systems on Academic Publishing in South African Universities" by Crain Soudien: This essay examines the influence of ranking and incentive systems on decisions higher education institutions are making with respect to research and academic publishing. It describes and analyes 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.

"Ranking Regime and the Future of Vernacular Scholarship" by Mayumi Ishikawa: World university rankings and their global popularity present a number of far-reaching impacts for vernacular scholarship. This article employs a multidimensional approach to analyze the ranking regime's threat to local scholarship and knowledge construction through a study of Japanese research universities. First, local conditions that have led to the perpetuation of the world university rankings are examined. Next, the use of bibliometric indicators in performance assessment, a critical consequence of the popularization of the world university rankings, is tested against two prevailing factors in Japanese academia: the bipolar character of academic publishing and institution-centered audit. Despite high-flying idealism, the quest to improve positions in the rankings may fall short of addressing real needs of enhancing individual performance in pursuit of globally relevant research and ensuring equity among different generations of scholars. The study also points to the precarious future of vernacular scholarship, as the rankings celebrate audit culture and export its norms as well as an increasingly inward-looking propensity of Anglo-American academic circles to the rest of the world.

"The SSCI Syndrome in Taiwan's Academia" by Chuing Prudence Chou: With the global expansion of higher education in the last two decades, the maintenance of academic quality to meet requirements for international competitiveness has become a critical issue for policymakers and universities. In addition, the neoliberal emphasis on the market has increased the competition for global university rankings, and this emphasis continues to have consequences for university autonomy and academic governance. To cope with these challenges, Taiwan has introduced strategies for benchmarking its leading universities. Under the new evaluation system, universities are evaluated by external standards instead of those ensuring academic autonomy or contributions to society. This article details how these recent policy reforms have given rise to a new "SSCI syndrome," which risks turning faculty members into paper producers rather than public intellectuals. These changes have also impacted students' rights as well as the greater goals of academic development. The article then argues that, as voices from both within and outside of Taiwan's academia have begun to respond to the issue, it begs the question as to whether or not Taiwan can serve as a model for the many other non-English-speaking countries of the academic "periphery" who are currently confronting similar issues. Given the increasing global

pervasiveness of this SSCI syndrome, understanding the effects of policies recently implemented in Taiwan has important implications for higher education throughout the world.

Part III: Cases, Contexts, and Reflections

"The Global Ranking Regime and the Reconfiguration of Higher Education: Comparative Case Studies on Research Assessment Exercises in China, Hong Kong, and Japan" by Jun Li: Comparative case studies: The global drive for world-class universities is twinned with a radical movement to create research assessment indicators, and universities have never been pressured as much as today by global rankings. This paper focuses on how research assessment exercises have reconfigured the institutional missions of the university in terms of knowledge production, teaching, and service address, by comparing four top research-intensive universities in Mainland China, Hong Kong, Japan, and the US. It critically investigates how far and in what ways academics in the three systems have been pressured to respond to these exercises. The empirical findings show that all three cases have been affected severely and that Hong Kong universities are the most internationalized and Mainland universities are the most productive in research outputs, as also evidenced in recent QS rankings. The paper argues that the global ranking regime has created a Double Bind for East Asian universities, and has brutally dominated their institutional reconfigurations. To turn the tide, the manipulated emphasis, flawed methodology, and unethical desirability of global university rankings and research assessment exercises should be avoided to help universities healthily and meaningfully focus on real missions to which they should commit themselves. Meanwhile, critical reflections and policy actions are particularly urgent regarding indigenous knowledge exploration and production by higher education systems in East Asia and other postcolonial contexts. The paper anticipates that the importance of teaching and service will be revitalized in the new stage of East Asian universities, e.g., the Chinese University 3.0.

"Measuring by Numbers: Bibliometric Evaluation of Faculty's Research Outputs and Impact on Academic Life in China" by Wenqin Shen, Dan Mao and Yaqiong Lin: Quantification or audit has become a management tool worldwide, to greater or lesser degree. Since the 1990s, along with the 211 project, 985 project, and the professional transformation of university teachers, Bibliometric evaluation has become

an important means to evaluate university teachers' research performance. Based on the analysis of the key policy texts of different periods, this chapter reveals how bibliometric evaluation was historically constructed as a legitimate evaluation method. At the same time, based on interviews with more than 20 teachers and administrators in three universities, the impact of quantitative assessment on the academic life of university teachers, such as ritualism in the production of knowledge, the increase in the workload of faculty members, is analyzed.

"Trends in Publication in the Race for World-Class University: The Case of Taiwan" by Chuing Prudence Chou: Taiwan's government has launched policies rewarding universities for their faculty's publication rates in journals listed in the Social Science Citation Index or the Taiwan Social Science Citation Index with the goal of improving international visibility and global competitiveness. Consequently, a "publish or perish" situation has arisen, affecting university hiring, promotion, and reward systems across disciplines. This article illustrates how higher education policies reoriented faculty research performance in two departments—Anthropology and Education policy—within one national university in Taiwan. In each department, faculty journal publication rates were calculated for 1993, 2003, and 2013, and trends analyzed. Then, in-depth interviews were conducted among senior faculty. Research findings indicate that Taiwan's new higher education policies have impacted academic culture and research practices in the social sciences and humanities. Although faculty visibility via publication has improved, this may be at the expense of local impact and social relevance.

"The Paradox of Autonomy: Japan's Vernacular Scholarship and the Policy Pursuit of 'Super Global'" by Mayumi Ishikawa and Chengzhi Sun: Japan's humanities and social science scholarship has retained its commitment to the national language and local readership over the past two decades despite a policy-driven shift away from the old norm of distinctive independence once termed "opting out" of the game. Analysis of academic publications in two disciplines (Education and Anthropology) in a public research university from the 1990s to the early 2010s indicates little change in language or medium: an overwhelming majority are written in Japanese and published in national periodicals and books. The article unveils the paradox of autonomy in Japan's academia by examining the continued commitment to locally relevant research at the expense of global recognition vis-à-vis the government's declaration to make some of the nation's top universities "super global." Amidst the

global fad to join the ranks of the world's top-ranked universities, the Japanese government's quest is likely to bring mixed consequences for domestic higher education institutions. In particular, the study points out an increasing risk of compartmentalization and erosion of vernacular research that demands a serious policy reappraisal.

"The Shifting Sands of Academic Output: University of Cape Town Research Output in Education and Social Anthropology (1993–2013)" by Crain Soudien and Derek Gripper: We investigate the publication strategies and decisions of academics in two key fields at the University of Cape Town, South Africa. We ask how research output has been shaped over the last two decades by the increasing priority attached to institutional rankings and the accompanying pressure to publish in key journals. Drawing on output data from three selected years: 1993, 2003, 2013, and interviews with colleagues in Education and Social Anthropology, this contribution is an analysis of the factors behind the publishing patterns, including shifts toward international collaboration, that have emerged in South Africa over the past 20 years. Differing trends emerge in these two fields with a common theme including an emphasis, regardless of the questions being asked, on publishing internationally in accredited journals. The increasing pressure to satisfy performance management criteria required for promotion and monetary reward has driven researchers to be more individualistic and strategic in their approach to research output.

"Audit Culture and Academic Production: Re-shaping Australian Social Science Research Output (1993–2013)" by Anthony Welch: The perceptible rise of an audit culture has had marked effects in higher education, including in Australia. Since their introduction in the early 1990s, academic audits have grown in size and sophistication, consuming ever more time, energy, and financial resources. While supported by both governments and institutional leaders, this study reveals that the effects have significantly distorted the academic mission. Drawing on a systematic analysis of academic outputs in two fields (Education and Anthropology) for the years 1993, 2003, and 2013, as well as individual interviews, the analysis underlines the fracturing of the profession, including gender dimensions, and a trend toward publication in highly ranked international journals. For an English-language system that is increasingly integrated into the Asia-Pacific, with a diverse academic staff, the effects are complex, and not entirely uniform. But overall, the effects have been to devalue collegiality, in the interests of reshaping academics into self-monitoring subjects.

"Global Research Productivity Rivalry: A Comparative Case Studies of Two Latin American Public Universities" by Gustavo Gregorutti, Marcelo Rabossi and Hugo Casanova: Over the last two decades, an increasing trend to classify and rank higher education has been instituted. However, less productive social science departments have not always been able to keep to this trend of publishing in major English journals, a key factor for improving university rankings. So, this study explores: In what ways have rankings promoted publications in international journals in the departments of Anthropology and Education of the sampled universities? Using a comparative and descriptive mix-method to track research productivity from the departments of Anthropology, and Education, in the Universidad de Buenos Aires, Argentina, and Universidad Nacional Autónoma de Mexico, the quantitative analysis focuses on number of publication in international and English journals in the years 1993, 2003, and 2013. The qualitative part looks into the themes that emerge from interviews in those two departments. This chapter clarifies that disciplinary research productivity varies according to many factors, shedding light on how to advance policies to address the imposition of international agendas on Latin American universities.

"Scientific Journals of Universities of Chile, Colombia, and Venezuela: Actors and Roles" by Jorge Enrique Delgado: A qualitative study was carried to identify the roles of actors associated with the publication of scientific journals in Chilean, Colombian, and Venezuelan universities. Twenty-four semistructured in-depth interviews were conducted with journal editors, university authorities, and other experts. The categories of analysis included university leaders (journal directors/coordinators), institutional actors (university presses and libraries), and journal editors. Changes emphasizing open access journals and salary incentives to increase productivity among university professors are creating new roles for those involved in the publication of journals. University journal directors and coordinators are being challenged to provide support and to seek inclusion in national and international indexes. Although university presses have not played an important role in this process, libraries have gained new responsibilities associated with data processing and the creation of repositories. Challenges exist for individual editors to obtain supporting personnel, as journal publication work grows and demands more.

Part IV: In League: The Brave New World of Higher Education

"In League? The Brave New World of Higher Education: Conclusion" by Anthony Welch: Drawing on case studies presented in individual chapters, and wider literature, the conclusion argues that the cultural shift that the current obsession with rankings and league tables has led to major distortions. Both scholars and HEIs are being reschooled to concentrate on narrow performance indicators that boost rankings on the global league tables which increasingly populate the higher education landscape. This diverts research priorities from major challenges that call for international collaboration, such as work on noncommunicable diseases, to research outputs that boost rankings. In turn, this means a focus on a limited range of high-profile, largely English-speaking journals, often US-based. For non-US-based researchers, this presents a pointy dilemma: focus on publishing in major international journals, often in their second language, thereby risking the loss of their domestic profile; or concentrate on local journals, at the risk of being unknown internationally. As the examples given in the chapter illustrate, while the competitive pressures are common, responses differ. Gender, discipline, and rank are found to play important roles in determining differential impact, while incentive schemes further distort priorities.

Implications

While the two editors were editing this volume, the world has moved radically into the Post-Covid Era. Education, including the higher sector, is experiencing a fundamental shift from conventional, face-to-face teaching and learning to a new normalcy of purely or mostly online format. It is thus imperative for everybody to reflect on such a radical, global and systemic transformation. There are at least two additional implications to which can be pointed in terms of higher education improvement in the Post-Covid Era.

Firstly, the fact that, although the editing of this volume was completed during a critical time in which the global the Covid-19 Pandemic crisis pervasively affected the daily life of billions worldwide, none of these 16 chapters was prepared for such a catastrophic situation. However, as Yuval Noah Harari, the author of *A Brief History of Humankind*, argues: "the storm will pass, humankind will survive - but we will inhabit a different world" (Harari 2020, March 20). This includes the world of

higher education, which is being affected by, for example, the restricted flows of international students as well as the ongoing budget cuts that result from the economic storm unleashed by the virus (As just one example, Chinese universities were handed budget cuts of 30 per cent in mid-2020). International student flows are likely to resume earlier than budget restoration. Irrespective, the new normality demands us to pay more balanced attention to how research and educational outcomes may be better and differently measured and evaluated, such as including the well-being of faculty and students, and infrastructural support for them, on which have never been really focused before by any of the current ranking schemes.

Second, the new, mixed format of on-site and online education urges policymakers, implementers, researchers, and other stakeholders as well, to face squarely the challenges for teachers and students and more broadly the redefined mission of higher education. Higher education improvement should cease basing itself upon narrowly defined "outputs" measured by "metrics" within a neoliberal, functionalist and technocratic viewpoint, but be more inclusive: of vision, values, objectives, equality, diversity, governance, structure, mechanism, curriculum (programs), networking, characteristics, to name some (Li 2021, forthcoming; Welch 2020).

It is in such terms that this book is to be more valued in the Post-Covid Era!

References

Ball, S. (Ed.). (2018). *Governing by numbers: Education, governance, and the tyranny of numbers*. London: Routledge.

Chou, C. P. (2014). The SSCI Syndrome in Taiwan's academia. *Education Policy Analysis Archives, 22*(29), 1–22.

de Certeau, M. (1984). *The practice of everyday life* (trans. S. Rendall). Berkeley: University of California Press.

Gonzales, L. D., & Núñez, A.-M. (2014). The ranking regime and the production of knowledge: Implications for academia. *Education Policy Analysis Archives, 22*(31), 1–24.

Harari, Y. N. (2020, March 20). Yuval Noah Harari: The world after coronavirus: Free to read. https://www.ft.com/content/19d90308-6858-11ea-a3c9-1fe6fedcca75.

Hazelkorn, E. (2017). *Global rankings and the geopolitics of higher education: Understanding the influence and impact of rankings on higher education, policy and society*. London: Routledge.

Hazelkorn, E. (2015). *Rankings and the reshaping of higher education: The battle for world class excellence* (2nd ed.). Basingstoke: Palgrave Macmillan.

Hazelkorn, E. (2011). *Rankings and the reshaping of higher education: The battle for world class excellence*. Basingstoke: Palgrave Macmillan.

Ishikawa, M. (2014). Ranking regime and the future of vernacular scholarship. *Education Policy Analysis Archives, 22*(30), 1–27.

Li, J. (2021, forthcoming). Educational improvement for world-class teachers? A critical analysis of policy implementation in China. In *Envisioning the Teaching and Learning of Teachers for Excellence and Equity in Education*. Springer.

Li, J. (2016). The global ranking regime and the reconfiguration of higher education: Comparative case studies on research assessment exercises in China, Hong Kong and Japan. *Higher Education Policy, 29*(4), 473–493.

Marope, P. T. M., & Wells, P. J. (2013). University rankings: The many sides of the debate. In P. T. M. Marope, P. J. Wells, & E. Hazelkorn (Eds.), *Rankings and accountability in higher education: Uses and misuses* (pp. 7–19). Paris: UNESCO.

Marope, P. T. M., Wells, P. J., & Hazelkorn, E. (2013). *Rankings and accountability in higher education: Uses and misuses*. Paris: UNESCO.

Sampson, S. (2015). Comment: The audit juggernaut. *Social Anthropology, 23*(1), 80–82.

Shin, J. C., Toutkoushian, R. K., & Teichler, U. (2011). *University rankings: Theoretical basis, methodology and impacts on global higher education*. Dordrecht: Springer.

Shore, C., & Wright, S. (2015). Governing by numbers: Audit culture, rankings and the new world order. *Social Anthropology, 23*(1), 22–28.

Slaughter, S., & Leslie, L. (1997). *Academic capitalism: Politics, policies and the entrepreneurial university*. Baltimore, MD: John Hopkins University Press.

Slaughter, S., & Rhoades, G. (2004). *Academic capitalism and the new economy: Markets, state, and higher education*. Baltimore, MD: John Hopkins University Press.

Reuters, T. (2008). *Using bibliometrics: A guide to evaluating research performance with citation data*. Retrieved from http://ips.clarivate.com/m/pdfs/325133_thomson.pdf.

Tierney, W. G. (1998). *The responsive university: Restructuring for high performance*. Baltimore, MD: John Hopkins University Press.

Tierney, W. G. (1999). *Building the responsive campus: Creating high performance colleges and universities*. Thousand Oaks, CA: Sage.

van Vught, F. A., & Ziegele, F. (2012). *Multidimensional ranking: The design and development of U-Multirank*. Dordrecht: Springer.

Welch, A. (2020). Neoliberalism in comparative and international education: Theory, practice, paradox. In T. Jules, R., Shields, & M. Thomas (Eds.), *The Bloomsbury handbook of theory in comparative and international education: Theory and practic*e. London: Bloomsbury.

Conceptualization and Theory Building

Rank Scholarship Today

*David Post, Amy Stambach, Mark Ginsburg, Emily Hannum,
and Aaron Benavot*

In the years since this essay originally appeared in the February 2012 Comparative Education Review—where we then served as editors—the global critique of academic productivity measures has intensified, especially outside the United States where—because of the decentralized funding of American universities—researchers still behave as if they are relatively immune from the pressures experienced in non-English-language contexts. Here we first reprise our original commentary, and next we examine the impact of "impact factor" publication within a US university to show that some faculty feel little of the pressure felt elsewhere.

Our observation originally was that the word "rank" has a double meaning in English. At least since the time that Shakespeare wrote *Hamlet,* it has meant both an ordered and hierarchical series (as in Act 1) and also (as in Act III) something that is rotten or filthy.[1] In most of the

---

[1]"For the apparel oft proclaims the man, and they in France of the best **rank** and station are most select and generous, chief in that." Act I, Scene 3

"O, my offence is **rank**, it smells to heaven." Act III, Scene 2

[NOTE: DO NOT TRANSLATE].

D. Post (✉) · A. Stambach · M. Ginsburg · E. Hannum · A. Benavot
The Pennsylvania State University, State College, PA, USA
e-mail: post@pop.psu.edu

21

world today, university tenure committees and acquisition librarians are familiar with "rank" as it was conceived in Act I, as an ordered series. But Shakespeare's conception of "rank" in Act III is also well-understood. Both meanings of "rank" scholarship could describe commercial businesses, such as Thomson Reuters, which promote "impact factors" as the best way to evaluate scholarship.

We have argued that the use of impact factors and ranking to assess publications, institutions, and researchers is related to four movements: the (irreversible?) rationalization of expertise, as a taken-for-granted feature of bureaucratic authority; the politics of higher education regulation and control, as manifest in the new managerialism and associated research assessment exercises; the pricing and finance of commercial scholarly publishing, which takes advantage of the preceding developments by charging high prices to university libraries, soaking up most of their budgets; and the increasingly staged drama that editors and their journals are expected to produce, even when they see themselves as hosts of conviviality and thought, as opposed to line employees in C.V. manufactories. After considering each of these four movements, we must consider the alternatives. Here we again wish to suggest ways to promote a more vital and engaged educational research community than what looks to be its fate from some publications, where the titles of many articles are destined primarily for authors' resumes. Here we wish to suggest a means to judge the quality of scholarly journals that could be used as an alternative, or supplement, to the metric of the impact factor alone, by considering articles as the by-products of scholarly communication. We advocate that journals and their readers attend to the intrinsic value of that communication as the most fundamental product.

Certified Expertise: The Modern Educational Researcher

Max Weber held that rational bureaucratic structures of domination advance independent of the knowledge areas over which they hold authority. Weber foresaw that the dynamic growth in the certification of expertise would be independent of the growth in the knowledge over which bureaucratic authority had been extended. "When we hear from all sides the demand for an introduction of regular curricula and special examinations, the reason behind it is, of course, not a suddenly awakened 'thirst for education' but the desire for restricting the supply of these positions and their monopolization by the owners of educational certificates"

(Weber 1958, pp. 240–241) "Gate keeping," as a concept, if not a term, originated out of the theory of bureaucratic authority.

Other theorists from different traditions excavated the underpinnings of supposedly "universal" knowledge and also found institutional constructions. Knowledge about clinical medicine did not eventuate in the creation of medical clinics in nineteenth-century France, according to Michel Foucault (1994[1963]). To the contrary, widespread and taken-for-granted facts about human anatomy were by-products of the rise of clinics. "The clinic is both a new 'carving up' of things and the principle of their verbalization in the form which we have been accustomed to recognizing as the language of 'positive science'"(xviii).[2] Peter Berger and Thomas Luckmann (1966), similarly theorized the ways that reality becomes taken for granted as it is institutionalized. As we get closer to the emergent field of comparative education, beginning in the 1960s John Meyer proposed that schools create "graduates" possessing socially legitimate "diplomas" partly because of an implicit and informal charter that societies assign to these institutions. He subsequently elaborated on this theory and distinguished his argument from a purely credentialist interpretation of Weber.[3] Public recognition of the expertise of economists and psychiatrists, Meyer argued, results partly from the expansion of the university institutions and the invention of authoritative knowledge and degrees in these fields. There are clear implications for the understanding of scholarly journals. If personnel are not only sorted but are also granted new expertise by educational institutions, then "top" journals form parts of systems to define the knowledge they stamp out in the name of the experts who review or edit their publication. Through journals, discoveries can be "authorized" in the Weberian sense of authority. Even where

[2] Similarly, one faction in the early French republic hoped to free teaching from central control, such that learning would become transmitted spontaneously. "No examinations and qualifications other than age, experience, and the respect of the citizens; whoever wished to teach mathematics, the fine arts, or medicine had only to obtain from his municipality of certificate of integrity and good citizenship." This hope foundered (Foucault 1994[1963], p. 49).

[3] Meyer (1977, p. 67) wrote that "education does not simply allocate people to a fixed set of positions in society. It expands the authoritative culture and the set of specialized social positions entailed by this culture. Thus the creation of academic economics means that new types of knowledge must be taken into account by responsible actors. The creation of psychiatry means that former mysteries must now be dealt with in the social organization."

there are distinctive systems of non-commensurable knowledge—think of Hong Kong's complimentary university faculties of Chinese and Western medicine—institutionalized knowledge is hierarchical by nature. Thus, within each medical system, there are perceptions of "rank."

New Managerialism

The advent of quality assessment in higher education is an aspect of the "new" managerialism, a movement that applied to public enterprises, and to the production of public goods, the management techniques previously used in private enterprise.[4] The global diffusion of ideas about the regulation of schools and universities has been widely discussed (see Welch 1998). Within this larger movement in higher education, the most relevant feature for scholarly journals, and for this discussion, is that government financial support has incorporated explicit guidelines and funding formulae to reward research productivity.[5] "Productivity" has been measured not only by the sheer number of experiments conducted and investigations completed, but also by the publication of the results of this research, now conceived as the "product." Publication has further been defined in various categories, including peer-reviewed publications like the one we edit. There are cases—for example Hong Kong, according to Ka Ho Mok (2000, p. 160)—where the "publish or perish" syndrome affects not only individual employees but also their employers, because institutional funding is tied to research productivity.

[4] "Managerialism insists that 'managing' and 'management' are, respectively, socio-technical practices and the collective agents and institutions responsible for their enactment that are universally required in a modern, economically and technologically advanced society. These practices, agents, and institutions stand above, indeed outside, the wider social moral and political struggles…. As such, Managerialism is a general ideology or belief that regards managing and management as being functionally and technically indispensible to the achievement of economic progress, technological development, and social order within any modern political economy" (Deem et al. 2007, p. 6).

[5] While non-US readers are already familiar with such systems, the United States experienced a less-governmental and more market-oriented equivalent in its decentralized public and private universities. American readers are unscathed by national-level management. Instead, here the substantial reductions in funding by the 50 states led institutions to become sellers of research and purveyors of technical assistance along with athletic apparel. Hopefully, academic publishing will not be expected to return profits to universities under siege. An excellent recount of American managerialism is by Kirp (2004).

Peer-review publication has been further categorized according to journal ranking, under the theory that publication in better journals indicates that the product itself is of better quality. For example, last year the Australian Research Council ranked 22,000 journals into "grades," with top journals given a ranking of "A*" and lesser journals graded from A down to D. This ranking—since withdrawn after some well-placed shots—would have had immediate consequences for researchers and their funding (Howard 2011). Such lists commoditize scholarship as they rationalize and quantify, on a global scale, the products of university and individual energies.

While the rationalization of expertise under a bureaucratic authority provides the stage for the enactment of new management strategies, it is individual governments and individual academics—with names and biographies—who act as agents of their own self-interests in this process. Eugene Garfield, the man who invented the impact factor as a means to track the diffusion of US government-funded medical research in 1955, looked back fifty years later on the unintended consequences of its use in evaluating not only research but also the journals publishing that research, the individual researchers and (we might extrapolate) evaluating their institutions. He commented (Garfield 2005) that "a better evaluation system would involve actually reading each article for quality. But … [w]hen it comes time to evaluating faculty, most people do not have or care to take the time to read the articles anymore! Even if they did, their judgment surely would be tempered by observing the comments of those who have cited the work."[6] It is one thing to describe the dilemma of peer review, but quite another to celebrate disengagement or the devices we use to avoid connection, especially if the profitability of one's company depends on people not having "time to read the articles anymore." Even a discerning fan of Garfield, Robert K. Merton (2000, p. 438) saw that citation indices could become a motivating extrinsic reward that "at its

---

[6]When Garfield's address was reprinted in the *Journal of the American Medical Association* the following year, it was more tempered and less celebratory in tone. "In an ideal world, evaluators would read each article and make personal judgments. Most individuals do not have the time to read all the relevant articles. Even if they do, their judgment surely would be tempered by observing the comments of those who have cited the work" (Garfield 2006, pp. 91–92). The JAMA editors inserted the following statement at the conclusion of the article: "Financial Disclosures: Dr Garfield owns stock in, and occasionally has received per diem payment from, Thomson Scientific."

dysfunctional extreme, displaced … the motivating intrinsic reward" of research.

Extending a point made originally by Keith Hoskin (1996) about auditing cultures, and then applied by Marilyn Strathern (1997) to higher education in England,[7] David Bridges (2011, p. 33) reminds us that "when something shifts from being a *measure* to a *target*, then it ceases to be a measure. The trouble is that what start off as perhaps empirically grounded (extrinsic) indicators of quality rapidly become targets that people seek to achieve – and this distorts behaviour in a way which invalidates the original evidence of an association or at least the grounds for believing that the extrinsic indicator has a probabilistic relationship with intrinsic features of quality." Bridges takes inspiration from Martha Nussbaum's (1990) insistence on the noncommensurability of valuable things, writing that in the face of assessment schemes and impact factors, and journal rankings we must be clear that "quality in research is not reducible to a single set of values, nor representable by a single set of measures on a scale. In making qualitative judgments we have to find a way to hold a plurality of values in our minds at once and to discover such as are appropriate in the object under scrutiny" (Bridges 2009, p. 513).[8]

[7] Strathern (1997, p. 321) problematized the externalities, the overkill, and the unusable production that are generated by an audit culture and total quality management approach to higher education productivity. Once quality, productivity, and "impact" are measured and audited, there is just one rational goal for higher education: improvement on these same measures. "How to abate the fever of enhancement?" she asked. "For all the important gains that audit has brought into public practice, what do we do with the overkill? What do we do with an abundance that threatens to asphyxiate us when the abundance is of oxygen? Can one have too much life-blood? Let me repeat that we are witnessing an effect that we (practitioners in higher education) have helped produce. Auditors are not aliens: they are a version of ourselves."

[8] The Canadian wit, Malcolm Gladwell, has lampooned the incommensurable components of quality used by a US magazine whose business model depends on marketing annual university rankings based on one-dimensional "scores." See Gladwell's "The Order of Things: What College Rankings Really Tell Us." *The New Yorker*, February 11, 2011. But, since several of the authors cited respond to the English experience, it is important for those outside the United Kingdom to appreciate that this particular British theater is no laughing matter. See the incendiary column by George Monbiot regarding the profit commercial publishers has earned at the expense of libraries, writing in response to the publishing pressures described fourteen years earlier by Marilyn Strathern and reemphasized by David Bridges. Concerning the fees charged by *Informa* and *Elsevier* and others, Monbiot concludes "What we see here is pure rentier capitalism: monopolising a public resource then charging exorbitant fees to use it. Another term for it is economic parasitism. To obtain the knowledge for which we have already paid, we must surrender our

The Full Costs of Commercial Scholarly Publishing

At one time, individual subscriptions underwrote most costs of scholarly journals; now, institutions pay ever-larger portions of the costs. Today relatively few individuals subscribe to journals unless the journal is part of a membership organization (and even in such cases, individuals pay less than do institutions).[9] Because libraries have less money to buy books, academic publishers encourage fewer monographs. Commercial publishers solicit ad hoc collections of articles which are, sometimes, thoughtfully edited but which, in many cases, are compiled from conference presentations. The prices of these volumes are typically higher per page than most scholarly journals. The system "works" because, in many countries, rewards to individual scholars and their institutions are being indexed to extrinsic measures of productivity. When the intrinsic value of research is difficult to gauge, extrinsic measures are being used as presumptive proxies for the intrinsic value. One of the major indicators of research productivity and the value of the product has been said to be publication. Since this criterion began to be adopted, pressures on institutions and individual scholars have increased such that the ostensible measure of productivity became a target and ceased to measure an underlying intrinsic quality. Accordingly, research assessment exercises have rationalized the types of indicators needed and awarded actual points, in many cases, for publication in a particular journal or particular types of journals.[10]

feu to the lairds of learning." See Monbiot's piece on his website http://www.monbiot. com/ or in print in the 30 August 2011 *Guardian*. "The Lairds of Learning. How did academic publishers acquire these feudal powers?"

[9] As of November 2011, this journal had about 1500 US-based individual subscribers and 800 non-US-based subscribers. In addition, there were 556 US libraries and 308 non-US libraries, which paid according to a sliding scale based on size or, for some countries, received free electronic access.

[10] In some countries, journals are being classified as either "domestic" or "international." The latter designation usually refers to English-language journals. By awarding lower assessment scores, this classification tends to disadvantage local research that is inherently difficult to communicate to English-language readers, for example about Cantonese versus Mandarin Chinese media of instruction in the case of Hong Kong, Hebrew language studies of education policies in Israel, or Sinhalese literature in Sri Lanka.

Today's commercial publishers of scholarly journals dwarf the largest university presses, and they are doing very well indeed. For example, with almost 2000 titles, Elsevier earned a 36% profit last year (US$1.1 billion on revenues of 3.15 billion). Even at large US research libraries, the exponential growth in the numbers of scholarly publications, combined with subscription price increases far outpacing inflation, have created an unsustainable burden at a time of dramatic cuts in government support to higher education. At Penn State University, for example, libraries must now spend over three-quarters of their acquisition budgets to these serials, squeezing out purchases of monographs.[11] The height of irony is that the (terrific) previously cited 2011 article by Professor David Bridges, of Cambridge University, is unavailable at his own institution because his library cannot afford to subscribe to the electronic journal where it appeared.

The Editor as Moderator and as Cosmotologist

In the midst of this drama are journals themselves and their editors. Like cosmetologists, editors see quite a bit. They read some embarrassing first drafts (which they often return to the author without external review). In each particular subfield, editors occasionally work backstage with their particular Prima Donnas and Don Juans, as these sit indolent in dressing gowns, and before make-up can white-out the traces of verbosity. Editors can help the stars either massage highlights into unruly data dumps, or grow-out underspecified regression models; they re-paste the dangling modifiers of the headline acts (and disappear their mixed metaphors). But, more than cosmetics, editing the academic journal today has become as much a process as about the product or final presentation. In this case, editors serve as moderators and advocates in the running commentary between reviewers and authors over one or two years.

One way to understand the review process is through access to an open file of reviews and editorial correspondence, which we have created

---

[11] May 26, 2011, *The Economist*. "Academic publishing: Of goats and headaches. One of the best media businesses is also one of the most resented." See the 2008 (open access) article by Glenn McGuigan and Robert Russell, "Business of Academic Publishing: A Strategic Analysis of the Academic Journal Publishing Industry and its Impact on the Future of Scholarly Publishing." *Electronic Journal of Academic and Special Librarianship* 9 http://southernlibrarianship.icaap.org/content/v09n03/mcguigan_g01.html.

for our own journal with the author's permission. We discuss this open file later. Another way to understand this process can be seen thanks to a careful history Andrew Abbott has written about the journal he edits for the University of Chicago Press. Abbott (1999) showed the transformation of the *American Journal of Sociology* (*AJS*) following the editorial term of Everett Hughes in the 1950s. Although Hughes was disinclined to permit anonymous reviewing of manuscripts (as the practice was then being initiated at the break-away *American Sociological Review*), the successor *AJS* editors embraced anonymous reviewing even while recognizing that it would dissuade senior scholars from submitting their work.[12] The number of external ad hoc reviewers expanded most rapidly under the *AJS* editorship of C. Arnold Anderson (who previously had institutionalized comparative education as a graduate degree program at Chicago). By the 1960s, the proliferation of US universities, and the boom in their social science departments, had produced a tremendous increase in the numbers of submissions, which soon outran the amount of paper available for printing articles. As growing numbers of social scientists reached tenure evaluation, the editors began to receive inquiries from deans and candidates about evidence of journal selectivity. Selectivity was supposed to indicate the quality of the articles ultimately published.

The review process eventually became something more than a means of adjudication. Critical to this process, not only in this journal but also in many others, are the assumptions about expertise behind double-blind review, and the pitfalls of using this system. Michele Lamont (2009, p. 158) observed the ways that scientific disciplinary review panels for research grant proposals differed from most scholarly journal evaluations.

---

[12] In 1980, AJS editor Edward Laumann told one of his associates, "Many established authors stop trying the major journals because they feel they are likely to be ill-used by overly-critical referees. I think, unfortunately, this is the price we pay for the anonymity of the review process" (Abbott 1999, p. 170). Abbott himself was critical of the review process for a different reason, seeing the opportunity for real teaching through the process as "a delusion." Abbott (1999, pp. 191–92) attributed this failing to the tenure process: "From the problems brought on by tenure… there is no escape…. The place to fight this war is in our own departments' vettings of cases – showing deans that we take intellectual substance more seriously than the number of pages. But there too the incentives are against it. Self-denial does not pay in university politics. The tail of tenure will wag the dog of journals until either the demography of academia settles into a steady state or teaching becomes a truly equal criterion for tenure or tenure itself fails." Note that Abbott's bleak view was authored two years prior to his beginning his own tenure as the journal's editor-in-chief.

The legitimacy of the panel review is greater, according to Lamont, because arguments for and against scores must be defended publically, while a "blind" review of a manuscript can be made anonymously. Her observation is provocative for editors at journals where double-blind review became the established policy but where, in the past, editorial boards did not use that system but, instead, discussed as a board the potential and limits of each submission. Are reviewers (or editors) more careful (and more "expert") with public reviews, than they might be when judgments can be expressed privately through the double-blind policy?

Options for Acting on a Managerialist Stage

Do the academics who rail against the commodification of scholarship indulge in shrill hyperbole when they invoke the master metaphor of alienation and draw from a Marxian tradition of criticism in which professors are becoming closer to a proletariat than to a profession? We would not push the metaphor too far. But it is neither hyperbole nor shrill to observe the contradictions of intellectual life facing editors who would take a stand outside a commodity culture of publication. Take, for example, the case of *Informa*, a business owning a range of service providers. These include several publishers, and one of these publishers markets a large share of the scholarship in the field of comparative education. The *Informa* website explains that "consumerism has long been a major key performance indicator of the world economy and has experienced dramatic fluctuations during the first decade of the 21st century. The spending power of the world's most developed nations has driven consumer industries to produce more and more goods to enhance and support the increasing demand of modern lifestyles…. Taylor & Francis, our academic publisher, has a number of titles in this [consumer] sector in both print and online formats."[13]

What are the alternatives? The radically decentered possibilities of the internet are widely discussed. As Dan Cohen and Tom Scheinfeldt have blogged (on http://hackingtheacademy.org/): "Can an algorithm edit a journal? ….. [T]oday serious scholars are asking whether the institutions of the academy as they have existed for decades, even centuries, aren't

---

[13] http://www.informa.com/What-we-do/Industry-sector/Consumer-Retail--Leisure/#main.

becoming obsolete. Every aspect of scholarly infrastructure is being questioned, and even more importantly, being hacked. Sympathetic scholars of traditionally disparate disciplines are cancelling their association memberships and building their own networks on Facebook and Twitter. Journals are being compiled automatically from self-published blog posts." A commercial variant of this model—perhaps more applicable to authors of books rather than to scholarly articles is for an online bookseller to by-pass any publishing company and produce electronic publications that could be accessed relatively cheaply on e-reader devices (such as the one now being promoted and sold by Amazon).[14]

What comes next? The future of scholarly publishing remains a mystery, but we doubt the hacker's utopian vision can be realized without taking into account the institutions born of the disciplinary expertise—and bureaucratic authority—which gave rise to much material we today recognize as scholarship and publish. Ideas that are deliberately detached from professions, and in this instance detached from membership associations and universities, could lack a community of peers who recognize their value or comment on them. Knowledge gets buried like a needle in the virtual universe haystack. Information is not a sufficient conversation starter when everyone holds a private piece of the puzzle.

Another future could be found in the open-access, anonymously reviewed, low-budget e-journals. In our own field, one long-time CIES citizen, Gustavo Fischman, has tirelessly edited the open-access *Education Policy Analysis Archives*.[15] Of course the dilemmas we describe have been addressed in other fields beyond education. The main open-access journal in economics, *Economic Bulletin* (specializing in short articles), emerged in response to the rapidly rising subscription costs of Elsevier's *Economics Letters*. But, for the moment, this is more the exception that proves that rule, as several other electronic journals, originally open-access, now charge libraries hundreds of dollars. In some cases, prices creep up despite the original aims of the journal.

[14] Russell Grandinetti, an executive with Amazon, heralded the entry to publishing of companies that once merely sold e-books and paper book published by others. Grandinetti saw this as a dramatic break from all prior publishing, dating as far back as Gutenberg, and claimed "the only really necessary people in the publishing process now are the writer and reader." New York Times 10/16/2011 "Amazon Signs Up Authors, Writing Publishers Out of Deal."

[15] http://epaa.asu.edu/ojs/.

Yet a different future for education research may be a hybrid of open and traditional publishing. In countries where the public has already paid once to carry out scientific research (too rare, alas, in the field of education), researchers could be required, as a condition of funding, to place articles they publish in traditional journals also into open repositories. In US medical research, for example, a recent law stipulates that "The Director of the National Institutes of Health shall require that all investigators funded by the NIH submit or have submitted for them to the National Library of Medicine's PubMed Central an electronic version of their final, peer-reviewed manuscripts upon acceptance for publication, to be made publicly available no later than 12 months after the official date of publication."[16]

To build on the advantages of university presses, there is a fourth option that is compatible with the second and not necessarily an alternative to data warehousing. It is our preference and our goal as editors. The route stresses scholarly communication as the main product, as opposed to a focus only on the production of articles per se. A recent taskforce on a business model by the Association of American University Presses (AAUP), in which the University of Chicago Press was a key participant, advised the academic publishing community that "the 'business' being modeled should be viewed as *scholarly communication*. Each new model may address a narrow or specific aspect of this broad system but it will only succeed if it recognizes our ecosystem—the interdependencies among the interconnected partners in the extended academic community (universities, faculty, libraries, presses, scholarly societies, government agencies, foundations, and others)" (AAUP 2011, p. 29).

Obsolescence, the Review Process, and Options for Judging *Qualities* in Journals

Academic journals began in an era when communication to a present and future community was the main reason for writing and also the main purpose of printing and mailing the author's writing. Journals were

---

[16] The policy was adopted after heated debate among publishers (who preferred that NIH offer only web links to the publishers) and scientists and librarians from around the world who preferred that the embargo period be shortened to six months. See the comments from editors, librarians, interest groups, and publishing industry representatives: http://publicaccess.nih.gov/comments2/comments_web_listing.htm.

created, in large part, because writers wanted to share and exchange thoughts with people who lived long distances from the author. Has this purpose become as obsolete as the Dictaphone? What can phrases such as "adding machine" or "Long Distance Call" mean to readers under the age of 40. Obsolescence and irrelevance has its charm. However, we prefer for journals to achieve immortality by not dying, to paraphrase Woody Allen.

Against the bounty offered through fiber optic cables, scholarly journals promote scholarship much as the slow foods movement promotes cooking and eating. The "table" is more necessary and relevant and less obsolete than ever. Journals slow down the file transfer process, forcing peers to engage and contribute to a conversation about their methods and arguments. How does this work in practice? Earlier we mentioned that our experience with peer review is consistent with observations by Hirschauer (2010), who saw that even anonymous peer review is in some way public, and not so different from the evaluation of scientific proposals by review boards observed by Lamont (2009). As editors, we first read submissions with an eye to "fit," and we also decide whether basic minimum standards have been met. We have been selecting about half of submissions in recent years for a full external review by specialists in method, discipline, and national context. Reviewers return reports to us, usually within an agreed number of weeks. Then, two members of our editorial team take responsibility for synthesizing the external assessments and generating an official response to the author. Since 2003, only two submissions have been accepted after this first round, but many are invited to engage with the reviewers by revising and resubmitting their manuscripts. Copies of reports and letters are circulated to the entire set of reviewers (and about one-third of the files of published articles are available for public viewing). Yes, this takes time.

We find that many external reviewers are writing evaluations as much for one another as for the author, because they know their reports will be circulated among peers. This can slow down the process because reviewers (and editors) write longer reviews and do not merely vote up or down. But a slowed-down process can be a good thing if one does not view scholarly publishing as a variety of gate-keeping, or as a quality control service for tenure committees too busy to read their colleagues' work. After all, editors are not unpaid volunteers who staff research assessment exercises. If we accept, as the goal of scholarly publishing, the model that is suggested by the AAUP, then we must resurrect the function of

communication among scholarly networks. There can be no denying that, as one among several criteria for judging the extent of this communication, the impact factor can play a useful role. But it can be only the beginning of a serious attempt to judge the actual depth of this scholarly communication. Much more information is needed about the review process and the responsiveness and development of ideas and methods in the course of the development of articles. The *Comparative Education Review* created an open file—viewable on the University of Chicago Press site—with reviewers' report and our responses to authors in about one-third of the articles we published during our term as editors. This includes, for recent articles, copies of the authors' responses to their reviewers and editors.[17] The main purpose of the open file is to help authors and reviewers. But we also hope it illustrates some of the many dimensions of quality that cannot be quantified. If other journals would open their files, with permission from authors, then it would be possible to judge each journal's *qualities*.

There are perverse consequences of assessment, of the commercial control of scholarship, and the exclusive focus on impact factors in the ranking regime. Editorial boards and the professoriate must take control of their own scripts in order to avoid, or at least to acknowledge, the casualties in the current arrangement. In our own field we observe the privileging of topics and methods that are communicable in the English language, to the detriment, for example, of curriculum studies or discourse analysis of education practices and policies. We suspect that, even within English-language scholarship, area studies lose out in favor of quantitative cross-national studies, since these can be more easily published by an "international" journal. Corruption and plagiarism also become more likely due to rank scholarship. When an earlier version of this essay was presented at Hong Kong University, one scholar from Mainland China protested that rank was impossible to ignore because large salary bonuses are paid to university faculty who publish in "top" (i.e., English language) international journals. The practice of informal payments to editors was recently criticized in a front-page article in China's *People's Daily*, and a 7 November 2011 directive from China's Ministry of Education is for universities to look for other measures of

---

[17] http://www.jstor.org/page/journal/compeducrevi/samples.html   Clicking   on   an item in the Table of Contents takes the reader to the correspondence for a particular published article.

quality research than merely counting or ranking publications. Closer to home, as we discussed in our February 2011 editorial column, we discovered a case of plagiarism in an article we printed and then were forced to retract. That case underscored the pressure that researchers feel to get published, no matter what the risk or moral hazard. Most of all there is the ability to ignore content by counting publications and by ranking journals.

Publication Pressures in a US Research University? What Pressures?

Interdisciplinary fields such as education, public health, international affairs, or information sciences were inspired by the putative synergy from working at problems using different toolkits. But the use of formulaic measures of worth gives scholars an opportunity to disengage by ignoring the content of publications and attending only to externally validated indicators, which have become indicators mainly of the ability to meet institutional targets. And yet, from the (ad)vantage point of US institutions, the pressures described in this essay have been only lightly felt by researchers.

Since the 2012 publication of Rank Scholarship, we became aware of a further unintended consequence of English-language research publication as an index of university quality and productivity. Because the professoriate in some countries use English language as their daily medium of instruction and of research, there is little to no pressure to publish in other languages than English and the globalization of scholarship has had little if any consequence for the decision of where to publish. In the remainder of this essay, we report on the case of one highly "ranked" US university and we examine in detail the publication experiences of faculty in a professional school of education, and in the social sciences.

We first created a roster of names of all professors with full-time (tenured or tenure-track) appointments who worked in these two departments in 1993, 2003, and 2013. For the 2013 roster, we were able to download the CVs of most professors. For all names of professors in all three years, we were able to use "Google Scholar" to create an inventory of their published research. We created a database with faculty journal publications by all faculty in all three years. We did not include books or anthologized chapters in this database. We then coded each journal publication in different factors, including: the year of publication; the journal

language; the national focus stated in the title, if any; the geographic focus of the title, if any; and the journal's current country of publication. With these data, we are able to compare over time tendencies in the focus of research articles by faculty who worked in a major US research university. Additionally, when we inspected the format of Curricula Vita available online, we were able to note whether professors have tended to include journal ranking and Impact Factor statistics with their publications as possible indicators of quality. We immediately noticed the near-total absence of any such statistics in the CVs of these authors, although certain publications were noted to have received awards from scholarly associations. Our database included a cumulative total of 420 research articles published in journals over the careers of faculty members of a social science department who were still in the department in 2013. In addition, our data include information on a further 94 articles by members of this same department in 1993, but who were not working in the department in 2013. Our database includes a large department in the university's school of education. There is information about a career cumulative total of 560 research articles published in journals by the faculty members who worked in this department in 2013. In addition, we have information about a further 115 articles published by authors who were members of this department in 1993, but who were not affiliated with the department in 2013.

These data are not easily quantified, but are revealing nonetheless. Among the cumulative total of 560 research articles published in the education department, all but seven had appeared in English. Five appeared in Spanish, and two in French. This would be unsurprising, since the focus of education research is usually national. However, the focus of the article (at least as indicted by the article title) was not always the United States or any English-speaking country. Fifty-seven titles of these articles indicated that they were studies of some non-English-language country, in addition to the seven non-English articles previously mentioned. By contrast with the cumulative total languages and foci in the 560 articles by recent faculty members, in 1993 the focus was even more on the United States. Of the 115 articles published by previous professors prior to 1993, only one was not about the United States, and only one was in Spanish. The focus of research, we conclude, is becoming slightly more international, but the language of publication has not, and the site of publication has remained largely in US journals.

In a social science department at the same university, only 57 of the 420 publications by faculty in 2013 were not focused on the contemporary United States (although there were archeological research articles on the colonial and precolonial period). Most of those publications, not surprisingly, were focused on non-English-language societies, but only nine publications were not in English (all in Spanish archeological journals). Among faculty members of the same department 20 years earlier, but who were not in the department in 2013, out of the 115 articles published cumulatively by 1993 only two were not focused explicitly on the United States. None of the 115 articles were in languages other than English.

In terms of the publishers, in the social science department's cumulative publications as of 2013, there were 28 out of the 420 articles that appeared in journals that were published outside of either the United States or the United Kingdom. However, even the articles that appeared in journals published in The Netherlands, for example, often had editorial board members and editors who were based in the United States or the United Kingdom. In the education department, 55 out of the 560 articles appeared in journals whose publications office (though not necessarily editorial board) was located outside the United States or the United Kingdom. The titles of the articles very rarely referred to the United States. It was assumed and was taken for granted that the article was based on the US experience and US data unless stated otherwise. Where the setting was not the United States, the title specified the location. Otherwise, the authors and the publisher assumed that the US experience was the focus.

To provide context for the possible changes—and possible stability—of publication over recent years, David Post interviewed two social scientists and two education professors. Three of the four informants who were interviewed for this essay—both of the education professors, and one of the social scientists—worked previously at non-tenure-track jobs based on commercial business or nonprofit grant revenue. Their appointments were made under renewable contracts. One of the social scientists took a first job at a different university before moving to the current research university. It is noteworthy that in none of the four publication trajectories did my informants ever become aware of specific publishing expectations or benchmarks. They were also not told explicitly by their employers, their funding agencies, their supervisors, or their peers about a need to publish in specific journals. Informally, all four informants become socialized that they should produce research that was publishable either articles

or books. Education Professor #1 recalled having total autonomy over what to research and write about, and where to publish it. This informant was well aware of being on a renewable contract, but the expectations were inexplicit.

> *David Post*: What was the connection between writing articles and getting a salary?
> EDUCATION PROFESSOR #1 Well, I was appointed as a research associate for 12 months
> *DP*: So to keep up, to renew, you would have to report to [the director] and he would just decide to renew you or not? How did that work?
> EDUCATION PROFESSOR #1 well, you know, it wasn't cut and dried like that. You were expected to be productive, and that meant doing research, occasional reporting on your research, just doing all the things that scholars did.

Similarly, a second Education Professor also did not remember any explicit expectation even prior to taking a tenure-track position in a university. But this professor describes socialization toward academic publishing.

> *DP*: Was there in any explicit contract, when you were working for the management analysis center, that you had to publish research articles?
> EDUCATION PROFESSOR #2: No, nothing at all, because it was the faculty-staff joint venture. [Publishing] was looked on favorably…. I am not sure, I am assuming it factored into the overall evaluation which would lead to year-end bonus… I have no idea how much that played into that or not, and that's not why I did it. Why I did do it? It was something that I think was encouraged. No, "encouraged" is the wrong word…. It was *modeled* by the faculty and so I took [publishing] as a good thing to do.

A conversation with Social Scientist #1 revealed an early consciousness, since graduate school in the 1980s, about which journals were considered most reputable and were considered "top" journals. However, this informant never received any explicit guidance about which journals to publish in or whether to publish articles rather than books, or to publish in English rather than another language. Social scientist #1: "There were not any explicitly stated expectations about where to publish, but everybody knew the score…. You are socialized in graduate school and when you go [work in] a top department you know that you just better be

productive and get your work placed in pretty top journals or you are not going to make it, so you know that was the goal: to do the best work I could and get it published in the best journals I could but at the same time keep a fairly high level of productivity and, you know, it was unstated but it was just clear."

Upon taking university jobs, all four informants felt pressed to publish their research. But none could identify the focus of the pressure or an explicit understanding of where they should publish their research.

> DP: Tell me about the pressure and the incentives to publish in particular journals
> EDUCATION PROFESSOR #2: I was coming out of the doctoral program, and I was looking for an academic job… It became clear what one needed to do, and that is publish.
> DP: How clear was it? Was it written down anywhere?
> EDUCATION PROFESSOR #2: It may have been written down. It's sort of the way we had it here in that you look at teaching, research, and service. You talk to other people and you are part of the culture there, and you realize that research scholarship is the most important among those three and so if you are looking at what you need to do to be successful, which I was it's clear what you need to do: you need to publish—you know—relatively frequently and in high quality publications.
> DP: How did you know what were "high quality" publications? How did you know what journals or what outlets would be considered high or low quality?
> EDUCATION PROFESSOR #2: I was looking at journals that related to my field, which was education finance, and there are several ways in which you can understand which ones are the important ones. One way is through your graduate program, the readings you do, the things that are assigned. I worked with a couple of faculty there, and it was clear what they were doing, which publications they either assigned in class, or where they published. There were relatively few journals that focused on this area… and you just knew what they were.

Beginning their university careers long before journals were ranked and before citation indexes and impact factors appeared, the four informants did have impressions that certain journals were more reputable than others. Although this pressure was acutely felt by assistant professors, there was never an authorized list from the university, local government, or US government to indicate while publication outlets were most strategic.

DP: What were the expectations from your department?

Social scientist #1: From the department there were sort of clear expecta-
tions—maybe stated explicitly maybe not—that you needed to publish
a couple of articles a year in good places, *decent* places.

DP: You said that the dept. had clear expectations about two articles a
year. How clear were those expectations? Were they ever written down?

SOCIAL SCIENTIST #1: No, I don't think they were written down.

DP: Well, what did you mean when you said "clear?"

SOCIAL SCIENTIST #1: Well, that's a really good question. I think it was
just…… I am not quite sure how I developed that idea. But it seemed
like that was a good thing to aim for. Not really quite sure where that
came from.

The absence of explicit ranking or guidelines may have given the infor-
mants freedom to consider lengthier projects leading to books rather than
articles as their project. One of the four informants has published mostly
books, and did not feel much pressure to do otherwise, commenting that
"people basically said do whatever you want as long as you publish."
Time pressures were not the only disincentive for Social Scientist #1 to
publishing a book as an alternative to publication in reputable journals.
The investment could also be considered risky. As she commented: "the
only time in my career when I seriously considered writing a book was
right when I got out of graduate school, and there were two possible
things. One was the dissertation and another was this work I had done
with my faculty mentor. He had been talking about writing a book
together on that and I guess on the dissertation. I ended up deciding
that it was too risky to put too many eggs in a basket on a book rather
than articles." When asked about edited anthologies and special issues of
journals, this social scientist was also socialized to prefer regular issues of
peer-reviewed publications: Social Scientist #1: I picked up the view that
that was a less well regarded form of publication and that people who did
a lot of that were just doing the easy thing and that it didn't really count
for nearly as much as a peer-reviewed article. So I just thought I was not
going to mess around with it… I did on a few occasions, but not very
many. I just felt like it's is not the best use of my time.

Although the university and US government did not directly reward
journal publication over books or give incentives for publication in "top"
journals, the informants were well aware of their position relative to peers.
It is important to notice that at the US university discussed in this article,

faculty self-evaluation was the driving force for this awareness. It is also noteworthy that funded research, for example from the US National Institutes of Health or the National Science Foundation, creates pressures to publish, but there is no explicit formula of how or where, and not even a strict requirement for publishing previously funded research.

Regarding the language media, all four informants have traveled and worked in non-English-speaking societies, but only one of them consciously attempted to publish in another language. As the previously discussed lists of publications reveals, even when the topic of research is a different country, in most cases the research is published only in the United States. As Social Scientist #1 commented, "my Spanish wasn't good enough so I don't think I ever thought of it. I mean I guess I could have had somebody else translate it, but I didn't feel ….like it was an audience I was trying to reach. There was no need to write in another language since my audience was English speaking." This view was shared by social scientist #2:

> None of my stuff has appeared in any foreign language journal that I know of and I have not attempted to publish any of my research in, for example, a Spanish language journal. I have a difficult time enough of English! I really haven't thought about having my work published in non-English publications. Nobody's ever explained to me why I would want to publish my research in a non-English publication when English is kind of the world language. If I were Czech I might want my paper in a Czech journal. I also might want to have it in an English language journal just to reach more people, and you can reach as many people as possible in a English language journal. [But as an American author] it would take more work, more resources than it would be worth to publish in a non-English language journal… It would take both time and money.

Post asked the four informants whether there were greater or lesser pressures today and whether journal publication was more explicitly part of the job requirements as compared to the time they began in academia 30 years ago. This view of increasing pressure without explicit criteria was echoed by one of the education professor informants:

> EDUCATION PROFESSOR #2: Now for someone new it's a completely different story. I think the publication pressures escalated dramatically because of the competition. I don't know the details on other universities but in our department, the level of publications in quality

journals has really gone up, the bar has been substantially raised over 5 years or more than what it used to be.

DP: Is there an explicit "bar?" Has there ever been in this department or in your program a written down expectation for beginning assistant professors?

EDUCATION PROFESSOR #2: I don't think there is a number… [You need to] make regular presentations at AERA or other associations is … Those are things that you need to do and I think when mentoring happens that's what I say. I say I don't know [how many publications, but] you need to have a good publication.

By contrast with 30 years previous, today US academics are becoming somewhat aware of the use of journal metrics. However, in none of the four publication trajectories did my informants state that they themselves had used these metrics as the reason for publication or for pursuing a line of research. It is striking that sensitivities that have been felt for much longer outside the United States are only now becoming apparent in this US university.

DP: At what point did first hear the term "impact factor?"

SOCIAL SCIENTIST #1: I don't think it was early in my career; I think it was really more like five or ten years ago. I don't know when it started.

DP: Has the publication situation changed today?

SOCIAL SCIENTIST #1: my graduate students are always looking up the impact factor when they're deciding where to send the paper. You know, they come in with a list of possible journals and they always have the impact factor next to it and then they you now try to figure out where to send it and figure out whether it's a good enough paper to send it to the high impact factor journal or whether it makes more sense to go to a lower one.

DP: Are the expectations for young scholars today the same as 30 years ago?

SOCIAL SCIENTIST #1: I think that what we expect of them in terms of publication is no different than what was expected of me, but it's possible that it's gotten harder to get into those places because there is just more competition. But I think that it's not that much less was expected of us… I think the same thing holds now as then in that publication is the main measure used in our department to determine if somebody is any good …if they are productive, anyway.

One of the informants saw some advantages to using citation indexes in order to determine the usual impact of articles published in particular journals. According to Social Scientist #2, there were no extrinsic consequences, however, to publishing in a journal with a high impact factor. There were intrinsic incentives in that it is possible to have greater influence within the profession and the readership. The imperfections of internet-based citations are also evident to this informant.

> *DP*: as a result of choosing a journal with a higher impact factor and getting it published there, are there any positive rewards or benefits for you?
>
> *SOCIAL SCIENTIST* #2: There is nothing concrete that you can point to. There is the possibility that if you send a paper to a higher impact journal, it will be more visible and the paper itself will have more influence. This is the only reason why you would ever use [the Impact Factor]. You want to be more visible in terms of your professional activities. If that wasn't important I would just write up a paper for the fun of writing it up and put it in my file cabinet, right? But nobody wants to do that because we all want to do research that is relevant and potentially has an impact on something.

Conclusions

The cumulative publications by faculty members of a department of social science and of education do not reveal tendencies toward non-English publication. Interviews with professors also reveal no extrinsic pressure to publish in any particular journals. Although there are clearly pressures to publish in "top" journals, the definitions for these are apparently left to researchers, who were most influenced by their own experiences reading these journals as part of a professional association or from the time they were students. The four US informants—admittedly not a representative sample of even within their one US university—had only a vague awareness of the ranking pressures seen elsewhere in the world.

It is ironic that one of the leaders in the new academic ranking industry has been cautious in recommending that any country seek to increase its numbers of highly ranked institutions because "the zero sum nature of 'top' rankings creates movement downward as well as movement up" (Cheng 2015). The director of Shanghai Jiao Tong's "Center for World-Class Universities" has stated that the pursuit of the aims of countries to achieve "higher ranking or more top-ranked universities should not

be encouraged until the rankings are based on what a university or a country really wants." But what would be the mechanism to bring a ranking system into alignment with the wants of any particular university or country?

One possibility is for professors who take ownership over quality assessment. In Taiwan, professors have been involved in selecting the journals used to decide ranking, including Chinese language publications (Chou 2015).[18] There are also lessons from the United States about how this might work. As seen from the publications lists and interviews at one large research university, the absence of official government or even university listings does not mean that professors are unconscious of quality, unconcerned about their impact, or unproductive. Intrinsic rewards seem sufficient to motivate my interviewees. Another point for comparison can be found by considering the ways that US universities are accredited, which are quite different from the national agencies used in much of the world. In the case of the University of Pittsburgh, there was a report conducted by one of the several private accrediting associations, Middle States Commission on Higher Education. The 2012 report was led by the president of New York University, John Braxton. It begins by acknowledging that "University of Pittsburgh's reputation as a world class research university has been advancing steadily."[19] But the report discusses the ways that quality research and other outputs are measured in that university, emphasizing that, "[t]he University of Pittsburgh wisely has decentralized the manner in which assessment is done, thereby allowing units to develop methods of assessment suitable to their context while insisting nonetheless that the measures developed be rigorous, meaningful and tied to goals."

In the United States, some universities are famous because of their sports teams more than for their professor's publications. There are also countries where universities become famous as industrial development enterprises. If there must be rankings, then let them at least consider the varied purposes of higher education. Two alternatives from

[18] In Taiwan there was an attempt to gauge university productivity using the Social Science Citation Index (SSCI), which lists journals mainly using English. In response to these incentives, in 2010 over 3000 Taiwanese university faculty signed a petition demanding that the government discontinue the use of SSCI journals as the indicator for university productivity. See chapter by Prudence Chou in this volume.

[19] http://www.middlestates.pitt.edu/sites/default/files/middlestatesfinalreport1.pdf.

the United States—Washington Monthly and Colleges That Change Lives—can suggest possibilities.[20]

If research productivity is widely agreed to be the most important criterion for university quality, then professors must address the question of how to appreciate and recognize the value of scholarly inquiry. And, on what basis will it ultimately be thought to matter, to have an impact? University professors do have options in the face of global rankings? Internal pressure can make us less complacent and more energetic. But central to the purpose of higher education there is the importance of critical reflection about what we do and why, both what we do as individuals and what we do collectively for our particular societies as we contribute our modest creativity and effort. After reflection, the knowledge-workers in some countries may decide that they prefer to retake control over the creation of multiple, complementary criteria of quality universities. Then Rank Scholarship will no longer be an exclusive measure of quality.

References

Abbott, A. (1999). *Department and discipline: Chicago sociology at one hundred*. Chicago: University of Chicago Press.

Association of American University Presses (AAUP). (2011). *Sustaining scholarly publishing: New business models for university presses*. Task force on Economic Models for Scholarly Publishing.

Berger, P. L., & Luckmann, T. (1966). *The social construction of reality: A treatise in the sociology of knowledge*. Garden City, NY: Anchor.

Bridges, D. (2009). Research quality assessment in education: Impossible science, possible art? *British Educational Research Journal, 35,* 497–517.

Bridges, D. (2011). Research quality assessment: Intended and unintended consequences. *Power and Education, 3,* 31–38.

Cheng, Y. (2015). "Academic ranking of world universities: Changes in world higher education?" *International Higher Education*." 79, (pp. 13–15) (Winter). http://ejournals.bc.edu/ojs/index.php/ihe/article/view/5841.

Chou, C. P. (2015). Higher Education Development in Taiwan. In Shin J., Postiglione G., Huang F. (eds.), Mass Higher Education Development in East Asia. Knowledge Studies in Higher Education, vol 2. Springer, Cham. https://doi.org/10.1007/978-3-319-12673-9_5.

---

[20] http://www.washingtonmonthly.com/college_guide/toc_2015.php   http://www.ctcl.org/.

Deem, R., Hillyard, S., & Reed, M. (2007). *Knowledge, higher education, and the new managerialism the changing management of UK universities*. New York: Oxford University Press.

Foucault, M. (1994 [1963]). *The birth of the clinic: An Archaeology of Medical Perception* (Alan Sheridan, Trans.). New York: Vintage.

Garfield, E. (2005, September 16). *"The agony and the ecstasy: The history and meaning of the journal impact factor."* Paper presented at the international congress on peer review and biomedical publication. Chicago.

Garfield, E. (2006). The history and meaning of the journal impact factor. *Journal of the American Medical Association, 295,* 90–93.

Hirschauer, S. (2010). Editorial judgments: A Praxeology of 'Voting' in peer review. *Social Studies of Science, 40,* 71–103.

Hoskin, Keith. (1996). "The 'awful idea of accountability': inscribing people into the measurement of objects. Pps. 226–282 in *Accountability: Power, Ethos and the Technologies of Managing*, ed. by R. Munro and J. Mouritsen. London: International Tomson Business Press.

Howard, J. (2011, May 8). "Controversial journal rankings in Australia affect research funds and careers." *Chronicle of Higher Education*.

Kirp, D. L. (2004). *Shakespeare, Einstein, and the bottom line: The marketing of higher education*. Cambridge, Mass.: Harvard University Press.

Lamont, M. (2009). *How professors think: Inside the curious world of academic judgment*. Cambridge, Mass.: Harvard University Press.

Merton, R. K. (2000). "On the Garfield Input to the sociology of science". In Blaise Cronin & Helen Barsky Atkins (Eds.), *The Web of Knowledge: A Festschrift in Honor of Eugene Garfield* (pp. 435–448). ASIS: Medford, NJ.

Meyer, J. W. (1977). The effects of education as an institution. *American Journal of Sociology, 83,* 55–77.

Mok, K. H. (2000). Impact of globalization: A study of quality assurance systems of higher education in Hong Kong and Singapore. *Comparative Education Review, 44,* 148–174.

Nussbaum, M. (1990). *Love's knowledge: Essays on philosophy and literature*. New York: Oxford University Press.

Schweisfurth, M. (2011). "Editorial: How did we get here? Unintended consequences in education." *Comparative Education*.

Strathern, M. (1997). Improving ratings: audit in the British university system. *European Review, 5,* 305–321.

Weber, M. (1958). *From Max Weber* (H. Gerth & C. W. Mills, Trans.). New York: Oxford University Press.

Welch, A. R. (1998). The cult of efficiency in education: Comparative reflections on the reality and the rhetoric. *Comparative Education, 34,* 157–175.

Local Knowledge When Ranking Journals: Reproductive Effects and Resistant Possibilities

Suresh Canagarajah

"We are working like factory workers trying to churn out papers.
Nobody cares about whether you enjoy your research.
The only thing which they care is output."

In recent years, scholars have questioned the inequalities and biases in publishing practices. In the beginning, much of the criticism was motivated by the disadvantages for developing and non-English speaking communities outside the centers of research and education in the West (see Belcher 2007; Braine 2005; Canagarajah 2002; Curry and Lillis 2004; Flowerdew 1999, 2000; Lillis and Curry 2010). More recently, neoliberal orientations to productivity have caused concerns among scholars in the West as well about the implications for the quality of knowledge constructed under the pressure of citation indexes, impact factor, and ranking. In a promising development, even editors of respectable journals have begun to question the implications of ranking for knowledge construction (see Byrnes 2010; Editors 2012). This article

S. Canagarajah (✉)
Penn State University, State College, PA, USA
e-mail: asc16@psu.edu

47

is a grounded perspective on the implications of ranking for knowledge production, scholarly networking, and academic communication in a specific local community.

I wish to extend the recent theorization of the editors of *Comparative Education Review* (*CER*) on the implications of ranking journals (Editors 2012) for this case study. In considering the increasing prominence of certified expertise, ranking, and quantification of knowledge, the editors situate these developments in the rise of Modernity and the continuing trends toward Managerialism. According to Deem:

> Managerialism insists that 'managing' and 'management' are, respectively, socio-technical practices and the collective agents and institutions responsible for their enactment that are universally required in a modern, economically and technologically advanced society. These practices, agents, and institutions stand above, indeed outside, the wider social moral and political struggles.… As such, Managerialism is a general ideology or belief that regards managing and management as being functionally and technically indispensible to the achievement of economic progress, technological development, and social order within any modern political economy. (Deem et al. 2007, p. 6; as cited in Editors 2012, p. 4)

Managerialism finds new realization in recent neoliberal discourses of productivity and progress. In an interesting paradox, though such discourses believe in the value of unregulated competition according to market forces to facilitate progress, they also assume the role of state and other institutions to create the conditions that favor such competition and maintain productivity measures (see Harvey 2007).

There are many implications for higher education and knowledge construction in all this. As we well know, universities are also becoming corporatized, developing productivity measures to assess the research quality and output of their faculty members and compare their performance with other universities. To facilitate such measures, we also find the ranking of journals based on citation frequencies. The editors of *CER* draw from the thinking of a range of social theorists such as Weber, Berger and Luckmann, and Foucault to consider how the institutions designed to manage education and scholarship take a life of their own, get divorced from the real value of inquiry, and then produce knowledge that serves their interests. These institutions develop their own norms, and then reproduce knowledge and social relations to sustain their hegemony. Thus

criteria for measuring quality become translated into targets of productivity. These extrinsic targets become more important than the intrinsic worth of the academic products. In publishing, then, aspects such as citation patterns which can be indicators of peer uptake of an article become the objective for publications. Authors often adopt rhetorical strategies to make their articles more citable, and engage in names-dropping to boost the citation rates of the journals and scholars they favor. Editors too insist on writing practices that make the article more citable (such as choosing titles that are more visible for Internet search) and insist on articles in their journals being cited more frequently to make the article publishable.

I extend this perspective in significant directions to address the publishing exercise reported in this article. In some ways, the perspective on Managerialism adopts a largely reproductionist orientation to knowledge and social institutions (see Bernstein 1981; Bourdieu and Passeron 1977; Bowles and Gintis 1977). According to such a perspective, the power inequalities in society are maintained and sustained by dominant ideologies working through social institutions. Applied to educational institutions, the orientation powerfully demonstrates how dominant economic and ideological interests shape the knowledge, values, and skills produced in schools and universities. In publishing, we can adopt a similar orientation to show how micro-textual and rhetorical features in writing academic articles can be shaped by dominant economic and ideological values. In this sense, this article takes the implications of neoliberal ideologies of accountability, productivity, and measurement, and the practices of Managerialism, into microlevel considerations of academic communication and interaction to show the everyday effects of reproduction.

However, theories of reproduction have been critiqued for being somewhat overdetermined and deterministic (see Giroux 1983; Canagarajah 1999). Influenced by poststructuralist orientations, critical scholars attempt to identify spaces for critique, negotiation, and reconfiguration of power structures. Even in contexts of hegemonic institutions, researchers have identified institutional interstices or gaps where there are relatively safe spaces for oppositional thinking and practices. While the editors of *CER* identify new practices of publishing and refereeing that can counter the damaging effects of neoliberal ideologies and Managerialism, I explore possibilities at the textual level. To some extent, the practices identified by the editors of *CER* point to changes at the institutional level. I focus in this article on textual and discoursal resistance within existing institutions

and conventions to explore possibilities of more subtle and microlevel changes from within.

A perspective that informs the discursive practices explored in this article is the distinction de Certeau draws between strategies and practices in everyday social life. De Certeau defines a *strategy* as:

> the calculation (or manipulation) of power relationships that becomes possible as soon as a subject with will and power (a business, an army, a city, a scientific institution) can be isolated. It postulates a *place* that can be delimited as its *own* and serve as the basis from which relations with an exteriority composed of targets or threats (customers or competitors, enemies, the country surrounding the city, objectives and objects of research, etc.) can be managed. (1984, pp. 35–36, emphasis original)

The construct explains the role of Managerialism in higher education well. Measures of productivity, and related institutions such as citation indexes and impact factors, are ways of the scholarly community delimiting the norms from which its power can be sustained, preferred knowledge promoted, and alternate forms of knowledge from other institutions excluded. In contrast to strategy, a *tactic*

> is a calculated action determined by the absence of a proper locus…. The space of a tactic is the space of the other. Thus it must play on and with a terrain imposed on it and organized by the law of a foreign power. It does not have the means to keep to itself, at a distance, in a position of withdrawal, foresight, and self-collection…. It operates in isolated actions, blow by blow. (pp. 36–37)

What is significant about tactic is that it takes into account the framework set for operation by the strategy of the powerful. In this sense, it is a tactic of resistance from within. It identifies spaces within the existing conventions and practices to renegotiate dominant interests for its own purposes. This is a pragmatic approach, compared to certain orientations to resistance that disregard the status quo. It is idealistic to assume that one can move away from established conventions and practices in a given institution and still speak or act meaningfully. However, it is possible to reconfigure established conventions by taking them seriously and acting within them. Though there is the possibility for status quo to appropriate these forms of resistance through its revised strategies, there is also the possibility for change that is ground up and gradual. However, a minor

qualification must be made. De Certeau seems to conceive of these tactics as "isolated actions" with an "absence of a proper locus." I am open to such seemingly individual, hidden, and spontaneous acts of resistance forming shared and evolving cultures of resistance. Elsewhere, I have demonstrated how scholars in the periphery develop shared writing practices meant to overcome some of the inequalities they face in dominant publishing conventions (see Canagarajah 2003).

In areas of rhetoric and writing, Bhabha's notion of hybridization offers a useful example of tactic at the discoursal level. Since texts and language are not monolithic (despite the strategy of the powerful to define them so), there are spaces within them for diversity. In renegotiating genre and language conventions in their academic articles, scholars may represent local and critical knowledge to pluralize scholarship. Bhabha defines hybridization thus:

> The hybrid strategy or discourse opens up a space of negotiation where power is unequal but its articulation may be equivocal. Such negotiation is neither assimilation nor collaboration. (1996, p. 58)

> For me, hybridization is a discursive, enunciatory, cultural, subjective process having to do with the struggle around authority, authorization, deauthorization, and the revision of authority. It's a social process. It's not about persons of diverse cultural tastes and fashions. (1999, p. 39)

In labeling this tactic hybridization rather than hybridity, Bhabha focuses on the practices behind it rather than the product (as it has been adopted in popularized versions of this notion). In his words, it is a process not a person. Needless to say, such practices are risky, contingent, and exploratory, open to assimilation or collaboration. In each context (of different journals, fields, and institutions), there might be different scope and avenues for hybridization, based on the fact that their conventions and discourses are equivocal and, thus, negotiable. Scholars have to be sensitive to the dominant conventions and practices in their disciplines and publishing contexts to identify spaces for negotiability and tactically encode alternate discourses.

In this study, I first show how the list constructed in a particular academic department in a non-Western university for ranking relevant journals for publication (hereafter, the "List") has reproductive effects on knowledge construction. This situated exploration brings out in greater

detail the implications of ranking for the construction and representation of local knowledge. I show how this List shapes scholarly interactions both inside and outside the academic department, with implications for the types of knowledge created. I first adopt a microlevel orientation to publishing, considering how rhetorical and textual considerations are influenced by the List. I then broaden the lens to show how academic interactions and communication among local scholars are also shaped by such productivity targets to reproduce dominant knowledge. While my focus is on a specific academic field in a specific university in a specific country (as befitting a situated case study), I raise broader questions for the geopolitics of knowledge production and disciplinary discourses elsewhere. I hope that situated studies of this nature will help understand how academic managerial practices shape diverse areas of academic life, with different implications for different communities.

The Context

This article derives from my engagement as a US-based scholar with faculty members in a non-Western community in a mentoring exercise on publishing. As a visiting professor, I was assigned to meet with six junior scholars on a weekly basis for a month to work on their drafts for publication. Several other faculty members consulted me on their writing projects outside the mentoring group. Though I later revised my role as the exercise continued, I initially modeled my role along the notion of a "literacy broker." Literacy brokers are defined as mentors, editors, friends, academic peers, translators, and English language specialists who intervene and influence texts as they move toward publication (see Lillis and Curry 2010). Participants in the mentoring group each maintained a journal to reflect on the dilemmas they faced in areas such as framing the article, interpreting the data, citing relevant sources, and developing the implications of their studies. They treated this journal as a means of awareness development on composing and rhetorical practices. They also considered the possibility of publishing their collective reflections on the challenges in negotiating publishing norms, treating their journals, interactions, and drafts as data.

However, when I constructed a first draft based on these sources of data for collaborative revision after the workshop, a majority of the participants reconsidered their decision. They found the critical orientation developing from our reflections and experience a professional liability.

Therefore, they declined to be named as coauthors and refused to grant me permission to quote them directly in the article. The scholars felt that even pseudonyms and anonymity will not provide them sufficient protection, as the details in their drafts and journals can reveal the context and identity. I will discuss below the local political and academic culture that explains their fear of penalization. Furthermore, as junior faculty members going through the tenure process, they found it risky to critique the establishing publishing practices and assessment criteria. However, it is ironic that local scholars are reluctant to articulate views that lead to their own empowerment. Perhaps it is a testament to the power of managerial ideologies and institutions that resistance against them is censored by the subjects themselves.

I eventually decided to frame this as a single-authored article based on my own observations and experiences after a version of the paper that went through double-blind review was recommended for publication. The editors and I decided that there was value in representing such experiences of vulnerable faculty members and marginalized scholars, after taking sufficient safeguards to protect everyone's anonymity. We realized that there was no way to fully protect everyone's identity without also masking the name of the country where the scholars are located in. Therefore, I am presenting a version of the paper that omits considerable contextual information in deference to the concerns of the other scholars involved in this project. I quote directly from the drafts and journals of a couple of scholars who gave me permission to do so. In the case of others, I provide only my observations and interpretations of their experiences without quoting their words directly. I have to take sole responsibility for the views expressed in this article. Though my own journal, observation, and interactions, together with the drafts and journals of the participants provide possibilities for triangulation, I have to present this article as a narrative of my own situated experiences and perspectives on the publishing challenges for these scholars in this country.

"Nation X" (the label I will use to refer to the country where the university is located) is a good example of a country that measures productivity in efficient and planned ways and makes steady progress toward development. The political culture is very managerial, with all social domains under close surveillance. Some might consider the country as featuring a one-party, even a single-family, rule despite the veneer of democracy. There are much-publicized cases of scholars who published critically on local social realities failing to get tenure or being charged for

defamation. The limits on free expression in Nation X came under spot-light recently when certain American universities (such as Yale) planned to establish satellite campuses of their "liberal arts" education locally. However, unlike many other non-Western countries, Nation X is not a poor country. It has the economic and technological resources for local scholars to be networked globally. Two local universities are ranked highly in the international higher education system. Their success is no doubt attributable to the pressure to excel in research and publish in presti-gious journals. An example of such measures of productivity and success in many departments in local universities is the tiered list of journals to publish in. Scholars are intensely aware of the need to publish in such recognized journals for tenure and promotion. The managerial system in Nation X is able to effectively enforce such productivity measures on scholars and universities.

This mentoring experience focuses on a specific area of scholarship that unifies the work of the participants—applied linguistics. This field addresses the interface of education and linguistics. Though not all of applied linguistics may have a pedagogical focus, the research of the department in which this mentoring exercise occurred has one. The department also works in collaboration with the Ministry of Educa-tion in Nation X. Faculty members have to visit secondary schools to observe classroom teaching and offer consultation to local teachers and administrators.

The mentoring and publishing exercises were constrained by the docu-ment of ranked journals circulated internally by the department, titled "International Refereed Journals Relevant to Language Studies." None of my informants had detailed information on how this List was constructed. One participant said that "a panel of colleagues review journals and rank them." I gathered that the faculty member overseeing research activities and a few senior scholars in the department had constructed it. The List contains 204 journals. They are arranged into three tiers. Though impact factor seems to influence the ranking of the journals, this is not always the case. In some cases, the "prestige" of the journal (measured by other considerations) supersedes impact factor. For example, *TESOL Quarterly* has an impact factor of 0.0969. It appears in tier 1, as it is the flagship journal of the global association for English language teaching (TESOL International). Certain other journals with a higher impact factor—i.e., *Scientific Studies of Reading*, with an impact factor of 1.864—are not in tier 1. Not only is the latter journal from a less known professional

organization, this is also because it is a niche journal, focusing on a narrow area of the field. (Other journals in this category include those focusing on corpus research or computer assisted learning.) Some journals (such as *System*) appear in tier 1, though they are ranked lower by other universities in both Nation X and outside. (Some mentoring group members explained that this ranking had ulterior motivations as certain senior members in the committee that constructed the List had published in *System* before. It is not known what other journal got into the List this way.) Furthermore, many journals published regionally (such as *Asian Englishes, Asian Journal of English Language Teaching*, and the *Asia Pacific Journal of Language in Education*) appear in tier 3. However, other journals "local" to the West (with titles such as the "*British Journal of*—" or "*American Journal of* –") are placed in tier 1. In some cases, the ranking has little to do with their impact factor of the journals. For example, the *Asia Pacific Journal of Education* with an impact factor of 0.492 is tier 2, but the *British Journal of Educational Studies* with 0.568 is tier 1. These hierarchies reflect other biases in academic communication. Studies emerging in local settings outside the West are often treated as parochial, while those from the West (including those focusing on local policy issues such as No Child Left Behind) are treated as universal. While the former studies have to be related to the international conversations to be considered for publishing, the latter seem to enjoy automatic status as matters of global relevance.

Writing Practice

I now narrate how the List shapes writing, textual and rhetorical decisions for members of the mentoring group. To begin with, the List dictated their choice of journals and, in effect, the types of studies to be conducted. Their orientation has been shaped by unsuccessful publishing attempts in the past, when they addressed concerns important for their local languages or communities in their submissions. A scholar who had focused on a local language for her dissertation research reflected in her journal how she had some bad experiences trying to publish a paper on the acquisition of pragmatic norms in that language. The topic was recommended by her dissertation supervisor who said it would be an interesting addition to the current body of L2 pragmatics research which focuses rather heavily on Western languages as a target language while overlooking non-Western languages. She got positive reviews on her draft

from peers and mentors, but unfortunately it was turned down by all the journals she submitted it to. Some rejected it without sending it for review because they felt that it did not fit with the journal's scope and aim. Others said they would not be interested in a topic that they felt didn't have much to do with the concerns of scholars in the rest of the world. She was now ready to abandon that manuscript. We must remember that many international journals define their "scope and aims" in terms of publishing studies that contribute to a "global" conversation relevant to scholars everywhere. Their notion of global is influenced by the biases noted above. In this sense, "scope and aims" are already unfair, though they may sound like objective criteria for rejection of an article.

Another member of our group confessed that she has started choosing what article to write and even what subject to research based on her choice of the ranked journal. She confessed that she had given up writing on issues that she was passionate about. This is because she found after working on some projects that they didn't fit the most current conversations or "scope and aims" of the ranked journals. She wryly reflected that she might reverse the process in the future and first do a "needs analysis" of what was needed by the journals before she started her research. This way, she would write on something that fit the "needs" of the ranked journals. Hers is an ironic use of the term "needs analysis." In language teaching circles, this refers to a survey on the needs of learners in order to design a relevant and meaningful curriculum. In this colleague's case, the term refers to taking stock of the topics a journal is interested in. The dominant conversations on its pages would suggest the "need" of the journal. The scholar thus identifies her research topic and designs her study based on this information. Her research, therefore, is not defined by the pressing concerns of her teaching or social context but the needs of the listed journal.

The fact that the topics and concerns of ranked journals do not relate to the concerns of local scholars can have serious repercussions on the research motivation and passion for writing. Another scholar (willing to be quoted, whom I will refer to as Sean) said, "I'll be honest and say that i hate reading most of the ed research stuff in the countless journals out there. Even the top journals regularly turn out pieces that bore me utterly. I don't want to be a boring writer, but i feel that i must to some degree participate in these tedious conversations by getting published in some top-tier journals. Otherwise, i won't get tenure and advance in this profession."[1] Another scholar reflected on the limited possibility of publishing

the research he really cared about, "I think it is quite de-motivating. We are working like factory workers trying to churn out papers. Nobody cares about whether you enjoy your research. The only thing which they care is output." Interestingly, such publishing requirements also had implications for other areas of professional life, such as teaching. Sean went on to mention, "Oh, did i mention also that i'm beginning to hate teaching because much of it doesn't seem to be contributing to my research output? No time to write, read, think, feel, etc."

On the other hand, those who did conduct a study in a local context mentioned the efforts they had to make to shape it for publication in ranked journals. They confessed that they made what appeared to be a fabricated and artificial connection with global concerns in order to make the article publishable. A lot of rhetorical strategies go into shaping the study for ranked journals. For certain scholars, the local had to be filtered out as the study is framed in relation to "international" conversations. It often also involves interpreting the findings in relation to non-local concerns. Furthermore, the implications of the findings may not be discussed in relation to local social needs or policy considerations. I discuss below, from the experiences of those in the mentoring group, some of the textual implications of this shaping process.

Much time in our mentoring exercise was spent on the opening framing of the research article (hereafter RA). As many scholars would affirm, the framing of the article plays a critical role in the publishability of the RA. In recognition of this fact, as ethnographers of writing find, writers expend most amount of time and effort in the opening of the article (Knorr-Cetina 1981). Swales (1990) has categorized the opening of the RA as constituting three "moves" in his influential CARS (i.e., Create a Research Space) model. The three moves are: Establishing a Territory, Establishing a Niche, and Occupying the Niche. Authors typically identify the disciplinary conversation to situate their article and establish the centrality of their study; then they identify a gap in the conversation to make a case for the relevance and significance of their study; finally, they announce their argument/thesis to show how they fill the gap they have identified.

As we found out in our mentoring meetings, decisions relating to these three moves are shaped by the List. Since authors are compelled to treat the tier 1 journals outside their region as the best venue for their work, they feel pressured to establish the territory of their studies (even

though locally conducted) in terms of translocal disciplinary conversations. Consider the example of two scholars who were working on a collaborative article on the acquisition of bilingual pragmatics in family settings. The authors were initially confused as to the territory/centrality of their paper. They were torn between framing the RA in terms of the needs of Nation X families or disciplinary debates in the field. They initially outlined three different disciplinary territories and a contextual/social centrality. In terms of the latter, they made a case for critical information parents needed in order to shape their feedback to their children to facilitate pragmatic acquisition. However, they were not certain that this kind of opening will be persuasive for a journal published in the West. The dominant conventions of RA favor the relevance of an article to be made in terms of new knowledge rather than social relevance, as it has been discussed elsewhere (see Canagarajah 2002). Centrality claimed on social needs and investment are often treated as irrelevant or biased. Furthermore, the social concerns of non-Western communities would be treated as even less relevant by international journals. The authors doubted that a leading journal in the West would be impressed with a study that helps local parents model their speech for their children's language acquisition. The authors eventually situated their study on an esoteric disciplinary debate in pragmatics. They opened their article with a review of research on "corrective feedback," deciding to drop the social relevance from their subsequent drafts.

In terms of making disciplinary niches in the opening, one has to be careful in identifying a niche that relates to the conversations in the West. It is an unstated realization locally that the conversations that matter are those in the elite research centers and professional communities in the West. This bias can exclude certain disciplinary niches that speak to the concerns of local communities. In another collaborative article by two scholars on local secondary school teachers' stated knowledge and beliefs about instructional pragmatics, the authors initially identified a niche in relation to the place of pragmatics in bilingual communication. It is possible to make a niche by arguing for a type of pragmatics that went beyond the L1/L2 (i.e., first language/second language) binaries dominating the field. One could argue that a bilingual pragmatic competence (that developed not in relation to one language or the other, but something in between) has not been considered in language acquisition studies. In fact, some teachers interviewed by the authors did state that they have to teach pragmatics differently because their students use

English in everyday life with a mix of local languages. There is thus a good opportunity for the authors to complicate the discourse on pragmatics in mainstream disciplinary circles by drawing from local communicative realities. However, the authors chose to frame their study in terms of the constructs already available in the field. They established the niche in terms of teacher knowledge in L2 pragmatics instruction. They considered the alternate framing too risky. It takes more time and space to make a case for an alternate paradigm, taking valuable space away from the discussion of their data. Besides, there is the danger that such a niche may not connect to the existing discourses. In fact, their submission might get rejected outright for not falling under the guidelines of the journals, which currently identify themselves as either L2 or L1 based.

A related issue was what citations one chooses to employ in establishing one's disciplinary territory and niche. Mentoring group participants felt persuaded that they should cite publications by scholars in the West rather than studies in locally published books and journals. They mentioned that they often felt a subtle pressure by reviewers and editors of international journals during review process to cite articles previously published in their own pages. In one sense, such citation practices explain the high impact factor that accounts for the tier 1 status of these journals. But this practice affects knowledge construction as well. The choice of citations subtly frames the conversation the study enters into. The centrality of the topic discussed and the niche created relate to the publications cited in the framing of the article. Consider the citations in the previously mentioned article on the teaching of pragmatics in local schools. The authors mostly cite articles from outside Nation X to frame and interpret their study. Although it is possible that some of the studies they cite are from other multilingual communities (similar to Nation X), those authors too do not foreground the cultures and communities where these studies come from. The titles of these papers foreground the disciplinary niches and not the places where they have been studied. (Given the reproductive effects of publishing conventions, those authors also probably felt pressured to filter the local out of their articles for tier 1 journals.) The authors of the collaborative article cited only one article from Nation X which discusses syllabus design in ELT in local classes, not specifically the role of pragmatics. Eventually, it appeared as if the authors were simply using local data to conduct a disciplinary conversation that is denuded of social context. The citations built a discoursal world that compels us to read the local data in terms of an "unplaced" disciplinary discourse.

It is not that there are no local conversations on issues central to the discipline. However, there is such a vast difference between the local and global conversations that scholars may find it difficult to make the connections in their publications. In one case, a local scholar (whom I will call Celia) consulted me on an abstract for a scholarly conference in the United States. It was on critical pedagogy and written, in part, as thus:

Language, Literacy, Criticality: Pedagogical Issues and Possibilities in Critical Applied Linguistics

Applied linguistic scholarship that takes a critical and questioning stance towards issues of power, difference and resistance in relation to language and its contexts of use has gained prominence within the field…. Accompanying theoretical applied linguistic work, there have also been attempts to discuss and document how criticality, in Pennycook's sense of the word, can be fostered through pedagogical interventions, particularly in language teaching/learning (e.g., Norton & Toohey, 2004). However, applied linguistic work that focuses on critical pedagogical approaches to language and literacy has been scarce, especially when compared to the body of critical conceptual work seen in the last few years. This colloquium aims to draw attention to the need for continuous discussion within applied linguistics about the possibility of pedagogical responses to issues raised by theoretical critiques of global political-economic arrangements and their impact on language. The papers in the colloquium represent a range of contexts and perspectives. Some raise broad questions of critical pedagogy, situating it within current debates in applied linguistics, while others focus on specific settings, particular issues and contextual responses to them. They are united in their commitment to reflexive pedagogical practice and in their conviction of the necessity to foster criticality and awareness among language users.

The abstract assumed that critical pedagogy was new in applied linguistics and pedagogical application "has been scarce." It is framed in terms of tensions between theory and practice in critical discourse. Reading the abstract from an American lens, I found these assumptions problematic. Having been part of the critical pedagogy movement in language teaching circles, I did not think of pedagogical approaches and applications as scarce. I had myself published such studies. Furthermore, I conveyed to the author that I did not write or speak on anything titled "critical pedagogy" lately as there was a sense in the field that critical pedagogy has

been accepted as an important movement and become "old news." In fact, in some circles it has become the orthodoxy. The interest has now shifted to particular challenges in critical pedagogy, such as addressing identities of gender or nonnativity, or accommodating practices such as multilingualism or multimodality.

During the consultation, however, I realized that there were good reasons why critical pedagogy still posed considerable problems locally and generated a different local conversation. Celia explained that in non-Western communities such as hers, where criticality is not valued and often suppressed, critical pedagogy posed considerable challenges for classroom implementation. This may not be the case in the West, where a liberal and individualistic temperament is treated as the norm, at least in higher education circles. Therefore, critical pedagogy has to be realized in a different way, or might take different forms, in local communities. Unfortunately, these legitimate local conversations might go unpublished in the West, being treated as out of date, unoriginal, or irrelevant in relation to their concerns.

The local can get suppressed in other sections beyond the framing. Though their data is steeped in local contingencies and details, authors feel pressured to filter out the contextual information when they interpret their findings. However, if all knowledge is local, the situated meanings and contingencies can add a lot to the findings. Authors may miss the opportunity to bring out significant insights to reconstruct disciplinary constructs. In the article cited earlier on the acquisition of bilingual pragmatics in family settings, the authors chose to frame the paper eventually in the disciplinary discourse on corrective feedback in L2. The specificity of the data obtained in Singapore recedes to the background. Interestingly, there is a brief mention later in an inconspicuous section that the Singaporean data might not easily fit into the current dichotomy of L1 and L2 pragmatic studies. The bilingual subjects state that as they adopt conventions that are a hybrid of both languages. Despite acknowledging this anomaly, the authors move on to discuss their data in terms of L2 pragmatics. In personal conversation, they mentioned that it might be a difficult and risky argument to engage with the context-specificity of the data and complicate disciplinary knowledge. Though engaging with the social context and local knowledge can make a profound difference in central disciplinary constructs, the authors chose to interpret the data in relation to dominant disciplinary discourses in the West. In effect,

they were imposing a disciplinary grid that failed to fully address the complexity of their data.

The implications of studies in the conclusion of the articles can also detract from issues of local relevance. Many authors tended to adopt a largely descriptive focus and conducted "normal science" in a positivistic mode. They stopped with the immediate implications for the disciplinary constructs and rarely proceeded to explore the social and pedagogical ramifications of their findings. In some cases, the social ramifications can actually help reframe the article in a manner that makes a different contribution to the scholarly conversation. For example, some scholars are studying local varieties of English. In a draft titled "Negotiating Grammaticality in [Nation X] English," where the author (whom I will call Sue) complicates the notion that local English is a monolithic variety and brings out its grammatical diversity, she frames the paper around a methodological debate. While the internal variation in Singaporean English has been observed in qualitative studies, Sue argues that she will show it (perhaps with finer detail to bring out greater internal variation) from a corpus-based quantitative approach. This framing of the paper around a methodological niche helps in many ways. In one sense, Sue is able to move the discussion beyond local concerns and connect the paper to broader disciplinary debates. Those scholars who are not particularly interested in Nation X English may value the study for its methodological contribution. However, from another perspective, this methodological (and descriptive) focus distracts the author from critiquing some of the limiting assumptions in World Englishes studies (see Kachru 1986). The dominant orientation that there are Englishes organized around nation-state boundaries can be easily critiqued by her study. In a multilingual country such as hers, where diverse languages are in contact with English and subcultural groups use different varieties, the notion of a homogeneous variety of "national" English would be untenable. There are many policy and pedagogical implications deriving from the nation-state orientation to World Englishes that will also come into question.

Outside the Text

In addition to shaping the textual representation of knowledge, the List also had implications for the way in which local scholars positioned themselves in relation to their social contexts as they engaged in knowledge construction. To begin with, the filtering of the local to produce

"unplaced"/generic disciplinary knowledge enabled scholars to avoid commenting on local policies. In the case cited above, the methodological focus would help the author steer clear of the official government policy of speaking "Good English." (I omit the well-known policy slogan, as it will give away the country.) The government is promoting "native speaker" norms (such as British or American English) and trying to eradicate local varieties of English on the understanding that they will improve communicative efficiency for international relations and economic development. Though there are some very talented scholars working on local English varieties, and they understand their sociolinguistic appropriateness in postcolonial settings, they adopt a descriptive focus and avoid commenting on policy issues. There are other controversial local policy issues, such as the promotion of a regional lingua franca over the heritage dialects, that scholars consider forbidden territory. Sue reflected in her journal about

> an experience recounted to me by one of our colleagues who wrote a controversial paper on Mother Tongue instruction in [Nation X]. She never submitted the paper for publication as she felt that it could be used against her, that it could result in some sort of censure.

> Less tragic, but equally disturbing are some of the laundered accounts and interpretations of the social impact of [Nation X] language policies–those that promote [the regional lingua francae] at the expense of the mother tongues of the community here, those that promote "Good English" (Does anybody have a problem with the term "good English"? Can English be good?) and discourage [local Englishes], etc.

Another scholar narrated an example of her research on teacher knowledge. Her findings generated a complicated picture of the beliefs and assumptions of local teachers. An official from the Ministry of Education had expressed discomfort with publishing the study in that form. She felt that the study will present an unflattering picture of local teachers. Later, the local official had suggested that the author provide some suggestions that will make the article more "constructive" and "positive" rather than merely critical. Examples like this explain the reluctance of local scholars to comment on their implications for local policies of language teaching and education deriving from their research.

In an interesting paradox, this silence on local policy implications in deference to the dominant political discourse is aided by the international publishing discourse which finds the local peripheral or irrelevant. Local scholars can (with good conscience) avoid making critical applications or promoting alternate policies as they focus on the more abstract disciplinary conversations required by the top-tier journals. In this sense, publishing practices and ranking may unwittingly collude with authoritarian political regimes in moving conversations away from situated and critical local discourses.

The formation of local scholarly networks that could ferment critical discourses was also affected by the List. Local scholars did not exhibit too much motivation to network with fellow scholars on topics of mutual interest, as they were focused on establishing connections with scholars in the West to gain access to publications in ranked journals. I jotted down the following in my journal:

> [Rodney] tells me that he is more interested in networking with colleagues and peers in the US or UK. It was important for him to network with scholars in the West who were tuned into disciplinary conversations in the mainstream. He considered them the primary audience of his studies and writing on [xxx]. Therefore, he derived more benefits in being networked with them. Though there are many local scholars with areas of similar interest—i.e., in topics such as World Englishes—they do not display too much interest in organizing themselves or developing multiplex channels of communication. (I do find some personalized collaboration between supervisors and mentees, or colleagues working on a limited publishing project, such as an article.) In general, local scholars seem to be very "outside" oriented. They are flying out for conferences and workshops in UK or Australia, but don't have enough time to meet each other in their offices. Office doors are mostly closed, with scholars working by themselves. Faculty members stop by for a quick word in the corridors, rather than engaging in sustained collaboration on specific projects.

In a sense, there was also very little time available for local scholars to network with others in their local institutions. The fact is that local institutions prioritize teaching and teaching-related service (such as classroom observations). In addition, scholars had to teach six courses in an academic year. They have to seek time for research and publication from the precious little time left after those responsibilities. Here is another entry from my journal:

Local scholars appear to be under considerable stress and seem exhausted with teaching and service that they do not have too much time for socializing among themselves or with me. Their weariness is often written on their faces and bodies. They walk around the corridors as if they are exhausted and lifeless. Though [Ruth] and [John] emailed me before my visit and said that they will like to meet with me and discuss some of my publications, they haven't found the time to do so. And now my visit is coming to an end! They give me "apologies" about being busy when I see them in the corridors. Junior scholars joke about the unfairness in comparing their performance with scholars in elite research institutions for tenure and promotion. Some scholars mentioned their in-group slogan "A teaching university that pretends to be a research university" for their institution. These constraints also seem to make the scholars very individualistic, as they are focused on using the precious little time on working hard to reach journals and audiences outside their institutions for their academic status, rather than socializing among themselves.

The reproduction of the List, therefore, works in complex ways. To begin with, the preference of the department for international journals with a high impact factor shapes the microlevel rhetorical and textual decisions made by local authors in their articles. Though there are rigorous studies conducted in local contexts with rich local data, they are framed and interpreted in relation to translocal disciplinary debates in order to be publishable in such journals. Local scholars are distracted from making critical contributions for local social, educational, and linguistic life, as they frame their knowledge in terms of disciplinary discourses. As the data and findings get interpreted in relation to the conversations in Western academic circles, mainstream scholarly discourses get further developed. Local conversations are peripheralized and local knowledge remains undeveloped. More ironically, the translocal discourses begin to hegemonize other conversations. The knowledge constructed in the West begins to shape how experiences are perceived locally—not only by the Western scholars, but by local scholars themselves. Local realities are interpreted in relation to discourses from the center. As presumably all local communities shape their knowledge in relation to these centralized and limited discourses, knowledge is developed in terms of the journals and institutions in the West. Such production of knowledge affects the formation of scholarly networks and academic communication. Local communities focus on being networked with scholars in the West and ignore channels

in their own setting. This tendency limits the possibilities for the construction of local knowledge that can creatively challenge central disciplinary constructs. Unfortunately, this arrangement is convenient for local power structures also. As local scholars conduct "normal science" or engage in disciplinary conversations in the West, there is no danger of local policies being challenged. All this leads to strengthening the status quo. It results in a self-confirming view of the world and reality that sustains the status of the privileged. Needless to say, as knowledge is constructed in terms of mainstream disciplinary conversations, the impact factor of ranked journals also goes up, further confirming the inequalities in the List.

Ways Forward

As a mentoring group, we did reflect on ways to mitigate the local/global hierarchy, and the impoverishment of local resources, knowledge, and networks in knowledge construction. Despite the overdetermined nature of Managerialism's reproductionist processes, we considered how there might be spaces in the microlevel domains of text and rhetoric for critique and reconfiguration. One of Sean's journal entries provided us some clues. He wrote:

> Critical scholarship ought to challenge the neoliberal political economy of academic publishing in both strategic and tactical ways (in a de Certeau-ian sense). What's important for me now is to focus on my intrinsic motivators, focus less on some of the debilitating circumstances here at xxx (esp the lack of any real intellectual community around my areas of research interest), and be "tactical" in doing what the institution wants while satisfying my own agenda for now. I have even contemplated quitting academia once my bond is up. But that's another story….

The idea that we might be able to bring our knowledge into the dominant structures of knowledge production as a form of tactic was interesting to explore. This is a wise approach, as we cannot reject outright the admittedly unfair publishing arrangement in academia. Rejection of such institutional practices is no less than professional suicide. The approach suggested by Sean hints at a possibility of resistance from within. While engaging with top-tier publications to satisfy institutional requirements, we must also explore how to represent our own interests. It is possible

to both engage with the dominant discourses and also find spaces for our agendas to complicate publishing practices? I offer a few examples on how we attempted to move forward in this direction.

Consider how Celia revised the conference abstract cited earlier for submission. Here is her revised version after consultation with me:

Critical Pedagogical Practice: Research from International Settings

It is fair to say that criticality has become mainstreamed in applied linguistic research and scholarship. While prefixing one's work as critical was quite common even ten years ago, it is increasingly difficult to locate published studies that bear that mark explicitly. A critical and questioning stance towards issues of power, difference and resistance provides the basis for current conceptual debates that center around issues of migration, globalization, neoliberalism and their complex linkages to and impacts on language learning, literacy, identity, and access (e.g., Block, Gray & Holborrow, 2012; Blommaert, 2010; Canagarajah, 2013). Being critical is the norm, at least in the liberal sociopolitical contexts of North-American scholarship. As a result, continued problematization of what it means to be critical seems to have become irrelevant.

The debate about the importance and possibility of critical scholarship and practice is far from over in other contexts where political, cultural and educational discourses, traditions and realities clash with emancipatory goals of critical approaches. Researchers and educators in these contexts find themselves confronted with several questions: What exactly does it mean to be critical in diverse cultures? How do teachers initiate critical practice among students who have been socialized not to critique? What are possible forms of agency that can be fostered in settings where tradition is valued?

This colloquium brings together applied linguists working in contexts where a critical stance as a social asset and an educational goal is not the norm. Based on case studies of engaging with criticality in teaching practice, participants will discuss broader conceptual issues related to critical scholarship and pedagogy in these settings. It is hoped that the colloquium will raise awareness within applied linguistics of the need for multi-centered discussions of criticality and, thus, the diversification of discussion within the field.

The writer is tactical in showing how local pedagogical realities can creatively complicate the Western discourses on critical pedagogy. To do this, she first engages with the dominant discourses. She signals an awareness of the status of critical pedagogy in the West (i.e., that it has become orthodoxy, and treated as old news, with rarefied new subjects under discussion) before she makes a case for scholars engaging with non-Western pedagogical contexts. Rather than presenting this project as simply a case of local application, the author shows the theoretical significance and motivations behind this application. From this perspective, local realities can serve as an asset in entering strategically into mainstream disciplinary conversations. This might be an example of the resistant potential in Bhabha's discoursal process of hybridization in publishing. In fact, in some projects, we recognized that local conversations and social realities can provide a persuasive edge to submissions. We can try to persuade international journals that an exploration of local realities can fruitfully reconfigure knowledge paradigms and constructs in the discipline. Especially on topics related to World Englishes, Heritage Language maintenance, and Multilingualism, local communities enjoy experiences and knowledge that can make a critical contribution. Of course, this approach is rhetorically risky, and uptake is not always guaranteed. It is understandable therefore that many local scholars, especially those that are junior and facing the ominous tenure clock, would rather resort to building on established discourses rather than complicating them.

As we continued our critical reflection and struggled with ways of framing our local research in a manner that is both intellectually honest and ideologically empowering, we also reconsidered the nature of the mentoring exercise. The notion of "literacy broker" has been applied in instrumentalist, pragmatic, and linear ways hitherto. The dominant understanding is that literacy brokers help off-networked authors approximate their article to the dominant norms and conventions of their publishing venue (see, for example, Lillis and Curry 2010). However, we realized in our group that one has to engage more critically in this venture. To this end, I revised the appropriate mission as one of "resistant brokering." I explored how to tap into my academic insider/outsider identities to help demystify the dominant conventions. As a former editor of a top-tier journal in applied linguistics (*TESOL Quarterly*), I understood the dominant publishing practices from the inside. But as I come from another multilingual non-Western community, Sri Lanka, I also appreciated the critical possibilities in local knowledge. As I introduced

the dominant conventions of RA, such as the CARS model, the mentoring group discussed the ideological implications of these conventions and ways to subvert them for its own purposes. The group read a critical article on publishing (Editors 2012, cited in the beginning of this article) and discussed the implications for publishing in Nation X. I looked for journals which were open to disciplinary critique and creative new genre conventions while being respectable in the field. To the scholar who expressed an interest in doing a "needs analysis" to figure out what top-tier journals wanted, I wrote the following email: "Rather than doing fresh research to suit the needs of the journal, we can also explore which journal suits our existing research."

As we worked on our drafts, we considered how we can make spaces for local knowledge and deconstruct dominant disciplinary constructs. Sue mentioned that she sometimes widened her publishing repertoire, opting to submit something to a professional newsletter or less prestigious regional journal in order to address a wider readership. She sometimes sacrificed tiered journals for a sole-authored book or a less prestigious local journal as it guaranteed a more relevant readership for her work. Sean, in his journal, also shared with us how he once sacrificed prestige for readership:

> i recently found time to write a manuscript criticizing the whole premise of scientifically based research on teaching - a mammoth task (for a beginning scholar like me) that required following a long scholarly conversation among some of the bigwigs in the field. It was a toss up between the *Journal of Curriculum Studies* and *Curriculum Inquiry*. The former has a higher impact factor and arguably more widely circulated, but the latter has a more critical pedigree with work by critical scholars that i've long admired. Eventually, I decided to send the MS to *Curriculum Inquiry*, because i felt that my piece would (a) be better appreciated by the scholars on the editorial board, (b) fit better with the more theoretical-critical "ethos" of the journal, (c) put me in the company of scholars i admired should it get published. To me, these factors were more worth the marginal cost of a higher impact rating with *JCS*. Eventually, *CI* published the piece (after subjecting my MS to six reviewers, a process that increased my respect for the journal), so i think this is a happy story for now.

Others shared how they sometimes sought diverse ways to disseminate a previously published work in a high-tier journal to local colleagues through other means. Sean shared an example of this in his journal:

> Not many people read what you write anyway, especially if you haven't established a name for yourself. And even if they did, it's not as if this kind of "critical scholarship" is going to materially change or "heal the world and make it a better place for the entire human race" (to quote the late Michael Jackson). As if to compensate for this sense of futility, I've surreptitiously put up my pieces on academic.org and provide weblinks to my Dropbox copies of my articles in an effort to "promote" my work. Yet I do so with "fear and trembling" - with a paradoxical sense of pride and self-deprecation. Am I really hungry for attention and affirmation when ultimately the people who seem to care about what i publish are precisely those who don't really care about the quality of my publications?

What these examples suggested was that there was already an underlife of resistant culture among these scholars. They were adopting diverse tactics to counter the limiting effects of Managerialism and promote local knowledge. It is interesting to explore if these somewhat intuitive and individual tactics can be marshaled, explicated, and theorized to develop a culture of resistant knowledge on academic publishing.

As we continued our mentoring exercise, we appreciated the importance of progressively reconfiguring academic publishing to facilitate a more democratic conversation between communities. The idea presented by Celia in the abstract cited above, that we should move toward "multi-centered discussions" in our disciplinary fields, provided a model worth working toward. Without adequate representation of local knowledge, the constructs and discourses in our fields will be distorted and illusory. It is ironic that on many issues intensely experienced and lived out in Nation X, disciplinary theorization is done by Eurocentric journals, scholars, and communities. Local scholars too have to work within these paradigms to improve their publishing prospects. However, without critically engaging with the knowledge of local scholars and communities, the disciplinary paradigms will be weak and thin. Consider topics in applied linguistics, such as World Englishes, Multicultural Education, Heritage Language instruction, and Skilled Migration. Nation X experiences these realities qualitatively and quantitatively in different ways from other communities. It can evolve as a "center" for knowledge relating to these experiences. Rather than elite research centers in the West being treated as authorities in all areas of knowledge in all fields, we should consider how certain institutions and regions in other locations can emerge as the hub for knowledge on specific topics, with their own platforms for scholarly communication and knowledge exchange.

For areas like World Englishes or Heritage Language teaching, local universities have enough expertise and a critical mass of professionals to be centers of excellence. If local scholars can network among themselves, collaborate with each other in a more programmatic way, and sustain these areas of research, they can develop a stature that is unique in the field for these areas of inquiry. They can make a radical contribution to knowledge construction by articulating and theorizing local experiences in relation to the central constructs in the discipline. They will also be able to develop journals devoted to sponsoring knowledge unique to these topics. Already, regional journals have the material and resources to develop as suitable platforms for such critical work in these areas. In order to develop this stature, these journals should articulate a conscious mission to promote scholarship and studies on local realities. Currently, these journals publish center-based prestigious scholars to boost their status. For these scholars, regional journals become a fall back option when their articles are rejected by ranked journals. If regional journals perform the mission of promoting local knowledge, it is possible that their impact factor will also rise. Scholars from elsewhere will have to cite their articles for these topics. If such lines of development take shape—admittedly a long term proposition—perhaps the List will also be revised and reconfigured to reflect the more diversified knowledge and knowledge sources.

However, there are limits to what can be published even in regional or less prestigious progressive journals if local scholars feel intimidated about publishing studies critical of local educational and language policies. Perhaps the more subtle rhetorical tactics of hybridization might be of help to local authors, as they can consider how critical interpretations and knowledge can still be coded within the established conventions and discourses—as in the case of Celia's abstract. This is a creative enterprise. Since the possibilities for resistance are limited, local scholars have to consider how they can gradually and subtly reconfigure knowledge from the inside, working within the established conventions and discourses.

Note

1. All texts from data are quoted with minimal editing to reflect the styles of the informants.

References

Belcher, D. (2007). Seeking acceptance in an English-only research world. *Journal of Second Language Writing, 16*(1), 1–22.

Bernstein, B. (1981). Codes, modalities, and the process of cultural reproduction: A model. *Language in Society, 10,* 327–363.

Bhabha, H. (1996). Culture's in-between. In S. Hall & P. du Gay (Eds.), *Questions of cultural identity* (pp. 53–60). London: Sage.

Bhabha, H. (1999). Interview. Staging the politics of difference: Homi Bhaba's critical literacy. In G. A. Olson & L. Worsham (Eds.), *Race, rhetoric, and the postcolonial* (pp. 3–42). Albany: SUNY Press.

Bourdieu, P., & Passeron, J.-P. (1977). *Reproduction in education, society and culture* (p. 1977). London: Sage.

Bowles, S., & Gintis, H. (1977). *Schooling in capitalist America*. New York: Basic Books.

Braine, G. (2005). The challenge of academic publishing: A Hong Kong perspective. *TESOL Quarterly, 39*(4), 707–715.

Byrnes, H. (2010). The changing scene for applied linguistics journals: Views from editors. *The Modern Language Journal, 94*(4), 636–664.

Canagarajah, A. S. (1999). *Resisting linguistic imperialism in English teaching*. Oxford: Oxford University Press.

Canagarajah, A. S. (2002). *A geopolitics of academic writing*. Pittsburgh: University of Pittsburgh Press.

Canagarajah, A. S. (2003). A somewhat legitimate and very peripheral participation. In C. P. Casanave & S. Vandrick (Eds.), *Writing for scholarly publication* (pp. 197–210). Mahwah: Erlbaum.

Curry, M. J., & Lillis, T. (2004). Multilingual scholars and the imperative to publish in English: Negotiating interests, demands, and rewards. *TESOL Quarterly, 38*(4), 663–688.

de Certeau, M. (1984). *The practice of everyday life* (S. Rendall, Trans.). Berkeley: University of California Press.

Deem, R., Hillyard, S., & Reed, M. (2007). *Knowledge, higher education, and the new managerialism: The changing management of UK universities*. New York: Oxford University Press.

Editors. (2012). Editorial: Rank scholarship. *Comparative Education Review, 56*(1), 1–17.

Flowerdew, J. (1999). Writing for scholarly publication in English: The case of Hong Kong. *Journal of Second Language Writing, 8*(2), 123–145.

Flowerdew, J. (2000). Discourse community, legitimate peripheral participation, and the nonnative-English-speaking scholars. *TESOL Quarterly, 34,* 127–150.

Giroux, H. A. (1983). *Theory and resistance in education: A pedagogy for the opposition*. South Hadley: Bergin.

Harvey, D. (2007). *A brief history of neoliberalism*. Oxford: Oxford University Press.

Kachru, B. B. (1986). *The alchemy of English: The spread, functions and models of non-native Englishes*. Oxford: Pergamon.

Knorr-Cetina, K. D. (1981). *The manufacture of knowledge: An essay on the constructivist and contextual nature of science*. Oxford: Pergamon.

Lillis, T., & Curry, M. J. (2010). *Academic writing in a global context*. Abingdon: Routledge.

Swales, J. M. (1990). *Genre analysis: English in academic and research settings*. Cambridge: Cambridge University Press.

The Ranking Regime and the Production of Knowledge: Implications for Academia

Leslie D. Gonzales and Anne-Marie Núñez

Introduction

In this integrative review of literature, we address a powerful movement among interrelated, evaluative organizations that we refer to as the "ranking regime." We argue that the ostensive purpose of this regime is to identify "world class" universities, and thus to organize postsecondary education into a competitive transnational market, where, just like in any market, some win and some lose (Cantwell and Taylor 2013). Included in our definition of ranking regime are government-driven performance and accountability systems, commercial ranking outfits, and similar auditing technologies that scholars have some hand in producing (e.g., journal impact rates).

L. D. Gonzales (✉)
Michigan State University, East Lansing, MI, United States
e-mail: gonza645@msu.edu

A.-M. Núñez
Ohio State University, Columbus, OH, USA
e-mail: nunez.80@osu.edu

To date, a growing body of literature has examined the impact of accountability technologies and rankings on the field of higher education at a macro level (Amsler and Bolsmann 2012; Cantwell and Taylor 2013; Kaba 2012; Leslie et al. 2012; Lo 2011; Marginson 2007, Pusser and Marginson 2013; Shin et al. 2011). There is a specific and substantial body of work detailing administrative responses to the ranking regime (Bowman and Bastedo 2009; Brint et al. 2006; Morphew and Baker 2004; Sauder and Epseland 2009; Taylor and Morphew 2010). However, there are few studies showing how the evaluation of faculty and faculty members' production of knowledge might be shaped by this overarching ranking regime.

To this end, this review of literature was motivated by our desire to understand the influence that the ranking regime has on the production of knowledge within academia, which we define as the formation of research projects, the methodologies employed in the research process, and the audiences toward which one's research is directed. The specific question that guided our review and analysis was: What are the implications of the ranking regime for the production of knowledge within academia and for faculty work evaluation? In consideration of this question, we have analytically integrated and synthesized studies that addressed the impact of commercial ranking bodies, quality assessment, or performance measurement on colleges and universities in relation to faculty roles, work practices, and experiences. At the outset, it is important to note that our search was limited to English-language journals, which we could access via Google Scholar and through our institutional library licenses.

To set up the paper, we first provide a basis and rationale for our definition of the "ranking regime," which is somewhat similar to what others have described as an "audit culture" (Power 2004) or "higher education's accountability movement" (Toutkoushian and Webber 2011). Then, we consider two theoretical lenses that are frequently mobilized, although rarely simultaneously, to explain the emergence, power, and consequences of rankings in higher education. First, we consider the utility of Neo-Institutionalism (NI), which presumes a cultural, rather than a rational or economic, explanation for postsecondary organization and actor behavior. Then, we consider neoliberalism, which stresses the link between culture, political economy, and resource allocation for public institutions, like higher education. After outlining the insights from these two theories and describing our literature search approach and method, we present an analytical review of the literature that addresses, either directly or indirectly, how the ranking regime touches upon the work of faculty.

What Is the Ranking Regime?

Our conceptualization of the "ranking regime" suggests an interrelatedness of various kinds of organizations (e.g., government accountability, accreditation, commercial rankings), which work together to define what excellent higher education, valuable knowledge, or at the grandest level, "world-class universities" are made of. Thus, although most ranking-related scholarship in higher education is focused on commercial ranking outfits like *US News and World Report*, *MacLean's Rankings*, *Academic Rankings of World Universities*, or *Times Higher Education*, we suggest that government-driven accountability, evaluative, and quality assurance agencies perform a very similar function. In this way, commercial rankings, governmental accountability bodies, and similar evaluative entities all claim to measure "excellence," "value," and/or "quality" in order to develop hierarchical, snapshot understandings of college and university performance (Colyvas 2012; Morley and Aynsley 2007; Ramírez 2013). Accordingly, we use the term "ranking regime" rather than "accountability culture" (Toutkoushian and Webber 2011) or "audit regime" (Power 2004) because rankings are intended to communicate a hierarchical organization of the field of higher education.

The Governmental Accountability Dimension of the Ranking Regime

As noted above, some of the organizations and agencies that comprise the ranking regime are arms of local, state, and national governments. In fact, higher education scholars have documented that government accountability efforts for higher education have grown and thrived, particularly in the last few decades (Enders 2004; Shin and Harman 2009). Apple (2013) described heightened government accountability efforts in the United States and United Kingdom as follows:

> … across borders, the daily life of faculty members and the content of the curriculum are being steadily transformed by 'audit cultures'. The demand to constantly 'produce evidence' that one is acting correctly – in essence to act in an entrepreneurial manner – has spread ….in the USA, there is now growing pressure on university faculty to enumerate the ways in which their work has 'value added' effects, *with legislation mandating this form of evaluation now being considered in a number of state legislatures.* (p. 387, emphasis added)

Consistent with Apple's observation, Filippakou (2011) also wrote about the introduction of quality performance measures by the UK government, which assume that "quality" can be captured with a singular definition or measure. Governmental accountability measures are not unique to the United Kingdom or United States. Asian countries began to adopt accountability measures in the mid-1990s when the demand for higher education from a more diverse student body led to increased higher education costs, at a time when public spending for social goods was declining overall (Shin and Harman 2009). Maldonado-Maldonado (2009), Pusser et al. (2012), and Torres and Schugurensky (2002) have also documented the many forms of government-driven accountability across Latin American colleges and universities. Maldonado-Maldonado (2009) described the evaluative turn in Latin American countries and showed how the state-sponsored evaluative bodies often used quantitative measures that were contradictory. Moreover, in countries that might be termed "developing," governmental policy and practices are deeply influenced by entities like "like the World Bank, the Business Forum, and the International Monetary Fund" (see Kaba 2012; Spring 2008).

In sum, across the globe, what we call "the governmental dimension of the ranking regime" has been emerging for the last three or four decades, and the literature reviewed in this section offers three main insights. First, government accountability is often presented as an attempt to reign in public spending. Second, government accountability relies on quantitative, overly simplistic measures of quality. Third, and finally, international entities, like World Bank, are involved in accountability measures and policies, especially in non-Western countries.

The Commercial and Market Dimension of the Ranking Regime

In addition to efforts sponsored by governments, the ranking regime is also constituted by commercial outfits whose sole purpose is to "rank" postsecondary institutions. Amsler and Bolsmann (2012, p. 285) noted that as far back as 1879, institutional researchers and scholars of education produced comparative data to "rank" students according to professional exam scores and alumni accomplishments. Such early ranking efforts were not intended for government or consumer purposes, but to inform program development. However, between 1980 and 2000, commercial ranking bodies entered the US and UK markets (Amsler and Bolsmann 2012).

Early commercial rankings tended to have a domestic focus, but global university rankings began to emerge in the last decade or so. In fact, as of 2013, the European University Association estimated that there were at least 32 ranking bodies that provide international or global comparisons of higher education. Two of the most well-known global ranking systems are *Times Higher Educati* (*THE*) and *Academic Ranking of World Universities* (*ARWU*), which were launched in 2004 and 2003, respectively. Like domestic ranking bodies, global university rankings purport to provide consumers with information about various higher education providers.

Ramírez (2013) noted that global rankings have a far reach. On this point, Ramírez noted that even in emerging higher education systems, rankings are used to "symbolically communicate high aspirations…[and that] depending on the reference group of countries, the rankings can be used to promote an image of the university as a high-quality establishment or as one striving to attain high international standards" (p. 132). As further evidence of the influence that global rankings wield, Morley and Aynsley (2007) demonstrated that political and economic elites pay attention to the rankings in the development of national educational policy. Specifically, Morley and Aynsley pointed out that such rankings influence investments in particular programming, especially around the issues related to labor force and job readiness. Echoing the interconnectivity between rankings and government, Cantwell and Taylor (2013) wrote that global rankings were developed among "higher education, states, and markets" (p. 196) in order to identify "world-class" universities or "global research universities" (p. 196) and to form a competitive higher education field that operates much like the wider capitalist market, where alliances (or mergers) among super powers promise further power, and the reproduction of inequitable relations (both economic and cultural). This competition hinges on research, knowledge production, and knowledge dissemination, which are measured with impact rates or prestigious appointments that faculty hold due to their discoveries/work. This research focus reflects the privilege that the field of higher education itself has historically allotted to research activity (Clark 1986; O'Meara 2011), and for this reason, the global rankings, like *THE* or *ARWU*, might appeal more to academic audiences than other commercial outfits, like *USNWR*, because some of the criteria used in global rankings stem directly from academia (evaluation of citations, consideration of impact rates, disciplinary renown).

At this point, we have shown how various kinds of organizations work in similar ways to evaluate and hierarchically organize college and university performance, both domestically and internationally. We also showed how no matter the organization, performance, or ranking practices force a narrow measurement higher education. Below, two theoretical perspectives are presented to consider why the ranking regime has risen to such influence.

Theoretical Lenses

Neo-Institutionalism

Neo-institutionalism was developed in the 1970s to explain organizational behavior and patterns that did not reflect the rational behaviors emphasized in classic organizational theories (DiMaggio and Powell 1991; Meyer and Rowan 1977). One of the key principles of NI theory is that organizations are situated in particular fields, either cultural or technical (Scott 1991). Neo-institutional theorists consider higher education (and education, more generally) a cultural field, because it does not produce goods that are easily or objectively measureable. Unlike an organization that might produce pencils or cars, postsecondary organizations produce knowledge through highly social, interactional, and tacit processes of teaching and learning. Following this line of thinking, neo-institutional scholars stress cultural fields are measured by and interested in the attraction of cultural resources, like legitimacy and prestige, rather than objective or economic resources. On this point, Toma (2012) argued, "prestige is to higher education what profit is to corporations" (p. 118).

If cultural resources like prestige and legitimacy are of primary concern to higher education, two critical matters of concern are: how are cultural resources defined, and how are they rewarded? This brings us to another key tenet of neo-institutional theory, which posits that cultural fields are not only difficult to evaluate because of their hard-to-measure production function, but also because they are filled with professionals who are responsible for making such cultural judgments (Deephouse and Suchman 2008). For example, Brint and Karabel (1989) demonstrated how research-oriented postsecondary institutions in the United States have long held a position of privilege and power over other, perhaps vocational or teaching oriented, institutions. They traced this privilege to the history of higher education in the United States, the wealth of

research-oriented institutions, and their service to a wealthier base as well as judgments made about the value of technical education/teaching by early higher education leaders. Relatedly and directly relevant to the role of faculty, cultural resources for professors are contingent on a scholar's publication record, the establishment of an (inter)national reputation, and media attention (Fairweather 2005; Rusch and Wilbur 2007).

Taken together, these insights suggest that neo-institutionalism provides a plausible and compelling explanation as to why colleges and universities work hard to attain certain measures of performance, whether it is a better ranking (Tuchman 2009) or a particular accreditation offered by the state or through a professional organization (Rusch and Wilbur 2007). In short, these sorts of accomplishments offer up cultural resources, like legitimacy and prestige, to organizations that rely on such tacit measures of success. Following this line of thinking, neo-institutionalism also offers a reason for the power of global rankings, especially since many of the measures utilized in rankings are actually measures that academics themselves developed for use within academia. For example, Hart and Metcalfe (2010) demonstrated how impact and citation rates are highly valued in the evaluation of a professor's activities, and recall that the most well-known global rankings, like *THE* or *ARWU*, rely on such measures, as detailed by Ramírez (2013).

Neo-institutionalism helps to illuminate how and why the ranking regime might elicit compliance from postsecondary organizations and their constituent actors. However, it has little to say about the fact that some of these cultural measures, originally developed by academics for academic professional judgment (citation rates, for example), are now used by commercial outfits, and for the express purpose of creating a higher education field that behaves more like a market. As we argue in the next section, the perspective of neoliberalism helps us to understand these more recent developments.

Neoliberalism

While neo-institutionalism suggests that rankings confer cultural resources like legitimacy and prestige upon colleges and universities, neoliberalism helps one to see how these cultural resources have come to be connected to the dynamics of the political economy. In short, neoliberalism is an approach to public policy that centers the principles of the free market and simultaneously deemphasizes the utility of governmental oversight or

public investment in public goods (Harvey 2005). In this way, a critical assumption of neoliberalism is that all activities and goods can and should be measured for comparative and competitive purposes (Gonzales and Martinez 2014; Stratilatis 2014).

According to Harvey (2005), neoliberalism represented a shift from capitalism because it was an approach to political-economic policy intentionally facilitated by multiple national powers (China, England, and the United States). In terms of higher education, this led North American, Latin American, Asian, and European countries to position higher education as a private market good, where students were framed as consumers and faculty as academic laborers, as opposed to participants in the teaching and learning experience (Mumper et al. 2011; Shin and Harman 2009). Drawing from such insights, Slaughter and Leslie (1997) developed the theory of academic capitalism to help explain how these policy moves impacted the operation of Australian, British, and US colleges and universities. They asserted that college and university leaders asked (and rewarded) faculty to serve political and industry elites via their research programs. Slaughter and Leslie also showed that in this context, intellectual labor and faculty work were suddenly considered valuable for their revenue potential. Slaughter and Rhoades (2004) later revised "academic capitalism" to show how college and university leaders and academics were no longer merely responding to external political and economic environments, but had become active in promoting neoliberal values and norms from within academia.

Slaughter and Rhoades (2004) argued that a significant consequence of neoliberalism is its effect on how people understand the world and how it should operate. Slaughter and Rhoades suggested that the principles of neoliberalism (e.g., free market, competition, education for labor market) become so engrained in how one thinks through processes, activities, and decisions that they come to serve as a difficult-to-question logic. Following this line of thinking, Davies et al. (2004) explained that neoliberalism works through "technologies of regulation and compliance [that] are expanded, and more tightly codified, measured, scrutinised, assessed, rewarded and punished" (p. 673) in the name of efficiency, utility, and general market sensibilities.

Applying these insights to higher education, the rise (and hold) of the ranking regime becomes clearer: colleges and universities are treated as markets by governments, and associate ranking regime conformity as a way to generate fiscal resources. Furthermore, the logic of ranking,

measuring, evaluating, and even competing has become normalized in this neoliberal moment. In this way, it seems acceptable, and even normal, to measure and rank tacit cultural processes, like the work that unfolds within teaching, learning, research, and knowledge production.

On this note, there is a notable connection between neoliberalism and the privileging of a scientific epistemology (Pasque et al. 2012; Stratilatis 2014). Writing over three decades ago, Bleicher (1982) asserted that markets and science are tightly linked, since markets often thrive from developments and innovation derived from science. Moreover, the larger public views science and the associated scientific method as trustworthy and progressive, which helps to explain why the ranking regime is accepted as a way to gauge college and university performance. In other words, the ranking regime is normalized because of the epistemological orientations from which it is built and which circulate through society on a massive scale, particularly in the West.

In sum, we have stressed three major insights from the theoretical discussion of neoliberalism: (a) that government is only useful in providing the kind of framework necessary to engender a market-like environment; (b) that all goods and activities can and should be treated as if they have an exchange value; and (c) that a scientific epistemology is a legitimate and most suitable way to measure tacit phenomena such as college and university performance, faculty performance, teaching and learning, and so forth. Thus, while neo-institutionalism advances a cultural resource theory about rankings with little attention to the political economy, neoliberalism compels one to consider that the ranking regime extends beyond a cultural resource game, or even more interestingly, that it exploits what was once a cultural resource game in order to advance the neoliberal project.

Research Design and Data Sources

Having reviewed two theoretical interpretations of the ranking regime, we now turn to our research design, which is an integrative analysis of literature (Cooper and Hedges 2009). An integrative analysis brings together studies from multiple disciplines in order to view a complex topic from a new lens. As we searched for literature, we selected sources that responded to the following question in some fashion: "What are the implications of the ranking regime for the production of knowledge within academia and for the evaluation of faculty work?" Next, we specifically describe our selection of literature.

Selection of Literature

As higher education scholars who have examined the academic profession, the influence of rankings on university behavior, and faculty evaluation, we have a working knowledge of the current literature concerning this topic. To begin our literature review, we made a list of potential articles and authors that address this topic. This is a typical first step for an integrative review of literature (Cooper and Hedges 2009). Our initial list was composed mostly of higher education studies based in the United States, Canada, the United Kingdom, Australia, as well as a few studies about Asian and Latin American higher education.

We then developed a list of keywords/combinations of keywords reflected in this initial set of literature. These keyword combinations included: "accountability," "academia," "audit culture," "faculty work," "faculty rewards," "higher education," "rankings," and "neoliberalism." We used these keywords/combinations to search academic journal databases and Google Scholar. As we identified potential sources, we asked ourselves, "Does this source help us understand how faculty work, especially the production and evaluation of knowledge, might be influenced by the ranking regime, as we have defined it?" Our search was international in scope in that we looked for articles that addressed government accountability or rankings across the globe. Using these various search strategies, we considered almost 160 articles in English-language journals. In this paper, we have included the sources that seemed most relevant to our research questions.

Analytical Process

The following questions focused our analysis: (a) What does the literature suggest about how the ranking regime influences the evaluation of scholarship or knowledge production?; (b) What does the literature suggest about how faculty approach their work in response to the rankings regime?; (c) How might the ranking regime influence faculty dissemination of their scholarship?; and (d) How might faculty respond to concerns about the evaluation or legitimacy of their scholarship in relation to the ranking regime? As we examined the literature in light of these questions, we considered the perspectives offered by each of our theoretical lenses.

Trustworthiness

Given the interpretive nature of this work, we have followed the standard of trustworthiness (Cooper and Hedges 2009). Trustworthiness is achieved through strategies of transparency and triangulation (Maxwell 1992). Thus, we detailed our selection of literature and we explicitly articulated the theoretical lenses that helped us think about this problem, which are key to an integrative analysis (Cooper and Hedges 2009). Finally, we worked independently on the review and analysis of literature and came back together to subject one another's thinking to critique and triangulation.

Findings and Discussion

Our synthesis of the literature suggests that the rankings regime does, indeed, yield influences on the evaluation of faculty work, especially knowledge production, through the perpetuation of the following values or practices: (a) individualism; (b) standardization; (c) commodification; and (d) homogenization.

Concerning *individualism*, we argue that the ranking regime is structured and monitored in ways that encourage individual achievement. Individualism means that faculty work is oversimplified into singular products or processes and represented by singular marks, which enable *standardization*. Standardization simplifies and decontextualizes faculty work and knowledge production enough so that they become comparable. Comparison, with the implication of competition, implies the *commodification* of one's work as a product with exchange value. Finally, we offer evidence that the ranking regime emphasizes or assigns more value to certain types of faculty contributions, which we argue facilitates *homogenization* as it relates to the production and dissemination of knowledge. Table 1 summarizes each of these findings. As we discuss each of these findings, we also explore how faculty members respond to the implications of these themes, keeping in mind that not all faculty respond in the same way.

Table 1   Meaning of themes in the findings

Finding	Meaning
Individualism	Encourages individual competition through various evaluative technologies. Standardizationrequires the evaluation of faculty work with decontextualized, universal measures
Commodification	Utilizes the standardized information collected through evaluative technologies to compare the contributions of faculty.
Homogenization	Awards recognition narrowly to particular forms of faculty work, especially particular publishing approaches

Individualism

The practice of ranking, by its very nature, pits individuals and institutions against one another. This happens in a few ways. First, ranking and evaluative exercises typically account for the extent to which scholars publish as sole authors (Pasque et al. 2011; Ramírez 2013). Second, ranking and evaluative systems require that faculty members document carefully the work they have conducted as an individual. This process includes recording the percentage that they contribute to any collaborative project (Archer 2008; Pasque et al. 2011) or reporting individual achievements like sole publications, disciplinary awards, and research related recognition (Ramírez 2013). Furthermore, this reporting can be undertaken not only at the university, but also at the national level. For example, Musselin (2013) described how "in France, legislators adopted a decree modifying the status of faculty members in 2009, which introduced regular individualized evaluations of all faculty members" (p. 1166) while in Spain, "faculty members have undergone individualized evaluation since the 2000s" (p. 1166). In both countries, these evaluative processes have then been linked to compensation.

When solo efforts are emphasized, competition and individualism increases, and sense of community among faculty is diminished. Like most scholars, we are skeptical of a "golden era" where a community of scholars (Goodman 1962) ever truly operated, yet it is important to note the heightened sense of isolation that is yielded by competitive environments. Ylijoki's (2005) study provided insight into academic life in Finland, where competition and market-centered values have increased in recent years. One faculty member in Ylijoki's study described:

…people are pretty much in a hurry and have withdrawn into their own research without taking notice of what is happening around them. You really don't have much contact with other researchers…And what suffers from that is the general intellectual spirit that should prevail in such environments. It should prevail here as it used to do when I came to the department [when]…researchers might spend many hours in the afternoons discussing scientific matters from all sides and in a good spirit. At present this does not happen at all. (pp. 555–556)

Moreover, Gonzales (2012) studied faculty experiences in one university striving to win the top seat in a state-designed ranking system, and found that the majority of faculty were putting more distance between themselves and the university setting in order to focus on their own research- oriented professional endeavors. These examples suggest that ranking and accountability cultures promote neoliberal environments where "there is no space for collectivity" (Osei-Kofi 2012, p. 237).

Relatedly, Kenneth González (2008) described how individual achievement is prized in most tenure and promotion processes, which use many of the criteria (research record, impact rates, and individual reputation/impacts) now measured by ranking bodies. González noted that individualism challenges faculty who want to use their work to advance a broader, communal good. He reflected on how, during his own process of earning tenure, he postponed his desire to serve local Latino communities and deferred to discipline-based norms and approaches to inquiry. In line with neo-institutional theory, González expressed concern that if his work was not anchored in more common or legitimized and disciplinary-defined theories or approaches, it might not be well-received among colleagues.

Standardization

The rankings regime also engenders generic, or what we call standardized, approaches to measuring faculty and institutional characteristics and activities. In fact, standardization is a hallmark of the accountability movement throughout education (Ball 2003; Martínez Alemán 2012). Standardization enables comparisons of wildly different settings and contexts in order to gauge universities and colleges by single definitions of quality or excellence. The European University Association (2013) offered the following cautionary note to university leaders and policy makers:

…global rankings are no longer a concern only for a small number of elite institutions but have become a reality for a *much broader spectrum of universities* as they seek to be included in, or improve their position in one or the other rankings. This means that they have started to shape the development of higher education systems as such, which is a significant shift bearing in mind that most international rankings in their present form still only cover a very small percentage of the world's 17,500 universities…with little consideration given to the rest. (p. 6)

Standardization facilitates the collection of information that ranking bodies need to form the basis of their hierarchical evaluations. With regard to the evaluation of faculty work, one very common standardization practice is the heavy reliance on bibliometric data. Of this tendency, Safón (2013) noted that ranking bodies define quality by the number and prestige of publications and grants awards that a university's faculty obtains. Specifically, ranking bodies count faculty publications and give additional points to what they recognize as "top-tier" journals (Linton et al. 2011). This approach to the evaluation of faculty careers is problematic because it assumes that a valuable or standard faculty profile should be dominated by research activity. Furthermore, research suggests that when an institution intends to climb a ranking system, the approach to faculty evaluation skews heavily toward research and publications (Gonzales 2013; Henderson 2009; O'Meara and Bloomgarden 2011).

Importantly, however, academics themselves have had a hand in the privilege allotted to research, especially the emphasis on certain dissemination strategies. For example, Bray and Major (2011) asked faculty members within the field of higher education to list a number of predetermined journals as "first tier (high level of prestige), second tier (good level prestige), third tier (moderate level of prestige), and fourth tier (low level of prestige)" (p. 479). Their analysis revealed two key findings: (a) top-tier journals were general in terms of content and mostly associated with US-based studies/audiences, whereas (b) journals in lower tiers tended to be more specialized and included several that focused on issues related to student development and to promoting opportunities for students and college personnel from different social and economic backgrounds (e.g., college counseling, teaching and learning, community colleges, Hispanics in higher education). Furthermore, according to members in Bray and Major's (2011) study, faculty cited first-tier journals at an above average rate. Meanwhile, two-thirds of the entire group of

journals were cited by fewer than one in eight (12.5%) faculty members. This suggests that these faculty members read, aim to publish in, and cite a standard set of top-tier journals.

These findings can be interpreted in at least two ways. One could argue that the "higher prestige" journals are general or broad enough to feature a diverse and broad array of issues, meaning faculty might name these journals as high prestige because they believe they welcome diverse topics, theories, and methods. However, empirical evidence challenges this optimistic interpretation. Specifically, the top-tier journals in the higher education field have historically published little feminist scholarship, race/ethnicity-oriented work, qualitative work, or work that interrogates systems of inequality from a structural perspective (Harper 2012; Hart 2006; Hart and Metcalfe 2010; Stanley 2007).

The ranking regime can also apply dynamics of standardization to teaching. Although student evaluations have historically been conducted as a worldwide practice with both formative and summative aims, the summative purpose of such evaluations has increasingly been emphasized (Spooren et al. 2013). As Spooren et al. (2013) point out, "the principal purpose of [student evaluation] involves its use as a measure for *quality monitoring*, administrative policymaking…for determining whether teachers have achieved a *required standard* in their teaching practice" (p. 2). At the outset, meeting a "required standard" seems a laudable goal, but meeting or judging to a standard requires the assumption that resources, culture, and socio-political contexts do not matter. Additionally, it assumes that teaching and learning can actually be measured with some standard snapshot indicator (Alemán 2012). Furthermore, substantial research suggests that the validity and value of student evaluations is very questionable and inconclusive, and that limited (if any) conclusions about the quality of teaching can be drawn from these evaluations (Spooren et al. 2013).

An example of Kyrgyz higher education illustrates how the dynamics of standardization can play out from a national-international level. Specifically, after the Soviet Union's collapse, the Kyrgyz government attempted to infuse its higher education system with qualities that it deemed "first-world," in order to shed its "third-world" image (Amsler 2012). Consequently, higher education faculty and administrators across the country searched for universal measures to determine standardized models of teaching and learning that could prepare Krygryz students to compete in a global or knowledge economy. Amsler (2012) documented that this

process resulted in further standardization of student admission policies and practices, in addition to curricular designs and interventions.

In sum, standardization represents an attempt to establish universal value for quality, value, excellence, and prestige (and so on) within higher education. Standardization allows for comparison and competition of one's goods, which is discussed next.

Commodification

As noted earlier, it seems that standardization is a necessary precursor to commodification. Commodification "refers to the process of turning social goods and processes (as well as people) into commodities" (Canaan and Shumar 2011, p. 4), so that they may be inscribed with a use, exchange, and surplus values. It is necessary to standardize items as they are placed as commodities into a competitive market place. The commodification of faculty work seems to be facilitated in a number of ways. For one, grant-getting is a key strategy in the commodification of knowledge production (Slaughter and Rhoades 2004). Research on US institutions striving to move "up" in the rankings have found that faculty in these institutions often feel pressured to or actually do reallocate time. Specifically, faculty in such settings might prioritize research and/or grant-writing since grant money and industry partnerships are important in light of the university's desire to earn a higher ranking (Gonzales and Martinez 2014). Observers note that such trends are not limited to the US, but are intensifying worldwide (Metcalfe 2010; Pusser and Marginson 2013). To this point, one of the effects of commodification is that knowledge loses its intrinsic value as it gets inscribed with market values (Beck and Young 2005). Furthermore, as knowledge is inserted into the market, its "use value" is contingent on the kind of market-place it occupies. In the classroom, even if the teaching and learning process inspires dynamic, rich, and engaging knowledge production and exchange, ranking or evaluative bodies have no tool to capture that.

On the other hand, as academics produce more knowledge/research to keep up with the growing demands of research productivity encouraged by tenure and promotion processes and university attendance to rankings, the "value" of such work declines. Just as with any market good, the quantity or supply of the good influences its exchange value (Rhoades and Slaughter 1997). In turn, faculty members might cognitively commodify their own work as they think about scholarship in terms of quantity, pace

of production, and competition. In the most explicit cases of commodification, faculty work is translated into numerical and dollar figures for the purposes of evaluating faculty. For example, Davies and Bansel (2010) reported that "in Australian universities, a book's worth is uniformly calculated as 6 points (less if it is an edited book) and points are made meaningful [by] being given dollar values, which in turn translates into government funding to the university....and research status" (p. 6).

The studies cited here suggest that the ranking regime enables the commodification of knowledge and faculty work, overall. Commodification means that one's work is placed in the market, where some forms of work are ascribed more value than others. Next, we explore how this can yield a homogenization of approaches to faculty work as well as knowledge production itself.

Homogenization

Standardization and commodification can contribute to the homogenization of knowledge, as together these perpetuate narrow notions of "quality" faculty work. For example, the European University Association (EUA 2013) reports that nearly all of the 32 international rankings systems emphasize faculty research productivity, publication impact, and citation rates. Additionally, the EUA report explained that favor is very typically given to English-language research publications, because:

> ... [previous] research has clearly demonstrated that publications in languages other than English are read by fewer researchers than those in English from the same universities...The result is that the non-English-language output of these universities has a lower citation impact and thus a lower position in the ranking. (p. 19)

With such an incentive, faculty in European universities may be more likely to publish in English, and their institutions may encourage them to do so as well in order to move up in the rankings (Kaba 2012). This finding is even more powerful and convincing in light of Lo's (2011) finding that the vast majority of the highest ranked institutions in the 2009 *Times Higher Education-QS (THE)* were geographically concentrated in the West, where the United States has 54 universities and the United Kingdom had 29 universities in the rankings. Lo explained, "six out of every ten universities on the top 200 list were located in countries

that were at one time partly or fully colonized by the United Kingdom" (p. 1).

In sum, the themes that emerged based on our analysis of existing literature—individualism, standardization, commodification, and homogenization—fail to recognize the multiple professional activities that faculty undertake in colleges and universities, including the tacit and dynamic exchanges involved in teaching and learning, dialoguing with colleagues inside and outside of academia to solve problems or provide service of some sort to society, and engaging in time-intensive student and peer mentoring and advising. When the ranking regime does recognize or attempt to account for excellence in teaching, for example, it relies on narrow and universal measures of value (Brint 2011; Spooren et al. 2013). On the other hand, the ranking regime clearly privileges research activities and productivity in very specific ways: in ways that favor the use of English in scholarly dissemination (at least in the United States and Europe); in ways that uphold the dominance of disciplines and what seems to be narrow valuation of knowledge; and in ways that favor dissemination strategies to academic instead of broader audiences.

Implications

In this paper, we reviewed how the ranking regime, which is intimately connected to the desire among colleges and universities to establish themselves as "world class" universities, is shaping faculty work and roles, the production of knowledge, and faculty evaluation, overall. To address this question, we surveyed a broad, interdisciplinary body of existing literature. Considering our findings in light of neo-institutionalism and neoliberal lenses, we can draw the following implications.

This review reveals that the rankings regime perpetuates values of individualism and standardization among faculty members to account for excellence (Ramírez 2013) in their work. Further, it indicates that the ranking regime's emphasis on certain faculty activities like research, publication, and grant-getting enables the commodification of faculty work, a process in which faculty are distanced from the value assigned to their work, as it is turned into a product with exchange value. Finally, it illustrates how the ranking regime can lead to homogenization of knowledge production. These findings suggest that cultural resources traditionally emphasized in higher education institutions have come to serve the global political economy in ways that neo-institutionalism has traditionally not accounted for.

On this point, the neo-institutional lens is valuable for understanding the ranking regime because it points to the hand that the profession and the field have had in crafting the rules for cultural resources, which are now leveraged for very different purposes. Whereas these rules for faculty evaluation were once crafted as rules to guide the academic profession, these cultural resource rules now function as currency in a global, transnational competition among higher education institutions. And just as in all competitive markets, there are winners and there are losers. For the most part, it seems that winners include those institutions and those countries with historical privilege and resources, and longer higher education legacies. Cultural resources were, after all, first defined in such spaces, and so they have a head-start, so to speak. Kaba (2012) demonstrated this point well when he showed that rankings merely reproduce and reflect the imperial legacies of Western, English-speaking, capitalist countries. We believe that our synthesis of literature reinforces Kaba's argument in significant ways.

By blending insights from neo-institutionalism and neoliberalism, we can see how the ranking regime is successful because it is constructed with some of the cultural resource rules that long guided higher education. We argue that these cultural resource rules have come to be used for "neoliberal practices of regulation [that] suppress consideration of power, control, and interest" in higher education (Davies and Bansel 2010, p. 6). Following this line of thinking, in a political-economic moment when government no longer views higher education as a public good, colleges and universities quickly become subject—and indeed look for ways - to increase resources, in various ways. We argue that the cultural resource disposition of higher education has become coopted by neoliberalism.

Future research should investigate the extent to which accounting for excellence has intensified in academia, particularly since the neoliberal era emerged in the 1980s. Careful work needs to be focused on those universities and colleges that have declared intent to strive up the rankings or achieve an accreditation or some notable measure of performance to trace, empirically, the shifts in faculty behaviors. Oral histories with faculty who have been in the academy for longer and can reflect on their experiences over time could illuminate the extent to which these shifts have shaped their lives as academics, including whether increasing pressure to conduct research and particular kinds of research compromised their own willingness/capacity to engage particular theoretical or methodological approaches, their publication habits, or the ability to

advance the public good. Further investigating whether and how methods of reporting for promotion and tenure have changed over time would also provide insights into the influence of the ranking regime. Finally, exploring the extent to which lists of "top-tier" or "core" journals remain stable over time and whether they increase or decrease in number and type could also contribute to our understanding of how the ranking regime affects knowledge production.

With respect to policy, this review suggests that universities and colleges should be proactive in considering how they might re-shape definitions of accountability, value, or excellence to incorporate interests of the public good. This could mean following the practice among some institutions, such as the University of California, to call for increased recognition of public engagement and community service activities in the tenure and promotion process (Hurtado and Sharkness 2008). The US-based Carnegie Community Engagement Classification System (http://classifications.carnegiefoundation.org/descriptions/community_engagement.php) is another way that universities might consider measuring and reporting on their activity. Being atop this ranking suggests that colleges and universities are highly involved in local communities through partnerships, volunteer and civic engagement, or action/applied research.

Our review yields additional policy implications. Namely, these findings have relevance for tenure and promotion committees, as well as larger faculty governance bodies within universities. Faculty could consider these thematic findings as they develop or refine tenure and promotion, hiring, or resource allocation practices. For example, tenure and promotion committees can intentionally develop a reward system that recognizes faculty for working with local schools, hospitals, or other organizations; such efforts are likely to be documented in small action research efforts, policy briefs, or evaluative reports (Ellison and Eatman 2008; Sandmann et al. 2008). In this way, we argue that because faculty have helped to empower some of the most powerful metrics that drive the ranking regime, especially global ranking bodies, faculty also have the opportunity to develop alternative ways to consider and reward faculty work.

In closing, we acknowledge that the state of higher education and faculty work that we have portrayed makes it difficult, and some might even say impossible or unwise, to construct one's career in ways that do not align to the ranking regime. However, studies have illustrated the capacity for faculty resistance to neoliberal forces and associated narrow

constructions of prestige or legitimacy (e.g., Archer 2008; Huckaby 2008; Gonzales and Martinez 2014). Some of the most powerful and sustainable examples of resistance are often nurtured through collaborative faculty networks explicitly committed to egalitarian approaches to scholarship that challenge the norms of individualism, standardization, commodification, and homogenization (Carducci et al. 2011; Núñez and Murakami-Ramalho 2012). Also, mentoring graduate students and faculty to adopt critical approaches to faculty roles and purposes, and to engage in diverse dissemination strategies are other ways that scholars might be able to resist or challenge the power of the ranking regime.

References

Amsler, S. (2012). Higher education reform in post-Soviet Kyrgyzstan: The politics of neoliberal agendas in theory and practice. In J. E. Canaan & W. Schumar (Eds.), *Structure and agency in the neoliberal university* (pp. 101–130). New York, NY: Routledge.

Amsler, S. S., & Bolsmann, C. (2012). University ranking as social exclusion. *British Journal of Sociology of Education, 33*(2), 283–301. https://doi.org/10.1080/01425692.2011.649835.

Apple, M. (2013). Audit cultures, labour, and conservative movements in the global university. *Journal of Educational Administration and History, 45*(4), 385–394. https://doi.org/10.1080/00220620.2013.822349.

Archer, L. (2008). The new neoliberal subjects? Young/er academics' constructions of professional identity. *Journal of Education Policy, 23*(3), 265–285. https://doi.org/10.1080/02680930701754047.

Ball, S. J. (2003). The teacher's soul and the terrors of performativity. *Journal of Education Policy, 18*(2), 215–228. https://doi.org/10.1080/0268093022000043065.

Beck, J., & Young, M. F. (2005). The assault on the professions and the restructuring of academic and professional identities: A Bernsteinian analysis. *British Journal of Sociology of Education, 26*(2), 183–197. https://doi.org/10.1080/0142569042000294165.

Bleicher, J. (1982). *The hermeneutic imagination: Outline of a positive critique of scientism and sociology*. London: Routledge & Kegan Paul.

Bowman, N. A., & Bastedo, M. N. (2009). Getting on the front page: Organizational reputation, status signals, and the impact of *U.S. News and World Report* on student decisions. *Research in Higher Education, 50,* 415–436. https://doi.org/10.1007/s11162-009-9129-8.

Bray, N. J., & Major, C. H. (2011). Status of journals in the field of higher education. *Journal of Higher Education, 82*(4), 479–503. https://doi.org/10.1353/jhe.2011.0020.

Brint, S. (2011). Focus on the classroom: Movements to reform college teaching and learning, 1980–2008. In J. Hermaowicz (Ed.), *The American academic profession: Transformation in contemporary higher education* (pp. 44–91). Baltimore, ML: John Hopkins University Press.

Brint, S., & Karabel, J. (1989). *The diverted dream: Community colleges and the promise of educational opportunity in America, 1900–1985*. New York, NY: Oxford University Press.

Brint, S., Riddle, M., & Hanneman, R. A. (2006). Reference sets, identities, and aspirations in a complex organizational field: The case of American four-year colleges and universities. *Sociology of Education, 79*(3), 229–252. https://doi.org/10.1177/003804070607900303.

Canaan, J. E., & Shumar, W. (Eds.). (2011). *Structure and agency in the neoliberal university*. New York, NY: Taylor & Francis.

Cantwell, B., & Taylor, B. J. (2013). Global status, intra-institutional stratification and organizational segmentation: A time-dynamic tobit analysis of ARWU position among US universities. *Minerva, 51*(2), 1–29. https://doi.org/10.1007/s11024-013-9228-8.

Carducci, R., Kuntz, A., Gildersleeve, R. E., & Pasque, P. (2011). The disruptive dialogue project: Crafting critical spaces in higher education. *InterActions, 7*(2). Retrieved from http://escholarship.org/uc/item/7mf1j9mn.

Clark, B. R. (1986). *The higher education system: Academic organization in cross-national perspective*. Berkeley, CA: University of California Press.

Colyvas, J. A. (2012). Performance metrics as formal structures and through the lens of social mechanisms: When do they work and how do they influence? *American Journal of Education, 118*(2), 167–197. https://doi.org/10.1086/663270.

Cooper, H., & Hedges, L. V. (2009). Research synthesis as a scientific process. In H. Cooper, L. Hedges, & J. C. Valentine (Eds.), *The handbook of research synthesis and meta-analysis* (pp. 3–17). New York, NY: Russell Sage Foundation.

Davies, B., & Bansel, P. (2010). Governmentality and academic work: Shaping the hearts and minds of Academic workers. *Journal of Curriculum Theorizing, 26*(3), 5–20.

Davies, B., Browne, J., Gannon, S., Honan, E., Laws, C., Mueller-Rockstroh, B., & Peterson, E. (2004). The ambivalent practices of reflexivity. *Qualitative Inquiry, 10*(3), 360–391.

Deephouse, D. L., & Suchman, M. (2008). Legitimacy in organizational institutionalism. In R. Greenwood, C. Oliver, K. Sahlin, & R. Suddaby (Eds.), *The Sage handbook of organizational institutionalism* (pp. 49–77) Thousand Oaks, CA: Sage. http://dx.doi.org/10.4135/9781849200387.n2.

DiMaggio, P. J., & Powell, W. W. (Eds.). (1991). *The new institutionalism in organizational analysis*. Chicago, IL: University of Chicago Press.

Ellison, J., & Eatman, T. K. (2008). *Scholarship in public: Knowledge creation and tenure policy in the engaged university*. Syracuse, NY: Imagining America.

Enders, J. (2004). Higher education, internationalisation, and the nation-state: Recent developments and challenges to governance theory. *Higher Education, 47*(3), 361–382. https://doi.org/10.1023/B:HIGH.0000016461.986 76.30.

European University Association. (2013). *Global university rankings and their impact: Report II*. Brussels: Belgium.

Fairweather, J. S. (2005). Beyond the rhetoric: Trends in the relative value of teaching and research in faculty salaries. *The Journal of Higher Education, 76*(4), 401–422. https://doi.org/10.1353/jhe.2005.0027.

Filippakou, O. (2011). The idea of quality in higher education: A conceptual approach. *Discourse: Studies in the Cultural Politics of Education*, *32*(1), 15–28. http://dx.doi.org/10.1080/01596306.2011.537068.

Gonzales, L. D. (2013). Faculty sense-making and mission creep: Interrogating institutionalized ways of knowing and doing legitimacy. *Review of Higher Education, 36*(2), 179–209. https://doi.org/10.1353/rhe.2013.0000.

Gonzales, L. D. (2012). Faculty responses to mission creep: Cosmopolitan views and actions. *Higher Education, 64*(3), 337–353. https://doi.org/10.1007/s10734-011-9497-9.

Gonzales, L. D. & Martinez, E. (2014). Possibilities and responsibilities: How faculty talk can (de)construct rankings and university striving. *Journal of Critical Thought and Praxis, 2*(2). http://lib.dr.iastate.edu/jctp/vol2/iss2/2.

González, K. (2008). In search of praxis: Legacy making in the aggregate. In K. González & R. Padilla (Eds.), *Doing the public good: Latina/o scholars engage civic participation* (pp. 125–135), Sterling, VA: Stylus.

Goodman, P. (1962). *The community of scholars*. New York: Random House.

Harper, S. (2012). Race without racism: How higher education researchers minimize racist institutional norms. *Review of Higher Education, 36*(1), 9–30. https://doi.org/10.1353/rhe.2012.0047.

Hart, J. (2006). Women and feminism in higher education scholarship: An analysis of three core journals. *The Journal of Higher Education, 77*(1), 40–61. https://doi.org/10.1353/jhe.2006.0003.

Hart, J., & Metcalfe, A. S. (2010). Whose web of knowledge™ is it anyway? Citing feminist research in the field of higher education. *The Journal of Higher Education, 81*(2), 140–163. https://doi.org/10.1353/jhe.0.0083.

Harvey, D. (2005). *A brief history of neoliberalism*. New York, NY: Oxford University Press.

Henderson, B. B. (2009). Mission creep and teaching at the Master's university. *College Teaching, 57*(4), 185–187. https://doi.org/10.1080/87567550903218497.

Huckaby, M. F. (2008). Making use of Foucault in a study of specific parrhesiastic scholars. *Educational Philosophy and Theory, 40*(6), 770–788. https://doi.org/10.1111/j.1469-5812.2007.00369.x.

Hurtado, S., & Sharkness, J. (2008). Scholarship is changing, and so should tenure review. *Academe, 94*(5), 37–39.

Kaba, A. J. (2012). Analyzing the Anglo-American hegemony in the Times Higher Education Rankings. *Education Policy Archives Analysis, 20*(21). Retrieved November, 2013, from http://epaa.asu.edu/ojs/article/view/847.

Leslie, L. L., Slaughter, S., Taylor, B. J., & Zhang, L. (2012). How do revenue variations affect expenditures within US research universities? *Research in Higher Education, 53*(6), 614–639. https://doi.org/10.1007/s11162-011-9248-x.

Linton, J. D., Tierney, R., & Walsh, S. T. (2011). Publish or perish: How are research and reputation related? *Serials Review, 37*(4), 244–257. https://doi.org/10.1016/j.serrev.2011.09.001.

Lo, W. Y. W. (2011). Soft power, university rankings and knowledge production: Distinctions between hegemony and self-determination in higher education. *Comparative Education, 47*(2), 209–222. https://doi.org/10.1080/03050068.2011.554092.

Maldonado-Maldonado, A. (2009). Latin American higher education: Hope in the struggle? In D. Palfreyman & T. Tapper (Eds.), *Structuring mass higher education: The role of elite institutions* (pp. 73–94). New York, NY: Routledge.

Marginson, S. (2007). University mission and identity for a post post-public era. *Higher Education Research & Development, 26*(1), 117–131. https://doi.org/10.1080/07294360601166851.

Martínez Alemán, A. M. (2012). *Accountability, pragmatic aims, and the American university*. New York: Routledge.

Maxwell, J. A. (1992). Understanding and validity in qualitative research. *Harvard Educational Review, 62*(3), 279–301.

Metcalfe, A. (2010). Examining the trilateral networks of the triple helix: Intermediating organizations and academy-industry-government relations. *Critical Sociology, 36*(4), 503–519. https://doi.org/10.1177/0896920510365920.

Meyer, J. W., & Rowan, B. (1977). Institutionalized organizations: Formal structure as myth and ceremony. *American Journal of Sociology, 83*(2), 340. https://doi.org/10.1086/226550.

Morley, L., & Aynsley, S. (2007). Employers, quality and standards in higher education: Shared values and vocabularies or elitism and inequalities? *Higher Education Quarterly, 61*(3), 229–249. https://doi.org/10.1111/j.1468-2273.2007.00353.x.

Morphew, C. C., & Baker, B. D. (2004). The cost of prestige: Do new research I universities incur higher administrative costs? *The Review of Higher Education, 27*(3), 365–384. https://doi.org/10.1353/rhe.2004.0005.

Mumper, M. Gladieux, L. E., King, J. E., & Corrigan, M. E. (2011). The federal government and higher education. In P. G. Altbach, P. J. Gumport, & R. O. Berdahl (Eds.), *American higher education in the twenty-first century—Social, political, and economic challenges* (3rd ed., pp. 113–138), Baltimore, ML: John Hopkins University Press.

Musselin, C. (2013). Redefinition of the relationships between academics and their university. *Higher Education, 65*(1), 25–37. https://doi.org/10.1007/s10734-012-9579-3.

Núñez, A.-M., & Murakami-Ramalho, E. (2012). The demographic dividend: Why the success of Latino faculty and students is critical. *Academe, 98*(1), 32–37.

O'Meara, K. (2011). Inside the panopticon: Studying academic reward systems. In J. C. Smart & M. B. Paulsen (Eds.), *Higher education: Handbook of theory and research* (Vol. 26, pp. 161–220). New York: Springer. http://dx.doi.org/10.1007/978-94-007-0702-3_5.

O'Meara, K., & Bloomgarden, A. (2011). The pursuit of prestige: The experience of institutional striving from a faculty perspective. *The Journal of the Professoriate, 4*(1), 39–72.

Osei-Kofi, N. (2012). Junior faculty of color in the corporate university: Implications of neoliberalism and neoconservatism on research, teaching, and service. *Critical Studies in Education, 53*(2), 229–244. https://doi.org/10.1080/17508487.2012.672326.

Pasque, P., Carducci, R., Gildersleeve, R., & Kuntz, A. (2011). Disrupting the ethical imperatives of "junior" critical qualitative scholars in the era of conservative modernization. *Qualitative Inquiry, 17*(7), 571–588. https://doi.org/10.1177/1077800411409878.

Pasque, P., Carducci, R., Kuntz, A. K., & Gildersleeve, R. E. (2012). *Qualitative inquiry for equity in higher education: Methodological implications, negotiations and responsibilities* [ASHE Higher Education Report, 37(6)]. San Francisco, CA: Jossey-Bass.

Power, M. (2004). The risk management of everything. *The Journal of Risk Finance, 5*(3), 58–65. https://doi.org/10.1108/eb023001.

Pusser, B., Kempner, K., Marginson, S., & Ordorika, I. (2012). *Universities and the public sphere: Knowledge creation and state building in the era of globalization* (pp. 1–276). New York, NY: Routledge.

Pusser, B., & Marginson, S. (2013). University rankings in critical perspective. *Journal of Higher Education, 84*(4), 544–568. https://doi.org/10.1353/jhe.2013.0022.

Ramírez, F. O. (2013). World society and the university as formal organizations. *Sisyphus Journal of Education, 1*(1), 124–153.

Rhoades, G., & Slaughter, S. (1997). Academic capitalism, managed professionals, and supply-side higher education. *Social Text, 51,* 9–38. https://doi.org/10.2307/466645.

Rusch, E. A., & Wilbur, C. (2007). Shaping institutional environments: The process of becoming legitimate. *The Review of Higher Education, 30*(3), 301–318. https://doi.org/10.1353/rhe.2007.0014.

Sandmann, L. R., Saltmarsh, J., & O'Meara, K. (2008). An integrated model for advancing the scholarship of engagement: Creating academic homes for the engaged scholar. *Journal of Higher Education Outreach and Engagement, 12*(1), 47–64.

Safón, V. (2013). What do global university rankings really measure? The search for the X factor and the X entity. *Scientometrics*, 1–22.

Sauder, M., & Epseland, W. (2009). The discipline of rankings: Tight coupling and organizational change. *American Sociological Review, 74*(63), 63–82. https://doi.org/10.1177/000312240907400104.

Scott, W. R. (1991). Unpacking institutional arguments. In W. Powell & P. DiMaggio (Eds.), *The new institutionalism in organizational analysis* (pp. 143–63). Chicago, IL: The University of Chicago Press.

Shin, J. C., & Harman, G. (2009). New challenges for higher education: Global and Asia-Pacific perspectives. *Asia Pacific Educational Review, 10*(1), 1–13. https://doi.org/10.1007/s12564-009-9011-6.

Shin, J. C., Toutkoushian, R. K., & Teicher, U. (2011). *University rankings: Theoretical basis, methodology, and impacts on global higher education.* New York, NY: Springer. https://doi.org/10.1007/978-94-007-1116-7.

Slaughter, S., & Leslie, L. L. (1997). *Academic capitalism: Politics, policies, and the entrepreneurial university.* Baltimore, MD: The Johns Hopkins University Press.

Slaughter, S., & Rhoades, G. (2004). *Academic capitalism and the new economy: Markets, state, and higher education.* Baltimore, MD: John Hopkins University Press.

Spooren, P., Brockx, B., & Mortelmans, D. (2013). On the validity of student evaluation of teaching: The state of the art. *Review of Educational Research, 83*(4), 598–642. https://doi.org/10.3102/0034654313496870.

Spring, J. (2008). *Globalization of education: An introduction.* New York, NY: Routledge.

Stanley, C. (2007). When counter narratives meet master narratives in the journal editorial-review process. *Educational Researcher, 36*(1), 14–24. https://doi.org/10.3102/0013189X06298008.

Stratilatis, C. (2014). University rankings and the scientification of social sciences and humanities. *Ethics in Science and Environmental Politics, 13,* 77–92.

Taylor, B. J., & Morphew, C. C. (2010). An analysis of baccalaureate college mission statements. *Research in Higher Education, 51,* 483–503. https://doi.org/10.1007/s11162-010-9162-7.

Times Higher Education—The World University Rankings. (2011). Retrieved from http://www.timeshighereducation.co.uk/world-university-rankings/.

Toma, J. D. (2012). Institutional strategy: Positioning for prestige. In M. N. Bastedo (Ed.), *The organization of higher education: Managing colleges for a new era* (pp. 118–159). Baltimore, MD: Johns Hopkins University Press.

Torres, C. A., & Schugurensky, D. (2002). The political economy of higher education in the era of neoliberal globalization: Latin America in comparative perspective. *Higher Education, 43*(4), 429–455. https://doi.org/10.1023/A:1015292413037.

Toutkoushian, R. K., & Webber, K. (2011). Measuring the research performance of postsecondary institutions. In J. C. Shin, R. Toutkoushian, & U. Teichler (Eds.), *University rankings: Theoretical basis, methodology, and impacts on global higher education* (pp. 123–144). New York, NY: Springer.

Tuchman, G. (2009). *Wannabe U: Inside the corporate university*. Chicago, IL: University of Chicago Press. https://doi.org/10.7208/chicago/9780226815282.001.0001.

Ylijoki, O. (2005). Academic nostalgia: A narrative approach to academic work. *Human Relations, 58*(5), 555–576. https://doi.org/10.1177/0018726705055963.

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

Crain Soudien

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

C. Soudien (✉)
University of Cape Town, Cape Town, South Africa
e-mail: csoudien@hsrc.ac.za

103

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 Sitienei and Ocholla (2010) for Library Sciences, as example), 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 specialized 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 gradua-
tion rates improved dramatically after 1994, the system still only produces
1200 PhDs each year—the equivalent of Brazil's leading research univer-
sity, the University of Sao Paulo. In 2009 the country had 10,499 candi-
dates registered for the Ph.D. and graduated 1224 (Samuel 2012, p. 1).
As compared with the output of countries with similar population, such
as South Korea with its Ph.D. output of 187 per million of the popula-
tion, 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, p. 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 Depart-
ment 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 Scien-
tific 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 competi-
tiveness 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%20c ategories-approved%20EEC%2013%February%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, p. 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 among 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 (2010a, b, c, 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 benefit 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 (2010b, 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 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

---

[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.

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)

---

[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.

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 Breckenridge (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 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 prioritize 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—recognizing 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 2011, 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 Rensburg (University of Johannesburg 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 1).

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

	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

Table 1 University of Johannesburg outputs, 2008–2011

Source University of Johannesburg (2011, p. 13)

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 2012, 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-impactjournals 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) (Fig. 1).

Significantly, at UCT, as the table produced by Mouton (2013, p. 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 (Fig. 2).
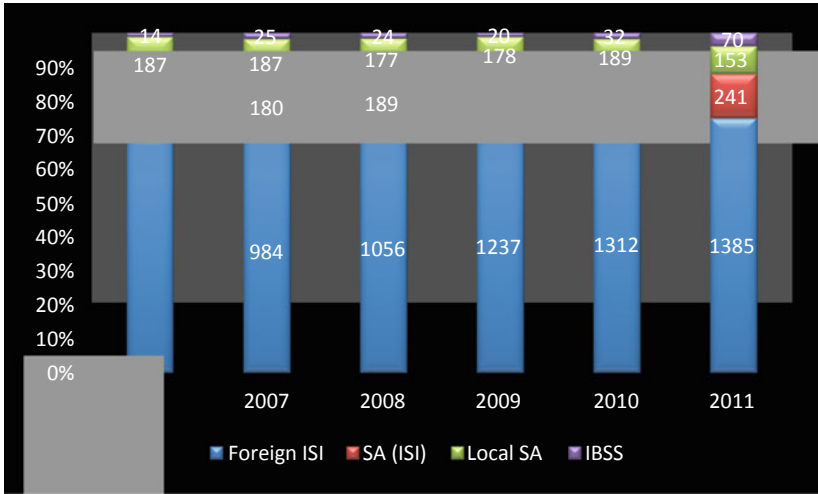
Fig. 1 UCT output (papers) by journal index and year (2006–2011) (*Source* Mouton 2013, p. 25)
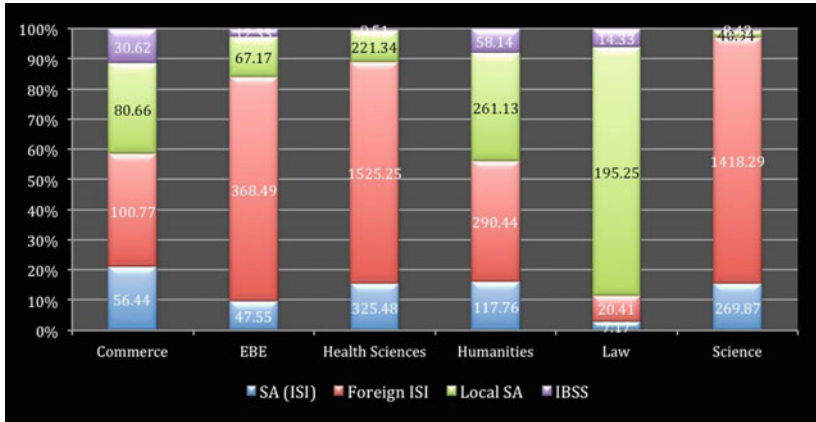
Fig. 2 UCT output per disciplinary field (*Source* Mouton 2013, p. 27)

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 2012, 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 (2013, 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, among 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 1991–2000 period. While there had been, as Mouton (2003) shows in the table below a decline in the periods 1996–2000 of published outputs in accredited (ISI and IBSS) journals, the table thereafter indicates a much greater move towards accredited journals (Table 2 and Fig. 3).

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 equiva-lents 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

Fig. 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 recognize 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 acknowledge-ment 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 'excel-lence'. 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 socio-logical 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 coun-try'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 diffi-culty 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 intel-lectuals, including activist-scholar vice-chancellors and rectors are posing the question of what 'excellence' means. They recognize how much South Africa has been gifted an opportunity to address the fundamental ques-tion 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 recognized 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.

References

Badat, S. (2010a, April 14). *Have global university rankings any value for the global south?* Retrieved October 3, 2013. http://www.isa-sociology.org/universities-in-crisis/?p=421.

Badat, S. (2010b). *Global rankings of universities: A perverse and present burden.* Retrieved October 3, 2013. www.Can-aiu.net.conferences/pdf/WSSF-Badat.pdf.

Badat, S. (2010c). *Deliberative democracy in a global context: A South African model of higher education*. Retrieved October 3, 2013. http://www.isa-sociology.org/universities-in-crisis/?p=437.

Botman, R. (2012). Foreword. In Stellenbosch University Research Report, Stellenbosch, University of Stellenbosch.

Breckenridge, K. (2013). The future of the book in Africa. Unpublished mimeo.

Brown, V. (2010). *How university academics respond to the introduction of new quality policies in South African higher education*. D. Phil thesis, Department of Education Management and Policy Studies, University of Pretoria.

Caboz, J. (2012, May 14). Competing for top 100 spot requires upgrading. In *Vuvuzela: A Publication of Wits Journalism*. Retrieved February 12, 2014. http://witsvuvuzela.com/2012/05/14/competing-for-top-100-spot-requires-upgrading/.

Centre for Research on Evaluation, Science and Technology. (2010). *A review of scholarship, 1995–2010*. Stellenbosch: Centre for Research on Evaluation, Science and Technology.

De Beer, J. (2005). *Open access scholarly communication in South Africa: A role for national information policy in the national system of innovation*. Unpublished M. Phil Dissertation, Stellenbosch University, Stellenbosch, South Africa.

Department of Education (DOE). (1997). *The higher education act*. Pretoria: DOE.

Drennan, R. (2011). *Towards research and knowledge leadership*. University of theWitwatersrand, Johannesburg, Research Report 2011, Johannesburg, University of the Witwatersrand.

Geach, C. (2013, October 3). UCT still in global top 200 varsities. *Cape Argus*, p. 8.

Govender, P. (2013, October 6). Wits ready to spend big to get to first place. In *Sunday Times*, p. 13.

Gray, E. (2012, September 4). *Open access in Africa—Green and gold, the impact factor, mainstream' and 'local' research*. Retrieved February 12, 2014. http://www.gray-area.co.za.

Jansen, J. (2011). *Diversity: A prerequisite for excellence*. University of the Free State, Annual Research Report, 2011. Bloemfontein, University of the Free State.

Jansen, J. (2013, October 10). What's in a Ranking? *The Times*.

MacGregor, K. (2008, May 25). South Africa: Latest rating of leading researchers. In *University World News*, Issue 5. Retrieved October 3, 2013. http://www.universityworldnews.com/article.php?story+2008052217280.

Makgoba, M. (2011). *Pre-eminence in research*. In University of KwaZulu-Natal Research Report, 2011, Durban, University of KwaZulu-Natal.

Meyer, M., Bushney, M., & Ukpere, W. (2011). The impact of globalisation on higher education: Achieving a balance between global needs and realities. *African Journal of Business Management, 4*(15), 6569–6578.

Mlambo, M. (2010). Concerted intervention needed to escalate PhD numbers: A comment. *South African Journal of Science, 106*(11/12), 1. http://dx.doi.org/10.4102/sajs.v106i11/12.498.

Mouton, J. (2003). South African science in transition. *Science Technology & Society, 8*(2), 235–260. https://doi.org/10.1177/097172180300800205.

Mouton, J. (2013). *A bibliometric analysis of the state of research at UCT*. Cape Town: University of Cape Town.

Nombembe, P. (2012, August 20). South African research up. *The Times*. Retrieved October 5, 2013. http://www.timeslive.co.za/thetimes/2012/08/20sa-research-output-up.

Price, M. (2010, September 24). Do university rankings matter? In *Mail and Guardian Online*. http://www.mg.co.za/article/2010-09-24-do-university-rankings-matter.

Price, M. (2012). *Message from the vice-chancellor*. In University of Cape Town Research Report 2012, Cape Town, University of Cape Town.

Rensburg, I. (2011). *Message from the vice-chancellor*. In the University of Johannesburg Research Report, 2011, Johannesburg, University of Johannesburg.

Samuel, M. (2012, November 2–8). Highest degree needs doctoring. *Getting Ahead, Supplement to the Mail and Guardian*.

Sitienei, G., & Ocholla, D. (2010). A comparison of the research and publication patterns and output of academic librarians in eastern and southern Africa from 1990–2006: A preliminary study. *South African Journal of Libraries and Information Science, 76*(10), 36–48. https://doi.org/10.7553/76-1-84.

Tijssen, R. (2012). *R &D globalization processes and university-industry research cooperation: Measurement and indicators*. Centre for Science and Technology Studies (CSWTS) (Working Paper Series). Leiden: CSWTS.

Turrell, R. (2012). South African knowledge—University funding: Government grants (Research-Publication Subsidy). Retrieved October 7, 2013. http://saknowledge.blogspot.com/2012/03/sa-knowledge-research-universities-dual_04.html.

University of Cape Town Research Report. (2012). Cape Town, University of Cape Town.

University of Johannesburg Research Report. (2011). Johannesburg, University of Johannesburg.

University of KwaZulu-Natal Research Report. (2011). Durban, University of KwaZulu-Natal.

University of the Free State, Annual Research Report. (2011). Bloemfontein, University of the Free State.

University of the Witwatersrand. (2011). Johannesburg, Research Report 2011, Johannesburg.

Ranking Regime and the Future of Vernacular Scholarship

Mayumi Ishikawa

INTRODUCTION: WORLD UNIVERSITY RANKINGS AS NATIONAL HIGHER EDUCATION PERFORMANCE INDICATORS?

In April 2013, Hakubun Shimomura, the Japanese Minister of Education, Culture, Sports, Science and Technology (MEXT), announced in a press conference that his ministry would seek to enlist at least ten Japanese universities among the top 100 in the world university rankings within the next ten years. The plan was part of a host of key strategies to be presented by MEXT to the Industrial Competitiveness Council attended by Prime Minister Shinzo Abe and several of his cabinet ministers. Among other priorities, these key strategies called for the creation of world-leading knowledge hubs by "globalizing" both human resources and operational systems of universities. Such university reform, if successful, is expected to boost the international stature of Japanese universities, leading to their improved position in the world rankings. The government subsequently announced a plan to allocate targeted, large-scale funds of 200

M. Ishikawa (✉)
Center for Global Initiatives, Osaka University, Suita, Japan
e-mail: ishikawa@cgin.osaka-u.ac.jp

121

to 400 million yen per year for up to ten years to the nation's twenty-some research institutions to enhance their international competitiveness. Only institutions that passed a prescreening, which incorporated an assessment of paper production and citations, were eligible to apply.

Although Shimomura did not specify during his interview the rankings and league tables in which Japanese universities were expected to improve their performances, a document submitted to the Council[1] clearly earmarked the results of the Times Higher Education (THE) World University Rankings. In addition, the same document identified "international" and "citation" indices as two areas in which Japanese universities are particularly lagging behind their peers overseas. Thus, universities are expected to improve their performances by making considerable efforts in these "weak" areas.

The less overt but perhaps more profound impact of Shimomura's announcement was that it indirectly endorsed the use of commercial world university rankings as a tool to assess national higher education policy outcomes. Although such appropriation may seem unwarranted, the Japanese government is hardly alone in its efforts to align university reform goals with methodologies employed by ranking organizations. Some neighboring East and Southeast Asian states had earlier embarked on creating "world-class," "top," or "excellent" universities,[2] employing language that tacitly reflects the desire to be listed among the top universities in the world university rankings.

Despite the world university rankings lacking "validity, rigor, or meaning of value" (Boulton 2010, p. 5), universities are not only

---

[1] Document submitted by Minister H. Shimomura to the 7th meeting of the Industrial Competitiveness Council on Prime Minister of Japan and His Cabinet website, dated April 23, 2013: http://www.kantei.go.jp/jp/singi/keizaisaisei/skkkaigi/dai7/siryou07.pdf. The goal of placing more than ten Japanese universities in the ranking of the world's top 100 universities in the next ten years through national university reform was included in Prime Minister Abe's "Japan Revitalization Strategy—JAPAN is BACK," adopted in a cabinet meeting on June 14, 2013. For a provisional English translation, see: http://www.kantei.go.jp/jp/singi/keizaisaisei/pdf/en_saikou_jpn_hon.pdf.

[2] See, for example, China's "985 Project" Mohrman (2008); Ngok and Guo (2008), Korea's "World Class University Project" Shin (2009); Kim and Nam (2007), Taiwan's "Aiming for Top University" through the "five-year-fifty-billion" program Lo (2013); Song and Tai (2007) and Singapore's luring of "brand name" foreign universities Sidhu (2005). Initiatives to create world-class universities usually go hand in hand with internationalization efforts, which are typically represented by goals of increasing international students and scholars, English-language publications and course offerings, among other goals.

"tempted" to improve their performance specifically to meet rankers' requirements (Rauhvargers 2011, p. 15) but are now driven to do so by state authorities. With the increased clout of university rankings, there is a growing importance bestowed on institutional prestige. It is no longer "the quality of individual students within national systems that are benchmarked, but the quality of these national education and training systems as a whole" (Brown et al. 2008, p. 133). As many university rankings also publicize "by country" scores (x numbers of universities in the top 200, for example), they look as much like Olympic medal counts as a "beauty contest" (Cantwell and Taylor 2013, p. 201).

A quest to raise the global profile and reputation of flagship research universities is reported prevalent among institutions and policy-makers worldwide (e.g., Altbach and Balán 2007; Hazelkorn 2008). Some use the rankings as a policy instrument to evaluate the performance of universities (Hazelkorn 2008; Deem et al. 2008), reflecting problematic "confusion" of rankings with evaluation and accreditation tools (Hazelkorn 2008, p. 211). Asian or East Asian governments, in particular, are said to be particularly "sensitive to rankings" (Lo 2013, p. 462; see also Shin and Cummings 2010, pp. 581–582). Consequently, higher education institutions and scholars in the region are exposed to pressure to perform and excel in a manner compatible with the ranking systems.

For instance, in South Korea, many institutions employ the same standard measures to assess research performance as those used by the university rankings, regardless of academic field. Such evaluation typically favors publications and citations in "international" journals over their domestic counterparts (Shin and Cummings 2010, pp. 591–592). As a result, "soft-discipline scholars" are often disadvantaged in faculty hiring, promotion, and remuneration considerations (Shin and Cummings 2010, pp. 591–593). In Taiwan, scholars collectively protested against the government's blanket use of indexed journal indicators as research evaluation criteria through an online petition. Humanities and social science scholars, in particular, objected to the devaluation of and disregard for their research accomplishments (Chu 2009; Chou 2014). Similar concerns are raised in different national contexts concerning diminishing interest in research that addresses local needs (Chou et al. 2013; Deem et al. 2008, p. 91; Kang 2009).

Against such a background, this article analyzes the pervasive impact of the world university rankings for vernacular scholarship and knowledge through a study of Japanese research universities. It first analyzes

local conditions that have led to the perpetuation of the world university rankings in a non-English language academic context, where blanket application of standardized and monolingual parameters is particularly problematic (for Japan, see Ishikawa 2012). Factors examined here include: the "decline" of domestic universities scandalized in the media; growing corporate demand for globally savvy graduates; allegation of insularism among students of leading Japanese universities; and inter-ministerial rivalry for shares of diminishing state funds. Together these factors form fertile ground for university rankings to thrive as legitimatized denominators of national competitiveness.

Next, the article focuses on the wider acceptance of bibliometric indicators[3] in performance assessment as a critical consequence of the popularization of university rankings and their influence over vernacular scholarship. Here, two dimensions of Japanese academic society, the bipolar character of academic publishing and an institution-centered audit system, are highlighted as posing particular challenges under the growing influence of the global ranking regime. This section first provides an overview of academic publishing in Japan, within which resides a bipolarity that juxtaposes autonomy and dependency. It goes on to argue that English-language paper and citation data omit significant segments of Japan's academic research, and are therefore unfit to accurately assess the performance of scholars in Japan. Although humanities and social science scholarship remains rooted in the national-language medium, overwhelming proportions of research articles by scholars in natural science, engineering and biomedical disciplines are published in international journals. As the latter group opts out of publishing in domestic journals with lesser impact, the bases of domestic journals are further weakened.

---

[3] "Bibliometric indicator" here refers to a quantitative tool used to assess scientific publications and citations, typically in scientific journals listed on commercially available databases such as Thomson-Reuter's Web of Science. A bibliometric indicator is the most frequently used denominator of a university's research performance and is thus closely linked to institutional positioning in various league tables, despite repeated criticisms over misuse see, for example, Anninos (2014); Dolan (2007, pp. 25–28); van Raan (2005). Tools that measure citations and calculate journal impact factors are based predominantly on publications in English language journals and rarely acknowledge vernacular language research ouputs, especially for papers in the humanities and social sciences (see, for example, Montgomery 2013, Chap. 4).

In addition, as the nation's nascent "audit culture" increasingly favors measurable data in much the same way as its Western predecessors, institutions and individual scholars are subjected to uneven pressure to realign their research performance along global parameters. In this sense, the ranking regime exposes inherent contradictions in Japan's emergent audit culture, which tends to strengthen already tight government control over national research universities, while individual scholars are conversely given less supervision and fewer opportunities for evaluation. Despite its high-flying idealism and popularity with local stakeholders, the push towards creating more top-ranked universities may fall short of addressing real needs to enhance individual performance in pursuit of globally relevant research and ensure equity among different generations of scholars.

The final section ponders the future of vernacular scholarship in the changing order of the world's knowledge by responding to voices of concern (Barth 2002; Gledhill 2002; Scott 2012). One of the issues raised is how the homogenizing and standardizing power of the "North Atlantic vernacular" (Scott 2012) may jeopardize the appreciation and sustainability of other vernaculars. More importantly for this article, "academic self-enclosure" (Gledhill 2008, p. 173), a byproduct of neoliberal "audit culture" in the West (Shore and Wright 1999; Strathern 2000), may now be exported to the rest of the world together with the proliferated ranking regime. Japan's case is instructive when we critically question the adherence to a monolithic, world-class universities model in a globalized post-industrial society that celebrates diversity and multiplicity as a source of creativity.

The dire condition of Japan's scholarship under the ranking regime also resonates with difficulties encountered by other non-English language scholarships in Asia and elsewhere in the world. Diversity in local contexts and academic traditions notwithstanding, more studies will show that core concerns of the politics of ranking are those of identity, representation, and justice rather than "methodological fetishism" prevalent in the studies of rankings (Amsler and Bolsmann 2012, p. 292). Further empirical evidences are due to identify what is behind the relationships unfolding under the banner of globalization both at the power center and the periphery of the world's academic knowledge production.

Behind the Perpetuation

Scandalizing the "Fall" of Local Universities

When Times Higher Education (THE) published the results of its "renewed" world rankings in 2010, after ending their collaboration with Quacquarelli Symonds (QS) and forming a new collaborative partnership with Thomson Reuters, Japanese newspapers were quick to harp on the "downfall" of local universities: Only five Japanese universities were listed among the world's top 200, compared with eleven in the previous year. Also, Asia's top position went to the University of Hong Kong, replacing the University of Tokyo as the region's higher education leader (see for example, Nihon Keizai Shimbun 2010b, September 13; Yamane 2010). Significantly, the news either downplayed or ignored the fact that the 2010 THE rankings lacked continuity with previous ranking methodology conducted under the aegis of the THE–QS partnership and in fact were the latest addition to an existing line of rankings with varying methodologies, approaches, and biases. Rather, the media amplified a narrative bemoaning the "deteriorating" performance of Japanese institutions. Public outcry and terse remarks from political leaders ensued.

Also, by calling the exercise The Times rankings, the local media's coverage of the ranking outcomes conveyed an air of authority via established Western journalism. Despite its former alliance with *The Times* (of London), the current THE magazine has no affiliation with the newspaper but retains the name and the international "brand" image that comes with it, a strategy that proved successful in Japan. The fact that THE is a British commercial educational magazine, providing college information to readership mostly in the United Kingdom, has been obscured. In other words, the THE's audience and "provincialism" (Scott 2012, p. 113) are rarely, if ever, critically examined by the local media.

The media reports also elicited from Japanese nationals lingering memories of "PISA shock" in 2003, in which Japan fell from 1st to 6th in Mathematic Literacy and 8th to 14th in Reading Literacy in the Programme for International Student Assessment (PISA). PISA shock reverberated throughout the nation, and mounting criticism over the Japanese education system subsequently led to an overhaul of primary and secondary education policies in Japan (Ishikawa et al. 2013, p. 16). This episode demonstrated the increased weight international comparison used to assess global competitiveness had garnered in public opinion, particularly for evaluating the outcome and quality of domestic education

policies. Brown et al. (2008, p. 133) cite world university rankings and the PISA exam results as sources of competition pitting schools, colleges, universities, think tanks, design centers, and research laboratories against one another on the front line of "knowledge wars" that place national pride at stake.

Business Community's Quest for Global Talent

Due to "shock" over the reported decline of local universities reinforced by the namesake of the prestigious Times, the world university rankings have secured wide publicity in Japan, even when compared with preceding world league tables such as the Shanghai Jiao Tong University's Academic Ranking of World Universities (ARWU) and the QS World University Rankings, launched in 2003 and 2004, respectively. There is more to this development than mere hype, however. One cannot deny that the media in fact provided a story local stakeholders wanted to read.

Coverage of the university rankings in newspapers such as *Nihon Keizai Shimbun* (Nikkei), Japan's leading economic daily, in a way sheds light on the business community's frustration over the state of Japanese universities. Following the release of the new rankings, Nikkei articles repeatedly cite the opinions of business leaders who denounce the "delay in universities' internationalizing efforts" and emphasize the need to cultivate global capacity among graduates. The portrayal of Japanese universities, their lagging competitiveness and susceptibility to being over-taken by their Asian peers may reflect growing frustration on the part of employers over universities and the training they provide for graduates. Not only is Japan poorly represented among the top 200 shares in the league tables in terms of the ratio of institutions to GDP (22nd), but also Japanese universities' contribution to economic development compared with other OECD countries is particularly low (Goodman 2013, p. 38).

Japan is among the world's most rapidly aging societies, with shrinking domestic markets. Coupled with a stagnant economy, Japanese business is enhancing global outreach, particularly operations in vibrant neighboring Asian markets. Japanese corporations have thus been increasingly vocal about the need for hiring and training *gurobaru jinzai* or "global human resources." That is, those who possess international outlook, experience and foreign language skills and who will undertake expanding business operations overseas.

Since about the same time the renewed THE rankings were released in 2010, there has been a fundamental shift away from the conventional hiring of new graduates from domestic universities to searching for global talent within or outside of Japan. For instance, Panasonic Corporations, one of Japan's largest recruiters of new college graduates, announced in 2010 its plan to allocate 80% of spring 2011 job openings overseas (1100 out of 1390 total) while reducing domestic recruits by 40%.[4] Concurrently, there was another notable trend to change the intra-company medium of communication to English, thus requiring minimum standards for new recruits' communicative skills in English. Rakuten Inc., Japan's leader in internet marketing, and Fast Retailing Co. Ltd., a leading company in apparel manufacturing and retailing well known for its Uniqlo brand, announced a decision to convert their official company language to English (The Yomiuri Shimbun 2010, August 25). At the time, these moves, which might have already been pursued in some neighboring Asian countries, were still new to Japan. Subsequently, recruiting new staff overseas and instituting a company-wide policy making English the official language of communication have become commonplace and cease to make national headlines.

Such trends in recruitment and hiring practices are closely monitored by students, prospective students and their parents. Although prestigious local universities offered a secure "passage" to regular, full-time employment up until the 1990s, the bridge between schools and companies has since become not only "longer but narrower" (Komamura 2011). As part-time employees and those on a temporary contract basis already account for as much as 30% of the total workforce in Japan, "full membership" in a company, which offers traditional job security and other benefits, is no longer taken for granted (Komamura 2011, pp. 170–171).

---

[4] Panasonic is only one of many Japanese corporations that have implemented similar changes in staff hiring. According to an editorial in *Nihon Keizai Shimbun*, dated June 15, 2010a, Mitsubishi Heavy Industries Ltd. announced a plan to increase the number of foreign nationals, who are mainly of Asian nationality, by 800 every year until their number reaches 4000, a goal expected to be reached in five years time. Positions available are for engineers, technicians, and production personnel. The company also plans to hire an average of 2000 Japanese new graduates per year, which translates to roughly a 40% reduction from the number of domestic recruits as of 2010. The article refers to other examples of leading corporations such as Toyo Engineering Corporation and Daikin Industries that likewise have increased the number of overseas recruitments for managerial or technical positions.

Elite Students' Insularism?

Higher educational institutions cannot turn a blind eye to changing requirements from the corporate sector as the success of graduates in the job market may well determine their own future viability. Internationalization policy of the Japanese government and universities, which had previously focused on the recruitment of international students, began in the 2010s to place more weight on sending Japanese students overseas to reverse their "insularity" or "inward-looking" tendency.

The stagnating number of Japanese high school and university students studying overseas since 2000, at a time when the number of international students was seeing phenomenal growth around the globe (OECD 2012, p. 362), further deepened the concern over Japanese students' insularity. Critics (e.g. Fukushima 2010; Hobo 2010; Tsuji 2010) identified what might be called an "elite (student) insularism" or the inward-looking tendency among students of leading universities as well as professionals. They point out that the stagnation in study overseas is not the outcome of economic woes but more a reflection of the lack of aspiration among youths to venture abroad. Although the trend stems from a combination of factors and is not necessarily psychological in nature as many critics claim, the lack of enthusiasm to study overseas among students at Japan's most prestigious universities raises national concerns over their ability to train the next generation of leaders. Universities nationwide have since launched new or expanded previously existing study abroad programs with the government's support.

As discussions of insularism provoke worry, it is not hard to imagine ambitious prospective students and parents forgoing domestic universities and seeking an education that maximizes their competitiveness and future job security by deferring to top-rated institutions listed in the world university rankings.[5] Graduates of prestigious domestic universities are still able to land secure jobs with relative ease at present, but their future appears increasingly unsure, judging from changes in corporate hiring practices and global operational demands.

---

[5] The opening of new preparatory or cram schools in recent years for students who aspire to enter major American universities may be case in point (Ishikawa 2012, p. 90). Also, see a special issue of the *Nikkei Business* magazine (2013, October 14) titled "The world's top universities," featuring the story of a group of young people who chose to bypass Japanese leading universities and instead enroll with their well-known American counterparts.

International Competitiveness and Distribution of Public Funds

The reported decline of Japanese research universities' positions in world university rankings has additional repercussions. Namely, it is used to pressure universities to improve cost-effectiveness under a national political climate of fiscal austerity. Over the years, MEXT has taken issue with Japan's level of public expenditure on tertiary education, which remains among the lowest of OECD countries (0.6% of GDP, compared with the OECD average of 1.3%) (Newby et al. 2009, pp. 39–40; OECD 2013, p. 199). MEXT has used such figures to negotiate an increase in public spending with the Ministry of Finance (MOF) to keep universities internationally competitive. The MOF, however, employed the same "competitiveness" rhetoric and used the world university rankings as a proof of local universities' under-performance, criticizing poor cost-effectiveness and lack of effort on the part of publicly funded universities.[6]

To counter MEXT's claim, the MOF strongly criticized Japanese universities for the decline in research outcomes despite having received greater government support in the form of increased funds and opportunities to apply for competitive research grants. Furthermore, the MOF denied a correlation between budget size and research performance by comparing two universities: Tokyo Institute of Technology, a leading science and technology institute in Japan, and University of Tsukuba (formerly Tokyo University of Education), a comprehensive research university with traditional strengths in the humanities and social sciences. Although Tokyo Tech receives only half the amount of subsidies for their operational budget, it recorded 1.3 times more paper citations than Tsukuba.

The reported dramatic decline of Japanese universities in the world university rankings thus instigated inter-ministerial rivalry over shares of diminishing public funds. The use of citation indices as instruments to measure institutional research performance is also indicative of the nature

---

[6]The MOF, citing the results of the THE world university rankings, claimed that only 16 Japanese universities made it within the best 400 institutions, compared with 27 in 2006, additionally pointing out and that there were only two universities (the University of Tokyo and Kyoto University) listed among the top 100. The fact that the methodology used to produce these two rankings lacks continuity was again ignored. Details and scrutiny of the debt-laden national budget (*jigyo-shiwake*) implemented by the former Democratic Party government was available online, as of November 21, 2011, under Working Group A2 on the Cabinet Office website, Government of Japan. The webpages concerned were subsequently removed.

of the emergent audit culture in Japan, which will be revisited in the following section.

Faced with criticisms from both within the government and outside, MEXT set a concrete target to improve the global reputation of local institutions in the public eye. Global reputation is thought to be reflected in the world university rankings, making the rankings both a competitiveness and an accountability issue. Yet, pressure on universities to improve their positions may lead to outcomes both intended and inadvertent.

Impact of the Ranking Regime on Local Scholarship

Autonomy and Dependency: Academic Paper Production in Japan

As noted, factors that have contributed to the "popularity" of the global rankings in Japanese society are multifaceted and complex. Various factors in media, business, universities and government as well as issues such as employment and recruitment, medium of communication and inter-ministerial rivalry in an increasingly neoliberal political climate all play a part. In a sense, the rankings accommodate both global and local demands.

This section seeks to assess the impact of the ranking regime on local scholarship by focusing on the proliferation of paper and citation indices often used in ranking exercises. Before doing so, however, an overview of local academia, particularly the status of academic journal publications in Japan, is warranted in order to facilitate a contextualized understanding of these issues.

Japan has arguably one of the most autonomous higher education and research systems in the non-Western world. This is due to the nation's history, the use of the national language for all levels of education and an independent system to train university faculty without requiring them to attend Western institutions to attain higher degrees or garner prestige, except during periods immediately following the establishment of the modern university system in the late nineteenth century. Also, the existence of a sizable academic community and domestic intellectual readership has sustained domestic markets, as is the case for humanities research outputs. Even when scholars in the humanities and social sciences

were sent to Western institutions to obtain postgraduate degrees, English-language publications were not necessarily required or particularly valued when these scholars applied for faculty positions upon their return home, that is, until fairly recently.[7]

Academic publishing in Japan, however, is characterized by its bipolar nature within a single national system of research. At one pole, scholars in broader "hard" science fields publish the majority of their articles in journals overseas. At the opposite pole, research in cultural and social studies remains solidly embedded in the national-language medium (see Ishikawa and Sun, this volume). For both the hard sciences and the humanities, publishing English-language articles in international peer-reviewed journals has gained importance over the past decade. One must consider both dimensions to fully understand the country's representation in overall science as well as the university ranking exercises.

Although detailed, contemporary data on academic publishing trends by language that specifically addresses the humanities and social sciences in Japan is rare, an informal internal survey conducted at a single research university may provide a rough indication of where these trends are headed. Take Osaka University, one of Japan's leading comprehensive research universities, enlisted in most world university rankings and league tables, as an example. The university has some 24,000 students and 3000 faculty members in 11 undergraduate and 16 graduate schools in a multitude of disciplines, as well as roughly 30 specialized research institutes and centers. The university is known for its prominent medical and engineering faculties with smaller but reputable humanities and social science faculties, which constitute roughly 20% of the university's total faculty members. Osaka University is fairly representative of Japan's several former imperial universities, which have served as the backbone for the nation's postwar economic success. Between fiscal years 2003

---

[7] Japan's graduate education has expanded significantly in terms of enrollment, in large part due to a government initiative launched in 1991 that aimed to double the number of doctoral degree holders. While the number of Ph.D. holders has increased, the academic job market has not offered more employment opportunities. According to Fujimura (2004), the estimated postdoctoral unemployment rates in 2002 were at least 47.1% in the humanities, social sciences and education (compared with 36.9% in science and engineering). To secure academic positions, publications in refereed international journals have become one way to gain an advantage over competitors, particularly for young scholars.

and 2005, over 80% of all papers published by the natural science, engineering and medical faculties were written in English. Research papers produced by two representative humanities faculties, on the other hand, were predominantly written in Japanese: An average of 91% and 87% of the total academic papers produced during the same period within the faculties of letters and law, respectively, were written in the national language (Ogawa 2006, pp. I–3, 9). Barring the faculty of economics, where papers written in English (70% in FY 2005 when single-authored and internationally co-authored papers are combined) outnumber those in Japanese, the majority of research output in the humanities and social sciences is written in Japanese (ibid. p. 9). Note, however, that there is significant variation by institution and by year, even within the same discipline.[8] In addition, due to globalization trends of higher education and research in recent years, coupled with the Japanese government's policy of internationalization as noted above, publishing papers in English has become more common even among the humanities disciplines. The fact that the number of English-medium journals in the humanities in Japan has doubled between 2003 and 2009 testifies to this point (see Footnote 10). Paper outputs in the humanities and social sciences by Japanese scholars in international journals listed on Web of Science have increased by nearly 10% over the past five years, if not their shares in total paper outputs worldwide (Funamori 2012, slide 13).

Although the use of Japanese for academic communication purposes is, more or less, limited to within Japan, the "autonomy" of national language-based academia is supported by relatively robust scholarly communities. Although smaller in size compared with their medical, natural science and engineering counterparts, quite a few domestic academic associations in the humanities and social sciences count their members in the thousands, thanks to a long history and solid membership bases, some having been established soon after Japan's modernization period in the late nineteenth century. There were more than 104,000

---

[8] A comparative study of the departments of economics in twelve Japanese research universities shows that the numbers of papers per faculty listed in international databases such as EconLit vary considerably from one institution to another, depending on the ratio of foreign faculty, overseas education and work experience of faculty members Yamauchi (2006, pp. E125–131).

researchers in the social sciences and humanities in Japan in 2011; approximately 93,000 of them are affiliated with universities (MEXT 2012a, p. 124). According to a Science Council of Japan database of academic societies (*Gakkai Nenkan*), the Japan Sociological Society (Established in 1924. Numbers in parentheses that follow also indicate the year of each organization's establishment) has 3600 members, the Japanese Educational Research Association (1941) has 3000, the Historical Society of Japan (1889) 2300 members, the Society of Philosophy (1884) 2300 members, and the Japanese Society of Cultural Anthropology (1934) 2000 members. These associations as well as non-affiliated, highly literate intellectuals form a core readership that has sustained domestic markets for articles and books in the Japanese language produced by scholars in Japan. In other words, most scholars in the humanities and social sciences have conducted research in the national language for domestic scholarly and intellectual audiences in a rather autonomous home academic market.

Scholars in broad natural science fields, on the other hand, have long used or more recently converted to the English language with relative ease, albeit with notable differences between disciplines. The natural science community in Japan has in fact been highly dependent on overseas journals as an outlet for its research output.[9] In 2009, when scholars in Japan produced about 8% of the world's academic papers, 80% were published in journals overseas (MEXT 2012b, pp. 3–4, 40). There has even been a concern raised in the domestic academic community over "paper drain," meaning some of the best research results produced at home are published elsewhere.

---

[9] This does not mean, however, that domestic journals and conferences are unimportant for science communities in Japan. On the contrary, they often function as a critical outlet and "incubator" for the most cutting-edge scientific research. Most scientists the author interviewed over the years at Osaka University stressed the importance of domestic academic outlets and the use of one's native language to nurture conceptual creativity. One senior university executive and chemistry professor, for example, stated that innovative ideas tend to be first published in domestic journals at a stage when they are "too new" and thus likely to be rejected by established journals overseas. A successful "induction period" of three to five years for a major discovery to be mainstreamed requires first a supportive home audience, the chemist stressed.

Currently there are more than 2000 academic journals in Japan (MEXT 2006, p. 70). The number of journals with high impact factors, however, indicating that they are read worldwide, remains small.[10] Referring to the "underdevelopment" of domestic scientific journals, a MEXT policy document cited the lack of a system "to properly evaluate excellent research outputs with authority" (MEXT 2006, p. 73). In addition, most scientific journals in Japan are published by academic associations and circulated among members for the purpose of exchanging information among insiders (MEXT 2006, p. 74). Few journals expand their market beyond the realm of academia and seek a for-profit business model. The MEXT report (ibid.) thus concluded that many of the existing journals are still in need of stricter quality control, financial independence and appeals beyond inner circles to contribute to the advancement of academic fields in Japan.

To maximize publicity and the impact of their work, the majority of natural science, engineering and medical science scholars in Japan prefer to publish their research outcomes abroad in internationally recognized journals. As a result, Japanese scholars need to pay increasingly higher fees for subscription and access to domestic research results (MEXT 2012b), raising accessibility concerns at home.

In the above, the bipolar character of academic publishing in Japan was reviewed. Although researchers in natural science, engineering and medical science faculties by and large rely on overseas, English-language journals to publicize the outcomes of their research, researchers in the humanities and social sciences still publish mostly in national-language medium outlets with low international visibility. Paper and citation indices, the most frequently used denominators of universities' research performance as well as various ranking exercises, are based predominantly on publications in English-language journals and rarely acknowledge vernacular language research results, thereby undercutting

---

[10] Some 400 of the 2000 journals in total were English-language medium as of 2009. Of those 400, 84% were in the natural sciences, engineering and medicine, while the remaining 16% were in the humanities and social sciences. Although the representation of humanities journals remains fairly small, English journals in these fields have increased two-fold since 2003 MEXT (2012b, p. 40). Sheer difficulty of using a foreign language, quality control and standardization of academic terminology, shortage of staff skilled in English-language editing and publishing and resultant high costs are cited as factors contributing to the conservative number of English-language publications in general MEXT (2006, p. 71).

researchers producing papers or books in the humanities and social sciences. Japanese universities that make the top 100 in international league tables, the majority of which are national (public) universities, are all, not surprisingly, comprehensive research institutions with strong natural science, engineering and medical faculties.[11] Universities specializing in the humanities and social sciences do not usually fare as well in ranking exercises that employ metrics tending to obscure strengths in these fields, particularly those in a vernacular language.

When the world university rankings measure research performance by referring to Thomson Reuter's Web of Science, for example, out of all papers produced by researchers in Japan, the share of the humanities and social sciences combined constitutes a mere 1%.[12] One cannot generalize by relying on a single source, and research portfolios clearly differ among countries.[13] Yet the fact remains that a predominant proportion of papers produced by scholars in Japan, which are considered to have some measure of international visibility, are in fields other than the humanities and social sciences.

Simply put, the global university rankings, which heavily rely on journal citation indices, generally acknowledge most of the natural science research outputs by Japanese scholars but rarely those of their colleagues in the humanities and social sciences as well as national language-based science disciplines. The "world reputation" of Japanese universities has thus been forged through the "dependency" of scientific fields on Western publications. A quest to improve standings in the world university rankings by the Japanese government may pressure institutions to realign their institutional goals with international indicators. Such an attempt can

---

[11] The seven former imperial universities of Hokkaido, Kyoto, Kyushu, Nagoya, Osaka, Tohoku and Tokyo, and private universities of Keio and Waseda with strengths in natural science, engineering and medical disciplines are case in point.

[12] This is a rough estimate calculated using data compiled by Funamori (2012, slide 13), a specialist on institutional research and evaluation at the University of Tokyo, based on her analysis of Thomson Reuter's Web of Science from 1981 to 2010. The quoted figure is derived from data provided for different academic fields in the year when their annual outputs were at their highest and thus does not reflect the share of humanities and social sciences in any given year.

[13] It is difficult to determine from the figures if the share of humanities and social science articles is disproportionately small in Japan. For a comparison, the share of social science articles in the United States in 2010 was 5.9% National Science Board (2012, Chap. 5, Appendix Table 5–43).

have consequences for all research-oriented institutions, but it may affect individual disciplines differently.

Nascent "Audit Culture" and National University Corporations

Evaluation by bibliometric tools, which may be more applicable to some segments of research over others, has become increasingly common in Japan. Since the 1990s, the importance of performance evaluation of universities has been stressed in an overall trend of nationwide university reform, resulting in the establishment of an accreditation system and evaluation and quality assurance mechanisms for education and research (Itsumura and Yasui 2006, pp. 131–132). Furthermore, the incorporation of national universities in 2004, which ostensibly made them independent agencies, required these institutions to submit to MEXT their mid-term goals every six years, based on which their performance and degree of achievement were to be evaluated. The evaluation at the end of each term would determine the financial support available for each institution, an amount destined to dwindle in the climate of national fiscal austerity (Kaneko 2013, pp. 177–180). Consequently, while the evaluation scheme of national university corporations was intended to measure the degree of achievement stipulated in institution-specific targets, in reality, absolute performance indicators were preferred when it came to evaluation of research (Kaneko 2013, p. 180).

Concurrent with the incorporation process, the government has taken steps to reduce the financial support of universities' regular operational funds and increase shares of competitive research grants. Citation indices and journal impact factors, which had been used with restraint and caution up to the mid-2000s,[14] thereafter came to be used widely among researchers as performance indicators when they applied for research grants, especially in the natural and medical science fields. Even prior to this shift, since the late 1990s journal impact factors have come to

---

[14] Until the mid-2000s, the Japanese government was rather conservative in using journal impact factors and citation indices for the assessment of research, judging from a review of policy documents over the past decade and interviews with university administrators experienced in research evaluation. When MEXT released a guideline for evaluation of research and development in 2005, they in fact cautioned against the misuse of journal impact factors and clearly warned not to confuse journal impact factors with indicators of the quality of research articles late MEXT (2005).

be used for individual promotion and performance evaluation among medical faculties and departments (Itsumura and Yasui 2006, p. 141).

Contrary to the purported objective of giving more autonomy to national universities, the incorporation of national universities has failed to weaken the government's hold on institutions (Newby et al. 2009). Although the university reform that resulted in the incorporation of national universities in Japan bears striking resemblance to Britain's neoliberal policy under the Thatcher administration of the 1980s (Kaneko 2013, p. 177), somewhat idiosyncratic dynamics are at play for state assessment exercises in Japan and the resultant "audit culture" (Shore and Wright 1999; Strathern 2000).

Institutional Vs. Individual Audit

Audit of Japanese national university corporations has primarily been a monitoring and assessment exercise targeting institutions rather than individual scholars. Individual scholarly evaluations such as the Research Assessment Exercise (RAE) in the United Kingdom has not been imposed on Japanese national research universities by the state authorities concerned. A system that prioritizes institutional evaluation may reflect the strong tendency toward collectivism in Japanese society, according to Takamitsu Sawa (2011, pp. 7, 9), an economist with extensive experience in university senior management and government advisory positions. The assessment system of national universities based on mid-term planning is a legacy of the centrally planned economy of Japan's past. Such institutional evaluation works against the very principle of liberalization through incorporation, Sawa argues. Instead, Sawa urges that, since research is an outcome of individual creativity, it must be evaluated individually, implying the need for peer review by a small number of experts for each specialized field.

Fundamentally, the university audit system in Japan is not "emancipatory" as in the case of the United Kingdom, where it was promoted in the name of "autonomy" for the academic community "policing itself through peer review" rather than the state (Goodman 2013, pp. 43, 48). Nor is the audit system pursued in the name of "equality" or "democracy" (Scott 2012, pp. 119, 127) by introducing "objective" methods of evaluation. The world university rankings were introduced and adopted in Japan in the absence of a systematic review of individual performance or history of peer or external evaluation such as that implemented in the United Kingdom (Goodman 2013, p. 44).

For one, audit pressure is not burdened equally among different generations of scholars. Takeuchi (2010) thus talks of an "inter-generational gap, clash and friction" among university faculty in Japan. From the 1990s, there has been a long and steady decline in academic jobs in Japan due to nationwide expansion of graduate schools and a concomitant increase in the number of new Ph.D.'s (Takeuchi 2010, pp. 14–15; see also Footnote 7). Facing a tight and competitive job market, young scholars are pushed to increase productivity, driving them to create the equivalent of a "paper trail" (Barth 2002, p. 9; Shore and Wright 1999, p. 567). Senior faculty members, on the other hand, landed academic jobs when the market was still expanding. Many were recruited under a lifetime employment arrangement rather than a short-term contract, often through references, where promotion was contingent on age and availability of posts rather than individual merit (Takeuchi 2010, pp. 16–17).

Once securing a permanent position within the university, individual faculty members are still left with considerable leeway in their daily conduct of education and research, even if exposed to increasing burdens of administrative and other work demands. If Americans are "among the most normalized and monitored people in the world," contrary to their rugged individualist self-image (Scott 2012, p. 127), Japanese senior scholars have remained rather unmonitored, at least for now, while host institutions are subjected to ever tighter control and pressure from the state to become globally competitive.

Metrics concerning journal article production, impact and citations are the mainstay of many world university rankings as they purport to offer globally comparable, objective scores. The rankings thus reward institutions that play by the rules of the audit game. The emerging audit culture for national research universities in Japan, however, is primarily concerned with meeting declared targets as a way to achieve institutional accountability. The collective auditing does not promote equity or fairness among member institutions, nor does the exercise reward or penalize individual performance, all the while placing a disproportionately heavy burden on young researchers just entering the academic job market.

The world university rankings and the existing corporate audit system that binds Japan's national universities to prescribed standards of achievement both insist on measuring and comparing institutional performance, but they are ironically at odds with one another. With the recent announcement of the government's quest to enlist ten universities among

the world's top 100, Japanese university auditing methodology, particularly when applied to leading research institutions, may change. A transition toward concrete scoring systems, based on measurable indicators used in the rankings, may already be underway.

The goal to create "world-class" universities will further concentrate funds toward a small number of institutions. Disciplines that can produce more measurable outputs, such as papers published in journals listed in the Science Citation Index (SCI) and the Social Sciences Citation Index (SSCI), and thus contribute to improving ranking scores will be strengthened, and so will universities with more internationally visible academic fields. In addition, the move will reward a handful of established and thus relatively senior researchers and their teams in measurable and globally competitive areas of science. The "measure the measurable" trend will proceed in a national context where the measurable is more severely limited than in English-speaking countries. Anglo-American databases such as SCI and SSCI simply do not capture the depth or multiplicity of research produced in Japan. There is no alternative in sight, however. Scientific publishing in Japan is too "international" to develop an independent system of assessing domestic research, while the humanities and social sciences are too autonomous and lacking in global input. Neither seems to offer a solution to producing indicators of global significance for locally meaningful research output.

The ranking regime will undoubtedly affect assessment and funding trajectories in Japan. This change will be reflected in the strategic behavior of individual researchers, departments and institutions, and perhaps not always in a manner conducive to improving the quality of research (Itsumura and Yasui 2006, p. 141). Heavy concentration of funds devoted to a small number of research universities and centers of excellence over the past decade has already changed the national research structure from a pyramid shape to a tower, according to K. Oike, former president of Kyoto University (Nihon Keizai Shimbun 2013, June 13). Unlike the old system in which the upper echelon of academia was supported by a broad foundation comprising a number of diverse public and private institutions with their own research function and agendas, it now teeters atop a thinning and weakening base to fall back on.

Ranking Regime and the Future of Vernacular Knowledge

"Partial View" of Japanese Universities

Following an analysis of the perpetuation of the world university rankings in a Japanese local context, two conditions were cited as factors rendering the use of bibliometric indicators for cross-cultural assessments of institutional research performance problematic: the bipolar character of academic publishing and institution-centered audit. Building on this discussion, the final section ponders the future of vernacular scholarship, focusing specifically on the Japanese language-based humanities and social sciences. Rather than forecasting the future, the objective of this section is to recapitulate the emerging contradictions and contestations in knowledge production, both in local and global contexts, which affect the future course of vernacular scholarship.

The first condition stemming from the use of bibliometric indicators in assessment of research performance is the bipolarity of academic publishing in Japan; that is, the dependency of the nation's scientific community on international English-language journals on one hand, and the autonomy of the humanities on the other, which is sustained by the size and long-standing tradition of national language-based academic markets. Natural science scholars have ensured the visibility of scientific research from Japan, particularly when international contests such as the world university rankings employ paper production and journal impact factors as proxies of excellence. By and large, productivity and competitiveness in many natural science, engineering and medical fields have led to some of Japan's research universities being awarded top-ranked positions in the global university league tables, earning a prestigious reputation for the nation's university community.

Works by local humanities and social science scholars, on the other hand, have been obscured by predominantly English and thus Anglo-American-centered journal databases and citation indices. Even when non-English vernacular journals are listed in commercial journal databases, their contribution to journal impact factors is negligible due to limited readership, appeal and accessibility of national-language scholarship in the global research community. Non-English papers published in journals with smaller circulations may even be detrimental to overall citation "scores" by eroding per paper or per faculty points compiled by

the rankers. In addition, vernacular journals offer smaller prospects for commercial profit due to more limited markets. Consequently, journal publishers and database providers, who thrive on increased journal sales (Post 2012, p. 7) and analytical tools due to the global popularity of auditing and rankings exercises, are unlikely to promote the inclusion of vernacular journals in their lists or data sets. Hence, Japanese universities are and will be, for the foreseeable future, assessed and ranked through a "partial view" (cf. Brenneis 2004; Considine 2006).

Asymmetrical to Multidirectional Globalization

There is no doubt that raising English-language paper productivity in the humanities and social sciences matters for Japan's future. It is a critical step on the path to promoting globally engaged research, while ensuring connectivity and fostering dialogue with international scholarly communities. Doing so while upholding the scholarly commitment to local society means that researchers play dual roles, a demanding task, to say the least. Therefore both roles need to be evaluated fairly. Here, the second condition, which concerns the assessment system of Japanese national universities, poses a particular challenge.

The current assessment system of national universities holds institutions responsible for their own mid-term goals. The responsibility to undertake assessment or quality assurance exercises in principle rests with each individual institution after its incorporation. If institutions do not properly assess the performance of individual scholars, which is the tendency under the current system, there is little incentive for Japanese humanities scholars to publish in English. Some of them voluntarily publish in languages other than Japanese for international recognition, while others, particularly young researchers, who are vying for positions in an increasingly competitive academic job market, seek leverage by publishing in internationally recognized journals. Those works by young researchers may not be evaluated highly, unless perhaps at the time of appointment. Now, with a national drive to improve positions in the world university rankings, the national university assessment system is likely to place more weight on metrics, such as citation indices and the total amounts of external funds received, to evaluate research performance. The move may inevitably lead to further concentration of public research funds toward measurable scientific fields at selected research universities. This then renders the humanities disciplines further obscured, un-assessed, and under-funded.

For the humanities and social sciences, the real issue is to alter the flow of knowledge from a one-way to two-way traffic. It means rectifying the asymmetrical, unilateral flow of knowledge, currently directing predominantly from the West to local societies, and activating a two-way communication between the Japanese humanities and social sciences communities and their counterparts overseas. All the while local scholarly commitments need to be retained. To do so, local scholars need to be encouraged to engage more with the world and contribute to the construction of knowledge from a vernacular perspective. The motivating factor for the humanities and social sciences to engage in discourse with their colleagues overseas is to profit from diversity as a driver of critical analysis and creativity, rather than the profane reason that English papers contribute to improved positions in the ranking exercises.

The government's policy of recruiting more foreign scholars, as announced by Minister Shimomura in the same press conference introduced at the beginning of this article, is thus somewhat misplaced. The MEXT directive to increase foreign staff, if promoted as part of an initiative to include more Japanese universities in the world's top 100, may exacerbate an existing imbalance of West to East knowledge traffic. The diversity of staff has value in and of itself but needs to be pursued as part of each institution's strategic plan for the future. Again, the importance of proper evaluation of research and education by faculty needs to be reiterated. When researchers of diverse backgrounds converge in institutions of higher education and research, equity regardless of age, gender, and national and cultural background need to be ensured through fair evaluation.

Ranking Regime Celebrates and Exports Audit Culture

All over the world, it is not uncommon for research universities with ambitions to improve their standing in the university rankings to encourage faculty to publish in journals listed in specific databases, which are then measured as a proxy of the institution's research power. Among frequently used indicators is Thomson Reuters Web of Knowledge, formerly the (Institute for Scientific Information) ISI database, which includes SCI, SSCI and the "Arts and Humanities Citation Index." At the time of its creation by the ISI, SCI was a tool for libraries to make purchasing decisions as to which journals to keep and which to

drop (Ciancanelli 2007, pp. 71–72; Guédon 2001, Chap. 6). The tool subsequently came to be used to evaluate the performance of research scientists by measuring the impact of their articles. For university administrators, SCI has come to signify an objective and quantifiable, and thus verifiable, evaluation mechanism applicable across disciplines. It has thus evolved into a "new managerialism" or "career management" tool (Post 2012, pp. 4–6; Guédon 2001, Chap. 6) and an "unyielding yardstick for hiring, tenure, and grants" which may even affect research orientations (Monastersky 2005).

Bibliometric indicators have developed into convenient tools for the faculty reproduction, promotion and distribution of resources within academia in the United States and elsewhere (Cameron 2005, pp. 112–114). Even when used within the particular national context where they first originated, indicators such as SCI and SSCI are inherently "invalid and inevitably corrupt" (Scott 2012, pp. 112–128). Scott (2012, pp. 56, 112–113) argues that such techniques of quantitative commensuration rarely measure the quality at stake with accuracy and are basically a provincial Anglo-American exercise masquerading as a universal assessment tool (p. 56). Furthermore, the very existence of such a tool, despite its ostensible utility when first devised, inevitably precipitates a chain of events, such as "rings" of scholars who regularly cite each other, that undermine the tool's validity (Scott 2012, p. 115).

As audit and quality control have become dominant in education systems throughout much of the world, with the proliferation of neoliberal policies and ideologies, journal impact factors and citation indices have become a collective "force" that solicits a "perverse colonizing effect" (Scott 2012, pp. 115–116). This force is strengthened and spread to the rest of the world through the propagation and popularity of various world university rankings (see also Amsler and Bolsmann 2012, p. 292).

The world university rankings celebrate audit culture by rewarding its subscribers. The rankings export the norms and tools of audit operations originating in English-speaking countries and promote allegiance to quantitative commensuration adopted there internationally. Institutions with a desire to be listed among the world's top universities drive their staff to upgrade their performances along scales recognized by the audit culture, and by extension, ranking parameters.

Journal impact factors and citation indices have already become a global currency. Ironically, however, while on one hand the global appeal of these tools is enhanced, they seem to promote reclusiveness in academia

on the other. As noted above, bibliometric indicators are used for the sustainability and the reproduction of academia, an internally useful tool. Consistent with the popularity of bibliometric tools, the audit culture in the United Kingdom, for instance, places "an even greater premium on 'impact' in the academic field itself" (Gledhill 2008, p. 182), thereby promoting a "culture of professionalization and academic self-enclosure" (p. 173).

The world university rankings export this worrisome, inward-looking propensity to the rest of the world; meanwhile citations continue to be concerned with "inner circle" visibility. In addition, some reputational surveys conducted by the ranking agencies score peer reviews, which are largely conducted within the same regions and the same disciplines as those of reviewers.[15] Disciplinary and geographically specific connections and visibility thus matter and contribute to improving ranking scores. Despite the illustrious image of "world-class" institutions and global excellence, the world university rankings seem to promote rather than shun insularity in the academic community.

By citing and being cited, universities may metrically flourish with increased paper production and measured impacts. Behind races to create the world's top-ranked universities, some of those governed by the ranking and audit regimes will resort to "triviality" rather than enhancing their imagination and creativity (Barth 2002, p. 10). Along the way, fundamental questions of "For whom do we produce knowledge?" and "What purpose do we serve?" remain unanswered (cf. Gledhill 2002).

For Japan and its vernacular scholarship, answers to these questions touch the very heart of the mission and existence of research universities, which are being radically transformed under globalization. The state has embraced the world university rankings embedded in its policy goals without importing the core principle of audit culture. The path the country takes will therefore differ from others, but it will be rugged and

---

[15] For example, in a reputational survey of the QS World University Rankings, respondents are "invited to select features" only from their own region. Respondents to the reputational survey conducted by Thomson Reuters for the THE World University Rankings, on the other hand, choose a specific region and a narrower disciplinary field but are also able to nominate institutions from regions outside their first choice. Either way, one region is given precedence over others for primary review Ishikawa (2012). Both QS and THE reputational survey methodology pages back in 2013 to 2014 have subsequently been updated and no longer available on their websites.

equally precarious as seen from an uneven unfolding of the construction and representation of global knowledge.

References

Altbach, P. G., & Balán, J. (Eds.). (2007). *World class worldwide: Transforming research universities in Asia and Latin America*. Baltimore, MD: Johns Hopkins University Press.

Amsler, S. S., & Bolsmann, C. (2012). University ranking as social exclusion. *British Journal of Sociology of Education, 33*(2), 283–301. https://doi.org/10.1080/01425692.2011.649835.

Anninos, L. N. (2014). Research performance evaluation: Some critical thoughts on standard bibliometric indicators. *Studies in Higher Education, 39*(9), 1542–1561. http://dx.doi.org/10.1080/03075079.2013.801429.

Barth, F. (2002). An anthropology of knowledge. *Current Anthropology, 43*(1), 1–18. https://doi.org/10.1086/324131.

Boulton, G. (2010). *University rankings: Diversity, excellence and the European initiative* (League of European Research Universities Advice Paper 3). Leuven: LERU Office. Retrieved from http://www.ireg-observatory.org/pdf/LERU_AP3_2010_Ranking.pdf.

Brenneis, D. (2004). A partial view of contemporary anthropology. *American Anthropologist, 106*(3), 580–588. https://doi.org/10.1525/aa.2004.106.3.580.

Brown, P., Lauder, H., & Ashton, D. (2008). Education, globalisation and the future of knowledge economy. *European Educational Research Journal, 7*(2), 131–166. https://doi.org/10.2304/eerj.2008.7.2.131.

Cameron, B. D. (2005). Trends in the usage of ISI bibliometric data: Uses, abuses, and implications. *Portal: Libraries and the Academy, 5*(1), 105–125. http://dx.doi.org/10.1353/pla.2005.0003.

Cantwell, B., & Taylor, B. (2013). Global status, intra-institutional stratification and organizational segmentation: A time-dynamic tobit analysis of ARWU position among U.S. universities. *Minerva, 51*(2), 195–223. http://dx.doi.org/10.1007/s11024-013-9228-8.

Chou, C. P. (Ed.). (2014). *The SSCI syndrome in higher education: A local or global phenomenon*. Rotterdam, The Netherlands: Sense Publishers.

Chou, C. P., Lin, H. F., & Chiu, Y.-J. (2013). The impact of SSCI and SCI on Taiwan's academy: An outcry for fair play. *Asia Pacific Education Review, 14*, 23–31. http://dx.doi.org/10.1007/s12564-013-9245-1.

Chu, W. W. (2009). Knowledge production in a latecomer: Reproducing economics in Taiwan. *Inter Asia Cultural Studies, 10*(2), 275–281. https://doi.org/10.1080/14649370902823405.

Ciancanelli, P. (2007). (Re)producing universities: Knowledge dissemination, market power and the global knowledge commons. In D. Epstein, R. Boden, R. Deem, F. Rizvi, & S. Wright (Eds.), *World Yearbook of Education 2008* (pp. 67–84). New York, NY: Routledge.

Considine, M. (2006). Theorizing the university as a cultural system: Distinction, identities, emergencies. *Educational Theory, 56*(3), 255–270. https://doi.org/10.1111/j.1741-5446.2006.00231.x.

Deem, R., Mok, K. H., & Lucas, L. (2008). Transforming higher education in whose image? Exploring the concept of the 'world-class' university in Europe and Asia. *Higher Education Policy, 21*(1), 83–97. https://doi.org/10.1057/palgrave.hep.8300179.

Dolan, C. (2007). *Feasibility study: The evaluation and benchmarking of humanities research in Europe*. Humanities in the European Research Area (HERA). Retrieved from http://www.aqu.cat/doc/doc_34869796_1.pdf.

Fujimura, M. (2004). Kenkyu hyoka to daigakuin (in Japanese) [Evaluation of research and graduate schools]. In T. Ehara & T. Umakoshi (Eds.), *Daigakuin no kaikaku* [Reform of graduate schools] (pp. 103–122). Tokyo: Toshindo.

Fukushima, F. (2010, April 8). Reverse Japan's insularity. *The Japan Times*. Retrieved from https://www.japantimes.co.jp/opinion/2010/04/08/commentary/reverse-japans-insularity/#.XfsV8S3ANEJ.

Funamori, M. (2012, March 6). Nihon oyobi sekai no rombun toko jokyo no bunseki (in Japanese) [The status of publication and citation of academic articles in Japan and the world],. A presentation at kenkyu kaihatsu hyoka shimpojium [Symposium on Research Development and Evaluation]. Retrieved from: http://www.mext.go.jp/component/a_menu/science/detail/__icsFiles/afieldfile/2012/05/24/1321315_01.pdf.

Gledhill, J. (2002). A small discipline: The embattled place of anthropology in a massified British higher education sector. In W. Lem & B. Leach (Eds.), *Culture, economy, power: Anthropology as critique, anthropology as praxis* (pp. 73–87). New York, NY: SUNY Press.

Gledhill, J. (2008). Fateful legacies and the burdens of academic excellence: UK anthropology and the public sphere. *World Anthropologies Network E-Journal, 3,* 167–179.

Goodman, R. (2013). The changing role of the state and the market in Japanese, Korean, and British higher education: Lessons for continental Europe? In R. Goodman, T. Kariya, & J. Taylor (Eds.), *Higher education and the state: Changing relationships in Europe and East Asia* (pp. 37–54). Oxford: Symposium Books.

Guédon, J.-C. (2001, May). *In Oldenburg's long shadow: Librarians, research scientists, publishers, and the control of scientific publishing*. Paper presented at the 138th Membership Meeting of the Association of Research Libraries

(ARL), a meeting held in conjunction with the Canadian Association of Research Libraries in Toronto.

Hazelkorn, E. (2008). Learning to live with league tables and ranking: The experience of institutional leaders. *Higher Education Policy, 21*(2), 193–215. https://doi.org/10.1057/hep.2008.1.

Hobo, T. (2010, April 8). Nihon jin ryugakusei wa naze fuenu? (in Japanese) [Why the number of Japanese students who study overseas does not increase?] *Nihon Keizai Shimbun* (ev.).

Ishikawa, M. (2012). University rankings, global knowledge constructions and hegemony: Critical reflections from Japan. In B. Pusser, K. Kempner, S. Marginson, & I. Ordorika (Eds.), *Universities and the public sphere: Knowledge creation and state building in the era of globalization* (pp. 81–99). New York, NY: Routledge, Taylor & Francis.

Ishikawa, M., Fujii, S., & Moehle, A. (2013). *STEM country comparisons: Japan*. Securing Australia's Future Project 2. Australian Council of Learned Academies (ACOLA). Retrieved from https://acola.org/wp-content/uploads/2018/12/Consultant-Report-Japan.pdf.

Itsumura, H., & Yasui, Y. (2006). Inpakuto fakuta: Kenkyu hyoka to gakujutsu zasshi [Impact factor: Research evaluation and academic journals]. *Nagoya Journal of Higher Education, 6*, 131–144.

Kaneko, M. (2013). The Japanese higher education and the state in transition. In R. Goodman, T. Kariya, & J. Taylor (Eds.), *Higher education and the state: Changing relationships in Europe and Asia* (pp. 171–197). Oxford: Symposium Books.

Kang, M. (2009). 'State guided' university reform and colonial conditions of knowledge production. *Inter Asia Cultural Studies, 10*(2), 191–205. https://doi.org/10.1080/14649370902823355.

Kim, K. S., & Nam, S. (2007). The making of a world-class university in the periphery: Seoul National University. In P. G. Altbach & J. Balán (Eds.), *World class worldwide: Transforming research universities in Asia and Latin America* (pp. 122–142). Baltimore, MD: Johns Hopkins University Press.

Komamura, K. (2011). Yuragu 'gakko' to 'shigoto' no kakehashi (in Japanese) [A swaying bridge between schools and jobs]. *Sekai, 814*, 166–174.

Lo, W. Y. W. (2013). University rankings as a zoning technology: A Taiwanese perspective on an imaginary Greater China higher education region. *Globalisation, Societies and Education, 11*(4), 459–478. https://doi.org/10.1080/14767724.2013.819275.

Ministry of Education, Culture, Sports, Science and Technology, Japan (MEXT). (2005). *Monbukagakusho ni okeru kenkyu oyobi kaihatsu ni kansuru hyoka shishin* [Guidelines of research and development evaluation at the MEXT].

Retrieved from: http://www.mext.go.jp/b_menu/shingi/gijyutu/gijyutu0/toushin/05111501/shishin.htm.

MEXT. (2006). Gakujutsu joho kiban no kongo no arikata ni tsuite (in Japanese) [The future of academic information infrastructure in Japan]. Retrieved from: http://www.mext.go.jp/b_menu/shingi/gijyutu/gijyutu4/toushin/__icsFiles/afieldfile/2013/07/16/1213896_001.pdf.

MEXT. (2012a). *Indicators of science and technology in Japan 2011.*

MEXT. (2012b). *Infrastructure development for strengthening the capacity of international scholarly communication.* Science Information Infrastructure Working Group and Research Environment Infrastructure Group, Subdivision on Science, Council for Science and Technology. Retrieved from http://www.mext.go.jp/b_menu/shingi/gijyutu/gijyutu4/toushin/1323857.htm.

Mohrman, K. (2008). The emerging global model with Chinese characteristics. *Higher Education Policy, 21,* 29–48. https://doi.org/10.1057/palgrave.hep.8300174.

Monastersky, R. (2005, October 14). Impact factors run into competition: Researchers look for other ways to evaluate a paper's importance. *Chronicle of Higher Education.*

Montgomery, S. L. (2013). *Does science need a global language? English and the future of research.* Chicago, IL: University of Chicago Press. https://doi.org/10.7208/chicago/9780226010045.001.0001.

National Science Board. (2012). *Science and engineering indicators 2012.* Arlington, VA: National Science Foundation.

Newby, H., Weko, T., Breneman, D., Johanneson, T., & Maassen, P. (2009). *OECD reviews of tertiary education: Japan.* Paris: OECD.

Ngok, K., & Guo, W. (2008). The quest for world class universities in China: Critical reflections. *Policy Futures in Education, 6*(5), 545–557. https://doi.org/10.2304/pfie.2008.6.5.545.

Nihon Keizai Shimbun. (2010a, June 15). *Kaigai de kambukoho tairyo saiyo: Mitsubishijuko ya Panasonic* (in Japanese) [Increasing the number of overseas recruits for managerial positions: Mitsubishi Heavy Industries and Panasonic]. Retrived from https://www.nikkei.com/article/DGXNASDD1406A_U0A610C1MM8000/.

Nihon Keizai Shimbun. (2010b, September 13). *Sekai daigaku rankingu, honkon daiga ajia shui, todai nuku* [The world university rankings: Hong Kong University is Asia's top, overtaking University of Tokyo]. Retrieved from http://www.nikkei.com/article/DGXNASGM10027_T10C10A9NNC000/.

Nihon Keizai Shimbun. (2013, June 13). 'Sentaku to shuchu' no heigai (in Japanese) [Adverse effect of too much selection and concentration], an interview with Kazuo Oike.

Nikkei Business. (2013, October 14). Sekai no toppu daigaku (The world's top universities). https://business.nikkei.com/article/NBD/20131004/254189/.

OECD. (2012). *Education at a glance 2012: OECD indicators*. Paris: OECD.

OECD. (2013). *Education at a glance 2013: OECD indicators*. Paris: OECD.

Ogawa, Y. (2006). Osaka daigaku kokusai kyodo kenkyu koryu genjo bunseki: Gakujutsu ronbun chosa kara (in Japanese) [Status of international collaborative research at Osaka University: From a study of academic papers] appendix I, 1–27. *Sekai no naka no Osaka Daigaku: Kokusaikouryu ni kansuru genjobunseki hokokusho* [Situation analysis report—Osaka University in the world: Globalization of higher education and its impact on the university's international activities] (IPP working paper series no. 1) Osaka, Japan: Office for International Planning and Programs, Osaka University.

Post, D. (2012). Rank scholarship. *Comparative Education Review, 56*(1), 1–17. https://doi.org/10.1086/663834.

Rauhvargers, A. (2011). *Global university rankings and their impact*. Brussels, Belgium: The European University Association.

Sawa, T. (2011). Kokuritsu daigaku hojinka no kozai o tou (in Japanese) [Questioning the outcome of national university incorporation]. *Kaikei kensa kenkyu* [*Board of Audit of Japan*], *44*, 5–12.

Scott, J. C. (2012). *Two cheers for anarchism: Six easy pieces on autonomy, dignity, and meaningful work and play*. Princeton, NJ: Princeton University Press.

Shin, J. C. (2009). Building world-class research university: The Brain Korea 21 project. *Higher Education, 58*(5), 669–688. https://doi.org/10.1007/s10734-009-9219-8.

Shin, J. C., & Cummings, W. K. (2010). Multilevel analysis of academic publishing across disciplines: Research preference, collaboration, and time on research. *Scientometrics, 85*(2), 581–594. https://doi.org/10.1007/s11192-010-0236-2.

Shore, C., & Wright, S. (1999). Audit culture and anthropology: Neo-liberalism in British higher education. *Journal of the Royal Anthropological Institute, 5*(4), 557–575. https://doi.org/10.2307/2661148.

Sidhu, R. (2005). Building a global schoolhouse: International education in Singapore. *Australian Journal of Education, 49*(1), 46–65. https://doi.org/10.1177/000494410504900103.

Song, M.-M., & Tai, H.-H. (2007). Taiwan's responses to globalisation: Internationalisation and questing for world class universities. *Asia Pacific Journal of Education, 27*(3), 323–340. https://doi.org/10.1080/02188790701594067.

Strathern, M. (2000). *Audit cultures: Anthropological studies in accountability, ethics and the academy*. London: Routledge. https://doi.org/10.4324/9780203449721.

Takeuchi, Y. (2010). Daigaku kyoin no sedaikan kakusa to shototsu, atsureki (in Japanese) [Intergeneration gap, clash and friction among university faculty in Japan]. *IDE Gendai no Koto Kyoiku, 519*(4), 12–18.

The Yomiuri Shimbun. (2010, August 25). *Eigo ga shanai koyogo to naru jidai* (in Japanese) [Trend of English becoming the official intra-company language].

Tsuji, A. (2010, April 13). Ryugaku shinai todai sei (in Japanese) [The reluctance of Tokyo University students to study overseas]. *Asahi Shimbun* (ev).

van Raan, A. F. J. (2005). Fatal attraction: Conceptual and methodological problems in the ranking of universities by bibliometric methods. *Scientometrics, 62*(1), 133–143. https://doi.org/10.1007/s11192-005-0008-6.

Yamane, K. (2010, October 27). Sekai daigaku rankingu no hamon hirogaru (in Japanese) [A new world university ranking causing a ripple]. *Asahi.com*.

Yamauchi, N. (2006). The evaluation of the internationalization of Japanese universities: With reference to publicly available data. *Developing evaluation criteria to assess the internationalization of universities*, Grant-in-Aid for Scientific Research (A) (2), final report of research activities for fiscal year 2004–2005. E112–136.

The SSCI Syndrome in Taiwan's Academia

Chuing Prudence Chou

Introduction

With the rise of neoliberalism in public finance since the 1980s, a great deal of public investment in New Zealand, Australia, Canada, and many countries in Latin America has been linked to the business and market sectors rather than allocated directly to the education sector (Dale 2001). Furthermore, a sharp reduction in public budgets has influenced not only social values but also educational quality. In particular, as the impacts of globalization have reached higher education, many countries in East Asia have started urging university reforms. Whether in the form of mainland China's 211 project and 985 project, Korea's BK21 program, Taiwan's Five Year Fifty Billion Plan, or Japan's National University Corporation Plan, all have been responses to the process of globalization and increasing demand for competitiveness in academia. Many governments, including Australia, Canada, China, France, Germany, Hong Kong, Japan, Korea, Malaysia, Norway, Singapore, Switzerland, Taiwan, and the United Kingdom, have introduced different strategies for benchmarking their

C. P. Chou (✉)
Department of Education, National Chengchi University (NCCU),
Taipei, Taiwan
e-mail: iaezcpc@nccu.edu.tw

leading universities to facilitate global competitiveness and international visibility (Chou et al. 2013).

As a result of these forces as well as its accession to the World Trade Organization (WTO) in 2002, the education system in Taiwan, similar to others in East Asia, has undergone an enormous transformation. Higher education, in particular, has interwoven its path with trends of globalization, localization, the development of information communications technology, and a series of political, social, economic, and managerial changes. As these forces drive policy agendas, these transitions altogether have produced multifaceted influences on higher education in Taiwan, many a result of corresponding policy reforms (Chou and Ching 2012).

This article covers two major issues that are byproducts of the forces of globalization, the mainstreaming of the neoliberal economic ideology, and the worldwide trend toward greater international competition in higher education. The first of these are the policy changes resulting from the expansion of the higher education system in Taiwan. Four major areas of policy change are detailed, including governance and the related "academic drift," the new plans for financing higher education on the national and institutional level, the introduction of an evaluation system for faculty that emphasizes quantitative research performance indicators, and the new flexible salary system intended to reward academics who succeed in this system. The second part then explores a major impact of these policy changes: the emergence of an 'SSCI syndrome' in Taiwanese academia, as professors and researchers are forced to adapt to the new policies. It then discusses some of the local responses attempting to confront the issue and questions whether or not these responses can serve as a model for other countries facing similar situations in higher education, concluding that there are important lessons to be learned as well as significant limitations to using Taiwan as a model of resistance.

Policy Changes

Prior to 1994, Taiwanese higher education was promoted to serve economic development. The government implemented rather strict control measures over both public and private institutions in terms of establishing new higher education institutes (HEIs); determining their size and scale; appointing presidents; regulating admission quotas and curriculum standards; and supervising faculty and student affairs on campus. The addition of new universities was extremely limited thanks

to the centralized educational administration being heavily focused on economic development and political stability (Mok 2014). For example, in 1984 when the per capita income was only US$4,000, Taiwan had 173,000 university students studying locally, less than one percent of the total population of 19 million (Chou and Wang 2012). Higher education remained a means to cultivate elites using a rigorous college entrance exam system to select the best talent in the country.

Beginning in the mid-1990s, higher education in Taiwan experienced a period of unprecedented expansion in response to global competition, a series of domestic political elections from 1996 to 2006, and other social changes. Among these was the Taiwanese government's response to local calls in the form of a social campaign demanding the upgrading and establishment of more high schools and universities. A major goal of this was to alleviate the severe and long-existing pressure that resulted from high school and university entrance exams.

As a result of these domestic and international issues, there was an unprecedented higher education expansion in the number of HEIs and students in the following decade. Within the quarter century from 1984 to 2009, the number of universities increased to 148 (51 public and 97 private) and 15 vocational/technical colleges (MOE 2009). By 2012, there were 162 HEIs, including 120 universities, 28 colleges, and 14 junior colleges (excluding religious colleges, military and police HEIs, and the open universities). As a result, the overall number of students in higher education expanded rapidly as well. During this period, the total student population climbed to nearly 1.36 million, including 3355 affiliated graduate programs with 215,825 postgraduates enrolled. In 2004, 68.1% of Taiwanese 18-year-olds entered college, an enrollment rate almost four times those of mainland China and Hong Kong (Song 2006). By 2008, higher education students then comprised almost 6% of Taiwan's entire population of 23 million, this remarkable demographic change having occurred over the course of two and a half decades (MOE 2012; Chou and Ching 2012; Chou and Wang 2012).

Governance and Academic Drift

Consequently, the government's public spending on higher education became relatively constrained. In response, the Ministry of Education (MOE) launched a series of new governance policies from 1994 to

1996, including revising its Universities Law and setting up the Executive Yuan Education Reform Commission to increase the deregulation, decentralization, democracy, and internationalization of higher education institutions (HEIs). For example, the University Law, as amended in 1994, transformed universities from being under the traditional centralized control of the MOE into more autonomous campus environments, reducing academic and administrative intervention and moving toward more autonomy in terms of admissions, staffing, and tuition policies (Mok 2014; Chou and Ching 2012). In so doing, HEIs were expected to become more competitive and responsive to individual, social, and global demands.

The rapid expansion of the higher education system caused some unexpected consequences. The overly rapid upgrade of some vocational/technical colleges into universities changed the nature of HEIs. One side effect was the so-called 'academic drift' of vocational and technological HEIs. This allowed them to convert into 'comprehensive universities' at the expense of their original educational foundation for vocational and technical training, which had formerly been at the core of Taiwan's economic development strategy (Chou 2008; Hayhoe 2002). Another impact came from the government's introduction of market competition mechanisms, which accelerated the uneven distribution of resources among public/private and elite/non-elite HEIs and eventually increased social stratification in Taiwan (Chou and Wang 2012; Chen and Chen 2009). In response to these issues, Taiwan's MOE launched several higher education reforms, including the establishment of new university finance plans, the revision of university evaluation systems, and a new system of flexible salaries for public university faculty (MOE 2009).

Finance Plans

In the past, public funding, tuition, and fees for Taiwan's public universities were entirely regulated by the MOE, which was their primary source of financing, whereas private HEIs relied mostly on student tuition. For instance, tuition comprised only about 10–20% of total expenditures for public universities, whereas the figures were 80–90% for private universities. Thus, public institutions relied heavily on government subsidies, while private institutions relied primarily on tuition payments for their operations (Chen and Chen 2009).

In order to reduce the funding gap between public and private HEIs, there has been a substantial increase in public assistance to private universities, significantly shrinking the amount of resources devoted to public institutions. The MOE also launched several funding reform schemes to facilitate the accountability and efficiency of public HEIs. Among these, public universities were allowed to set up and regulate their own individual University Funds, donated from the private sector and alumni, beginning in 1999. This policy has changed the relationship between public HEIs and the MOE, effectively transforming them from fully funded agencies into partially subsidized institutions. In addition to the increasing educational parity which took place among regular public HEIs due to lack of sustainable public funding, an inevitable polarization of resource distribution between elite and non-elite public universities has reproduced social stratification in Taiwan since the establishment of the policy (Chen 2001). Despite these shifts in financing and administration, 60% of the total income of public universities still comes from government subsidies, whereas only 20% does for private HEIs (Chen and Chen 2009).

Evaluation System

In order to meet the challenge of global competitiveness, standards and effectiveness, Taiwan's University Law was revised in 2003. This revision reiterated that evaluation was to serve as one of the major mechanisms for allocating funding and for assuring the quality of higher education in the future. Based on this law, quality assurance policies have been introduced and reinforced since 2005, and universities have been required to carry out regular self-evaluation in all aspects of teaching, research, and service. The Higher Education Evaluation and Accreditation Council of Taiwan were established accordingly to administer regular external evaluation.

Between 2006 and 2010, the first round of nationwide evaluation was implemented on the departmental, graduate institution, and university level. A total of 1908 departments and graduate institutions from 79 universities went through this evaluation process, which focused on the quality of universities, departments, and graduates. When reports on the evaluation results were released, they aroused great social controversy and complaints from faculty members and university administrators who were not satisfied with the outcomes being so highly correlated with public funding, institutional prestige, and student recruitment (Wu 2009).

The second round of national evaluations started in 2011 and will last until 2016. In contrast to the first round, its intended focus is more on evaluating student learning outcomes as well as departments, graduate institutions, and universities from more comprehensive perspectives. These include institutional self-positioning, university governance and management, teaching and learning resources, accountability and social responsibility, sustainable self-improvement, and quality assurance (Wang 2010).

In terms of the evaluation of individual faculty members, these national evaluations included the establishment of another internal and external evaluation system intended to monitor faculty publication records in various domestic and international databases, such as the SSCI, SCI, and EI. All of these new indicators, which will be discussed later in greater detail, are an effort to conform to international standards and lead to awards, achievements, and contributions to scholarship. Thus, the university evaluation policy is a top-down policy administered by the MOE using indicators developed without consideration of the Taiwanese context. Individual faculty members are thus required by law to submit not only to regular institutional evaluation by the above-mentioned professional associations but also to departmental assessment. Moreover, the evaluation results influence a faculty member's qualifications regarding promotion, changes in salary, sabbatical leave, and extra duties related to teaching and administration. Only recipients of awards at the national or international level can be waived from evaluation.

Flexible Salary System

The current seniority- and degree-based salary scale in Taiwan has been under criticism for its inadequacy in promoting the necessary competitive environment among faculty that might lead to better teaching and research quality. According to the MOE, the total fixed salary in 2001 for a professor at a public university was between NT$1,125,000 and NT$1,350,000 (US$37,500–45,000) before taxes, including a 1.5 month annual award, regardless of discipline. Professors in Hong Kong receive a salary around 3.5 times higher, and in Singapore, 2.5 times higher. The contrast in salaries is even starker when compared with those of their American and European counterparts (Wang 2009).

A recent migration of university professors away from Taiwan has caused serious concern in the country. Hong Kong, which initiated a new

four-year university system, has recruited some top faculty from Taiwan by offering an incentive two to three times the salary Taiwanese institutions offer (NowNews 2009). During the last eight years, a total of twenty-seven research fellows have left Academia Sinica, the top research institution in Taiwan, recruited by research institutions in the United States, Europe, and Hong Kong. Prominent faculty from top universities in Taiwan have also relocated to China, Canada, and other competing countries for various reasons (China Post 2010).

In responding to the global talent hunt and brain drain issues, the MOE, in conjunction with the academic sector, launched in August 2010 a possible solution to facilitate accountability and competition among HEIs and faculty and avoid further brain drain and recruitment shortage of top international research personnel. The flexible salary structure, entitled "recruit and retain special talented personnel implementing a flexible merit-based salary plan," has rewarded academic excellence based on performance and replaced the old fixed-salary system for public university faculty based on seniority and degree (Taipei Times 2010; Yeh et al. 2009). It is estimated that the new system requires additional funding of between NT$4 and 5 billion a year (US$130–165 million) from the MOE and the National Science Council (NSC). The new plan intends to attract top teaching and research personnel to Taiwan while discouraging faculty from leaving for overseas institutions. It also allows professors' salaries to be subsidized by the MOE's Aim for the Top University Project, known as the "Five-Year Fifty Billion Plan," and Teaching Excellence Award, given in three-year intervals beginning in 2005.

In response to the new flexible salary plan put in place by the government, many critics have expressed concern about the trend of increasing polarization and stratification following the introduction of faculty salaries and benefits based on quantitative indicators, such as journal articles. The system has revealed an unequal distribution of salary increases between faculty in science and the humanities/social sciences, between top and other HEIs, between public and private institutions, and especially between the activities of research and teaching. Complaints about the plan target the current oversimplified indicators of performance and meritocracy, which emphasize publication based on pure quantity rather than the quality and essence of performance with respect to teaching and other less readily quantifiable contributions, such as the social impact on society (Chou and Ching 2012; Yeh et al. 2009). The underlying justification of policymakers is that Taiwanese faculty are underpaid compared

to their international counterparts and that raising flexible income based on research performance will retain the best faculty and attract more top international personnel. However, this notion lacks legitimacy, as it deviates from the local context and overlooks the quid pro quo of the current academic salary structure. For instance, in addition to their base annual salary, university faculty in Taiwan are granted other opportunities to obtain external income as compensation, owing to Taiwan's cultural heritage, which pays high respect to intellectuals and professors. Thus, university faculty (especially those working at public HEIs) also receive more fringe benefits from their consulting services in the public and private sectors, coupled with lifetime medical care and a pension, which are less common among their international competitors (Chou and Ching 2012).

The SSCI Syndrome

As the above sections have discussed, policy reforms resulting from globalization, neoliberal restructuring, and an increased emphasis on competition in the international arena have had a tremendous impact on higher education in Taiwan. Each of these policies, including changes in governance, financing, evaluation, and salary structures, has been an attempt to enhance university quality. Today, meritocracy, accountability, and networking among faculty and staff now count for considerably more than they did in the past (Chou 2008). Yet, in many ways, these reforms have not led to the positive impacts that had been anticipated by policymakers. This is most evident in the emergence of a new phenomenon known as the SSCI syndrome.

Origins

Citation indices originated as tools for information retrieval, allowing users to trace research from an article by searching for subsequently cited articles and verify topics of interest throughout the years of research literature. Despite their originally intended purpose, researchers over a half-century ago discovered that they may be useful beyond this basic function (Price 1965; Garner 1967; Garfield 1994a; Thomson 2008). These indexes could also, through the tallying of future citations, estimate the influence of that work on the global research community and determine whether a theory had been confirmed, changed, or improved.

From this, the role of citation indexes expanded, and they began to be used to evaluate and rank the quality of journals (Garfield 1972, 1994b).

Today, the academic research quality and impact of individual scholars is commonly measured based on indicators from these citation indexes. Common indicators used derive from the Social Sciences Citation Index (SSCI), the Science Citation Index (SCI), Arts & Humanities Citation Index (A&HCI), and the Engineering Index (EI). These citation index databases are owned by Thomson Reuters, a private, for-profit company in the United States. The standards have long been recognized by major English-speaking universities in Australia, Canada, the United States, the United Kingdom, and New Zealand, especially by their science and engineering departments, in quantitatively evaluating the research impact of their faculty.

The past two decades have witnessed increased competition among universities for international ranking, in part, because of a demand for this from students, employers, and academics (Williams and Dyke 2004). In most cases, the criteria for ranking are based on the above quantitative indicators of research output. In the widely cited yet controversial international ranking of universities published by Shanghai Jiao Tong University, for example, the indicators of research quality, namely, articles published in the natural science-focused SCI Expanded and SSCI, have a weight of 20% (Institute of Higher Education 2012). As a result, scholars tend to equate the best research products with studies published in the natural sciences and indexed in the SCI and SSCI. Similarly, in "Asia's Best Universities," published by Asia Week, one important indicator of research performance is citations in academic journals tracked by the Journal Citation Index (Asia Week, n.d.). Citation data from the Essential Science Indicators of Thomson Reuters are also used in the Times Higher Education World University Rankings published in the United Kingdom.

In its pursuit of the internationalization of higher education, Taiwan's MOE has built an evaluation system that emphasizes the use of these quantitative indicators. In 2003, the MOE adopted international publication indicators as the evaluation standards for academic performance. Two ministers of education, presided over the implementation of these new standards. Initially, there was widespread support from government officials in the MOE and NSC as well as academics, particularly those in the natural sciences, economics, and other fields generally favoring the use of quantitative indicators. Prior to this, two anonymous reviewers were given the task of evaluating a scholar's list of publications in completing

the performance evaluations. Predominantly based on less quantifiable indicators, this process was seen as lacking objectivity, transparency, and efficiency. While many supported reforms in one way or another, there was also resistance from many in the academic community. As early as 2003, academics had begun to organize in opposition to the new measures. These local responses will be discussed later in greater depth.

The rationales for using international publication indicators stem from the emphasis on university internationalization both in terms of public resource allocation and the facilitation of higher education reform policies, namely, those calling for the establishment of world-class universities. For universities, there are two major driving factors in this pursuit. One is to acquire a superior position versus other higher education institutes in the budgetary competition; the other is to make the university more attractive to prospective students and faculty.

By promoting the use of international citation indexes as indicators for research performance, Taiwanese HEIs are expected to enhance their quality and competitiveness. As a direct response to these new policies, Taiwanese HEIs have set up administrative offices and centers fully devoted to the development of selected key subject areas and to the promotion of "quality" research. The primary performance evaluation process involves counting the actual number of faculty publications in the three databases to determine the final ranking of each college and university. Thus, the academic faculty members of Taiwanese HEIs have been under great pressure from both the government and their institutions to publish internationally in order to acquire SSCI, SCI, A&HCI, and EI records for the sake of promotion and accreditation (Ching 2014).

Impacts

Despite the best efforts of concerned parties to encourage academic excellence in Taiwan, the highly quantitative evaluation indicators have had negative effects. As the emphasis on publications indexed in the citation databases increases, the SSCI syndrome has permeated Taiwanese academia. Under great pressure to publish in indexed, peer-reviewed journals, academics are forced to accept the reality that this pursuit is of paramount importance from both a personal and institutional perspective, and the notion of "publish or perish" prevails.

Publication figures are used as major criteria in the university evaluation system, approval of research grants, university social rankings, the

granting of tenure, promotion, and even the awarding of government funding (Kao and Pao 2009). Not surprisingly, these assessment standards have led Taiwanese scholars to narrow their focus, emphasizing publication in international journals, in English instead of Chinese, and in subjects preferred by international journals rather than those addressing local needs (Chen and Qian 2004).

Moreover, publication expectations are not uniform across all disciplines. The distinctive characteristics of particular academic subjects are largely ignored, and professors of certain departments who feel that they are being subjected to unfair competition have complained. The goal of such evaluation is to improve research quality; however, the nature of the subject and the effect of the social and cultural context must also be considered (IREG 2010). In the evaluation of scholarship in terms of SSCI and SCI academic publication, more than a single set of standards should be applied to highlight the strengths and weaknesses of published scholarly work. For example, the "Five Year, Fifty Billion" Plan, launched in 2005 and sponsored again in 2011, is a program aimed at allocating funds based on competition (Chou and Ching 2012; Chang and Ho 2007). The financial resources from the plan go to selected leading universities, such as National Taiwan University (NTU), which offers more natural science courses than humanities and social science courses. These universities thus end up with rich research facilities and adequate financial assistance in an era of public budget constraints in Taiwan. Consequently, other universities are neglected. The social science-oriented National Chengchi University (NCCU), for one, has felt the impacts of these reforms, receiving the least amount of funding.

Thus, the flexible salary system has a lower value for faculty and universities in the humanities and social sciences, who publish less in SSCI and SCI than their counterparts in the natural sciences. Faculty members from two prestigious national universities with comparable student populations in Taiwan are treated differently according to the current rules of the game, in which only half of the faculty from the humanities and social sciences are granted this award, which is 50% less than that of their competitors with a science background. Increasing cultural and reward gaps have worsened the existing unequal distribution of resources between the sciences and the social sciences as a result of the government's new scheme. According to Ye (2004), the social sciences and humanities, whose major forms of publication are books rather than journal articles, are concerned mostly with local and national issues. These

fields also have historical and cultural boundaries. Consequently, the articles can be difficult to translate into English to break cultural barriers and address social concerns.

The academic incentive pay system also makes it far more complex and difficult to evaluate performance and accountability than in the past. As is the case with other professions, economic incentive is not the only factor that motivates faculty to accomplish goals and excel. Differences in level of performance in academia are large and contingent upon circumstances. According to research (Lin 2009), any tangible reward in the form of recognition, coupled with monetary rewards and promotions, will possibly yield increased productivity. However, it will also require a strong intuitive appeal, such as self-motivation and dignity through achievement. Many academic faculty prefer the idea of the university paying them indirectly by improving the whole academic structure and environment rather than setting a flexible salary that only rewards "star researchers," while the majority of faculty are devalued when they assume more responsibility for teaching and community service (Lin 2009).

Local Responses

Due to the rise of the SSCI syndrome and the trends discussed in the preceding sections, many have come to question the reforms. The emphasis on quantitative evaluation indicators has aroused controversy, and scholars of all disciplines are asking what can be done to prevent this continuing over-emphasis on SSCI publication in higher education policy. Reactions from the humanities and social sciences, fields in which research accomplishments are overlooked by the current paper-driven orientation, have been particularly strong.

As early as 2003, when the MOE and NSC were pushing to implement the new performance evaluation indicators, academics had already begun to organize in response to the reforms. After holding a series of conferences, a book entitled *Globalization and Knowledge Production: Reflections on Taiwan's Academic Evaluations* was published by a group of academics in the social sciences (Reflections Meeting Working Group 2004). While these early efforts increased awareness about the potential negative impacts of using international publication indicators, they were ultimately unsuccessful in altering the course of the reforms.

As research is increasingly geared toward publication rather than public benefit, a debate has begun on whether these educational policies'

performance indicators overly emphasize global standards and whether international benchmarks are dominated by Western (particularly, American) tradition and practice (Mok and Tan 2004; Lai 2004; Wang 2014). Unlike native English-speaking countries and other societies with historically high levels of English proficiency, English is a foreign language to the vast majority of researchers in Taiwan. In order to participate and survive in the international academic community, non-native English speakers need to strive to overcome language obstacles in order to publish in international journals. The global pervasiveness of the norm of English as the lingua franca often ignores different voices from the peripheral, or non-English-speaking, world (Liu 2014).

Nevertheless, more and more faculty members are falling victim to the SSCI syndrome and the competitive winner-takes-all reward system that emphasizes research more than teaching and other contributions to society. In fact, faculty members across Taiwan have lost their jobs due to their failure to satisfy research performance requirements or refusal to submit to an evaluation. One of the most controversial cases in Taiwan concerns a professor from a prestigious national university who was forced to leave due to his refusal to apply for self-evaluation. Despite having received two outstanding teaching awards on campus and being recognized as an exceptional professor by his students, he could not succeed in today's academia. He had published an insufficient number of research articles as well as failed to fulfill the university's requirement for self-evaluation. Thus, his case was vetoed twice, both by the university and the MOE grievance committee. Nevertheless, his termination of employment generated nationwide student support (Wang 2010).

In order to publicize the heated debates over SSCI–related issues, a group of Taiwanese university faculty initiated an online petition for collective action in November 2010. The petition had two purposes: firstly, to demand that Taiwan's government discontinue their policies codifying indexed journals as the primary indicators for university evaluation and funding purposes and adopt alternative evaluation policies. The petition also urged public funding agencies to expand both the quantity and the variety of academic journals in the international and domestic journal citation databases and give concordant weights to publications in the humanities and social sciences. The petition, on the whole, intended to protest the reforms with social action, locally and globally, encouraging Taiwan's government and university authorities to include diverse and reliable evaluation indicators in recognizing research of different nature

and disciplines while creating culturally responsive evaluation criteria for social sciences and humanities (Chou et al. 2013).

Since 2010, the petition has gained support from academics and civil society, including endorsement by nearly 3000 petitioners, 85% of whom worked in the humanities and social sciences and 10% in science-related fields. In addition, the major demands of the petition have been echoed in various public forums and public-sponsored research findings. Moreover, the debates over SSCI have continued to attract public awareness via national news coverage. Not until mid-2012, did the top government officials in Taiwan responsible for higher education policy, agree for the first time to review the SSCI issue. Thereafter, the government did make revisions to their pro-SSCI funding policies and evaluation guidelines (NCCU Teachers' Association 2012). Despite these minor policy changes intended to address the demands of academics, the SSCI syndrome continues to dominate the overall structure and reward system in Taiwanese academia.

Going Global?

Taiwanese scholars have come to understand that it is of great importance to invite more public discourse and social action out of this issue in search for alternative solutions to enhance competitiveness of Taiwan's higher education system. At the same time, professors have begun to ask whether the case of Taiwan can serve as a testimony and lesson for other higher education systems in the non-English-speaking world. Despite the bibliographic purpose of citation indexes, university administrators and public funding agencies continue to employ them when hiring, promoting, and funding faculty (Kokko and Sutherland 1999; Bauer and Bakkalbasi 2005). Indeed, this phenomenon is not limited to HEIs in Taiwan. There is increasing skepticism about the use of these tools to evaluate research performance (Ackermann 2001). According to the founder of Thomson Reuters (Garfield 1994b), a more reliable evaluation system should involve actually reading each article for its quality, although the problem of judgment between peer reviewers then arises. While citation criteria can be used as assessment measures of the impact of scientific scholarship (Lawani and Bayer 1983), some studies still contend that ISI citation indexes are far from objective, that determinations of the influence of ISI journals are not reliable, and that the word "global" stretches the truth about the master journal list (Cruz 2007). Journal articles in

the SSCI, SCIE, A&HCI, and EI are written mostly in English. Among the 96 articles listed in the sociology section of the SSCI, for example, 45 are from the United States, 27 from the United Kingdom, four from Germany, and two from France, all of which are written in English. Such statistics are discouraging to non-English researchers in the humanities and social sciences wishing to submit their articles to influential journals. Both the language barrier and cultural irrelevancy of these journals is a major factor in these considerations.

In Taiwanese attempts to increase the global awareness of the SSCI syndrome, efforts have been made to catalyze international collective responses. One notable example of this has been a book co-authored by colleagues from Hong Kong, Malaysia, Taiwan, and the United States entitled *The SSCI Syndrome in Higher Education: A Local or Global Phenomenon*. This endeavor begins with empirical research on Taiwan that critically examines how academics evaluate the impact of the recent university governance reforms on institutional autonomy and the academic profession, concluding that the academia in Taiwan and Asia, as a whole, is continually impacted by its strong managerial governance (Mok 2014).

Moreover, the rationale for a quantitative academic evaluation system lies in the need to control a restless academia in the process of rampant and factional democratization in Taiwan after the 1990s. Compared with their counterparts in Japan and the United States, Taiwanese academia has been characterized by factions and lacked the consensus of building systematic and integrated types of research capabilities with local and global features. Nevertheless, using citation indexes for academic evaluation neglects the issue of how Taiwanese academic research can become more attractive to international audiences while being reoriented towards solving local issues at the same time (Wang 2014).

As with other countries, education policy and programs in Taiwan have been myopic, refraining from any long-term focus due to the frequency of political elections, which lead to changes of administration locally and nationally. Consequently, quantitative criteria, justified as being in the name of fairness and objectivity, are widely employed. However, this approach conceals the subjective rationale of those who judge them. The ideology of "winners take all" has resulted in a concentration of resources among top-publication research groups and universities, widening the social gap between classes. Higher education policies such as the Plan to Develop First-class Universities and Top-level Research Centers have

negatively impacted the nature of academic research and educational equity (Chan and Lee 2014).

Furthermore, it has been demonstrated that the SSCI syndrome has a discriminatory impact on local publication while reinforcing the academic hegemony of native English-speaking countries. The current academic reward policy in Taiwan has promoted utilitarianism, academic capitalism, and hierarchy that aggravate the social injustice and inequity (Su 2014). Faculty and student perceptions indicate that the continuous influence of ISI has dominated the majority of academic settings and activities in Taiwan (Ching 2014). Undoubtedly, this phenomenon is not unique to Taiwan, though it must be noted that, at least when compared to China, where economic and academic resources are less transparent and accessible, Taiwan's fairly even distribution of resources is quite distinct (Liu 2014). Nevertheless, there may be certain lessons to be gleaned from Taiwan's experiences in confronting the challenges presented by the SSCI syndrome.

One possible solution to the SSCI syndrome that has been proposed in the field of education is the creation of a citation database for international education journals specifically focusing on the Taiwan context. The proponents of this solution argue that there should be a balance in the importance given to the impact factors from local and international citation indexes (Cheng et al. 2014).

On the whole, the SSCI syndrome in Taiwan reinforces the privileged status of English in the international academic community. Ironically, while the vast majority of the Taiwanese researchers are non-English speakers, scholars in Taiwan have been encouraged by government and university to self-align with the privileged discourse and participate in the international academic community regardless of discipline and academic background. Taiwan's higher education policymakers still believe that the legitimacy of a hegemonic English-based knowledge industry will enable Taiwan's academia to bring about a diverse voice from the periphery and lead to a paradigm shift coming from within Taiwan's academic community (Wu and Bristow 2014; Liu 2014). Nevertheless, unlike the natural sciences, the humanities and social sciences deal with more social and cultural issues. Thus, the latter are expected to foster a culture of social responsibility via culturally responsive and socially relevant research whose content and findings should meet the needs of local people and community. Therefore, the establishment of culturally responsive evaluation criteria for social sciences and humanities are essential not only for

the livelihood of academics in Taiwan and elsewhere but also for their potential contributions to the greater social good.

Conclusion

With the expansion of Taiwan's higher education system in the last two decades, the maintenance of quality to meet the requirements for international competitiveness has become a key concern for policymakers. This article has detailed how, since the early 2000s, the MOE has introduced a series of higher education policy reforms to enhance academic excellence in universities and established a formal university evaluation policy to improve the competitiveness and international visibility of Taiwanese universities. In so doing, the government has codified a clear link between evaluation results and public funding allocation. Faculty research performance has been prioritized as the key indicator for gaining public funding as well as academic and social prestige. University evaluation has taken on a highly quantitative dimension, which rewards academics based on factors associated with the number of articles published in journals indexed by SSCI and other indexes. The emphasis on quantitative evaluation indicators has resulted in mixed feelings and reactions among members of academic disciplines nationwide. Particularly for academics in humanities and social sciences, many of their research accomplishments have been undervalued or neglected by the dominant emphasis on quantitative indicators. In detailing the momentous impacts that these policy changes have had on academia and the responses that have resulted from them, this article has discussed some of the potential solutions to this SSCI syndrome that have been proposed in Taiwan. While it has its limitations and the process remains ongoing, the Taiwanese experience may offer valuable lessons for the many other non-English-speaking countries on the academic "periphery" that are currently undergoing similar challenges in academia.

References

Ackermann, E. G. (2001). *Developing comparative bibliometric indicators for evaluating the research performance of four academic nutrition departments, 1992–1996: An exploratory study*. Knoxville, TN: University of Tennessee.

Bauer, K., & Bakkalbasi, N. (2005, September). An examination of citation counts in a new scholarly communication environment. *D-Lib Magazine, 11.* http://dx.doi.org/10.1045/september2005-bauer.

Chan, J. C.-Y., & Lee, C.-N. (2014). A difficult situation of higher education in Taiwan. In C. P. Chou (Ed.), *The SSCI syndrome in higher education: A local or global phenomenon.* Netherlands: Sense Publishers.

Chang, K. W., & Ho, M. S. (2007). Half-hearted neoliberal reform: Analyzing Taiwan's college tuition policy and controversy. *Education and Social Studies, 12,* 73–112.

Chen, L.-C., & Chen, S.-T. (2009). *An analysis of our universities' financial structures and what it reveals about tuition and fee policy formulation.* Presented at the dialogue on education research and education policy international academic symposium, November 20–21, Taipei, Taiwan Normal University.

Chen, K. S., & Qian, Y. X. (2004). *Academic production under the neo-liberalism globalization (in Chinese).* Paper presented at the reflecting on Taiwan's higher education academic evaluation conference. International Plenary Hall, National Library, Taipei, Taiwan.

Chen, L.-J. (2001). The effect of public university fund policy in Taiwan. *Education Policy Forum, 4*(1), 118–166.

Cheng, K. S. Y., Jacob, W. J., & Yang, S.-K. (2014). Reflections from the Social Science Citation Index (SSCI) and its influence on education research in Taiwan. In C. P. Chou (Ed.), *The SSCI syndrome in higher education: A local or global phenomenon.* Netherlands: Sense Publishers.

China Post. (2010, January 24). Gov't mulls professor salary raise. *China Post.* Retrieved from http://www.chinapost.com.tw/taiwan/national/national-%20news/2010/01/24/242077/Govt-mulls.htm.

Ching, G. S. (2014). ISI perceptions and hard facts: An empirical study from Taiwan. In C. P. Chou (Ed.), *The SSCI syndrome in higher education: A local or global phenomenon.* Netherlands: Sense Publishers.

Chou, C. P. (2008). The impact of neo-liberalism on Taiwanese higher education. In D. Baker & A. W. Wiseman (Eds.), *The worldwide transformation of higher education* (pp. 297–312). Bingley, U.K.: Jai.

Chou, C. P., & Ching, G. S. (2012). *Taiwan education at the crossroad: When globalization meets localization.* New York: Palgrave Macmillan. https://doi.org/10.1057/9780230120143.

Chou, C. P., Lin, H. F., & Chiu, Y. J. (2013). The impact of SSCI and SCI on Taiwan's academy: An outcry for fair play. *Asia Pacific Education Review, 14,* 23–31. https://doi.org/10.1007/s12564-013-9245-1.

Chou, C. P., & Wang, L. T. (2012). Who benefits from the popularization of higher education in Taiwan? *Chinese Education and Society, 45*(5–6), 8–20.

Cruz, I. (2007). *Challenging ISI Thomson Scientifics' journal citation reports: Deconstructing "objective," "impact," and "global."* Vancouver, Canada: PKP Scholarly Publishing. Retrieved from http://scholarlypublishing.blogspot.com.

Dale, R. (2001). Constructing a long spoon for comparative education: Charting the career of the New Zealand model. *Comparative Education, 37*(4), 493–501. https://doi.org/10.1080/03050060120091274.

Garfield, E. (1972). Citation analysis as a tool in journal evaluation: Journals can be ranked by frequency and impact of citations for science policy studies. *Science, 178*(4060), 471–479. https://doi.org/10.1126/science.178.4060.471.

Garfield, E. (1994a). *The concept of citation indexing: A unique and innovative tool for navigating the research literature*. Retrieved from http://wokinfo.com/essays/concept-of-citation-indexing/.

Garfield, E. (1994b). *Linking literatures: An intriguing use of the citation index*. Retrieved from http://wokinfo.com/essays/linking-literatures/.

Garner, R. (1967). A computer oriented, graph theoretic analysis of citation index structures. *Drexel Press*. Retrieved from http://www.garfield.library.upenn.edu/rgarner.pdf.

Hayhoe, R. (2002). Teacher education and the university: A comparative analysis with implications for Hong Kong. *Teaching Education, 13*(1), 5–23. https://doi.org/10.1080/1047210120128555.

Institute of Higher Education, Shanghai Jiao Tong University (ARWU). (2012). *World ranking methodology*. Retrieved from http://www.shanghairanking.com/ARWU-Methodology-2012.html.

IREG. (2010). *The academic rankings: From popularity to reliability and relevance*. Retrieved from http://www.ireg-observatory.org/pdf/abstracts_and_speakers.pdf.

Kao, C., & Pao, H. L. (2009). An evaluation of research performance in management of 168 Taiwan universities. *Scientometrics, 78*(2), 261–277. https://doi.org/10.1007/s11192-007-1906-6.

Kokko, H., & Sutherland, W. J. (1999). What do impact factors tell us? *Trends in Ecology & Evolution, 14*(10), 382–384. https://doi.org/10.1016/S0169-5347(99)01711-5.

Lai, D. M. (2004). *Quantitative indexes are not the panacea of academic evaluation (in Chinese)*. Paper presented at the Reflecting on Taiwan's Higher Education Academic Evaluation Conference, International Plenary Hall, National Library, Taipei, Taiwan.

Lawani, S. M., & Bayer, A. E. (1983). Validity of citation criteria for assessing the influence of scientific publications: New evidence with peer assessment. *Journal of the American Society for Information Science, 34*(1), 59–66. https://doi.org/10.1002/asi.4630340109.

Lin, S.-D. (2009). A study on the flexible salary compensation system for national university professors in Taiwan. Unpublished master's thesis. Retrieved from http://nccur.lib.nccu.edu.tw/handle/140.119/34772.

Liu, Y.-J. (2014). Problems, strategies, and impact of SSCI publication in English: Perceptions and negotiations of Taiwanese researchers. In C. P. Chou (Ed.), *The SSCI syndrome in higher education: A local or global phenomenon.* Netherlands: Sense Publishers.

Ministry of Education. (2009). *Higher education for excellence*. Taipei: MOE.

Ministry of Education. (2012). *Education statistics*. Taipei: MOE. Retrieved from https://stats.moe.gov.tw/files/ebook/Education_Statistics/102/102 edu.pdf.

Mok, K. H. (2014). Promoting the global university in Taiwan: University governance reforms and academic reflections. In C. P. Chou (Ed.), *The SSCI syndrome in higher education: A local or global phenomenon*. Netherlands: Sense Publishers.

Mok, K. H., & Tan, J. (2004). *Globalization and marketization in education: A comparative analysis of Hong Kong and Singapore*. Cheltenham, U.K.: Edward Elgar Publishers. Retrieved from http://www.ireg-observatory.org/pdf/abs tracts_and_speakers.pdf.

NowNews. (2009). High salary in Hong Kong. Taipei. *NowNews Network*. Retrieved from http://www.nownews.com.

NCCU Teachers' Association. (2012). Petition statement. *Taiwan Competitiveness Forum*. Retrieved from http://memo.cgu.edu.tw/yun-ju/CGUWeb/ NCCUEdu2010/HomeAgainstSSCI.htm.

Price, D. J. S. (1965). Networks of scientific papers: The pattern of bibliographic references indicates the nature of the scientific research front. *Science, 149*(3683), 510–515. https://doi.org/10.1126/science.149.3683.510.

Reflections Meeting Working Group. (2004). Globalization and knowledge production: Reflections on Taiwan's academic evaluations. *Taiwan Society Research Forum 04.* Retrieved from http://taishe.shu.edu.tw/book_f orum_04.html.

Song, P.-C. (2006, October). Comparative assessment of 65 universities in greater China: Taiwan's teachers superior; research strong in China and Hong Kong. *Global Views Monthly*.

Su, S.-W. (2014). To be or not to be: Impacts of "I" idolization. In C. P. Chou (Ed.), *The SSCI syndrome in higher education: A local or global phenomenon.* Netherlands: Sense Publishers.

Taipei Times. (2010, January 1). Academic sector proposes flexible salary for experts. *Taipei Times*. Retrieved from http://www.taipeitimes.com.

Thomson, R. (2008). *Web of science*. New York: Thomson Reuters. Retrieved from http://scientific.thomson.com/products/wos/.

Wang, T.-L. (2009). *Salary of assistant professor is lower than those who teach in primary/junior high school*. Taipei: United Daily News Group. Retrieved from http://mag.udn.com.

Wang, B.-J. (2010). University evaluation based on the whole school evaluation approach. *Bimonthly Evaluation, 23*. Retrieved from http://epaper.hee act.edu.tw/archive/2010/01/01/2282.aspx.

Wang, H. H. (2014). The political economy of quantitative indexes for measuring academic performance. In C. P. Chou (Ed.), *The SSCI syndrome in higher education: A local or global phenomenon*. Netherlands: Sense Publishers.

Williams, R., & Dyke, N. V. (2004). The international standing of Australian universities. *Melbourne Institute*. Retrieved from http://www.melbourneinstit ute.com/downloads/reports/ExecSumm.pdf.

Wu, C. C. (2009). *Higher education expansion in Taiwan: The problems faced*. Taipei: National Taiwan Normal University. Retrieved from http://cve.ntnu. edu.tw.

Wu, L.-Y., & Bristow, A. (2014). Perishing Confucius: An analysis of a rupture point in the discourse of Taiwanese "New Higher Education". In C. P. Chou (Ed.), *The SSCI syndrome in higher education: A local or global phenomenon*. Netherlands: Sense Publishers.

Ye, Q. Z. (2004). *The lack of the sense of social practice: The myth of criterion-based evaluation (In Chinese)*. Paper presented at the reflecting on Taiwan's higher education academic evaluation conference, International Plenary Hall, National Library, Taipei, Taiwan.

Yeh, W.-Y., Cheng, Y., & Chen, C. J. (2009). Social patterns of pay systems and their associations with psychosocial job characteristics and burnout among paid employees in Taiwan. *Social Science and Medicine, 68*(8), 1407–1415. https://doi.org/10.1016/j.socscimed.2009.01.031.

Cases, Contexts and Reflections

The Global Ranking Regime and the Reconfiguration of Higher Education: Comparative Case Studies on Research Assessment Exercises in China, Hong Kong, and Japan

Jun Li

Introduction

The global drive for world-class universities is twinned with a recent movement to create research assessment indicators, and universities have never been dominated and pressured as much as today by the so-called global ranking regime, a series of assessment exercises in ranking and controlling outcomes for global status. Although the purposes and structures of university rankings and research assessment exercises have never been the same, quality has been the shared concern for both practices. In fact, national or institutional research assessment exercises have looked to global university rankings due to the wider publicity and aggressiveness of the latter. The twinned assessment schemes of higher education institutions (HEIs) have created the global ranking regime accelerated since the mid-2000s.

J. Li (✉)
Faculty of Education, Western University, London, ON, Canada
e-mail: jun.li@uwo.ca

177

The global ranking regime and particularly university rankings used to take humble forms in their earlier stage, but have been aggressively spreading worldwide in recent decades. As a corollary, the landscape of higher education has been dramatically reconfigured to create "world-class" universities (Li 2016): The ways of knowledge exploration and transfer have been narrowed to quantifiable metrics; publications defined by various research assessment exercises; scholarship and academic life as well have been fashioned to suit whatever can be measured as accountable; and ultimately, the mission of higher education has been reconfigured fundamentally and limited to a pragmatic orientation to serve this global ranking regime.

The impact of the global ranking regime has recently drawn much serious attention, worldwide, and there is a plethora of literature on it. However, how these rankings and research assessment exercises have reshaped universities' missions have remained under-explored with empirical data. Taking a case study approach, this chapter aims to address the concern by comparing three top research-intensive universities, one each in Mainland China, Hong Kong, and Japan, focusing on how research assessment exercises have reconfigured their missions in terms of knowledge production, teaching, and service. In particular, it critically investigates how far and in what ways academics working at different institutional contexts have been pressured to respond to these exercises. A consideration of the empirical findings leads to several policy implications for the improvement of higher education in future.

The Paradoxical Phenomenon

Quality assurance has been an increasing concern in the reform of higher education in recent decades (Harman 2011; Teichler 2011). As an alternative approach to quality monitoring and evaluation, global university rankings in general and research assessment exercises in particular have attracted wide attention from government policymakers, university leaders, academics, students and parents, as well as the general public (e.g., Chou 2014; Shin et al. 2011; van Vught and Ziegele 2012). Such global practices of quality monitoring and evaluation are viewed as serving "organizational effectiveness" (Shin 2011) and "research quality and impact" (Harman 2011) also as a "transparency tool" (van Vught and Westerheijden 2012), an "audit culture" (Power 2004), and an "accountability movement" (Toutkoushian and Webber 2011). These

endeavors can all be seen as elements in the global ranking regime, which results from a convergence from such forces as government accountability, accreditation, and commercial rankings, which are used to define excellence in higher education, valuable knowledge, and, at the grandest level, world-class universities (Gonzales and Núñez 2014, p. 3). A key concern is raised as to how the global ranking regime has impacted the landscape of higher education in different settings (Hazelkorn 2015), in the move from how to rank, to why to rank (Oguz 2004), and indeed to so what to rank.

Related literature shows the co-existence of two contrasting scenarios. There are some situations where positive effects are observable to some researchers. For example, Shin (2011) argues that ranking and quality management contribute to "institutional quality and organizational effectiveness" (p. 19). In a similar vein, Harman (2011) makes the point that the global ranking practice pressures higher education institutions to renovate their traditional, inappropriate mechanisms of quality assurance and focus more on "bibliometrics" as well as other quantitative measurements of research assessment and impact (p. 49). Furthermore, van Vught and Westerheijden (2012) recognize it as a transparency tool which can have a positive impact on setting "bigger and higher standards" for research universities (p. 12). Given these opinions, university leaders are urged to participate in the global movement of competition for higher quality.

However, the negative impact on higher education tends to dominate the discussion of the phenomenon, as evident in the recent criticism by Terry Eagleton (2015), a prominent critic and public intellectual who takes a postmodern position. According to his observations, instead of government by academics a good deal of "Byzantine bureaucracy" exists in the British system, which is less privatized than its American counterpart: junior professors are little but dogs bodies, vice-chancellors behave as though they are CEOs, senior professors are now senior managers, and the air is thick with talk of "auditing and accountancy" on campus. It is likely that whole humanities departments will be closed down in the coming years in the midst of this debacle (Eagleton 2015). Furthermore, he continued as below:

> The vast increase in bureaucracy...occasioned by the flourishing of a managerial ideology and the relentless demands of the state assessment exercise, means that academics have had little enough time to prepare their

teaching even if it seemed worth doing….Points are awarded by the state inspectors for articles with a bristling thicket of footnotes, but few if any for a best-selling textbook aimed at students and general readers. Academics are most likely to boost their institution's status by taking temporary leave of it, taking time off from teaching to further their research. (Eagleton 2015)

Taking Taiwan as an example, Chou (2014) similarly observes that there are several negative effects on the reshaping of the institutional development of universities in Taiwan, which are summed up in the term SSCI Syndrome with the following characteristics:

1. The hegemony of English;
2. The conflict between teaching and research;
3. The dilemmas of research performance and the metrics of measuring it;
4. The lack of local relevance in research outputs; and
5. The overlooking of the value of publications in the form of books in humanities and social sciences (p. x).

Mayumi Ishikawa (2014) employs a multidimensional approach to analyze the threat of the global ranking regime to local scholarship through a study of research universities in the case of Japan, concluding that the exercises of ranking may fall short of addressing real needs of enhancing individual performance in pursuit of globally relevant research and ensuring equity among different generations of scholars; rather there is an increasing tendency for Anglo-American academic circles to dominate the rest of the world. Gonzales and Núñez (2014) find from their review of relevant literature that the rankings regime may yield negative influences on the evaluation of faculty work, especially research, through the perpetuation of the following values or practices: (a) individualism, (b) standardization, (c) commodification, and (d) homogenization (p. 8).

Although there has been some literature about the impact of the global ranking regime on changes in higher education, little attention has been paid, in either empirical or comparative approaches, to how research assessment exercises have reconfigured the landscape of higher education. This study aims to address this gap by collecting, analyzing, and reflecting on first-hand data from three top research-intensive universities, one each in Mainland China, Hong Kong, and Japan, focusing on how research

assessment exercises have reconfigured their missions in terms of knowledge production, teaching, and service. In particular, it investigates how far and in what ways academics working in different institutional environments have been pressured to cater to the demands coming from research assessment exercises.

The Analytic Framework and Research Design

As an institution that fosters a "basic determination to know" (Jasper 1959, 20), the university has been traditionally expected to play three major roles in individual and societal development: the search for truth, the training of students, and the interpretation of knowledge and ideas, as noted by Abraham Flexner in his analysis of the modern American, English, and German systems (Flexner 1930, p. 6). Flexner's view was further carried forward by Clark Kerr (1963), the first Chancellor of the University of California at Berkeley in the 1950s, when he wrote about the uses of the multiversity. Quite recently, Jaroslav Pelikan (1992) explicitly defines the institutional functions of the university as research, teaching and duties to society, and Grant Harman (2006) classifies them into teaching, research and scholarship, and service (p. 309).

This study builds on this theoretical clarification of the core dynamics of the university and employs it as the analytic framework for data collection and analysis. More specifically, academic publications are used to indicate the research function of higher education, while teaching undergraduate and postgraduate students and community services as two other key dimensions. Furthermore, the trilateral relationships among them are also of particular interest in this research, which aims to compare their interactions and impact in different socio-political, economic, and cultural contexts under the global ranking regime.

This study is part of the project on "World-class Universities, Publication and Research Assessment: Rethinking the Mission of Higher Education in the Global Age" originally led by the author and sponsored by the Research Development Fund of Worldwide Universities Networks (RDF/WUN, Ref.: 4930217). Given the breadth of this study, a multi-site case study design was planned to generate similar and contrasting findings, with a purposive sampling strategy to identify three critical, research-intensive universities in each context of Mainland China, Hong Kong, and Japan (please refer to Chapter One for more details of the

general design of the project). Interviewees were identified with both male and female academics by snowball sampling strategies from two disciplinary areas, i.e., anthropology and education policy, as they are viewed as common for research in social sciences and educational sciences, respectively—both are sensitive to research outputs with a tradition long enough for comparisons over time. As this study looks into the impact of research assessment exercises in different times, more than a dozen participants were identified from two groups each in the two areas, junior and senior academics. Interviews were conducted for around 40 min each in the three case study institutions, respectively. Additionally, three data point years were used by this study to tabulate journal articles published by academics in the two areas of the three case study institutions in 1993, 2003, and 2013, respectively.

Data collection followed the ethical policies and principles by respective universities of the research team, and it was conducted from February 2014 to December 2015, with three types of data collected for this study: the tabulated quantitative data of journal articles published in the three data year points; qualitative data including interviews with and observations of junior and senior academics; and related documents and news reports about the three institutions. Consent was obtained with each interviewee and audio recordings were done for most interviews. Interview data were coded with three types of coding strategies, i.e., descriptive, interpretive, and pattern (Miles and Huberman 1994, p. 57).

The Three Cases and Policy Contexts in China, Hong Kong, and Japan

Although the three cases in China, Hong Kong, and Japan are all from Confucian heritage societies, which tend to put a high value on excellence in higher education (Li and Hayhoe 2012), their policy contexts vary largely from each other (Table 1).

The Top China University (TCU)[1]

TCU is one of the oldest and most prestigious higher education institutions in China. It is a leading public institution in the sense of institutional

---

[1] Pseudonym, and hereafter.

reforms that have built its world-class status upon its research outputs. TCU has been widely viewed as the first-tier university in China that can compete with other world-class universities in the world.

TCU's reform has been profoundly influenced by China's three national agendas for building WCUs, i.e., Projects 211 and 985, and the National Evaluation of Baccalaureate Programs Project (NEBPP). Starting in 1993 and 1998, respectively, Projects 211 and 985 have aimed to improve the quality of teaching, research, and administration of universities, and to make some of them world-class, and Project 985 has been particularly tailored to facilitate a great leap forward in building elite world-class universities with a limited number, with a huge public investment from both the central and local governments.

Almost at the same time, China launched the NEBPP that aims to continuously monitor and improve the teaching and quality of universities. The NEBPP adheres to the principle of promoting reform and reconstruction of universities through assessment. Major measures used by the NEBPP include reviewing the institutional mission, faculty, teaching facilities and their utilization, program construction and teaching reform, teaching administration, teaching and learning style, and teaching effectiveness. Each of these seven indicators is "scientifically" designed and categorized into several sub-indicators.[2] Since the NEBPP has been adopted nationwide and the results of its evaluation every 5 years are publicized as "Excellent," "Good," "Qualified," or "Disqualified" by MOE's Higher Education Evaluation Center, every HEI in China views

Table 1 Statistical profiles of the three cases (2015)	*TCU*	*THKU*	*TJU*
Undergraduate Students	15,000	16,000	16,000
Master's Degree Students	19,000	1600	4600
Doctoral Students	10,000	2000	3200
International Students	3300	3500	2100
Schools	62	9	16
Faculty	4500	3000	4900

Note Data from the official website of the three cases, respectively

[2] For more information about the NEBPP, please refer to the Higher Education Evaluation Center of the Ministry of Education: http://www.heec.edu.cn/en/index.jsp.

earning a good reputation through the NEBPP as a political accomplishment critical to their institutional success.

More recently, the China Discipline Ranking (CDR) by the China Academic Degrees and Graduate Education Development Center (CDGDC) under the MOE has taken substantial shape in assessing research performance of individual disciplinary areas of Chinese universities. Among the four core indicators are research outputs measured directly by journal articles, books, and textbooks (CDGDC 2016). Since the summer of 2016, the fourth round of such a nationwide assessment exercise has got into full swing. Normally, the results of these assessments each time have been indirectly associated with government's budgeting available to individual HEIs in China.

The Top Hong Kong University (THKU)

THKU is one of the most prestigious higher education institutions in Hong Kong, and has often been ranked among the top 100 in the world by the QS World University Rankings. As a public institution, THKU is funded by the Hong Kong government with a British tradition of aegis under the University Grants Committee (UGC). From 1997 when Hong Kong returned to China as a special administrative region, the funding scheme has been adjusted to be more linked to the research performance of individual higher education institutions in Hong Kong.

Modeled on the British mechanism of quality assurance for HEIs, THKU has been regularly evaluated by the Research Assessment Exercise (RAE) since 1993. The RAE aims to assess the research quality of the eight UGC-funded institutions in Hong Kong in order to encourage world-class research, by using rigid measures of outputs, inputs, and esteem as key indicators for making publicly accountable the allocation and re-allocation of institutional funding and recurrent grants, bench-marking outputs against international research standards. Research outputs are classified into five categories: world leading (4 star), internationally excellent (3 star), international standing (2 star), regional standing (1 star), and unclassified, by employing the four definitions of scholarship from the Carnegie Foundation, i.e., discovery, integration, application, and teaching (Boyer 1990; Glassick et al. 1997).

The latest RAE carried out in 2014 introduced a new measure to the competition for public research funding among research universities: The results of annual competitions for the Research Grants Council (RGC) research grants are to gradually increase, over a course of 9 years, accounting for half of the research allocation, and the RAE 2014 results informed the other half of the research allocation. Although the RAE is not intended to produce a league table of the UGC-funded institutions or be an assessment of individuals' research performance (The UGC 2014, June), and results are communicated on a cost center basis without disclosing the identity of individual academic staff, academics are widely pressured to meet the high expectation of individual cost centers and institutions as well.

The Top Japan University (TJU)

TJU is among the top national universities in Japan, with a history going back to the nineteenth century when Japan was in the process of modernization through the Meiji Restoration. It was later merged as one of the seven Imperial Universities in Japan in the 1930s, and is widely recognized as among the top five comprehensive universities in the country.

Unlike China and Hong Kong, Japan has a higher education system dominated by a preponderance of private institutions. However, like in China and Hong Kong, public national universities in Japan have traditionally played a more significant role in research, closely monitored by the Ministry of Education, Culture, Sports, Science and Technology (MEXT). These national universities have been reorganized as corporations since 2004, intending to enhance their performance. Under the new system of National University Corporations, the MEXT lays out mid-term goals over a period of 6 years, which serve as the base for national universities to prepare their individual mid-term plans which must be approved by the MEXT. Based on these individual mid-term plans, the performance of national universities is evaluated at the end of the mid-term period by the former National Institution for Academic Degrees and University Evaluation (NIAD-UE), which was merged into the National Institution for Academic Degrees and Quality Enhancement of Higher Education (NIAD-QE) newly established on April 1, 2016. A key role of the new NIAD-QE is to evaluate education and research activities based

on requests from the Committee of National University Corporation Evaluation Committee (NUCC) under the MEXT.

The NUCE is an evaluation of national universities which measures their individual performances against their various developmental plans and mid-term goals for education, research, and management. The Evaluation Guidelines and the Guidelines for the Performance Report are provided by the former NIAD-UE as the framework of such evaluations of national universities. Each national university is required to produce a performance report following these two guidelines. Their individual performances are then audited through the evaluation process based on document analysis and site visits, similar to China's NEBPP and CDR, which were introduced earlier. The objectives of the NUCE are twofold: (a) quality assurance and improvement of the education and research of national universities and (b) their accountability as public institutions.

More importantly, MEXT has enforced a new system for allocating the fiscal budgets of national universities based on their evaluation results and institutional efforts, a similar mechanism that has been used by the UGC in Hong Kong. Along with the second round of medium-term evaluation and such new national initiatives as the "Global 30" and "Re-inventing Japan" Projects, all aimed at fostering world-class universities, the huge pressure and fierce competition among institutions and research centers have converged in ways that affect individual faculty members, especially those who work at such research-intensive universities as TJU.

Research?

To answer the research question on how research assessment exercises have impacted higher education systems in various policy settings, it is necessary to first understand how research has been configured in the institutional missions of universities. The findings of this study show that in all of the three cases research was highly valued and appreciated. And this is widely agreed by all participants in different disciplines and of different ranks in the TCU, THKU, and TJU. Most interviewees endorsed the view that research is one of the core missions of universities, especially of research-intensive universities. Almost all interviewees agreed that they were highly motivated to serve this mission in their respective institutions.

To give an example from the TCU case, Prof. Wang[3] recently retired as the former Director of the Institute of Higher Education from the university, but still serves as a professor emeritus of TCU. As a senior faculty member, he felt research had been a priority for TCU in his experience. He made the following supportive comments: "The university should follow its original nature….and it is in the university that research and truth can be explored." Comparing teaching and service with research, he insisted that research should be placed as the first priority among the three for his university, which is research-intensive. Similarly, as senior faculty members, both Prof. Lau in the field of education at THKU and Prof. Takamura in the field of anthropology at TJU confirmed that their universities also highlighted the importance of research, seeing such a priority as necessary for the mission of their respective institutions in the new global era. Such views were echoed by almost all participants in the three case study institutions.

Although participants in the three case study institutions all observed the importance of research in their respective universities, the policy settings were different among China, Japan, and Hong Kong. For example, interviewees at TCU viewed research not only as one of their institutional missions, but also as an imperative for socio-economic development in a domestic context and for national competitiveness in the ongoing process of globalization, often measured by global ranking schemes. A similar institutional rationale was observed in the Japanese context, as evidenced in TJU, but with a stronger sense of improving and maintaining their status in order to be more competitive globally in many areas, as also found by Ishikawa (2009). The cases from China and Japan manifest a strong catch-up or even competition mentality at both national and institutional levels. Additionally, TJU has emphasized the importance of research as at least equal, if not higher, than those of teaching and service.

The Hong Kong case suggested that research endeavors were more for the enhancement of its global status as an individual institution, as well as serving the economic competitiveness of Hong Kong as a special administrative region, as evidenced by Postiglione and Jung (2013). Specifically, as a public institution, THKU aimed at enhancing the world-class status of research to help transform Hong Kong into an international hub of

---

[3] Pseudonym, and hereafter.

higher education in the Asia-Pacific Region and beyond, according to the participants interviewed at THKU.

When the three core missions of the university are compared, research is increasingly highlighted as the first priority at THKU before teaching and service, according to Prof. Lau. He added that teaching is important to a research-intensive university, but research comes ahead of it definitely. Institutionally, THKU divides the three dimensions evenly in its annual appraisal exercise for all academics, but in practices research is usually viewed as the first criterion to evaluate the overall performance of everyone, as observed by Prof. Lau. He further proved that junior professors tended to be more strongly committed to research than teaching and service.

Research for Assessment?

The importance of research has been systematically configured into the institutional missions of the three case study universities, especially manifested in the form of regular, institutional assessment of the research outputs of faculty members, which creates various pressures on academics on campus. Fundamental differences emerge when the institutional impact of these research assessment exercises is examined across the three cases.

As shown by the quantitative findings (Table 2; Fig. 1), the three case study institutions shared the same historical trends of publications in the field of educational policy and anthropology from 1993 to 2013. It is observed that THKU tended to be most severely affected by the RAE from 1993 to 2013, and its journal articles per faculty member increased sharply from 0.47 to 1.50, with the fastest growth rate at 220% among the three universities over the same period. This finding suggests that THKU has been mostly involved in research assessment exercises and is

Table 2 Statistical trends of journal articles and faculty members (1993–2013)

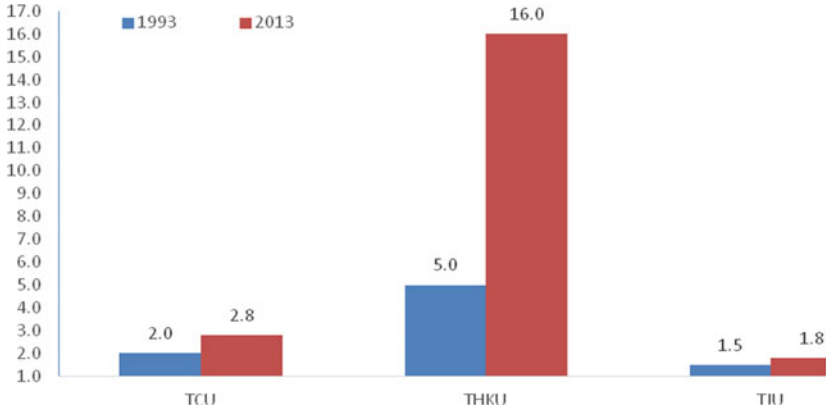|	1993	2003	2013	Total
TCU	18/13	66/21	54/26	138/60
THKU	9/19	55/23	42/28	106/70
TJU	15/10	26/9	18/8	59/27
Overall	42/42	147/53	114/62	303/157

Fig. 1 Statistical trends of journal articles per faculty member (1993–2013) (*Note* The term of journal article is used in a broader sense to cover the wide range of publications in the three contexts)

the system which has been pressured the most among the three cases in terms of the growth rate of journal articles per faculty member over time. The reason for this phenomenon may be related to its RAE mechanism that has associated research outputs of individual institutions with UGC's annual budgeting, which makes growth rates of journal articles per faculty member the most sensitive among the three universities.

During the same period, TCU shared the same pattern by the NEBPP with TJU by the NUCE, and their publication rates increased remarkably at almost the same pace of 50%, respectively, from 1.38 to 2.08 and from 1.50 to 2.25, suggesting that both TCU and TJU remained less and similarly affected by the global ranking regime, compared with THKU. Meanwhile, TCU appears slightly more productive in terms of the overall publication rate (2.30) than its Japanese counterpart (2.19) over the past two decades. In other words, it can be observed that TCU is the most productive system in journal articles per faculty member among the three cases.

In general, publication rates per faculty member jumped from 1.00 in 1993 to 1.84 in 2013 across the three institutions, with an overall growth rate at 84%, nearly doubled within the 20 years. This finding

evidences that research productivity represented by journal article publication rates per faculty member have increased remarkably in East Asian research-intensive universities within the past two decades.

Such quantitative findings can also be observed from the qualitative data. In terms of research pressure, it is apparent that senior faculty members tended to cater more for their personal interest and motivations of knowledge exploration, rather than being pressured to do research. As a renowned senior in the field, Prof. Wang at TCU mentioned that he had been long committed to and continuously involved in research activities throughout his whole professional life, and he was still active in leading several research projects even after he had retired. Another senior professor in the field of anthropology, Mr. Chao in his early 50s confirmed that his research outputs had been all produced based on his personal academic interest over a long time, not pressured by the institutional assessment of TCU:

> ....I have enjoyed my research a lot and have been in the department [of anthropology] over a long time, probably over 30 years. In the earlier times there were no such things as annual appraisal for pro- motion or research assessment for tenure at my university. That time not everyone published, except for a few very senior colleagues who just published something. What we measured were the academic interest in and commitment to research, instead of research outputs, not mentioning the indicator of quantity. Now, as a senior professor I have no fear to be measured by the current tough assessment – If my university measures me as incompetent – highly impossible – I can easily move around to work at other institutions.

Prof. Chao was extremely confident in his reputation for research excellence, and explained that he can enjoy the freedom of job relocation if TCU required him to comply with its institutional criteria of research appraisal. Similar experiences were evident in Hong Kong and Japan, as confirmed respectively by Prof. Lau at THKU and Prof. Takamura at TJU who were both senior and very active in all kinds of research activities.

Junior faculty members seemed to carry forward this tradition of research interest and motivation, consciously or unconsciously, and this can be observed across all the three case study institutions. For example, some assistant professors denied there is severe institutional pressure of research assessments on their choices of research. Assistant Professor Fang

in the field of anthropology at TCU was in his second year of employment, a Ph.D. holder returned from a prestigious private university in the U.S. He even indicated that research had not been his concern yet, explaining he still had enough time to explore in the forthcoming years.

Assistant Professor Ren in the field of education at THKU was in her fifth year of contract, and she smiled that she had never really been concerned about her research outputs, but had been more motivated by her intrinsic enthusiasm to do research over the years and she did not care if she would be able to pass the rigid "up or out" tenure assessment in 2014.[4] When asked about why there was no severe pressure on their research, both Profs. Fang at TCU and Ren at THKU were confident in their research capacity to generate adequate outputs that could meet the expected demand from their respective research assessment exercises.

It was true that these junior faculty members working at research-intensive universities were already prepared for higher expectations and tougher appraisals from their institutions. But still not all junior faculty members shared the same optimism and high morale. Assistant Professor Zhang, Fang's peer at TCU in the field of education, was in his fourth year and felt direct pressure relating to his research outputs as measured by the research assessment exercises of TCU. He mentioned he must work as hard as possible to make himself more prepared and competitive when the time came for his tenure application one year later.

Another example can be found from top Japanese universities. Miss Yamaguchi, a new assistant professor in anthropology, feared the institutional pressure of research assessment exercises at TCU and has been devoting herself to research activities all the time. Due to the busy schedule of her research, she was even unable to find time for her personal life, still being single in her late 1930s. She was unable to smile during the interview, summarizing her academic life in the following way:

> I have to be focused on research so that I can publish more papers in the coming years, or I will otherwise risk losing my position from my university…. The job competitiveness is fierce and my university has a high

[4] Some leading public universities in Hong Kong adopt this "up or out" assessment policy for tenure and promotion. In other words, after fulltime employment over a total of six years an assistant professor will be either promoted to a substantiated associate professor or his/her contract is to be terminated. In the latter case the assistant professor has to leave the institution. This mechanism is similar to the tenure system in many American universities.

expectation for everybody. If I lag behind I will surely lose my job… Therefore, I have led my personal life simply like this: coming to my office every day from my rented apartment at 6:30am in the early morning and going home from my office in the late evening – sometimes very late until midnight. I was lucky that my commute time is not that long every trip – it's just less than one hour.

Yamaguchi's stress was echoed by her peer at TJU, Prof. Saka in the field of education. Before the interview was started with him, he showed several academic books and papers in Japanese or English, which obviously indicated his pride in his greatest achievements over the past two decades. He explicitly indicated that research assessment exercises were very important to ensure the institutional status of his university, and he had been fully committed to supporting the competitive mechanism of TJU.

Research for Assessment of SSCI Journal Articles in English?

The pressure particularly on some junior professors can be further understood by looking into the changing impact of research assessment exercises in recent decades, which reflects how research-intensive universities have responded to the ongoing global competition in research excellence as measured by various global ranking schemes. The investigation of this dimension shall help answer the last question on the impact of research assessment exercises: how has it changed over time?

As shown by the quantitative findings (Table 3 and Fig. 2), the overall

Table 3 Statistical trends of journal articles in english and native languages (1993–2013)

	1993	2003	2013	Total
TCU	1/16	4/60	3/50	8/126
THKU	5/4	26/31	34/8	64/43
TJU	0/15	1/25	1/17	2/57
Overall	6/35	31/116	38/75	74/226

Note Data excluding those that were published in bilingual journals or other local languages
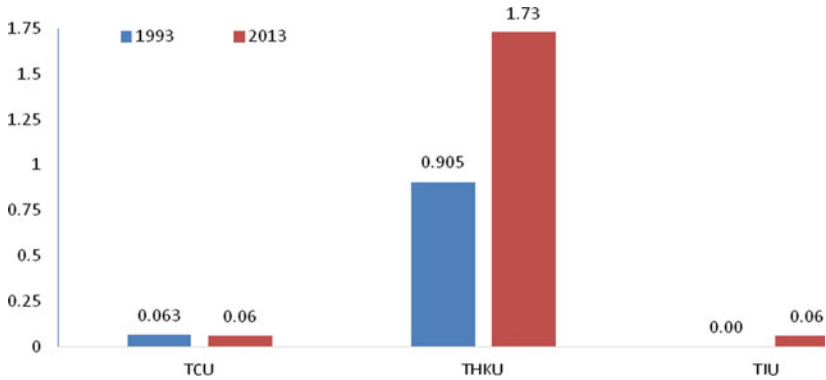
Fig. 2 Ratio trends of journal articles in english and native languages (1993–2013) (*Note* Data excluding those that were published in bilingual journals or other local languages)

publication ratios between English and national or local languages jumped from 0.17 in 1993 to 0.51 in 2013 across the three institutions, with an overall growth rate 198%, almost tripled within the 20 years. This is a clear signal that publication preferences in East Asian research-intensive universities have moved rapidly to the so-called international journals dominated by English language.

Individually, THKU tended to be again most severely affected by the RAE from 1993 to 2013, and its publication ratios between English and Chinese languages almost doubled from 1.25 to 4.25 over the two decades, with the highest overall publication ratio (1.45) and the rapidest growth rate at 240% between English and local languages in the past 20 years. This finding suggests that THKU has been most actively involved in the internationalization process of higher education among the three cases in terms of research outputs, due to the colonial history and post-colonial context of Hong Kong universities with a capitalist tradition, which is the most sensitive to the global ranking phenomenon.

TJU shared the same pattern by the NUCE with TCU by the NEBPP, and their publication ratios between English and national or local languages only increased slightly or even remained flat, respectively, suggesting that both TJU and TCU were less affected by the internationalization process of higher education, compared with THKU, while TCU appeared the least sensitive to the NEBPP and TJU marginally more sensitive to the NUCE. By and large, THKU has been the most

internationalized and in a leading status among the three top research universities, as measured by the two indicators of overall publication ratio and growth rate between English and Chinese languages over time.

The qualitative data support the quantitative findings and show that the historical trend can be explained by the changing nature of research assessment exercises, e.g., more demanding in terms of both quality and the use of English instead of native languages.

In the case of TCU, research assessment exercises directly use publications in SCI, EI, or SSCI journals as a core indicator for faculty advancement, substantiation, and awards. Specifically, publications are systematically measured by (a) the number of publications and/or (b) the number of SCI, EI, or SSCI journal articles. These criteria vary across different disciplinary areas and among different ranks of professorship. For example, to get a full professorship in natural sciences: (a) 10 and (b) 7, or (a) 8 and (b) 5 plus a high-quality monograph; and to get an associate professorship in natural sciences: (a) 6 and (b) 3, or (a) 4 and (b) 2 plus a monograph. Weighted bonuses are given for indexed journal articles in English. Such measurements were termed as ''evaluationism'' by academics at TCU.

Additionally, the global status of TCU in different ranking systems is used explicitly as for institutional promotion in faculty or student recruitment. For example, Essential Science Indicators, QS Ranking are used as advertising strategies for student recruitment. Furthermore, national rankings in (1) university ranking, (2) faculty quality, (3) graduate quality, and (4) media impact are also highlighted in commercial campaigns for student recruitment.

The emphasis on SCI, EI, and SSCI journal articles in English for evaluation was supported by both juniors and seniors who tended to view the global ranking regime as one way of the internationalization and standardization of research outputs, but seniors were not really affected, whereas juniors were. In terms of topic and language preference for publications, both seniors and juniors tended to emphasize local relevance over time, while they were also open and tolerant, as both tended to value more their impact at the local level instead of the international. This is an interesting finding in that TCU calls for global impact of its research but its faculty did not fully agree, as expressed in the following way by Assistant Professor Zhang:

In general my colleagues don't have many publications in English, and there is no significant change. One of the reasons [for this] is that publications in English have fewer readers from our domestic academia, therefore have little impact. For the majority of my colleagues here publications in English are not the first choice. However, there are two to three colleagues who are active in English publications, which is good for the global impact of higher education research from China.

THKU is better aligned with established research assessment exercises, which do not explicitly use the indicator of SCI, EI, and SSCI journals for faculty advancement, substantiation, and awards. But THKU does have such expectations for English publications, which were hidden in the external and internal review processes. As these two processes are crucial to faculty substantiation, normally no academics dare to ignore these hidden rules. In this sense, THKU is even more aggressive than TCU.

Based on interviews at THKU, senior members tended to agree on the enhancement of the global standards set by various assessment schemes, whereas juniors were compliant. The same was observed as seniors were not really affected while juniors were. Additionally, both seniors and juniors tended to emphasize the local relevance of publications over time. As academics in Hong Kong have the tradition of publications in English, both senior and junior academics valued their impact at local as well as international levels, with juniors exhibiting a greater preference for publication in SCI, EI, or SSCI journals. One junior professor felt the institutional pressure of research assessment exercises in this way:

As academics in Hong Kong enjoy the best salary rates in the world, universities here must make accountable their performance in research and education to the Hong Kong government and the general public, which has exerted huge pressures on us.... There is a weird, performance-counts-all mentality like a ghost haunting Hong Kong universities, that is, if I am unable to meet the high expectation in terms of research outputs my university can easily find somebody else who can replace me, and this is the case in other local institutions too. I don't feel I myself am that treasured by my university.

Compared with THKU and TCU, TJU seems to be affected less aggressively by the global movement of research assessment, but still follows the "audit culture" mandated by the NUCE under the MEXT. To meet

the mid-term objectives that were audited every 6 years by the NIAD-UE (revamped as the NIAD-QE since April 1, 2016), TJU encourages its faculty to publish their research outputs in refereed journals as one of the bibliometric indicators for career advancement and job substantiation. Institutionally SCI, EI, or SSCI journal articles are not explicitly used in its research assessment exercises, but there are unwritten criteria giving preference to such publications used by individual faculties or departments for appointment and promotion. Sometimes, these preferences become explicit for junior academics, e.g., internationally refereed or even SCI journal articles are required for Ph.D. students in the field of science or engineering.

Similar to their counterparts in China and Hong Kong, Japanese interviewees at TJU all viewed the addition of global standards of research assessment exercises as conducive and necessary to improving the academic status of TJU. Prof. Takamura agreed that this practice helped make Japanese universities more "visible" in the international community, but she also had concerns over how the new global parameters should be "properly used". Prof. Yamaguchi shared her worries on how she may be capable of producing "decent publications" in international refereed journals to meet such measures for her promotion in the years to come:

> Although I am new in the academic world, I am clear it's not an easy game for me to survive and grow, especially as a woman. It will be nice to have some decent publications in SSCI journals, but it's very difficult. You know English is not my native language, and writing in English is a painful process…. Having publications in English, however, will surely make me more competitive and safer in my job prospects at TJU, so I have to make every hard effort as I can to overcome it. I am of course not the only colleague here who worries about this.

Implications

In the new global age, higher education is undergoing remarkable reconfigurations in responding to many new challenges, and the global ranking regime is just one of its kind. Traditionally, the three core missions of the university have been facilitated and shaped as well by institutional financing, governance, faculty and students, socio-cultural environment, etc. Within just one decade the global ranking regime has overtaken these traditional factors, and become a pervasive, phenomenal, and powerful

force that systematically controls higher education almost everywhere in the globe. This is particularly true when publication becomes a major indicator of research productivity by research assessment exercises which have increased pressures on institutions and individual scholars (Post 2012).

As evidenced in this study, research has been a core mission for all the three case study institutions, and all academics endorsed such a mission as fundamentally important, institutionally and personally. Although research is just one of the three core missions of the university, it has been increasingly made more important than ever before, thus is widely seen as the first priority if compared with two other core missions, i.e., teaching and service. The danger here, however, is that all research assessment exercises and ranking schemes have taken—boldly and relentlessly—the single form of quantifiable indicators to measure "The noncommensurability of valuable things," though "not everything that can be counted counts, and not everything that counts can be counted" (Cameron 1963). Thus "publish or perish" has become a reality of academic life, and unfortunately, has in large part contributed to academic corruption and dishonesty on campus in many higher education systems.

Findings from the three cases manifest that research is reconfigured in the regular mechanisms of evaluation used for faculty advancement, job substantiation, and awards. These mechanisms have created the so-called "evaluationism" in China, "performance-counts-all mentality" in Hong Kong, "audit culture" in Japan, or "SSCI Syndrome" in Taiwan, with a specific emphasis on publications in refereed journals. When publications are evaluated, their international impact becomes an imperative metric either encouraged or mandated by a given national or societal context and by individual institutions. In most cases, publications in English are more recognized as English is a global "imperial tongue" (Altbach 2013) which dominates SCI, EI, or SSCI journals, traditionally controlled by Western publishing or indexing agencies.

Such a global ranking regime has callously created a dilemma or a Double Bind for East Asian universities, which are struggling very hard for a balance of various institutional missions to respond to global competition and local demands at the same time. The struggle has made academic life on campus much tougher than ever before, as experienced by the junior Japanese woman scholar. Worse than that, academics must make difficult decisions on where to publish their research findings—a dilemma of publishing globally and perishing locally or publishing locally and perishing globally, as argued by Hanafi (2011) in universities in the

Arab East. To turn the tide, the manipulated emphasis, flawed methodology, and unethical desirability of global university rankings and research assessment exercises should be avoided to help universities healthily and meaningfully focus on real missions to which they should commit themselves. Meanwhile, critical reflections and policy actions are particularly urgent on the indigenousness of knowledge exploration and production by higher education systems in East Asia and other post-colonial contexts.

Needless to say, this study is limited to the three top research-intensive universities in the East Asian Region, where institutional diversity and dynamism abounds. Have other types of universities been affected similarly by the global ranking regime? If yes, how have these universities been reconfigured, either in common with others or individually? How may these reconfigurations have changed institutional missions of the university, e.g., teaching quality? And how have academic life and student life been affected? These are all urgent questions that deserve further research in the future.

Conclusion

Thanks to globalization paved by colonialism and post-colonialism, the global landscape of higher education has been dominated, more or less, by the modeling of Western traditions—represented by Anglo-American systems, a model of the university captured by Guy Neave (2001) and Jun Li (2012). A ubiquitous manifestation of such a Western dominance is the hegemony of English language as the lingua franca around the world over the past century, as evidenced empirically by this study in research-intensive universities in Mainland China, Hong Kong, and Japan. The global ranking regime, typified by university ranking schemes and research assessment exercises, has turned out to be just another enhanced form of such a modeling carried forward in the new global age, but with a wrong post-colonial mentality. The dilemma created by such a global paradoxical phenomenon has generated multitudinous imperatives and tremendous pressures as well for an institutional reconfiguration of East Asian universities, as observed by many other researchers (e.g., Ishikawa 2009; Marginson 2010; Postiglione and Jung 2013; Yonezawa 2013, etc.).

East Asian universities have their unique institutional traditions (Hayhoe 1995; Li 2016). For example, the Taixue (The Imperial University) established and institutionalized in China since 124 BCE was the first

higher education institution in the world, 1000 years earlier than Western models. Since the late 1990s, universities in China have striven for a new stage of development, i.e., the Chinese University 3.0, rejuvenating from its cultural heritage with as self-mastery and intellectual freedom, humanist (zhi-xing) mission and institutional diversity (he'er butong) (Li 2012, 2016). It will be interesting to observe how this emerging East Asian model can balance the global, regional, and local missions of the university (Cheung 2012).

While some East Asian universities may take the new global challenges of ranking as opportunities to improve their institutional quality and status, many have experienced a weakened commitment to teaching and service that should be seen equally important and fundamental as research. It is anticipated, probably within the next few decades, that the importance of teaching and service will be revitalized in the new stage of East Asian universities.

References

Altbach, P. G. (2013). *The international imperative in higher education*. Boston, MA: Sense Publishers.

Boyer, E. L. (1990). *Scholarship reconsidered: Priorities of the professoriate*. New York, NY: The Carnegie Foundation for the Advancement for Teaching.

Cameron, W. B. (1963). *Informal sociology, a casual introduction to sociological thinking*. New York, NY: Random House.

CDGDC. (2016, April 22). *The fourth national discipline assessment formally launched*. Retrieved on May 25, 2016 from http://www.cdgdc.edu.cn/xwy yjsjyxx/zlpj/pgpsdtxx/281819.shtml.

Cheung, A. B. L. (2012). How Hong Kong universities balance the global and the regional. In B. Adamson, J. Nixon, & F. Su (Eds.), *The reorientation of higher education: Challenging the East-West dichotomy* (pp. 95–112). Hong Kong: CERC/Springer.

Chou, C. P. (2014). *The SSCI syndrome in higher education*. Rotterdam: Sense.

Eagleton, T. (2015, April 6). The slow death of the university. *The Chronicle of Higher Education*. Retrieved April 10, 2015 from http://chronicle.com/article/The-Slow-Death-of-the/228991.

Flexner, A. (1930). *American, English, German*. Oxford: Oxford University Press.

Glassick, C. E., Huber, M. T., & Maeroff, G. I. (1997). *Scholarship assessed: Evaluation of the professoriate*. San Francisco, CA: Jossey-Bass and The Carnegie Foundation for the Advancement for Teaching.

Gonzales, L. D., & Núñez, A.-M. (2014). The ranking regime and the production of knowledge: Implications for academia. *Education Policy Analysis Archives, 22*(31), 1–20.

Hanafi, S. (2011). University systems in the Arab East: Publish globally and perish locally vs publish locally and perish globally. *Current Sociology, 59*(3), 291–309.

Harman, G. (2011). Competitors of rankings: New directions in quality assurance and accountability. In J. C. Shin, R. K. Toutkoushian, & U. Teichler (Eds.), *University rankings: Theoretical basis, methodology and impacts on global higher education* (pp. 35–53). Dordrecht: Springer.

Harman, G. (2006). Research and scholarship. In J. J. F. Forest & P. G. Altbach (Eds.), *International handbook of higher education* (pp. 309–328). Dordrecht: Springer.

Hayhoe, R. (1995). An Asian multiversity: Comparative reflections on the transition to mass higher education in East Asia. *Comparative Education Review, 39*(3), 299–321.

Hazelkorn, E. (2015). *Rankings and the reshaping of higher education: The battle for world-class excellence* (2nd ed.). New York, NY: Palgrave Macmillan.

Ishikawa, M. (2014). Ranking regime and the future of vernacular scholarship. *Education Policy Analysis Archives, 22*(30), 1–22.

Ishikawa, M. (2009). University rankings, global models and emerging hegemony: Critical analysis from Japan. *Journal of Studies in International Education, 13*(2), 159–173.

Jasper, K. (1959). *The ideal of the university* (H. A. T. Reiche & H. F. Vanderschmidt, Trans.). London: Lowe and Brydone.

Kerr, K. (1963). *The uses of the university*. Cambridge, MA: Harvard University Press.

Li, J. (2016). Chinese University 3.0 in a global age: History, modernity and future. In P. C. I. Chou & J. Spangler (Eds.), *Chinese education models in a global age: Transforming practice into theory* (pp. 15–35). Singapore: Springer.

Li, J. (2012). World-class higher education and the emerging Chinese model of the university. *Prospects: Quarterly Review of Comparative Education, 42*(3): 319–339.

Li, J., & Hayhoe, R. (2012). Confucianism and higher education. In J. A. Banks (Ed.), *Sage encyclopedia of diversity in education* (Vol. 1, pp. 443–446). Thousand Oaks, CA: Sage.

Marginson, S. (2010, March 28). 'GLOBAL: Research: A force for globalisation. *World University News*. Retrieved January 3, 2016 from http://www.universityworldnews.com/article.php?story=20100326113121559.

Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook* (2nd ed.). Thousand Oaks, CA: Sage.

Neave, G. (2001). The European dimension in Higher Education: An excursion into the modern use of historical analogues. In J. Huisman, P. Maassen, & G. Neave (Eds.), *Higher education and the nation state: The international dimension of higher education* (pp. 13–72). Oxford: Pergamon.

Oguz, A. (2004). *Ranking competition: How much to endeavor to move up?* Unpublished MA thesis, Emory University, Atlanta, GA.

Pelikan, J. (1992). *The idea of the university: A reexamination.* New Haven, CT: Yale University Press.

Post, D. (2012). Rank scholarship. *Comparative Education Review, 56*(1), 1–17.

Postiglione, G. A., & Jung, J. (2013). Frameworks for creating research universities: The Hong Kong case. In J. C. Shin & B. M. Kehm (Eds.), *Institutionalization of world-class university in global competition* (pp. 237–254). Dordrecht: Springer.

Power, M. (2004). The risk management of everything. *The Journal of Risk Finance, 5*(3), 58–65.

Shin, J. C. (2011). Organizational effectiveness and university rankings. In J. C. Shin, R. K. Toutkoushian, & U. Teichler (Eds.), *University rankings: Theoretical basis, Methodology and Impacts on Global Higher Education* (pp. 19–34). Dordrecht: Springer.

Shin, J. C., Toutkoushian, R. K., & Teichler, U. (2011). *University rankings: Theoretical basis, Methodology and Impacts on Global Higher Education.* Dordrecht: Springer.

Teichler, U. (2011). Social contexts and systemic consequence of university rankings: A meta-analysis of the ranking literature. In J. C. Shin, R. K. Toutkoushian, & U. Teichler (Eds.), *University rankings: Theoretical basis, Methodology and Impacts on Global Higher Education* (pp. 54–69). Dordrecht: Springer.

Toutkoushian, R. K., & Webber, K. (2011). Measuring the research performance of postsecondary institutions. In J. C. Shin, R. Toutkoushian, & U. Teichler (Eds.), *University rankings: Theoretical basis, Methodology and Impacts on Global Higher Education* (pp. 123–144). Dordrecht: Springer.

University Grants Commission (UGC). (2014). *Research assessment exercise 2014.* Hong Kong: University Grants Commission. Retrieved January 3, 2016 from http://www.ugc.edu.hk/eng/doc/ugc/rae/gn_201406.pdf.

van Vught, F. A., & Westerheijden, D. F. (2012). Transparency, quality and accountability. In F. A. van Vught & F. Ziegele (Eds.), *Multidimensional ranking: The design and development of U-Multirank* (pp. 11–23). Dordrecht: Springer.

van Vught, F. A., & Ziegele, F. (2012). *Multidimensional ranking: The design and development of U-Multirank.* Dordrecht: Springer.

Yonezawa, A. (2013). Rankings and information on Japanese universities. In P. T. M. Marope, P. J. Wells, & E. Hazelkorn (Eds.), *Rankings and accountability in higher education: Uses and misuses* (pp. 171–186). Paris: UNESCO.

Measuring by Numbers: Bibliometric Evaluation of Faculty's Research Outputs and Impact on Academic Life in China

Wenqin Shen, Dan Mao, and Yaqiong Lin

INTRODUCTION

The use of quantification as a management tool is evident across the world (Shore and Wright 2015; Muller 2018). Government agencies are adept at using statistics and numbers to aid administration. In the field of higher education, the use of quantitative management on academics and their research activities worldwide has been increasing (Brenneis et al. 2005). This trend is motivated by various reasons, which include the rampant development of science and technology and the democratization of higher education (Weingart 2010).

In the UK, an increasing number of university teachers find themselves the subject of performance appraisals, which are inherently in conflict

W. Shen (✉)
Peking University, Beijing, China
e-mail: shenwenqin@pku.edu.cn

D. Mao
Shanghai Normal University, Shanghai, China

Y. Lin
Huazhong University of Science and Technology, Wuhan, China

203

with the institutional logic of the university (Townley 1997). In countries such as Australia, research performance evaluation has become a regular regime for faculty. One Australian university evaluates its faculty members on their performance in obtaining external funds, supervising Ph.D. students, and publishing (Whitley et al. 2010; Welch 2016). According to interviews conducted, teachers at the History Department of one Australian university needed to report the number of received citations by their publications when applying for promotion (Gläser and Laudel 2007). In France, the evaluation of teachers varies among different types of universities. However, the practice of assessing faculty research performance by journal classification and number of citations still exists (Paradeise and Thoenig 2015). Norwegian scholars who have analyzed research output by teachers at different age cohorts discover output for all cohorts in an upward trend, which is linked to university incentives (Kyvik and Aksnes 2015).

Traditionally, American research universities tend to rely less on quantitative approaches in their teachers' research appraisals. Such case is particular with top research universities; for example, neither UC Berkley nor MIT sets clear quantitative standards or requirements on the number of publications when promoting or recruiting teachers, and scholars' citation statistics in evaluation reports are for reference only (Thoenig and Paradeise 2014). In an interview by an American researcher, the head of the Chemistry Department of an American university pointed out that their rules on faculty promotion are "vague;" "In our faculty promotion guide, you won't find requirements that you have to have three research funds or publish six papers" (Nadler 1999, p. 61). However, other evidence suggests that even in the United States, the number of publications is becoming increasingly important in academic promotion. Many young teachers are informed that the primary factor that decides promotion is the number of publications (Anderson et al. 2010). Contrary to traditional scientific and sociological theories, analysis of the academic output by American scholars in social sciences reveal that an increasing number of scholars are publishing peer-reviewed papers, followed by a sharp increase in the scale of academic output. Such an increase can be caused by the encouragement to publish on the part of universities and the link between additional publications and high incomes (Hermanowicz 2016).

Although research publications by Chinese scientists have surged over the past two decades (Liu et al. 2015), it is less impressive in qualitative terms than quantitative. Studies show that even compared with top

universities in Hong Kong and Taiwan, research universities in Mainland China generate research output in larger quantity but of lower quality (Li et al. 2011). The present work argues that one reason behind the surge in publications by Chinese scholars is to cope with the quantitative appraisals by their institutions. The impact of bibliometric evaluation or audit culture on Chinese university teachers has caught the attention of some researchers (e.g., Yi 2011). Other scholars have analyzed the implications of global university rankings or national research evaluation regimes on university faculties (Li 2016), and others still studied the reaction of Chinese university teachers to new managerialist reforms (Huang et al. 2018).

Generally, existing research has yet to offer in-depth analysis dedicated to bibliometric evaluation and its implications, leaving a few questions unanswered. First, current research focuses on the policy implications at a global or national level (Li 2016), providing little attention to the variety or discrepancies among Chinese universities. Second, existing research examines the influence of research evaluation systems on Chinese university teachers but has not provided due attention to the impact of a special evaluation approach (i.e., bibliometric evaluation). Last, further attention has been provided to the natural sciences than social sciences, wherein making an equivalent impact has been proven complex for Chinese scholars. Therefore, this study seeks to analyze the quantitative management in the research evaluation of Chinese teachers and its implications for the research life of Chinese academics by interviewing 36 university teachers from 8 universities and analyzing relevant policy texts and bibliometric data from a selected Project 985 university.

The Authors interviewed scholars of engineering, physics, chemistry, Chinese literature, history, and sociology to present the impact of bibliometric research evaluation on faculty members of different disciplines in a balanced fashion. The interviews were conducted over an extended period in 2004, 2007, 2011, and 2015, which allowed us to observe historical continuity and changes. Output data for researchers in the two fields of education and anthropology in one Project 985 university were also analyzed for the years 1993, 2003, and 2013 to measure change over time.

Moreover, we assembled relevant policy texts on recruitment, research reward, professional promotion, workload appraisal of 10 research universities, and the "development schemes for the 12th and 13th Five-Year Plans" of 75 universities directly under the Ministry of Education to

understand how quantitative research evaluation is reflected in the policy texts of various universities.

This chapter is structured as follows. First, we present how quantitative evaluation, as a social technology, historically entered and gained legitimacy in the domain of higher education by reviewing relevant texts. Second, we illustrate how quantitative metrics evaluation is reflected in university policies by analyzing policy texts of individual universities. Finally, we analyze how national and university quantitative evaluation policies influence university teachers' academic lives, decisions regarding how and where to publish, and particular knowledge production activities.

The Rise of Bibliometric Evaluation in Chinese Universities

In the 1980s, quantitative evaluation had not gained prevalence in faculty evaluation in Chinese universities. In appraisals for promotion to associate professorship and professorship, seniority was part of the consideration, as well as reputation and influence in the field. In other words, peer review played a rather important role at that time. For example, in the 1980s, professorship appraisals in Peking University entailed reporting and defense at the university's academic council (Interviews with members of Peking University's academic council 2012).

From the end of the 1980s onward, bibliometric evaluation methods were gradually introduced first into natural sciences. In 1987, as required by the New Technology Bureau of State Scientific and Technological Commission, the Institute of Scientific and Technical Information of China (ISTIC) conducted statistical analysis of Chinese scientific publications between 1983 and 1986 indexed by SCI, ISR, and ISTP using bibliometric methods. In 1988, Shang Yichu of ISTIC published the top 10 Chinese universities in terms of academic publications from 1983 to 1986 in the report *China's Academic Standing in the World*. Since 1988, the Department of Science and Technology of the Ministry of Education has regularly published the Compilation of Science and Technology Statistics of Higher Education Institutions, which compiled data on researchers, research funds, and publications of various universities. Such official data served as reference for the comparison between the numbers of scientific papers published by different universities. Data for 1988 show that the number of academic publications by Chinese universities was low, with Peking University having 2412 researchers, publishing 1299 papers

or 0.54 paper per researcher. Equivalent numbers for Tsinghua University were 5768, 1293, and 0.22 (National Education Commission of the People's Republic of China 1989).

In 1989, commissioned by the Department of Comprehensive Planning of the State Scientific and Technological Commission, ISTIC conducted statistical analysis of scientific papers published in Chinese language journals. Since then, annual statistical analysis on the papers indexed by the three major international indexes for scientific literature (SCI, ISR, and ISTP) has become a regular endeavor. In 1990, the Chinese government evaluated National Key Labs. Subsequently, the Chinese Academy of Sciences appraised its subordinate research institutes, providing considerable attention to the number of publications. In 1992, for the first time, Nanjing University overtook Peking University and became number one in the list of SCI-indexed papers. In 1993, Nanjing University still held the first place, followed by Peking University (China Institute of Scientific and Technical Information 1995). On October 23, 1998, the Ministry of Science and Technology held a press conference, where it officially published the Statistics on Chinese Scientific Publications in 1997, which ranked Chinese universities. This report received a considerable amount of attention from university leaders across the country, being from such an official source.

Since then, SCI rankings have become increasingly important among Chinese universities. Moreover, with a policy orientation heavy on SCI papers, some traditional engineering institutions began to emphasize the number of SCI papers.

In 1998, the central government launched the Project 985, which aimed to build some world-class and top research universities. In 2002, the Ministry of Education officially launched First-level Discipline Rankings, with many of the evaluation metrics being bibliometric. Zhejiang University issued Provisions on Thesis Defense for Postgraduate Degrees of Zhejiang University in the same year, requiring a certain number of publications before Ph.D. students' thesis defense. Peking University would later adopt this practice, with other universities soon following suit.

In 2003, Shanghai Jiao Tong University presented the world's first Academic Ranking of World Universities, which is a thorough presentation of research performance that has since become highly important for universities worldwide. Some unofficial university rankings, such as Wu Shulian's Chinese University Ranking, have also been adding pressure on

universities. Therefore, 2002–2003 is a key milestone in the history of higher education in China, especially regarding research evaluation.

Driven by many university rankings, universities generally provided considerable importance to the number of scientific papers. In a 2004 interview, one teacher identified university rankings as one driver behind universities' emphasis on publishing additional papers:

> This is not easy. This decides a university's ranking. So the university leaders are very nervous about this, so they put high requirements on students. I don't know if they have this kind of requirements outside China. But for our university, they are always stressed about rankings. And there's quite a gap between us and universities in Beijing and Shanghai. So the university requires publications. And it really worked and our ranking went up. (Interview, Professor at a Project 985 university 2004)

With regard to the introduction of the World-Class University Project, the number of SCI papers has become a key metric pursued by university leadership. When some universities summarize their achievements, their ranking in the number of SCI and EI indexed papers in China is commonly featured. For example, when a Project 985 university summarized its successes, it indicated that their SCI and EI paper ranking among Chinese universities rose from 19th and 14th in 2009 to 7th and 8th in 2013, respectively. On this basis, numbers of papers, impact factor of the journal, and number of citations have been widely used in the assessment of teachers. Bibliometrics is an important criterion in annual performance assessments and academic promotions. Furthermore, bibliometrics has become a key criterion for important academic rewards. Many academic rewards, such as Ministry of Education's Award in Research Achievements and Cheung Kong Scholar Program, require candidates to submit citation statistics of their papers.

We selected a Sociology Department and a College of Education faculty members in one Project 985 university as cases to illustrate the historical construction of quantitative assessment in Chinese universities. We analyzed the research publication data of the two faculty members in 1993, 2003, and 2013. We found that the scale of teachers in both schools has considerably increased after the implementation of the Project 985 and the massification of higher education. The number of faculty in the Department of Sociology has increased from 4 in 1993 to 11 in 2003 and further expanded to 28 in 2013. The College of Education has begun

Table 1 Total number of journal articles/number of teachers

	1993	2003	2013
Department of Sociology	6/4	33/11	92/28
College of Education	10/12	79/21	61/27
Total	16/16	112/32	153/55

Table 2 Number of published articles in Chinese journals per capita

	1993	2003	2013
Department of Sociology	1.5	3.0	3.3
College of Education	0.8	3.8	2.3
Total	1.0	3.5	2.8

to take shape in 1993 and has 12 teachers. It expanded to 21 in 2003 and further increased to 28 in 2013 (Table 1).

In comparison with 1993, the per capita publication number of teachers in the two units showed a rapid development trend in 2003. The per capita publication number of teachers in Department of Sociology indicates a continuous growth trend. From 1993 to 2003, the per capita number of journal articles published by the members of the Department of Sociology doubled from 1.5 to 3.0; from 2003 to 2013, this figure continued to increase, although the growth rate slowed down to only 10% (Table 2).

In addition, the two colleges do not particularly emphasize the English publication in their faculty evaluation system; thus, the number of English publications has been limited in the two colleges. In the College of Education, the number of English publications was 0 in 1993, 3 in 2003, and 4 in 2013. In the Department of Sociology, no teachers published English papers in 1993, 2003, and 2013.

Bibliometric Evaluation in University Policies

Across the board, Chinese universities increasingly embrace bibliometric evaluation as a tool to manage teachers' research performance. As a management method, quantitative appraisal has permeated into every facet of faculty performance assessment, including university development planning, performance assessment, research incentive and academic promotions, thereby constructing an institutionalized system based on official policy texts.

University Strategic Planning

Soon after the founding of the People's Republic, planning systems were introduced into Chinese universities. Development planning is a tool for macro control by the state and an important way of autonomous governance by universities (Qi and Chen 2016). It is a compass that guides an institution's development in the coming years and exerts major influence on its various management systems and policies. Via an documentary analysis of the 12th and 13th Five-Year Plans of 75 universities directly under the Ministry of Education, it is found that setting quantitative metrics is common in the research development plans of universities. For example, a Project 211 university in Jiangsu Province indicated specific expectations as the following in its 13th Five-Year Plan:

> By the end of the 13th five year, we will strive to have 500 thousand RMB in per capita research funding for faculty members with senior titles, with total of 3 billion RMB research funding in place for the university. Among which, total horizontal funding (from private companies) shall exceed 500 million RMB... strive to secure at least 8 new important national scientific projects or key projects from key development programs, an average of 110 million RMB of project funding for National Natural Science Foundation of China projects, 15 key important projects from National Social Science Fund of China, 45 projects from National Social Science Fund of China, 5–6 international collaboration projects... 6 new National Science and Technology Awards, strive to achieve breakthrough in State Science and Technology Prizes, 2 new Award in Research Achievements in Humanities and Social Sciences of the Ministry of Education. Publish at least another 40 high-level (IF $\geq$ 9)) SCI papers, 7000 SCI/EI papers, 100 SSCI papers and 1800 CSSCI papers in total.

As a key metric for various evaluations and rankings, research achievement has become a crucial means to boost university ranking and reputation with the continued implementation of the World-Class University vision. The comparison of the research results during the 12th and 13th Five-Year Plans revealed that some universities not only named specific quantitative targets on research funding and scientific publications while formulating their 13th Five-Year Plan but also proclaimed high targets for the growth rate of these metrics. Consequently, a finance and economics university which had published 75 SCI papers and 90 SSCI yearly on average during the 12th five-year period boosted the numbers

of SCI and SSCI publications by over 100% to above 200% during the 13th five-year period.

Some universities began using key performance indicators in their planning and management to achieve the research performance targets set out in the 13th Five-Year Plan. Furthermore, they devolved the metrics level by level, all the way down to individual faculties and departments. For example, a Project 211 university in Central China listed the main performance metrics in research in its Notice on the Proposed Targets for 2017: National Key Projects (e.g., important and key projects from the National Natural Science Foundation), major government awards (e.g., State Science and Technology Prizes), and high-level papers (e.g., SCI and SSCI papers). When setting annual targets, schools and departments shall make "targets that are quantifiable, assessable with visible results, and weighted" (CCNU 2016). In many universities, the quantity of research publications is the core metric used in the annual assessment of individual schools and departments. The development planning texts of various universities indicate that the number of academic papers is still the primary target that many universities strive to meet or exceed. The quality of a paper is mainly determined by whether the journal in which it is published has been included in major bibliometric indexes (e.g., SCI, EI, SSCI, and CSSCI); thus, judging the quality of the paper is simply by the journal's impact factor.

Carrots for Publication

As mentioned earlier, numerous universities have planned to boost the number of research publications under the pressure of building world-class universities. However, if these plans are to be fully implemented at the level of individual teachers, a series of support policies are needed. Therefore, teachers and departments tend to heavily rely on rewards for scientific publications and research projects.

Generally, rewards for research performance mainly include the following types: (1) national-, provincial-, or ministerial-level research awards; (2) research papers or monographs; and (3) national-, provincial-, or ministerial-level research projects. Table 3 shows the research reward standard of a Project 985 university in Western China, such as rewarding of each paper with 30,000 RMB based on the journal of publication; each award for outstanding research achievement at national-, provincial-, or ministerial-levels ranges from 50,000 to 2 million RMB.

Table 3 Research reward standard of a project 985 university in Western China

Order	Category		Reward standard (thousand RMB)
Reward standard for academic papers in natural sciences			
1	Published in Science or Nature		300
2	Published in sister journals (research journals) of Science or Nature		100
3	Published in SCIE journals	Q1	30
		Q2	16
		Q3	8
		Q4	4
4	Published in EI indexed core journals (not indexed by SCIE)		3
Reward standard for academic papers in humanities and social sciences			
1	SSCI, A&HCI indexed		30
2	Authoritative university journals		8
3	Important university journals		4
4	Academic papers published in the Theory Edition of People's Daily and Guang Ming Daily or reprinted by Xinhua Digest and China Social Sciences Digest (over 2000 words) or reprinted in full by Copies of Publications of Renmin University of China (database)		4
5	Published in CSSCI regular core journals		1

Source 1) *The Notice regarding financial incentives on science and technology publication.* [EB/OL] http://kjc.cqu.edu.cn/info/1057/3920.htm; 2) *The Notice regarding financial incentives on humanity and social science publication.* [EB/OL] http://fah.cqu.edu.cn/info/1063/1183.htm. *Note* CSSCI refers to Chinese Social Sciences Citation Index. The database developed by Nanjing University since 1997 currently covers approximately 500 top Chinese academic journals of humanities and social sciences

To evaluate the quality of a paper, most universities look at the impact of journals by their inclusion in recognized indexes. Papers are usually classified in A, B, or C levels, which are weighted differently. In some universities, one A-level paper is equal to 3 C-level papers.

For scientific and engineering papers, many universities classify the *Science* and *Nature* journals as A, SCIE as B (some split SCIE into more levels according to quartiles), and EI as C. For social sciences, relatively few universities classify SSCI and the one or two most authoritative journals of a discipline as A, important journals of a discipline as B, and other CSSCI papers as C. The prominence of journals determines the size of rewards. In addition, the vast majority of universities require teachers

to be the first or sole author for the aforementioned research awards or papers. Second authorship or affiliation implies ineligibility.

In addition to direct financial rewards, the quantitative metrics in annual performance appraisals may also be linked to teachers' incomes. Some universities require teachers to produce a certain amount of research or a specific number of teaching "credits" each year. Different journals are assigned different weights to calculate research credits. In one Project 985 university, a teachers' research credit score is divided by the average score; a result below 0.5 is considered failure, whereas a result over 1 is deemed outstanding. This policy fosters a highly competitive atmosphere among teachers at various departments, because even if someone has published a substantial number of papers in objective terms, he or she may still fall short of the school average and run the risk of failing. A faculty member in the field of computer science at a Project 985 university stated in an interview that a teacher has the task to gain 2500 research credits yearly, with each 100 thousand RMB in project funding counted as 1000 credits (Interview with a professor at Computer Sciences Department 2010). In some universities, some teachers who cannot gain vertical project funding (organized and sponsored by central or local governments, wherein researchers have to compete for the funding) have to acquire horizontal project funds from an external partner (e.g., a company). Some teachers who have no horizontal projects even choose to sign research contracts with some enterprises while paying research funding out of their own pockets to meet research funding requirements (Interview with an economics teacher at a local university 2011). Under the pressure of such quantitative performance assessments, teachers are forced to increase their research output.

Bibliometric Evaluation in Promotion and Annual Appraisal

For university teachers, promotion is critical for their careers and income (Long et al. 1993). Promotion has also become an effective approach to incentivize teachers toward a large research output. At present, the majority of universities have set basic quantitative research achievement targets in academic promotion. Only when such targets are met do academics become eligible for applications. Although some universities do not have specific bibliometric evaluation in place for such appraisals, in practice, teachers with a large amount of publications tend to have a clear advantage.

In recent years, quite a few universities have reformed promotion systems and established differentiated regulations in place for research publications, particularly by discipline. In effect, a distinction is made in the appraisal standards for the natural sciences and engineering and those applied in the humanities and social sciences. However, such differentiation is often only down to the level of broad categories (e.g., natural sciences, engineering, and information sciences) and has yet to reach specific disciplines. Moreover, many universities have divided faculty into three tracks, i.e., teaching and research focused, research focused, and teaching focused. Nonetheless, mandatory research targets on research achievements invariably exist for whichever category. For example, in a Project 985 university in west China, one must meet the following requirements to apply for a full professorship position: (1) lead one national-level research project or lead research projects with 2 million RMB in accumulated funding (400,000 for humanities or social sciences); (2) publish three SCI or SSCI papers (two being in authoritative journals) or five papers in Chinese peer-reviewed journals; for social sciences, equivalent metrics are one SCI or SSCI paper or three papers in leading Chinese journals; and (3) national-, provincial-, or ministerial-level awards for outstanding achievements in research or teaching. If the candidate has not won such awards, then he or she would need another three SCI or SSCI awards (one SCI or SSCI paper or three papers in authoritative social science journals).

Most universities include external review as an important approach in the promotion process. But Reviews by external experts are often used as a mere reference. From the perspective of universities, setting bibliometric standards for promotion can save administrative costs, and avoid favoritism, thereby making appraisals fair and objective, while the disadvantages of this approach is ignored Consequently, academic council members who cast their votes don't need to face the relationship pressure and make the difficult decision on whose work is better, they can make decisions simply according to the numbers.

In some universities, the qualification to serve as a supervisor for Ph.D. students is linked to quantified research results. According to a document titled *Rules on Reviewing Ph.D. Supervisor Qualification* issued by a Project 985 university in Western China in 2005, applications to become a Ph.D. supervisor no longer require professorship but instead specific requirements regarding the number of academic publications. In the fields of natural sciences, engineering, medicine, and management, applicants

will need to have achieved "more than five papers published in authoritative international journals" as first author. Meanwhile, in humanities and social sciences, more than 10 papers in the past five years as first author in authoritative journals recognized by the graduate school are necessary. Based on our policy document analysis of Project 985 universities, many of these universities have similar policies, with some setting even higher requirements than the others.

It is found that quantitative research evaluation has found its way into every facet of university faculty evaluation. While these approaches may serve as a stimulus to increasing publications to a certain extent, they come with numerous problems. First, the evaluation methods used to determine a paper's quality are overly simplistic. The impact of a journal and whether it has been included by an authoritative database are insufficient evidence to determine the quality and impact of individual papers thoroughly. Second, over-emphasizing the quantity and efficiency of publication indicates that some basic or risky studies with long completion cycles are deprived of due attention. Third, although most universities make a distinction between the evaluation metrics for sciences and engineering and for humanities and social sciences, the inherent differences among disciplines in terms of research output and assessment are still often overlooked. Fourth, most universities consider indexes, such as SCI and SSCI, as the main standards for quality of publications. However, most of these indexes' journals are in English; therefore, some quality Chinese language journals receive less credit than they deserve. Excessive focus on publishing in English is impractical for some disciplines as well, particularly in history, philosophy, education, anthropology, and other such disciplines where considerable research output is devoted to local settings, making them less accessible to international audiences.

Having realized the flaws in such simplistic bibliometric evaluation, some universities have begun to reform their policies and systems, shifting their focus from excessive emphasis on quantity to the quality of research output. For example, Jilin University proposed in its 13th Five-Year Plan to *"explore an evaluation approach combining both quantitative and non-quantitative assessment in philosophy and social sciences, introduce a 'magnum opus' assessment system. For major achievements through committed research over an extended period, to offer retrospective and compensatory rewards and appraisal."* Fudan University, among others, also introduced a "magnum opus assessment system" some years ago and made productive efforts in non-quantitative evaluation

of research output. However, these endeavors still face formidable challenges, including the many flaws of the peer review system, which is the basis of non-quantitative evaluation. Some peer review mechanisms have faced numerous difficulties due to the lack of autonomy, intervention from administrators, and limited resources.(Zhou and Shen 2015; Jiang 2012). Wallmark and Sedig (1986) asserted that despite being overly simplistic, bibliometric evaluation has a low cost of merely 1% or less of peer reviews. In addition, the hierarchy within academic systems indicates that few elites dominate academic resources and the resource allocation process, in which politics, connections, and social capital often have a role to play, thereby compromising the fairness of peer reviews (Yan 2009).

Implications

As presented in the preceding discussion, quantitative audit, which is a systematic approach for resource allocation, includes funding, policy, and value and is now deeply inserted into every facet of universities. Government functions, such as the Ministry of Education at the macro level, universities at the meso level, and departments and researchers, have all become implementers of this system. Academics are the essential stakeholders in this system. Research audit concerns their everyday life. The number of subsidies, academic accolades, and career promotions are all determined by their quantified performance on metrics, such as quantity and quality of papers and the amount of funding. Research audit and bibliometric evaluation have initiated extensive and far-reaching reforms of scholars' academic endeavors and the academic profession as a whole, as well as a series of positive or negative consequences. On the basis of the interviews with researchers, we identify that the quantitative evaluation of research has enhanced the degree of professionalization in Chinese academia but led to the unintended consequence of "research ritualism."

Research Audit and the Professionalization of Academics

On the basis of the strong allocation function and mobilizing energy of quantitative evaluation, academic research in China, particularly in natural sciences and some engineering and social sciences, have begun accelerating their integration with the international academic community and enhancing the professionalization of academics. Professionalization herein

does not refer to the organizational establishments, that is, access thresholds of the academic profession (such as a doctoral degree) or specialized societies but rather how research paradigms, methodologies and technologies, theories and concepts, standards of academic writing, and many other processes of knowledge production have begun to be profoundly and extensively influenced by international academic norms.

The widespread use of bibliometric research metrics accompanies a wave of development of Chinese universities, with building world-class universities as a featured goal. As a state policy instrument, research evaluation has effectively guided Chinese academic research toward internationalization. After the People's Republic was established, the development of research suffered from misconceptions and detours, negatively affecting the professionalism and ethics of Chinese research academics. Quantitative research evaluation, which began toward the end of the 1980s, introduced a new idea of academic competition to the academia. Under the pressure to publish in international peer review journals, scholars (mainly in natural sciences and engineering) have to consciously improve the quality of their research to gain international recognition and publish their research results. The effect in the social sciences and humanities were complex, as argued above.

A key aspect of academic professionalization is the establishment of meritocracy and universalism in academic evaluation, which considerably changes the previously ambiguous title promotion and academic appraisal activities. Since then, the power relations of researchers and focus of their work have undergone academic shifts. Research audits have introduced forms of individualized competition, thereby transforming the human resource traditions that have been based on collectivism. Given the insignificance of peer review, non-academic standards can easily override academic considerations in the period prior to research audits. "Special factors," such as factional affiliation, seniority, position of mentor, and interpersonal relations, exist throughout a scholar's career. A scholar will need to invest energy to maintain *guanxi* (a network of relations) in the academic community in exchange for future development opportunities.

By contrast, despite its inevitable flaws, quantitative audits set clear targets and allocate academic performance a critical position. Academic performance has become the focus of academic work. Clear and universal standards have been established to determine who be promoted or rewarded, thereby eliminating social interference to the maximum extent possible. At present, the dominant logic of the system dictates that

capacity and performance will determine who will succeed, and the rules of stratification in the academia have shifted accordingly. Such a system incentivizes academic diligence and encourages scholars to focus their attention on a larger academic world rather than the complicated interpersonal relations within a department. In comparison with the previous distorted peer review systems, bibliometric evaluation is a system with more formal integrity. The president of a Project 985 university revealed that before introducing a bibliometric system, many people asked for favors before annual title appraisals. Such favors decreased after the quantitative evaluation system was set in place. Therefore, he contended that bibliometric evaluation must not be canceled lightly (President of a Project 985 university 2014).

Despite the criticism received by quantitative audits from the academia, many researchers recognize that the universalist principles of bibliometric evaluation protect them from particularism factors (See Long and Fox (1995) for details on universalism and particularism). In the Chinese academic community where academic mobility is still emerging, this universalism based on academic performance may be conducive to breaking the repression and injustice caused by a history of inbreeding and favoritism within the research community. A young humanities teacher holding a position in a rather inward-looking school, with most colleagues being graduates of that university, argued the following:

> I am a newcomer from outside. I bury my head in my research, teach my classes well, keep good terms with colleagues and that'll do for me. No need to rack my brain to play up to (leaders and colleagues). Bonuses, titles and awards require decent work. Without that, they wouldn't be able to get it, even if they had powerful people behind them. If an outsider wants to take root here, he'll need to publish papers constantly. (Assistant professor of education in one Project 985 university 2017)

Another teacher remembered her mentor's words before she graduated:

> that place (the institution she would work for) is complicated. So you bury your head in writing and publishing as many papers as possible. Put your perfectionism on hold for the moment, as long as you know where the flaws are. This will protect you… with this intense academic competition nowadays, they'll have to put some capable people to the foreground. (Assistant professor of sociology in one Project 985 university 2017)

However, some nuanced insights, as well as a long timeframe and global system support, are needed to understand how individualism based on academic performance affects the collectivism in the academic profession and how universalist principles correct particularistic principles. In fields where knowledge production is conducted on a team basis, many scholars cannot independently run a laboratory, which is relatively different from the US systems. A large research team often includes several teachers, sometimes comprising a dozen. The requisite resources, opportunities, and platforms for their careers are initially distributed within the teams, thereby affecting the academic performance of individual scholars who will need to balance academic strengths with power relations. Moreover, no simple zero–sum relationship exists between the individualistic competition and traditional collectivist culture brought in by quantitative evaluation.

Given the heightened academic competition and strengthened universalist principles, research activities now occupy a considerable amount of time and energy for teachers. Before the prevalence of bibliometric evaluation, wholehearted dedication to research came from passion and self-discipline on the part of researchers. Prior to the introduction of reward and punishment systems that oriented scholars toward research, the amount of academic pressure or time spent on research was a matter of choice for most academics, which differs from the situation in present time. An increasing number of scholars spend a considerable amount of time on academic works, especially in research universities. Numerous scholars are focusing on academic work, reflecting the macro trend of research professionalization at micro and daily levels. As one interviewee explained,

> Whenever I have time, I put it into work. Outside our world, many have the misunderstanding that university teacher is the easiest job. A few classes every week and the rest is all weekend, plus the long holidays in summer and winter. I don't know how to begin explaining this to outsiders. We never have too much off time. When there's a gap in my schedule, I'm thinking about my research. (Assistant professor of sociology in one Project 985 university 2017)

This description of this interviewee's pace at work is relatively common among research universities.

Overall, among the policies and systems in China's key university development drive, bibliometric evaluation of scholars' academic output has been the most universalist and consequential. Such policy yields an in-depth reconstruction of academic work and elevates its professionalization, which has been reflected in every facet of daily research practices.

Unintended Risk of Research Audit: Research Ritualism

While boosting professionalization, bibliometric research evaluation builds researchers a rationalized "cage." However, this approach also causes a series of unintended consequences, the most delicate yet riskiest of which is "research ritualism." Briefly, the term refers to the shift in orientation of research from knowledge to metrics. Thus, the purpose of research is not to attempt important theoretical or practical problems but to publish papers, secure projects, or obtain rewards from the system—the target number steering research. Many researchers and reviewers of the system provide little attention to the research itself and value considerably whether research will drive numbers up. Research has become a formality, void of substance and relevance, meaning rendered unimportant, and knowledge disembodied from the knowledge production scenario. Driven by the rewards and punishments of research audits, research values of "knowledge for knowledge's sake" has become "publishing for the sake of publishing." "Paper scholars" and "project scholars" are some apt terms coined to capture this shift.

Many interviewees at research universities have been aware of *"everyone going full throttle, working against the clock, not in pursuit of quality work, (but) to beat the targets."* In the critical rank advancement process, *"it (appraisal system and experts) looks at the number of papers, not at what problem a research addresses. This is a complication. This direction has very big implications"* (Interview with a professor of the Physics 2012). In some fields, such as biology,

> huge bubbles in research. 90% or papers published have no scientific significance whatsoever. They only want to publish the paper. Current evaluation system caused people to publish papers. Perhaps too few people truly want to solve a problem in science. They do exist. But there're just too few of them. (Assistant professor of biology in one local university 2017)

Quantitative auditing does not completely ignore the quality of research. However, quality, the assessment of which entails subjectivity, has been simply reduced to objective metrics—the journal in which a paper is published and its reputation. A *Cell, Nature*, and *Science* (CNS)-caliber paper is sometimes rewarded with hundreds of thousands of RMB. The system rewards the action and result of publishing in CNS or authoritative journals and not the academic value or social relevance of the research in question. This condition fosters a breed of darlings of the system; the prestige of CNS and the massive funding that comes along with it result in scholars buying expensive equipment and recruiting additional talents to publish more CNS papers. These researchers reap fortune and fame, feeling considerably at home with the research audits of the bureaucratic system. Whether they genuinely produce highly valuable research or have earned the highest honors in the international academic community have been neglected.

Research audits set meticulous metrics for bonus, promotion, and strict expiration dates for research output, which are typically the timeframe of evaluations, that is, the small annual evaluation, the big re-evaluation once every three years, the "past three years," and "past five years" in various forms, age limits in fund applications, and talent accreditations. These time management techniques build a "seize-the-moment" urgency and "now-or-never" anxiety.

Pressured by career development and financial reward, many researchers have to choose either "more" or "good" research. Compromising toward the former has become the rational option to survive in an atmosphere of audit culture. The traditional value of "it takes 10 years to properly sharpen a sword" implies immense career risks under the current system. "Your paper is out or you are out" is the destiny of all scholars on the upward curve of their academic careers. *"They only need 3 years to sharpen their sword. Maybe long before the sword is ready, they're let go", "(if) you want 10 years, you'll get no students. No students want to do it with you"* (Professor, Fudan University 2011).

In comparison with ambiguity and less interest in the old academic evaluation approach, research audits have thoroughly mobilized researchers' work commitment. "The more, the better" has become the strategy adopted by scholars facing job uncertainty with intense competition. When research evaluation is reduced to piecework, "those with the most, win" has become the first rule of survival for most faculty in the Darwinist climate of contemporary academia. "Those with the best,

win" is a less-commonly held axiom. Quantity is the prerequisite, whereas quality is the highlight. From this perspective, only by possessing both can one succeed in the fierce competition for academic resources. "Guided" by research audit policies, many researchers have developed a series of coping strategies in knowledge production. Our interviews reveal that some researchers may choose projects where results and papers can be produced in the short term. Time-consuming research works that demand undivided attention are neglected or shelved.

> He could have produced very high caliber papers but he hasn't done much of that. Working on high quality papers demands a lot of energy. If some teachers want to be practical and they want rank advancement, they will try to publish a lot of irrelevant papers. Because of publishing pressures, graduate students and Ph.D. students cannot afford to give their undivided attention to really delve into something. If they do what Chen Jingrun did, they'd have no chance of getting their degrees. To do difficult research with real value, probably time's not enough to publish a paper. (Professor of Physics 2012)

The increase in the number of authors on a paper has also been driven by quantitative research audits. Collaboration can lift a researcher's output amount, impact, or "credits." Some researchers have adopted a "dilution" tactic, splitting what can be condensed in one academic masterpiece into a few papers, *"dilute a cup of strong tea to a few cups of light tea. There are still new ideas or insights in each paper, and now your numbers are up."* (Associate Professor of Chemistry 2014)

The academic community is a highly differentiated world. Disciplinary differences exist in how social contexts influence the production of knowledge (Becher 1994). Therefore, research ritualism has various manifestations in the context of different disciplines. For example, in comparison with natural sciences in which transcending geographical differences and finding common goals across different regions are easy, the value of engineering research requires synthesis of local economy, society, and culture. Solving practical problems and promoting the integration and conversion among education, research, and industry are the key goals of many disciplines of engineering.

Current standards of quantitative research auditing mirror the standards for natural sciences. For other fields, research audits exhibit the "arrogance of ignorance" of the administrative system. Particularities of

some fields or institutions have been overlooked while setting metrics and standards. Moreover, the reliance on metrics, such as CNS and prestigious journals, impact factor, and citation frequency is squeezing out the breathing room of applied research in science and engineering subjects. A professor at an important engineering university asserted that when the entire university was fixated upon the numbers of SCI papers and citations, it ran the risk of *"losing applied disciplines."* This university had a tradition of undertaking military projects, which are often funded through the trust mechanism of commissioning due to their particularity and confidentiality. The competition mechanism of project application was rarely used, and such projects were seldom included in the statistics of "vertical projects." However, in current "research project and funding" appraisals, only vertical funding, that is, funding from national research councils, carries considerable weight. Hence, commissioned projects from state ministries, industries, and other agencies receive decreasing appreciation. As quantitative research audits delve into the fabric of academic governance, military projects at the university have diminished. Researchers are either actively or passively dragged into the selection process of the system. All their works and labor must be visible and quantifiable through the "filter" of quantitative metrics. The dominance of quantitative metrics is even more harmful to humanities and social sciences, which require extensive intellectual investment. Moreover, given that not all humanities and social science journals in China adopt a peer review system and publishing in non-peer review journals is relatively easy, some scholars tend to publish a large number of papers to gain visibility and influence.

Another symptom of research ritualism is "internationalization for the sake of internationalization." Particularly, in some social sciences and humanities disciplines, internationalization may lead to hollowness of research, detaching research contents from the Chinese context or guiding important academic questions onto biased pursuit of internationalization targets. Appraisal and competition in metrics have pushed the Chinese academia onto the world stage with their immense mobilization. The prevailing view that "international" represents superiority and is cutting-edge implies that "foreign accolades" are heavily preferred in China's research auditing. Publishing in international journals translates into considerable rewards and development opportunities. Therefore, an enormous drive to engage in internationalized research exists from the university down to academics. That is to say, "internationalization" can

become a strategy for resource acquisition rather than a genuine endeavor that stems out of the intrinsic needs of the research in question. Some schools and department prefer to recruit academics returning from overseas or place resources in fields where publishing SSCI or SCI papers is easy. Such plans may not have been conceived to build academic strongholds or enhance academic portfolios, and such new directions often struggle to synergize with traditional strengths of these schools or departments. These plans are rather designed to contribute to the internationalization metrics or discipline rankings.

Conclusion and Discussion

Bibliometric evaluation techniques have been gradually introduced to Chinese universities starting from the end of the 1980s. Among other assessments, World-Class University Rankings, as discipline appraisals, entered the domain of higher education and gained sweeping popularity, and quantitative evaluation techniques guided by publication and citation numbers gained enormous legitimacy. Analysis of university policy texts reveals that bibliometric evaluation techniques have been extensively utilized in faculty recruitment, professional promotion, reward, faculty appraisal, and other processes.

In addition to the boost provided by external assessments, the underdevelopment of the academic community and limited institutionalization of peer review culture are also key reasons for the unrestrained expansion of bibliometric evaluation. In China, although peer review has been an established practice for publishing in journals, appraising projects, reviewing academic honors, and title appraisals, rigorous implementation is often demanded or even twisted. Many journals still do not have strict peer review systems, and favoritism can be found in the publishing process. Pulling strings and favoritism are commonplace practices in the reviews of projects and academic honors. Without a strong peer review and a healthy research culture (Shi and Rao 2010), universities and scholars resort to publication numbers to improve visibility and reputation, and piecework research became the norm.

The entire academia is practically united in criticizing bibliometric research evaluation. However, in contrast to such views, this study holds that bibliometric evaluation has played some positive role in meeting the long demand of faculty professionalization due to the lag-behind of

Chinese higher education at the end of the 1970s. Ultimately, quantitative auditing of research is similar to a double-edged sword. Positive changes in China's academic work, improved professionalization, and an elevated role of research in the academic careers driven by number-driven governance approaches are observed. Meanwhile, an academic space characterized by weak academic autonomy and maldeveloped peer review also led to systemic risks most typically represented by "research ritualism." The range of choices (e.g., "10 years sharpening a sword") in academic work is gradually compressed. A large number of scholars have reminisced about the calm and composure of the good old days of lenient appraisals, reflecting the stress caused by research auditing.

The problems of bibliometric evaluation have drawn increasing attention of scholars and government officials. However, the evaluation of universities is still currently dominated by external forces that largely base their appraisals on quantified metrics. Bibliometric evaluation can well further intensify in the present new wave of Double World-Class University initiative. How Chinese scholars may respond to this bibliometric evaluation system deserves further investigation.

References

Aagaard, K., Bloch, C. W., & Schneider, J. W. (2015). Impacts of performance-based research funding systems: The case of the norwegian publication metric. *Research Evaluation, 24,* 106–17.

Anderson, M. S., Ronning, E. A., Vries, R. D., & Martinson, B. C. (2010). Extending the Mertonian norms: Scientists' subscription to norms of research. *The Journal of Higher Education, 81*(3), 366–393.

Becher, T. (1994). The significance of disciplinary differences. *Studies in Higher Education, 19*(2), 151–161.

Brenneis, D., Shore, C., & Wright, S. (2005). Getting the measure of academia: Universities and the politics of accountability. *Anthropology in Action, 12*(1), 1–10.

CCNU. (2016). *The notice regarding to make 2017 yearly plan.* [EB/OL]. http://hr.ccnu.edu.cn/info/1011/3137.htm.

China Institute of Scientific and Technical Information. (1995). Statistical analysis of Chinese scientific papers in 1993. *Science, 2,* 52–55. (In Chinese).

Gläser, J., & Laudel, L. (2007). The social construction of bibliometric evaluations. In R. Whitley & J. Gläser (Eds.), *The changing governance of the sciences. The advent of research evaluation systems* (pp. 101–123). Dordrecht: Springer.

Hermanowicz, J. C. (2016). The proliferation of publishing: Economic ratio-nality and ritualized productivity in a neoliberal era. *The American Sociologist, 47*(2–3), 174–191.

Huang, Y., Pang, S. K., & Yu, S. (2018). Academic identities and univer-sity faculty responses to new managerialist reforms: Experiences from China. *Studies in Higher Education, 43*(1), 154–172.

Jiang, K. (2012). Peer review system in the construction of educational academic community. *Journal of Peking University (Philosophy and Social Sciences), 49*(02), 150–157.

Kyvik, S., & Aksnes, D. W. (2015). Explaining the increase in publication productivity among academic staff: A generational perspective. *Studies in Higher Education, 40*(8), 1438–1453.

Li, J. (2016). The global ranking regime and the reconfiguration of higher education: Comparative case studies on research assessment exercises in China, Hong Kong, and Japan. *Higher Education Policy, 29*(4), 473–493.

Li, F., Yi, Y., Guo, X., & Qi, W. (2011). Performance evaluation of research universities in Mainland China, Hong Kong and Taiwan: Based on a two-dimensional approach. *Scientometrics, 90*(2), 531–542.

Liu, W., Hu, G., Tang, L., & Wang, Y. (2015). China's global growth in social science research: Uncovering evidence from bibliometric analyses of SSCI publications (1978–2013). *Journal of Informetrics, 9*(3), 555–569.

Long, J. S., Allison, P. D., & McGinnis, R. (1993). Rank advancement in academic careers: Sex differences and the effects of productivity. *American Sociological Review, 58*(5), 703–722.

Long, J. S., & Fox, M. F. (1995). Scientific careers: Universalism and particu-larism. *Annual Review of Sociology, 21*(1), 45–71.

Muller, J. Z. (2018). *The tyranny of metrics*. Princeton, NJ: Princeton University Press.

Nadler, Elsa G. (1999). *The evaluation of research for promotion and tenure: An organizational perspective*. Unpublished doctoral dissertation. West Virginia University, p. 61.

National Education Commission of the People's Republic of China. (1989). *1988 Compilation of scientific and technical statistics of colleges and universities*. Wuhan: Wuhan University Press, pp. 218–219.

Paradeise, Catherine, & Jean-Claude, Thoenig. (2015). *In search of academic quality*. London: Palgrave Macmillan.

(personal interview of a president of a 985 Project University, 2014).

Qi, M. M., & Chen, T. Z. (2016). The source of the obstacles to the imple-mentation of university development planning and the way to solve it (In Chinese). *Research in Higher Engineering Education, (04)*, 124–128.

Shi, Y., & Rao, Y. (2010). China's research culture. *Science, 329*(5996), 1128.

Shore, C., & Wright, S. (2015). Governing by numbers: Audit culture, rankings and the new world order. *Social Anthropology, 23*(1), 22–28.

Thoenig, J. C., & Paradeise, C. (2014). Organizational governance and the production of academic quality: Lessons from two top US research universities. *Minerva, 52*(4), 381–417.

Townley, B. (1997). The institutional logic of performance appraisal. *Organization Studies, 18*(2), 261–285.

Wallmark, J. T., & Sedig, K. G. (1986). Quality of research measured by citation method and by peer review—A comparison. *IEEE Transactions on Engineering Management, 4,* 218–222.

Weingart, P. (2010). The unintended consequences of quantitative measures in the management of science. In Hans Joas (Ed.), *The benefit of broad horizons. Intellectual and institutional preconditions for a global social science* (pp. 371–385). Boston: Brill.

Welch, A. (2016). Audit culture and academic production. *Higher Education Policy, 29*(4), 511–538.

Whitley, R., Gläser, J., & Engwall, L. (2010). *Reconfiguring knowledge production: Changing authority relationships on the sciences and their consequences for intellectual innovation.* Oxford: Oxford University Press.

Yichu, Shang. (1988). China's academic status in the world. *Chinese Science Foundation, 12,* 24–28.

Yan, Guang-cai. (2009). Power game and peer review system within and outside the academic community. *Education Review of Peking University, 7*(01), 124–138 (In Chinese).

Yi, L. (2011). Auditing Chinese higher education? The perspectives of returnee scholars in an elite university. *International Journal of Educational Development, 31*(5), 505–514.

Zhou, Y., & Shen, H. (2015). Peer teaching in universities: Advantages, difficulties and solutions. *Fudan Education Forum, 13*(3), 47–52.

Trends in Publication in the Race for World-Class University: The Case of Taiwan

Chuing Prudence Chou

Introduction

As the influence of globalization has reached higher education, many universities have encountered increased pressure for global visibility and competiveness which, in turn, plays a crucial role in attracting international talent, research collaboration and resources (Shin 2013a; Baker and Wiseman 2008; Shin and Harman 2009). In order to reform their higher education systems, governments have introduced different strategies for benchmarking their leading universities based on research output compatible with global standards (Chou et al. 2013). Many of these new higher education policies are responses to the process of globalization and competitive demand for resources, but have ultimately changed academic culture and norms in an unprecedented way (Ball 2012; Lorenz 2012; Marginson 2013). These include China's Project 211 and Project 985 (Yang and Welch 2012; Li and Tian 2014); Korean Brain Korea 21 (BK21) Project (1999–2012), World-Class University (WCU) Project (2008–2013), and BK21 Plus Project (2013–2019) (Suh

C. P. Chou (✉)
National Chengchi University (NCCU), Taipei, Taiwan
e-mail: iaezcpc@nccu.edu.tw

and Park 2014); Taiwan's Five-Year-Fifty-Billion Plan (Chou and Ching 2012); and Japan's National University Corporation Plan, Global 30 Program, and Super Global 37 (Ishikawa 2014). All of these government programs start with specific goals, with competitive funding mechanisms and accountability outcomes which have transformed the higher education profile (Chou 2008) and research output in key international journals serve as one of the major criteria (Cheng et al. 2014).

One of the most demanding global drivers in higher education today is the pursuit of world-class universities using research quality assessment indictors to measure productivity based on international publication standards. These new linkages between publication, research output, and individual promotion have changed academia into a more accountable and quantitative personnel assessment system (Guthrie et al. 2012; Ortinau 2011; KSB 2010; Woodside 2009; Kao and Pao 2009; Reed 1995). At the same time, as globalization increases contact and sharing of information, values, and issues across all borders, it also promotes competition at home and abroad. This may focus on certain set forms of publication and shared research agendas accepted by the international academic community (Soudien 2014; Reed 1995). For example, the medium of language for publication and common interest or agenda shared by main-stream publishers or editors may reinforce the globalized academic mind-set as conforming to a single set of standards which leaves no room for plurality (Ching 2014; Ishikawa 2009; Chen and Qian 2004). The drive for "world class" universities also creates a convergence and a risk of homogenization by favoring English as the *lingua franca* of scholarship (Kuteeva and Airey 2014). An increasing number of education policies involve research assessment exercises based on "ranked" or "indexed" journals published in North America and West Europe. As a result, non-English literatures and topics outside these publications' interests may be less likely to find favor in a publishing regime that focuses on "main-stream" and "international" scholarship in English, often to limited scholarly advantage (Thelwall and Maflahi 2015).

Additionally, higher education institutes (HEIs) increasingly tend to hire faculty with more key journal publications regardless of disciplinary requirement, specialty or experience (Guthrie et al. 2012; Ortinau 2011). Even social sciences and humanities are forced to compromise their conventional preference for candidates with book publications and instead recruit those with more journal publications (Li and Tian 2014; Bauer and Bakkalbasi 2005). Academics from science, technology, and quantitative backgrounds who tend to publish more will be more likely to

succeed in job applications and enjoy high job mobility (Wu and Bristow 2014; Liu 2014). Prolific authors employed in the non-English world who switch to English may lose their domestic relevance and local responsiveness and hence they may "publish globally and perish locally" (Wu and Bristow 2014; Hanafi 2011).

This paper explains how Taiwanese government has responded to the twin pressures of competitive University Rankings and higher education expansion by introducing a series of reform policies that emphasize quantitative research, and new probation and basic self-evaluation system designed to monitor faculty research output. A phenomenon of "publish globally or perish locally" has thus emerged, especially in the humanities and social sciences, which comes at the expense of local policy issues and academic visibility to taxpayers. University teaching is now also at risk thanks to prioritizing research and promoting globally visible publication, a situation not uncommon in neighboring countries (Cheng et al. 2014; Suh and Park 2014). The analysis of career paths in Australian faculty shows that of the staff on fixed-term or continuing contracts, those in teaching positions constitute nearly half at the lowest ranks compared to merely one-tenth at the highest ranks. The situation for research-focused academics was almost exactly reversed (Bentley et al. 2014).

This paper also shows how higher education policies have shaped faculty research performance in Ethnography and Education at a national university in Taiwan, using journal publication and in-depth interview. Research questions include: How has faculty research output in social science fields evolved in the last two decades? To what extent were faculty publication strategies and decisions among younger and older staff shaped by the increasing pressure from university and government to publish in key journals? What are the effects of these higher education policies?

Faculty publication of journal articles was calculated for 1993, 2003 and 2013, and analyzed based on the language and place of publication; and local versus international focus. One senior faculty member from each department were interviewed in-depth to discuss the connection between policy and research output.

The Context of Taiwan Higher Education

De-regulation and Expansion

Prior to 1994, higher education policy in Taiwan was heavily focused on economic development and political stability. The government implemented strict controls over the sector, including the establishment of new higher education institutes (HEIs), monitoring their size and scale, the appointment of presidents, admission quotas, curriculum standards, and faculty and student affairs on campus. As a result, the establishment of new universities was limited (Mok 2014).

Since 1994, the MOE launched a series of new policies, including revising its Universities Law and setting up the Executive Yuan Education Reform Commission to draft reform plans for HEIs (Mok 2014; Chou and Ching 2012). Subsequently, domestic political changes and social demand drove higher education in Taiwan started to expand in an unprecedented way: there were only seven HEIs in 1950, rising to 105 in 1986 (a 15-fold increase) and 163 in 2012. University student enrolment was only 6665 in 1950 but by 1986 there had been a 52-fold increase to 345,736 and in 2012, the university student population had more than tripled to 1,259,490. Today, nearly 70% of Taiwan's 18–22 age cohort studies in an HEI, the second highest rate in the world after South Korea (Wang 2014). Concurrently, government spending per university student declined from US$6700 (200,000 NT) to US$4300 (130,000 NT) today (MOE 2013) while the university admission rate has soared from around 20% in the 1960s to over 90% since 2006 (MOE 2013). Concomitantly, there has been a significant increase in postgraduate education and from 1995 to 2015, the number of doctoral students increased 3.43 times (MOE 2015). The total growth of postgraduate enrolment was 1.75 times within a decade (MOE 2013) and nowadays one out of 3.7 undergraduates ends up attending graduate school, with nearly 60,000 students graduating from master's programs and 4000 from doctoral programs each year. In short, 58.2 of every 1000 Taiwan citizens are university students (MOE 2013).

As a result of the expansion in institute and student numbers, public spending became relatively constrained and quality assurance was demanded by political leaders, business employers, as well as tax payers to guard against declining admission thresholds for new students. In order to ensure higher education quality after rapid expansion and budget constraint, MOE began to launch new policies in early 2000s in an attempt to incentivize universities toward greater quality assurance.

Pressure for the World-Class University Ranking

To cope with social change and competition for global human resources (Global Human Capital Trends 2015) in Taiwan, the MOE first promoted the World-Class Research University Project in 2003, then the Higher Education for Excellence Plan (also called Five-year-fifty-billion Plan, approximately US$1.6 billion). In the first, fiercest round of competition, twelve Taiwanese HEIs were selected in 2005 to receive additional funding over a span of five years. The project was renewed in 2011 to further increase universities' cross-border collaboration and publication, and to compete for global talent.

Ten years after the Five-year-fifty-billion Plan was implemented, participating universities have made progress in university ranking and research output. In the QS World University Rankings of 2015, National Taiwan University (NTU) ranked 70th, having been a top 100 university since 2009 (Quacquarelli Symonds 2015). At the same time, Taiwan's overall publication in SSCI-recognized journals rose by over 56% from 2298 to 3590 between 2008 and 2013 (World of Science 2014). Korea similarly showed an 80% increase in publications but neither country improved its ranking for academic impact, while the United States has maintained its prime position as publishing nation with a rise of only 9.5% in the same period. This discrepancy between absolute and relative gains shows that despite the huge investments poured into its higher education sector, Taiwan's research still lacks international competitiveness in research under "world-class university" criteria (World of Science 2014).

University Quality Assurance

The rapid expansion of the higher education system derived from upgrading vocational/technical colleges into "comprehensive universities" despite their original mission of vocational and technical training having served as the foundation of Taiwan's economic development since the 1960s (Chou 2008; Hayhoe 2002). As a result of concerns from the general public and policy makers regarding declining educational quality, the 2001 revision to the University Law mandated evaluation processes whose results have served as benchmarks for budget allocation. Quality Assurance (QA) systems were introduced and strengthened with the commissioning of a professional evaluation association in 2005. Teaching resources, extension services, student affairs, general education,

administrative support, degree of internationalization and research output all serve as indicators of institutional prestige in global academia (Hou 2015).

At the individual level, along with MOE and Taiwan's major research funder, the Science Council, each university had to comply with new QA systems. These were intended to monitor the publication records of individual faculty members in international and domestic journals, using Thomson Reuters' Science Citation Index (SCI), Social Science Citation Index (SSCI); and the Taiwan Social Science Citation Index (TSSCI). Each university has, therefore, set up its own criteria for bringing its scholarship into line with international standards, enhance recognition and increase scholarly contributions (http://www.twaea.org.tw; http://www.heeact.edu.tw). Most of these criteria were chosen to be as standardized and quantifiable as possible, to limit accusations of bias and improve Taiwan's international visibility and competitiveness.

Nevertheless, while these measures improved rankings and global exposure, more and more academic staff at Taiwan's leading universities in social sciences and humanities experience the "publish globally and perish locally" phenomenon (Hanafi 2011).

New Probation and Regular Performance Evaluation System

There was no tenure system for university faculty in Taiwan. Once hired, faculty first went through a two-year probation period, then progressed annually based on seniority. All university salaries and benefits were standardized regardless of public/private status. The University Law evaluation requirement of 2001 prompted many universities to adopt a probation system for new faculty members to stimulate their educational quality and research productivity. For example, in 2001 National Chengchi University (NCCU) applied a six-year probation deadline system to new faculty with grace period of two extra years; in return, new faculty can temporarily be exempted some teaching load. At the same time, another more standardized formula for promotion was adopted which required research papers in key journals (listed in SCI, SSCI and TSSCI). Those who could not meet the deadline for promotion may be suspended or discharged by the university (Chou 2014).

HEIs also introduced internal faculty assessment mechanisms for all faculty members under the University Law's Article 21. In 2001, NCCU launched another Faculty Basic Performance Evaluation Policy

which required faculty members to comply with a five-year-cycle of self-evaluation for individual teaching, research and social service performance. Again, those who cannot pass the evaluation will encounter sanctions (http://topu.nccu.edu.tw/First/file/law/27.pdf).

Research Context

Research Framework

The paper examines how higher education policies have re-oriented research output in two departments of a national university in Taiwan. Each faculty's journal publication was recorded and calculated from 1993, 2003 to 2013, and then analyzed based on selected criteria. In-depth interviews were conducted among prominent senior faculty members from each department.

University Profile

National Chengchi University (NCCU) includes nine colleges including Liberal Arts, Law, Commerce, Science, Foreign Languages, Social Sciences, Communication, International Affairs and, Education. There are 34 departments, and 48 postgraduate institutes, NCCU has long been among the top universities in Taiwan and is renowned for its Liberal Arts and Humanities, Social Sciences, Management, Politics, International Affairs, Communication, and Education programs. Consequently, a great number of alumni have worked in the government sector (http://www.studyintaiwan.org/~NCCU).

In the study, faculty in the Departments of Ethnography and Education were selected as the sample. Department of Ethnography was one of the original departments established in in Taiwan during the early 1950s and focused on studying ethnic minorities in the South and West of China before combining Chinese and Taiwanese studies with ethnography of Southeast Asia and Australia. Faculty conduct interdisciplinary research combining anthropology, education, history, geography, and linguistics.

Prior to 1955, Education was taught by the Civic Education Graduate Institute which later divided to form the Graduate Institute of Education and the Department of Education, respectively, dedicated to teacher preparation and educational administrator's training. Affiliated

pre-school, primary and high schools are all under the guidance of Education and dedicated to educational experiments and trial programs in curriculum and instruction. Faculty members are expected to engage in both teaching and research on policy- and school-related affairs at NCCU.

Research Findings

This section contains two sections: the first part attempts to answer quantitatively the first research question: How the faculty research output in social science fields has evolved in the last two decades?

Faculty Research Output in Three-Time Slots

In 1993, the average faculty's publication rate was 0.78 paper per year in Ethnography Dept and 1.48 in Education Dept. In 2003, it was still 0.78 in Ethnography but 1.67 papers in Education. By 2013, the average publication was 1.3 paper in Ethnography Dept and 4.17 in Education Dept, where faculty research output in conference papers, research reports, etc., had increased dramatically after 2005.

The trend in publication remained quite constant in both departments before 2003, when there were no policy incentives to publish in English or in key journals. Nevertheless, professors in Education started to publish more journal articles after 2003: for example, one senior professor, A, published 8 journal articles between 1993 and 2013, with 7 published after 2003: nearly 90% of his publication output took place between 2003 and 2013. The Five-year-fifty-billion plan may have thus played a major role in shaping journal publication in Education.

All of the publications from Education were in Chinese in 1993 and 2003, but after 2003 this started to decline from 100 to 74% and an increase in English publication became visible in Education. On the other hand, faculty in Ethnography continued to publish in Chinese throughout these three time slots and rate remained low throughout the three time slots, i.e., 1.3 papers per person in 2013. Promotion rates at all academic ranks were also extremely static over the last two decades.

Journal Origin

Only 28.3% of publication from Department of Ethnology was with Taiwanese publishers in 1993, but this number soared to 71.4% each in 2003 and 2013. In contrast, faculty in Department of Education mainly published in Taiwan before 2003, and afterwards in other regions (26% in 2013).

Disciplinary Variation

Scholars from science backgrounds tend to publish a much higher rates of journal articles than those in social sciences and humanities which can be attributed to the different nature of the work and disciplinary convention on publication (Wanner et al. 1981; Chou 2014). In this study, **disciplinary variation in research paper productivity is evident**.

Professor B specializes in Educational statistics and assessment and has been working since 1993. He has published 127 journal articles, among which 65 out of 127 were published between 2003 and 2013, 51.2% of his total research output. Another senior faculty, C, entered in 1992 and specialized in educational philosophy but has published only 41 journal articles up to 2013, a much lower rate than B.

Publication and Promotion

Hamilton (1990) argued that the "the publish or perish syndrome" and the phenomenon of over-publication in academia was due to aggressive marketing by the publishing industry coupled with academic incentive systems which place too much emphasis on article publication, thus generating both greater research output and greater capacity for publication. The current study also echoed that the academic culture in Taiwan uses "promotion" as incentive to encourage faculty publication regardless of discipline. The proportion of faculty who remained at the same rank in Ethnography outnumbered their counterparts in Education, indicating a correlation between research output and promotion success in these two departments.

In education, at least three junior faculty started as assistant professor and gained promotion to professor within 10 years. Professor C specializes in technology classrooms and educational innovation, and has published 21 journal articles up to 2014. Professor D, who specializes

in learning technology and science education, joined Education as assistant professor in 2004 and attained associate professor rank four years later, succeeding to professoriate in 2012. A third junior faculty who is an expert in educational psychology also entered Education in 2004 as an assistant professor and succeeded to professoriate rank in 2012 with 21 journal articles and no book publication. It seems evident that paper publication is more important than other forms of research in achieving promotion (Chou 2014; Wang 2014).

New Faculty Hiring Strategy

As indicated earlier, NCCU is under pressure to promote faculty research productivity to maintain its university ranking. As a result, the Department of Education increasingly hires junior faculty from educational psychology, science education, and educational technology to boost its research output. The introduction of new faculty with these quantitative backgrounds has changed the traditional profile of the discipline at NCCU: senior faculty hired before 1993 usually majored in educational administration, philosophy and educational systems, and undertook a variety of research and social engagements, including textbook and monograph publication for local readers, under a more laissez faire approach to academic endeavour. The younger generation hired under the post-2001 6-year probation contact have tried to obtain faster promotion rates through journal publication. The only exception is Professor E who entered in 2010 and, having published no journal article since, is at risk under the current probation system.

In the Department of Ethnography, there are only two full professor out of 14 members. Though Associate Professor F published 104 articles, they still remain at associate rank, while the rest have published more books than papers.

The new hiring strategy has led to the newer faculty applying a different approach to academia. Those with a quantitative background and fluent English tend to receive more academic recognition through English-medium papers, but they are less well-known at home. They publish fewer books and are less likely to engage in social debates or government consultancy. It is obvious that the six-year probation policy and emphasis on paper publication greatly changed faculty hiring practices and research outputs. Nevertheless, faculty in Ethnography remain quite "passive" in responding to university policy. This un-cooperative

attitude in publication and rank promotion may be connected to a more qualitative methodology and time-consuming field work, which is hard to quantify and adapt to numerical forms. The low publication rate also due to the highly interdisciplinary nature of most research in the department and the consequent difficulty in finding a publication which will accept it.

In-depth Interview

The following section explores the second research question: How far were faculty publication strategies and individual decisions shaped by the increasing priority attached to institutional ranking, and the pressure to publish in key journals from university and government? And what are the impact and outcomes of these higher education policies?

Impact of Five-Year-Fifty-Billion Plan

Higher education policy did not prioritize faculty's research or publication before 1993 and the only purpose of research was book publication to win funding from the Science Council. Before 2000, most professors in Education got their promotion via book publication, which carried more weight in terms of research output. The academic educational community also did not encourage English-medium research and this was less likely to be accepted for publication.

Since NCCU was renowned for social sciences and humanities, but it was more focussed on teaching and social services. NCCU faculty conducted research in a variety of forms, thus falling behind competitors who were more sensitive to global change and focussed primarily on journal publication. News coverage in October 2003 undermined NCCU's overall social prestige by reporting the headline number of SSCI, SCI (Science Citation Index) and EI (Engineering Index) publications from universities and colleges in Taiwan. This simplistic measure gained popular credence and damaged the university's national status. After that, NCCU started a long race to catch up, spurred by competition for the five-year-fifty-billion plan launched in 2005 (Chou 2014).

Though NCCU was eventually selected as one of the top universities under this plan, most senior faculty in Ethnography and many from Education have not followed the new publication-driven policies, partly because they were hired before 2001 and thus felt less pressured by the new requirement. It is also challenging to identify faculty

speciality in ethnography which contains many interdisciplinary features, with the result that few journals at home or overseas are interested in their research topics or publishing their papers. Some of the faculty had already published quite a few books before the new policy and did not catch up in paper publication later. In addition, there is an inconsistency between one's initial academic diploma and later academic capacity. It has become a matter of choice in one's academic career especially for those who are not under the probation scheme. "We may not have visibility in SSCI journals but we expect ourselves to be more recognized in our own research on Taiwanese/Chinese minority, though it is only limited to a small readership," faculty in ethnography who has joined the department two decades ago and now chairs the department commented.

Although NCCU introduced the Faculty Basic Performance Evaluation Policy, the standard is still quite vague and almost everyone meets the criteria. An exception is one associate professor with outstanding teaching awards who refused to comply and was forced to take an early retirement in 2010 (Chou 2014). Even without much publication in English or key journals, faculty in Ethnography can still pass their five-year-cycle self-evaluation. While the five-year-fifty-billion program has resulted in publication pressure on campus, its impact has been limited to those who can publish in English and thus are able to receive rewards from this scheme. NCCU total research output in indexed journals increased by 30% from 2005 to 2008, but was limited to certain faculty and disciplines. It has also created a "winner takes all" phenomenon which causes disharmony among faculty. The more publications in SSCI and other indexed journals, the more likely one will get faster promotion and receive more material rewards, especially for new faculty (Chou 2014; Wu and Bristow 2014). The pursuit of SSCI journal publications has become "something that you do not like but must accept as reality," the Education professor commented.

Discipline, Generation and Research Productivity

Both senior interviewees concluded that there exists a great variation in discipline and generation regarding research output. Owing to the interdisciplinary nature of their research, the professor in Ethnography commented that the entire department has experienced an "identity crisis" in being unable to find a home for their articles. The consequent low publication rate has hindered faculty academic visibility and social

impact for the past two decades, and most faculty members remain at the same rank throughout their academic career as a result. An exception is that some recently hired faculty with foreign experience have published more and are able to comply with university probation criteria. "*It is obvious that the strong get stronger and the weak get weaker under the current university evaluation system which rewards only journal articles rather than books with a diverse research outcome,*" the professor continued "*The promotion issue is that for those who were hired before probation scheme, the current evaluation system will either push you to increase your academic visibility by publishing more international journal articles, or push you down to stick with your own alternative career on teaching or engaging in social services or assuming administrative duties.*"

Pros and Cons of Probation System

As of 2013, NCCU faculty SSCI publication had increased noticeably. Education faculty especially accomplished high increases in publication, led by those hired under 6-year probation contracts. Since 2003, NCCU introduced a series of incentives such as monetary rewards per paper, decreasing teaching loads in exchange for research publication, in efforts to push its faculty toward SSCI publication. Even the dean of Education was asked to take the lead in SSCI publication from 2007 onward. As a result, most junior faculty members only write articles for SSCI or TSSCI publications instead of books, partly because most of them are on employment terms under which SSCI papers are a major criteria. In the last decade, almost all faculty members who used SSCI papers as their major promotion criteria succeeded in promotion, while not one submitted books for consideration. Acceptance by SSCI and TSSCI publications has become a de facto threshold for all kinds of promotion, awards and faculty hiring.

There is a tension between senior and junior faculty because of their research outputs. Many senior faculty members who have not reached full professor are under great pressure to publish papers in those key journals, while those who are professors tend to publish less than before. The overall faculty SSCI publication rate increased greatly but was concentrated in a small number of professors, 90% of whom are junior and specialize in quantitative research and science and published more in SSCI journals compared to those specializing in curriculum, administration, and philosophy.

English has become a barrier for some faculty but less so for those who are under probation contracts. According to a professor in Education, "Like faculty at University of Hong Kong and Chinese University of Hong Kong, junior faculty in Education at NCCU now tend to publish more papers in English and have no Chinese books… partly due to promotion requirements in which SSCI or TSSCI[1] carry more weight with the academic senate whose members also support this mentality."

Faculty in Ethnography and Education often confront choices such whether one should choose to publish in English to increase international visibility and meet the university criteria; or to improve social and local impact with Chinese publications. "It often depends on whether you are hired under probation scheme or not and what your specialty can come up with, a professor in Education commented." The ethnography professor indicated a different trend: "*Although our faculty do not publish as much as some disciplines, and suffer from low visibility at home and abroad, we play a key role in ethnic policy making in Taiwan* via *our social field work and provision of graduate students in our Department.*" Owing to the language barrier and cultural differences of local readership, many junior faculty members enjoy more international exposure (rather than international academic impact) with their English publications at the expense of losing their local contacts and impact on Taiwan's policy via government consultancy.

According to the Education professor, "*The younger generation is keener on internationalization and global compatibility in their research and mostly publish in English, whereas the senior faculty come from a time which was less likely to welcome English publication thanks to the limited academic network in education. But now the pendulum is swinging to the other extreme, which is in favour of more English publication.*" This new generation has never been encouraged or required to fulfil their public intellectual role as a condition of advancement to professoriate rank, and they are used to conducting "pure" research rather than social participation. "The younger educational experts become less-known in the education profession and are alienated from local educational practices," the education professor added. The older generation, however, tend to assume public intellectual roles via social participation and have more

---

[1] Note: TSSCI was first introduced by National Science Council (Taiwan) in 1995 with the attempt to standardize local academic journals in Taiwan via a few fixed criteria including Chinese language, external peer review, publication on a regular basis, etc.

social impact via their textbooks and services to the community. Many senior faculty members worked with local schools as advisor, consultant, research collaborator, and so forth. These social engagements do not necessarily relate to their research output. But the younger generation feels less obliged to do so now. "*The trade-off is that now you have created a generation who are good at and more used to publishing English papers and have more exposure and network in the international community. But at the same time, they are less likely and show no interest in engaging in local educational discourse and practices accessible to the taxpayers*," reflected the Education professor.

The third unexpected consequence is the neglect of research topics containing more social and local relevance and the de-valuation of book publication in disciplines where cultural relevance and local bonds are commonplace regardless of society (Huang 2015; Chou 2014; LERU 2012). According to the Education faculty, "*social sciences and humanities are treated as natural sciences in terms of becoming more quantifiable and objective regardless of their great differences in nature*," as a result of the new evaluation system. For social sciences and humanities, and especially for ethnographic studies, it is better to embrace "academic localization, and political globalization" rather than the opposite. "*For an island state like Taiwan, we should start with research topics relevant to the needs of society in Taiwan and China, and then apply our research findings to the global community which can build up our strong capacity later in theories and foundation,*" Ethnographic faculty suggested.

Concluding Remarks

This paper found that higher education policy has impacted academic ideology and practices to a great extent in Taiwan between 1993 and 2013. Since the early 2000s, government policies have placed institutional and faculty research output under pressure to achieve "world-class university" status and meet quality control measures stemming from higher education expansion. NCCU began to impose reward incentives and regulations to gear faculty research publication toward key journals. The introduction of six-years' probation for new faculty and the five-year-cycle-faculty basic performance evaluation systems in 2001 played a key role in monitoring faculty research performance and output. Consequently, faculty members, especially junior ones with a science, technology, and quantitative research backgrounds obtained faster promotion

through tending to publish more SSCI and TSSCI papers. But the trade-off is that those who are on the right track enjoy more international recognition and academic networking via publication in English key journals simultaneously lose contact with their local audience and tend to have less social impact in their home country. The current academic reward system in Taiwan has narrowed down the definition of academic research to paper publication by seeking to apply a particular definition of "world-class university." In reality, a top institution should be expected to be globally competitive, but also to embrace a humane value orientation, and maintain the core mission for teaching and research (Shin 2013b). In Taiwan, the most easily quantifiable measure of global competitiveness—English language journal publication—has been adopted.

What is more important for education scholars than their publication output is their overall academic impact on society. This impact includes both the quantity and the quality of research output. It also includes journal papers, books and many other forms of research outcomes and social contribution. In countries without centralized funding or assessment schemes, the SSCI is not emphasized and university professors are judged in a holistic way. But in a Chinese society like Taiwan an objective system with impartial and quantifiable indicators is widely accepted, even if the system has flaws and controversies.

The introduction of the indexed journal publication policy aroused social controversies from the beginning. Among these debates, an on-line petition endorsed by more than three thousand local academics and educators was initiated in 2010, promoting an alternative reward system consisting of multiple criteria for research output (Chou et al. 2013). In response, to overcome the drawbacks of the current publication-first policy and respond to academic disquiet, MOE initiated a trial program entitled "Faculty Multiple Promotion" in 2013 (http://amaaa.nsysu.edu. tw/ezfiles/258/1258/img/1547/200341783.pdf; http://c014.wzu. edu.tw/front/bin/ptdetail.phtml?Part=1040608_01). This program, scheduled for nationwide implementation in 2016, attempts to offset the over-emphasis of key journal papers in faculty promotion by introducing at least three types of performance criteria on research, teaching or practical contribution to business and industry. The reform is especially welcome by faculty from institutes of technology whose practical skills and knowledge have been neglected in the current promotion system.

Though the SSCI-focussed mentality has been imbedded in all faculty reward and evaluation systems across Taiwan, social concerns and awareness over the preceding issues have been more and more evident and accepted as grounds for change. It is likely that a diverse and multi-channel alternative will come into effect in the near future. It is hoped that the "publish globally and perish locally" phenomenon will be considered along with the inevitable drive for global talents and human resources. NCCU, as one of Taiwan's most vulnerable HEIs under the current paper-driven policy, should also take a lead in researching a de-construction of world-class university rankings from post-modern perspectives, especially in an era full of quest for higher education sustainability.

References

Baker, D. P., & Wiseman, A. W. (2008). Preface. In D. P. Baker, & A. W. (Eds.), *The worldwide transformation of higher education* (pp. ix–xii). Bingley: Emerald.

Ball, S. J. (2012, March). Performativity, commodification and commitment: An I-spy guide to the neoliberal university. *British Journal of Educational Studies, 60*(1), 17–28.

Bauer, K., & Bakkalbasi, N. (2005, September). An examination of citation counts in a new scholarly communication environment. *D-Lib Magazine*, 11.

Bentley, P. J., Goedegebuure, L., & Meek, V. L. (2014). Australian academics, teaching and research: History, vexed issues and potential changes. In J. C. Shin, A. Arimoto, W. K. Cummings, & U. T. (Eds.), *Teaching and research in contemporary higher education: Systems, activities and rewards* (pp. 357–377). New York: Springer.

Chen, K. S., & Qian, Y. X. (2004). *Academic production under the neo-liberalism globalization* (in Chinese). Paper presented at the Reflecting on Taiwan's Higher Education Academic Evaluation Conference. International Plenary Hall, National Library, Taipei, Taiwan.

Cheng, Y., Wang, Q., & Liu, N. C. (2014). How world-class universities affect global higher education: Influences and responses. In Y. Cheng, Q. Wang, & N. C. Liu (Eds.), *How world-class universities affect global higher education: Influences and responses* (pp. 1–13). Netherland: Sense.

Ching, G. S. (2014). ISI perceptions and hard facts: An empirical study from Taiwan. In C. P. Chou (Ed.), *The SSCI syndrome in higher education: A local or global phenomenon*. Netherlands: Sense Publishers.

Chou, C. P. (2008). The impact of neo-liberalism on Taiwanese higher education. In D. Baker, & A. W. (Eds.), *The worldwide transformation of higher education* (pp. 297–312). Bingley: Jai.

Chou, C. P. (2014). *The SSCI syndrome in higher education: A local or global phenomenon*. Rotterdam: Sense Publishers.

Chou, C. P., & Ching, G. (2012). *Taiwan education at the crossroads*. New York: Palgrave Macmillan.

Chou, C. P., Lin, H. F., & Chiu, Y. J. (2013). The impact of SSCI and SCI on Taiwan's academy: An outcry for fair play. *Asia Pacific Education Review, 14*, 23–31.

Global Human Capital Trends. (2015). *Leading in the new world of work*. Westlake, TX: Deloitte University Press. http://www2.deloitte.com/content/dam/Deloitte/at/Documents/human-capital/hc-trends-2015.pdf.

Guthrie, C. P., Everett, J. O., Vijayakumar, J., & Olds, P. R. (2012). Evaluating faculty publications in accounting Ph.D. programs: The author affiliation index as an alternative. *Journal of Accounting Education, 30*(3), 290–306. http://www.sciencedirect.com/science/article/pii/S0748575112000723.

Hamilton, D. P. (1990). *Publishing by–and for?–the numbers. Science, 250*, 1331–1332.

Hanafi, S. (2011). University systems in the Arab East: Publish globally and perish locally vs publish locally and perish globally. *Current Sociology, 59*(3), 291–309.

Hayhoe, R. (2002). Teacher education and the university: A comparative analysis with implications for Hong Kong. *Teaching Education, 13*(1), 5–23.

Hou, A. Y. C. (2015). The quality of mass higher education in East Asia: Development and challenges for Asian quality assurance agencies in the glonacal higher education. In J. C. Shin, G. A. Postiglione, & F. Huang (Eds.), *Mass higher education development in East Asia: Strategy, quality, and challenges* (pp. 307–324). Singapore: Sense.

Huang, S.-J. (2015, December 4). *The predicament of small nation sociology: The case of Taiwan*. Retrieved from Global Dialogue: Newsletter for the International Sociological Society. http://isa-global-dialogue.net/the-predicament-of-small-nation-sociology-the-case-of-taiwan/.

Ishikawa, M. (2009). University rankings, global models, and emerging hegemony: Critical analysis from Japan. *Journal of Studies in International Education, 13*(2), 159–173.

Ishikawa, M. (2014, July 12–14). *Ranking regime and local scholarship under threat: Through a study of Japanese research universities*. Paper presented at The WUN Project Meeting "World-class Universities, Publication and Research Assessment: Rethinking the Mission of Higher Education in the Global Age," Chinese University of Hong Kong.

Kao, C., & Pao, H. L. (2009). An evaluation of research performance in management of 168 Taiwan universities. *Scientometrics, 78*(2), 261–277.

Kogod School of Business (KSB). (2010). *Kogod school of business guidelines for recommending promotion to associate professor with tenure and for hiring tenured associate professors*. Washington, DC: American University.

Kuteeva, M., & Airey, J. (2014). Disciplinary differences in the use of English in higher education: Reflections on recent language policy developments. *High Education, 67,* 533–549.

League of European Research Universities (LERU). (2012). *Social sciences and humanities: Essential fields for European research and in Horizon 2020.* (Advice Paper, No. 11). https://www.kowi.de/Portaldata/2/Resources/horizon2020/LERU-AP-11-SSH-Essential-fields.pdf.

Li, J., & Tian, X. (2014, July 12–14). *Comparative studies on the ranking regime and SSCI syndrome in China and Hong Kong*. Paper presented at The WUN Project Meeting "World-class Universities, Publication and Research Assessment: Rethinking the Mission of Higher Education in the Global Age," Chinese University of Hong Kong.

Liu, Y.-J. (2014). Problems, strategies, and impact of SSCI publication in English: Perceptions and negotiations of Taiwanese researchers. In C. P. Chou (Ed.), *The SSCI syndrome in higher education: A local or global phenomenon*. Netherlands: Sense Publishers.

Lorenz, C. (2012). If you're so smart, why are you under surveillance? Universities, neoliberalism, and new public management. *Critical Inquiry, 38*(3), 599–629.

Marginson, S. (2013). The impossibility of capitalist markets in higher education. *Journal of Education Policy, 28*(3), 353–370.

Ministry of Education, Republic of China (Taiwan). (2013). *Education statistics*. Taipei: MOE. https://stats.moe.gov.tw/.

Ministry of Education, Republic of China (Taiwan). (2015, December 17). *2015 Education statistical indicators*. Retrieved from Education Statistical Indicators: http://english.moe.gov.tw/ct.asp?xItem=14504&CtNode=11430&mp=1.

Mok, K. H. (2014). Promoting the global university in Taiwan: University governance reforms and academic reflections. In C. P. (Ed.), *The SSCI syndrome in higher education: A local or global phenomenon* (pp. 1–23). Netherlands: Sense Publishers.

Ortinau, D. J. (2011). Writing and publishing important scientific articles: A reviewer's perspective. *Journal of Business Research, 64*(2), 150–156.

Quacquarelli Symonds. (2015, December 17). *QS World University Rankings 2015/16*. Retrieved from QS Top Universities: http://www.topuniversities.com/university-rankings/world-university-rankings/2015#sorting=rank+region=+country=+faculty=+stars=false+search=nationaltaiwanuniversity.

Reed, K. L. (1995). Citation analysis of faculty publication: Beyond science citation index and social science citation index. *Bulletin of the Medical Library Association, 83*(4), 503.

Shin, J. C., (2013a). The world-class university in different systems and contexts. In J. C. Shin, & B. M. Kehm (Eds.), *Institutionalization of world-class university in global competition* (pp. 1–13). Singapore: Springer.

Shin, J. C., (2013b). The world-class university: Concept and policy initiatives. In J. C. Shin, & B. M. Kehm (Eds.), *Institutionalization of world-class university in global competition* (pp. 17–18). Singapore: Springer.

Shin, J. C., & Harman, G. (2009). New challenges for higher education: Global and Asia-Pacific Perspectives. *Asia Pacific Education Review, 10,* 1–13.

Soudien, C. (2014, July 12–14). *A reflection on South African state initiatives since 1994 to stimulate scientific output*. Paper presented at The WUN Project Meeting "World-class Universities, Publication and Research Assessment: Rethinking the Mission of Higher Education in the Global Age," Chinese University of Hong Kong.

Suh, G.-S., & Park, S.-J. (2014). The Koren Government's policies and strategies to foster world-class universities. In Y. Cheng, Q. Wang, N. C. Liu (Eds.), *How world-class universities affect global higher education: Influences and responses* (p. 75). Singapore: Springer.

Thelwall, M., & Maflahi, N. (2015). Are scholarly articles disproportionately read in their own country? An analysis of mendeley readers. *Journal of the Association for Information Science and Technology, 66*(6), 1124–1135.

Wang, H. H. (2014). The political economy of quantitative indexes for measuring academic performance. In C. P. Chou (Ed.), *The SSCI syndrome in higher education: A local or global phenomenon?* Netherland: Sense Publisher.

Wanner, R. A., Lewis, L. S., & Gregorio, D. I. (1981). Research productivity in academia: A comparative study of the sciences, social sciences and humanities. *Sociology of Education, 54*(4), 238–253.

Woodside, A. G. (2009). Journal and author impact metrics: An editorial. *Journal of Business Research, 62*(1), 1–4.

World of Science. (2014). *Science citation index*. New York: Thomson Reuters.

Wu, L.-Y., & Bristow, A. (2014). Perishing confucius: An analysis of a rupture point in the discourse of Taiwanese "New Higher Education". In C. P. Chou (Ed.), *The SSCI syndrome in higher education: A local or global phenomenon*. Netherlands: Sense Publishers.

Yang, R., & Welch, A. (2012). A world-class university in China? The case of Tsinghua. *High Education, 63,* 645–666.

The Paradox of Autonomy: Japan's Vernacular Scholarship and the Policy Pursuit of "Super Global"

Mayumi Ishikawa and Chengzhi Sun

Opting Out? Japan's Prolific yet Parochial Academic Publishing

In his critical analysis of academic dependency, Alatas (2003) referred to the distinctive independence of Japan's social science scholarship as "opting out" of the game. The "game" here denotes the method of measuring academic success by publications in Western periodicals and in English, which is a prevalent way, Alatas argued, particularly in Third World academia, to gain prestige. While much influenced by Western ideas and models, Japan's social sciences nevertheless have remained committed to and reward publications in the national language in nationally recognized periodicals. Alatas thus considered Japan a possible alternative to Western dominance in the social sciences.

M. Ishikawa (✉)
Center for Global Initiatives, Osaka University, Suita, Japan
e-mail: ishikawa@cgin.osaka-u.ac.jp

C. Sun
Foreign Language Department, Dalian University of Technology, Dalian, China
e-mail: czsun@dlut.edu.cn

249

Alatas's argument is supported by an earlier work of Lie (1996, Chapter 8). In an appendix to his Trend Report in *Current Sociology*, he discussed the status of academic production in contemporary Japanese sociology. Among many salient features, Lie pointed out a profusion of publications produced by a sizable local scholarly community (Japan has the second largest national sociological association in the world) in academic journals, department publications, publicly circulated periodicals and interdisciplinary journals, books and edited volumes, as well as a large number of translated works of Western classics and monographs, all in Japanese. Rich and diverse as they might be, these works "remained under the thrall of Western sociology" (Lie 1996, p. 60) yet were out of reach for non-Japanese readers due to language accessibility.

Vernacular Scholarship and the Global Race for "World-Class"

Both of the accounts above were made before the proliferation of various world university rankings, being spearheaded by Shanghai Jiao Tong University's Academic Ranking of World Universities launched in 2003. Such institutional rankings and their popularity are among the most prominent destabilizing factors to the status quo of humanities academic publishing and the system of vernacular scholarship in Japan. By and large, humanities and social science scholarship in Japan has, until today, kept the autonomous features observed by Lie in the mid-1990s. Pressure for change, however, is intensifying both outside and inside Japan.

Externally, global competition for excellence and state interventions to create "world-class" universities has been intensifying worldwide and in Asia in particular (see Ishikawa, in this volume). Internally, a preferential funding scheme by the Japanese government effectively instructs leading research universities to proactively become "Super Global" and improve their standings in the world university rankings (Ishikawa, this volume; Kariya 2015).

The quest to improve institutional rankings often involves initiatives to steer faculty to focus on publishing in internationally indexed journals. Such measures, decided either by the government or university leaders, are often unpopular among humanities and social science scholars and considered problematic because they may undermine vernacular scholarship (see Chou 2014; Huang 2009; Lee and Lee 2013, for examples, from Asia). There are also problems inherent in using bibliometric indicators such as citations and impact factors in order to measure research

quality (see, for example, Anninos 2013; Dolan 2007, pp. 25–28; Scott 2012; van Raan 2005) and, by extension, institutional quality (Wright 2012). However, ambitious universities in emerging economies such as China and Brazil are said to be pursuing improvements in such indicators with an awareness that they would "do better in the numbers-driven race rather than opinion-influenced race" (Oleksiyenko 2014, p. 492). Increased publication productivity not only can lead to gaining prominence in the rankings but is also often viewed by universities "as a more attainable target than Nobel Prizes and Field Medals" (Oleksiyenko 2014, p. 500).

As neoliberal policies and ideologies have proliferated, issues of accountability and audits have become dominant in higher education systems throughout much of the world (Shore and Wright 1999; Strathern 2000).[1] The popularity of various world university rankings further promotes the use of metrics and proliferates audit culture (Ishikawa, this volume).

JAPAN: BETWEEN AUTONOMY AND GLOBAL ASPIRATION

Against such a backdrop, this article critically analyzes academic publishing in Japan over the past two decades in the context of recent national higher education policy development. We selected two fields of anthropology and educational policy for a pilot study in a research university and collected total article outputs during three reference years of 1993, 2003, and 2013.[2] Empirical data was augmented by interviews with junior and senior faculty from the same disciplines. The data indicates that the state of publications for humanities and social sciences in Japan is relatively static, especially when compared with the drastic changes in the evaluation of academic publishing in neighboring countries

---

[1] Neoliberal policies are among many factors and by no means the only reason for the intensifying global race for competitiveness. Kang (2009, p. 192), for instance, states that the Korean government's university reform policy is more "state market-ist" rather than neoliberalist.

[2] This study is part of a larger international comparative project on the impact of global competition on local publication and the scholarship. Please see the preface of this issue and the next section of this article for the details of the methodology.

that now prioritizes publications in internationally indexed journals (see, for example, Chou 2014; Lee and Lee 2013; Li and Flowerdew 2009; Lo 2013; Shin and Cummings 2010; Oleksiyenko 2014; Stack 2016, p. 17; and contributions in this volume). Yet Japan's case exhibits highly contextualized and locally specific patterns and practices of academic publishing. There are also signs of a policy-driven shift away from the "opt-out" past. The resultant data and interview accounts identify subtle yet emerging changes in publishing trends in Japan and outline diverging aspirations among different generations of scholars.

In the next section, the research scope and design are first introduced, followed by a summary of the major findings and analysis. We then turn to a discussion of the impending question of the sustainability of the "opting out" paradigm amid growing questions around the autonomy of humanities and social science scholarship and recent higher education policy development that prioritizes international competitiveness. What are the implications of the establishment of government-sponsored "Top Global Universities" (locally called "Super Global Universities") project in Japan, and the division of all national universities into the three categories of global, local, and specialized? These policies inevitably change the ways that operational and research funds are distributed and university audits are conducted, thus profoundly affecting the future course of vernacular humanities and social science scholarship in Japan. Although enhancement of global research engagement may be desirable over the long term (Mathews 2015), the authors point out the risk of "compartmentalization" (Hanafi 2011) by stratifying the national university system through uneven restructuring of local academia. Furthermore, the creation of "global universities" by adhering to a narrow definition of science and scholarship, "namely one that can be captured by Anglophone neoliberal audit cultures" (Jöns and Hoyler 2013, p. 57), may improve the ranking positions of Japanese universities in the short term but it risks de-contextualization (Kang 2009), the demise of long-sustained local scholarship, and the loss of autonomy in vernacular knowledge production.

The article in the end critically questions a policy quest or "policy panic" (Stack 2016, p. 110) for global recognition triggered by the proliferation of rankings and the "world-class university game" (Slaughter and Cantwell 2012, p. 601). The race for world-class status prescribes the adherence to "excellence" indicators used by rankings rather than what is important for higher education (Hazelkorn 2013). Our case study

from Japan illustrates that "narrowly Anglo-American" (Paasi 2005) international English-language publication data omits significant segments of Japan's academic research, and is thus unfit to accurately assess the performance of scholars in Japan (see also Ishikawa, this volume).

Research Design and Scope

The research done for this article is part of a larger comparative research project that documents and assesses academic publishing trends over the past 20 years in different countries by focusing on a publically financed research university from each participant country, including Japan (see Preface, this issue). In line with the project's methodology, the authors conducted a quantitative survey of journal articles published by faculty of a national research university during the reference years of 1993, 2003, and 2013 in order to capture the changing and unchanging dimensions of academic publishing in Japan. Subsequently, interviews with junior and senior faculty and examination of relevant literature and policy documents were conducted to supplement the data analysis. The journal survey was preceded by a study of the status of academic publishing in Japan, which provided an overview of the trends in scientific publications in relation to the nation's institutional audit system (Ishikawa 2014). In addition, the problems associated with blanket application of standardized and mono-lingual parameters used in rankings were examined using an ethnographic approach based on long-term participant observation at a non-English university (Ishikawa 2009). While referencing these findings, the focus of this article is to present concrete and empirical evidence in order to analyze changes in academic publishing in a particular local context.

The research site for the study is a national university, one of Japan's leading comprehensive research universities listed in most world university rankings and league tables. The university has some 24,000 students and 3000 faculty members. It is known for its prominent medical and engineering faculties; smaller but reputable humanities and social science faculties constitute roughly 20% of the total faculty. The university is fairly representative of Japan's seven former imperial universities that have served as the backbone of the nation's postwar economic success and scientific innovation. As such, the university is research-oriented, and faculty is expected to adhere to high standards of research outputs both for appointment and promotion. As a recipient institution of the "Top

Global Universities" project, the university proactively promotes internationalization strategies both in research and education. If Japan shows any sign of producing an increasing number of internationally recognizable research articles in humanities and social sciences, it should manifest first in a leading institution such as this chosen research site.

We identified faculty members in the fields of anthropology and education policy at the university in 1993, 2003, and 2013 and created a directory of their total article outputs up to June 2013. These two key fields and the time frame are consistently used for the comparative research noted above. In addition, unlike more English-language-based and thus internationally visible disciplines such as economics, psychology, and business administration, these two disciplines more or less represent the general trends in humanities and social sciences academic publishing in Japan (Hayashi and Tsuchiya 2016, p. 334; see also the '"Delayed Internationalization"' section below). In the field of anthropology, the directory covers a total of nine scholars and their 302 articles (an average of 33.5 articles per scholar). For education policy, a total of 684 articles by ten scholars (an average of 68.4 articles per scholar) were collected and tabulated.[3] Subsequently, all the data was classified according to eight categories and tabulated to track changes over the two decades (see Tables 1 and 2).

Following the article survey and tabulation from May to July 2014, semi-structured interviews were conducted in June and July 2014 with six scholars, one each from anthropology and education policy, as well as four junior scholars in education policy and higher education. The results of a recent study commissioned by the Japanese government on the internationalization of humanities and social sciences in five key disciplines were also referenced.

The articles are listed in the CiNii Articles database made available by the National Institute of Informatics, Japan. As noted, international journal databases such as Web of Science (WoS) do not capture the predominant proportions of research results in humanities and social sciences in Japan (cf. Hayashi and Tsuchiya 2016, p. 333). The CiNii, which is the nation's largest and the most comprehensive publically sponsored directory for academic titles, is thus used for the analysis. It should

---

[3] The total number of scholars and articles does not equal the total figures in Tables 1 and 2 as there are some duplicates. Some scholars remained in the same faculty position during different reference years.

Table 1   Article survey: anthropology

Year		*1993*	*2003*	*2013*
Number of researchers		4	4	4
Total number of articles		202	79	84
Average per scholar		50.5	19.8	21
Co-authorship	Not-coauthored	202	79	84
		100%	100%	100%
Title language	J	169	47	50
		83.7%	59.5%	59.5%
	J/E, J/F, E, G…	33	32	34
		16.3%	40.5%	40.5%
Title relevance	Borderless	92	25	17
		45.5%	31.6%	20.2%
	Japan	45	4	3
		22.3%	5.1%	3.6%
	Other countries	56	50	64
		27.7%	63.3%	76.2%
Title geographical category-	National	40	4	2
		19.8%	5.1%	2.4%
	International	64	57	69
		31.7%	72.2%	82.1%
	Overlapping	11	2	1
		5.4%	2.5%	1.2%
	Borderless	87	16	12
		43.1%	20.3%	14.3%
Abstract language	J	2	3	6
		1.0%	3.8%	7.1%
	J/E, J/F, E	12	21	29
		5.9%	26.6%	34.5%
	N.A.	188	55	49
		93.1%	69.6%	58.3%
Journal language	J	198	73	78
		98.0%	92.4%	92.9%
	E	3	6	6
		1.5%	7.6%	7.1%
	G	1		
		0.5%		
Journal origin	Japan	198	79	84
		98.0%	100%	100%
	Other countries	4		
		2.0%		

Table 1   (continued)

Year		1993	2003	2013
Journal geographical category	National	198 98.0%	79 100%	84 100%
	International	4 2.0%		

E = English, F = French, G = German, J = Japanese, S = Spanish, N.A. = Not Available

be noted that the articles listed in the CiNii database are not equivalent to peer-reviewed academic journal articles such as those listed in SSCI by Thomson-Reuters. Japanese humanities and social science scholars often publish, or in fact prefer to publish, for the broader public in generalist and/or interdisciplinary periodicals for better visibility, impact, and prestige (cf. Lie 1996, pp. 59–60). While scholars in research universities tend to produce more publications for academic and professional journals, some of their works are also published for the broader public, policymakers, and national intellectual readership. As it is hardly possible to distinguish one from the other, we consistently use the same database. Our case study is thus meant to track changes of publishing practices within Japan. We also capture changes in publishing practices by the same scholars over time, and among different generations of scholars.

Major Findings and Analysis

Overview

First, the major findings of the study are summarized below, followed by quantitative and qualitative analysis and observation.

1. Japanese humanities and social sciences scholars did not change their publishing practices in a significant way from the 1990s to the early 2010s. Analysis of research articles in two disciplines indicates little change in authorship, language, or medium: an overwhelming majority are single-authored articles written in the Japanese language and published in local (national) journals and periodicals.
2. In anthropology, articles with bilingual titles and abstracts, typically in Japanese and English, have become common over the

Table 2 Article survey: education policy

Year		1993	2003	2013
Number of researchers		6	5	4
Total number of articles		434	250	250
Average per scholar		72.3	50	62.5
Co-authorship	Not-coauthored	430	248	249
		99.1%	99.2%	99.6%
Title language	J	340	156	172
		78.3%	62.4%	68.8%
	J/E, J.F, E…	94	94	78
		21.7%	37.6%	31.2%
Title relevance	Borderless	96	27	22
		22.1%	10.9%	8.8%
	Japan	333	173	148
		76.7%	69.2%	59.2%
	Other countries	5	50	80
		1.2%	20.0%	32.0%
Title geographical category	National	332	174	139
		76.5%	69.6%	55.6%
	International	5	46	78
		1.2%	18.4%	31.2%
	Overlapping	2	3	5
		0.5%	1.2%	2.0%
	Borderless	95	27	18
		21.9%	10.8%	7.2%
Abstract language	J			1
				0.4%
	J/E, E, F…	49	54	41
		11.3%	21.6%	16.4%
	N.A.	385	196	208
		88.7%	78.4%	83.2%
Journal language	J	432	248	244
		99.5%	99.2%	97.6%
	E	2	2	6
		0.5%	0.8%	2.4%
Journal origin	Japan	432	248	244
		99.5%	99.2%	97.6%
	Other countries	2	2	6
		0.5%	0.8%	2.4%
Journal geographical category	National	432	248	244
		99.5%	99.2%	97.6%
	International	2	2	6

Table 2   (continued)

Year	1993	2003	2013
	0.5%	0.8%	2.4%

E = English, F = French, G = German, J = Japanese, S = Spanish, N.A. = Not Available

past decades. Though articles are predominantly published in the Japanese language in domestic journals, anthropology is considered a "global discipline" in inputs and research orientation in Japan.

3. Education policy is more locally embedded in medium and in content. The education scholars in this study primarily published for the national scholarly community and intellectual readership. However, international contents such as comparative analyses with other countries or internationalization of local schools have become more common in recent years.

4. Books are consistently favored over articles. Articles in academic journals are often considered milestones to publishing books. Books are more accessible for the general public than are professional journals, thus having better outreach and more significant social impact. For these same reasons the scholars in this study, particularly those in education policy, published articles in intellectual journals, popular magazines, government bulletins, and newspapers.

5. Both senior and junior scholars acknowledge the growing importance of publishing internationally and predict an increase in English-language publications. Young scholars are more willing to publish articles in English in international journals. For young scholars, international research outputs and expertise (for example, presenting papers at international conferences and participating in international research collaboration) are becoming a requirement for obtaining faculty positions in research universities. Despite this, English and Japanese articles are evaluated equally under current academic norms and practices. Young researchers interviewed are therefore often torn between writing one English article and producing more higher quality articles in Japanese.

6. Senior scholars publish in English in international journals as an outcome of international collaboration or by invitation. At least among those interviewed for this study, no reference was made to

strategically choosing certain prestigious journals such as those listed in SSCI for recognition.

Journal Article Survey

Journal articles were classified according to the following eight categories in each reference year: (1) Co-authorship, (2) Title Language, (3) Title Relevance, (4) Title Geographic Category, (5) Abstract Language, (6) Journal Language, (7) Journal Origin, and (8) Journal Geographic Category.[4] Table 1 details the anthropology articles and Table 2 details those in the field of education policy.

In both fields, Japanese scholars publish predominantly single-authored articles in journals published in Japan for the national audience (see Co-authorship, Journal Geographic Category, and Journal Origin). Across all reference years, over 97% of articles were published in national journals, and over 92% in the Japanese language.

In the field of anthropology, there was a small yet notable increase in the number of articles published in English from almost none (1.5% in 1993) to about 7% in 2003 and 2013 (see Journal Language). Education policy scholars, however, have kept their national focus of research intact, with the proportion of English journal articles, despite a small increase, remaining a meager 2.4% of the total in 2013.

Concerning total and per scholar publications, 1993 figures well exceed the other reference years in both fields. This is due to the presence of two highly productive and long-serving scholars, one in each field, who were faculty in 1993, who have subsequently served many prominent positions in different institutions. The high figures in 1993 thus do not necessarily indicate a general decline in productivity in the following years. Also, publication patterns are specific to discipline and different between the two fields studied. An education scholar interviewed ascribed

---

[4] "Title Relevance" stands for the country of the research content. For example, if the article is about policy concerning incoming international students in China, the Title Relevance is China. "Borderless" is for a borderless or purely theoretical article. Regarding "Title Geographic Category," "Borderless" is the same as above. This criterion identifies whether the research scope of an article is more international or locally focused. For example, a comparison between Japanese and American immigration policies falls into "International." "Journal Language" denotes the official language of a journal. In Japan, Japanese is the official language for most journals. "Journal Origin" denotes the country in which the journal is registered.

the higher number of articles generated by education scholars to the fact that the field has many subdivisions, and consequently more academic journals, when compared to other disciplines.

An English-Japanese title and abstract listing has become the norm for anthropology. This trend corresponds to the increase in the number of articles with English abstracts in the discipline. The percentage of article titles written only in Japanese has decreased from 83.7% in 1993 to 59.5% in 2013, and titles in two languages, most typically in Japanese and English—even when most articles are written in Japanese—increased from 16.3 to 40.5% over the same period. A similar trend is harder to establish for education policy.

Regarding the local relevance of the articles (Title Relevance and Title Geographic Category), both disciplines exhibit a similar trend of increase in non-Japan focused content. In the field of anthropology, the proportion of nationally focused articles was already modest at 20% in 1993. This subsequently declined to 5.1% in 2003 and 3.6% in 2013. In education policy, nationally focused content also decreased, from about 76.7% in 1993 to 59.2% in 2013.

Anthropology is considered an "international" or "non-national" discipline in Japan, distinguished from locally focused ethnographic, historical, and cultural studies, which are usually classified as "folklore" studies. The percentage of research with borderless and non-Japan focused content, both in Title Relevance and Title Geographic Category, exceeded 90% for anthropology in 2003 and 2013. Higher nationally focused publication figures for 1993 scholars do not necessarily demonstrate a growing interest in international content. Rather, it is considered a reflection of older scholars gradually retiring from fieldwork overseas and shifting to domestic issues. Similar to their American counterparts, Japanese anthropologists started engaging in ethnographic research on societies all over the world in the 1970s thanks to economic development and growing affluence (Mathews 2015, p. 366). The field has thus become "global discipline" in inputs and research orientations, if not yet in outputs.

Education policy, on the other hand, has solidly retained its national, local focus. A close examination of the list of complied articles shows an unchanging commitment to national educational policy issues by scholars in this discipline. The majority of the articles focus on education scholarship in Japan without a major change over the past two decades. A growing percentage of articles, however, include content about other countries (1.2% in 1993 to 32% in 2013), and consequently

the percentage of articles written only about Japan has decreased from 76.5 to 55.6% over the same period (see Title Geographic Category). The figures may demonstrate education scholars' growing interest in international research topics. Even in cases where research is classified as "national," a closer examination reveals an increase in international research contents, such as comparative analyses of the education systems of Japan and Europe, assimilation of foreign school children in Japan, and other topics with international and comparative perspectives.

The article survey in two key fields thus captures little change over time in the language and the medium of publications with any notable changes in content rather than outlet. Our qualitative research, however, showed emerging, nuanced changes in the aspirations of different generations of scholars in Japan.

Signs of Change

A comprehensive report concerning the "internationalization of humanities and social sciences" in Japan, released by The Japan Society for the Promotion of Science (JSPS) in 2011 (JSPS 2011), criticized a "lack of ambition" on the part of Japanese humanities and social science scholars who have thus far remained "buyers rather than producers" in the international academic market (JSPS 2011, p. 2). The working group that undertook the two-year study commissioned by the Ministry of Education, Culture, Sports, Science, and Technology of Japan (MEXT) selected five key disciplines of Asian history, sociology, law, politics, and economics. The study was detailed both quantitatively and qualitatively, and included an analysis of bibliometric indicators on publications and citations, a study of publication trajectories of internationally renowned Japanese scholars, an assessment of weaknesses and strengths in each field, interviews and the results of focus group meetings with Japanese and non-Japanese scholars, and a review of the status of international research networks and collaboration.

Interviews conducted with senior and junior scholars for this study largely confirm rather than contradict the findings outlined in the JSPS report. All senior and junior scholars agreed that it is increasingly important to publish internationally and in English, particularly for younger scholars in humanities and social science fields. A senior education scholar in his mid-50s stated that for his generation, all scholarly training and works were done in Japanese. He has written articles in English and

published them internationally only on two conditions: as an outcome of international collaboration or joint research, and upon an invitation to contribute to an international conference and/or a special issue of a journal or an edited volume. He noted, however, that more scholars in their 40s and younger have overseas degrees and working experiences, and the number of English-language articles and books has been increasing. He says, "It used to be the case that only foreign scholars such as William Cummings and Ronald Dore wrote about Japan's education in English. Such works were subsequently reintroduced to Japan and became well known. Now, more works are written in English by Japanese scholars about Japanese education, some as members of international research teams."

Speaking about the general publication trends in anthropology, a senior anthropology scholar in his 60s says that academic publication over the past two decades has not changed significantly. There has, however, been "some increase" in the number of international conference papers by Japanese scholars. He promotes the internationalization of a professional association he belongs to and stresses the importance of internationally visible and relevant research. As part of such efforts, the association recently hosted a major international conference in Japan, during which a roundtable was organized with aims such as strengthening the capacity of Japanese scholars to publish more internationally. Awareness concerning the importance of publishing internationally has thus been rising among local anthropologists. In addition, public funding is gradually shifting away from purely domestic journals to those with more international appeal and outreach, and those written in English.

The senior anthropologist obtained his doctorate degree from a leading American research university but found that his qualification was not easily valued in the earlier days of his career in Japan. A senior education scholar shared the similar observation: "For a long time, Japanese academia underappreciated foreign Ph.Ds. This is because thirty years ago, only very senior scholars in humanities and social sciences were given a doctorate in Japan, usually just before retirement as recognition of lifetime achievement. A Japanese humanities doctorate was therefore only for a very limited number of top scholars who had achieved both success and fame." Now that has completely changed as more young scholars are given degrees upon completion of their graduate training. While this trend is positive, the education scholar also points out that some graduate students today are reluctant to study overseas. Not only has it become

easier to receive a doctorate degree in Japan, but some consider it easier to get a job with a domestic degree and domestic personal connections.

Yet according to a senior anthropologist, all junior colleagues recently appointed in the anthropology department have some international experiences, credentials, or expertise. According to another senior scholar, it is difficult to find a position in a research university today without international capacity and/or the ability to actively engage in international research groups or networks.

An education scholar in his 40s who studies European education systems says he has published several articles in a European (non-English) language. This facilitates his research by introducing his work and interests to local people and scholars. He adds that publishing in a foreign language and in foreign journals is definitely a plus due to the benefit of seeing one's own research objectively.

This same scholar observes that the overall internationalization process proceeds rather slowly because "Japan has an established (academic) market and academic associations based on the Japanese language." He mentions, however, that "the degree of internationalization depends on the specific field within education studies" and, citing a recent example of a comparative study of education curricula in China, Korea, and Japan, that "there is some internationalization developing within Asia, with the Japanese language as a medium."

All younger scholars confirmed the importance of publishing internationally and professed their desire to do so, despite apprehension about the difficulties involved. None imagine that their future research career can be adequately constructed simply by publishing in Japan in domestic journals and books. However, considering the fierce competition among young scholars for university faculty positions, one young scholar said it might be wiser to publish three articles in Japanese rather than publishing one in English, as an English article might be highly evaluated but may not provide the same rewards, despite the time and effort, as a number of quality academic articles written in Japanese. One young scholar mentions, "A scholar's robustness is evaluated by the number of academic papers, not by the language used."

This point, however, was refuted by two senior scholars in education and anthropology. The education scholar comments on "a worrisome trend" of fierce competition and says, "Both number and quality matter. But young people are number-oriented. Some just produce more articles by thinning the contents." The anthropology scholar agrees: "After all,

Table 3 Books vs. articles: publishing by selected senior scholars in both fileds

	Anthropology		Education policy	
Scholars	A	B	C	D
Number of books and edited volumes	27	17	67	25
Translated books	4	–	5	–
Articles and others	152	27	223	82

it is quality. But not the quality measured by (journal) Impact Factor." Similarly, none of the young scholars interviewed consider journal Impact Factor as relevant for their evaluation.

Concerning just how much leverage articles published in English in international journals offer, there seems to be a lack of consensus among junior scholars, resulting in differing strategies among individuals. One interviewee describes a fellow young scholar who, despite no real pressure from his supervisor to do so, prioritizes publishing in English, thinking it is the only way to be recognized.

In addition, senior scholars and junior scholars alike consistently favor publishing books over articles. Japanese scholars generally consider articles in academic journals as milestones to publishing a book. Sample book data, which we collected from four senior scholars, two each from the selected disciplines, is instructive (see Table 3). Books, to this day, have remained "the most prestigious and most effective media for disseminating ideas" (Lie 1996, p. 60). Two senior scholars who were among the faculty in 1993 (A and C in Table 3) still publish and remain prolific, though more as "public intellectuals" rather than writing pure academic articles and books later in their career. The data from two others (B in Table 3 was faculty in 1993, and D in 2003 and 2013) also indicates a strong preference to publish books.

"Delayed Internationalization"

According to the JSPS report and interviews conducted for this study, the major constraints for Japanese humanities scholars to publishing their work internationally are: language, differences in publication protocol and practice, and lack of rewards and incentives to publish in English (see also Yonezawa 2012). Some critiques also question the quality of graduate education in Japan, especially the poor quality of scholarly language

training as part of postgraduate training. In addition, an established and sizable national academia and intellectual readership ensure the viability of a national market for books and articles. An accumulation of Japanese-language books, articles, and a large number of translated works of major Western classics and monographs from pre-war periods also enable the continuation of research tradition and scholarly training in the national language.

The JSPS report (JSPS 2011, p. 148) also points out that internationally known Japanese political scientists published English articles such as those listed in Web of Science (WoS) only while they had faculty positions in universities overseas. Upon their return to Japanese universities, they stopped producing articles in English, indicating the lack of incentive to continue to do so. This point, that English articles might be highly evaluated at the time of faculty appointments but not necessarily thereafter, was repeatedly raised in our interviews. The JSPS report also points to little time allocated for research for Japanese scholars as another possible cause for not publishing in international journals.

As of 2009, some 400 of the approximately 2000 academic journals published in Japan were in English (MEXT 2012, p. 40). The majority of these were in physical science fields, with only 16% covering humanities and social sciences. Although the representation of humanities and social science journals remains small, English journals in these fields have increased twofold since 2003 (MEXT 2012, p. 40). The number of Japanese scholars who publish in WoS-listed humanities and social sciences journals has increased by nearly 10% over the five years, if not their shares in the total output (Funamori 2012, March 6, slide 13).

The overall trend of "delayed internationalization" in humanities and social sciences does not necessarily apply to other fields, as publication practices differ markedly among disciplines. Hayashi and Tsuchiya (2016) studied all the journal articles submitted for the first "Evaluation of Education and Research at National Universities" conducted in 2008 to analyze the proportion of articles indexed in WoS by field. The articles in their study supposedly represent the best research outcomes selected and submitted by participating departments and faculty of all national universities in Japan. While 90% of all articles submitted in medical, dental, and pharmaceutical sciences were listed in WoS, a rather modest figure of 65% of those in engineering was indexed. By contrast, only 2% of humanities articles were WoS indexed; less than 3% for most areas of social

sciences, including anthropology, geography, law, politics, and sociology were listed, with the exception of economics (46%) and psychology (37%).

International bibliometric indicators such as WoS or Elsevier's Scopus, adopted by most ranking institutions to measure research quality, thus capture only a fraction of humanities and social science research in Japan, except in a small number of fields. The international bibliometrics have thus far remained rather irrelevant for the majority of humanities and social science scholars in Japan, if not for their counterparts in the physical or natural sciences (Ishikawa, this volume). Compared with scholars in the natural and physical science fields, who have been awarded the second highest number of Nobel Prizes after American scientists since the beginning of this century, are their humanities counterparts still "opting out" of the game?

Global Ambitions and the Reform of National Research Universities

Becoming "Super Global"

Throughout much of the past century, Japanese universities have practiced a "policy of indigenization" (Amano 2014). Consequently, in a relatively short period of time after their establishment in the late nineteenth century, universities in Japan successfully achieved autonomy from their dependence on the West. This "indigenous" tertiary education system has produced a skilled workforce in an efficient, inexpensive manner, contributing to the modernization and industrialization of Japan (Amano 2014). This same success, however, has now become a burden for the nation faced with the challenges of globalization.

Various higher education internationalization policies have been implemented by the government since the 1980s, only to be strengthened since the beginning of the new millennium (Ishikawa 2011; Ninomiya et al. 2009), especially after national universities became incorporated as independent administrative and legal entities in 2004. As noted at the beginning of this article, the prevalence and popularity of various world university rankings, which have incidentally "arisen in parallel with the corporatization of Japan's national universities" gave pertinence to the arguments to reform and strengthen the country's research universities, particularly national research institutions (Amano 2014). The national universities, though fewer than 90 in number, are among the best of

nearly 800 universities in Japan in academic research and professional education. Not only do they account for 57% of master's students and 69% of Ph.D. students nationwide, they are also the highest positioned institutions in most world university rankings and league tables (Amano 2014). National research universities thus epitomize Japan's excellence in research and education, positioned at the core of national competitiveness policy discussions.

A notable recent policy to internationalize universities to "raise their international competitiveness" is the "Top Global University" project, locally called "Super Global" and launched in 2014.[5] A total of 37 universities nationwide are awarded competitive grants for up to ten years for their internationalization initiatives. Of these, thirteen are named "Top Type" with "the potential to be ranked in the top 100 in world university rankings"[6] and given a larger share of funding. The project was conceived after the former MEXT minister H. Shimomura announced in 2013 that his ministry wanted to see at least ten Japanese universities among the world's top-ranked 100 universities within the next ten years.

Selected universities are committed to improve their standings in the rankings and thus ambitious in their plans and objectives. Application documents, prepared by universities in accordance with the required standards prescribed by the MEXT, are awash with initiatives to increase the number of international students and staff as well as course offerings in the English language, to internationalize curricula, admission processes and administration, and strengthen international dimensions of education and research by promoting international exchange, joint research, and supervision, just to list some examples.

What is strangely lacking or downplayed in the Top Global application documents, however, are concrete plans or clear targets for increasing the number of academic publications in internationally indexed journals, a common and prevalent strategy for research universities overseas with ambitions to be ranked among the top universities worldwide. Only Keio University, a private and leading comprehensive university, refers to their plan to encourage scholars to publish in international journals listed in the WoS. Initiatives by other universities in this area are rather vague,

[5] Concerning the "downfall" of Japanese universities in *Times Higher Education (THE)* rankings in 2010 and a national uproar it created, which eventually led to the launch of this "Top Global University" project, see Ishikawa, in this volume.

[6] http://www.jsps.go.jp/j-sgu/data/shinsa/h26/h26_sgu_kekka_e.pdf.

such as to encourage and increase the number of internationally co-authored articles so as to improve citations and reputation scores, or to translate and publish faculty research into English by collaborating with the university press. Compared with the time-bound, specific, and quantitative goals required for the internationalization of the student body, faculty, and education content, as well as administration reforms, the issue of publishing research outputs internationally in indexed academic journal articles seems to be rather peripheral to the concern of ministry officials and university leaders.

New "Global-Type" Universities and a Risk of Compartmentalization

While universities across the globe that seek recognition as "world-class" are intent on strengthening their performance in the numbers-driven race by incentivizing and rewarding journal publications, Japanese counterparts seem to be more focused on improving international public relations, diplomacy, and outreach in their paths toward "Super Global."

Such inclinations, specific to Japan, have not emerged out of the government's concern for vernacular scholarship, especially in the humanities and social science fields. In June 2015, the MEXT informed all national universities to plan and implement radical reform measures to the point of "overhauling" their existing structures during FY2016 to FY2021.[7] The notice included a clause suggesting an organizational restructuring that might lead to the abolishment of faculties and schools in humanities and social sciences, or their conversion to "areas with greater demands from the society." A nationwide uproar and voices of protest against the ministry's "move to abolish humanities and social sciences from national universities" ensued (see, for example, Sawa 2015, August 23). Statements of protests from academic and professional societies (even from the Japan Business Federation), media stories, and special issues in influential periodicals such as *Gendai Shisō* [Contemporary Thoughts] and *Chūō Kōron* [Central Public Opinion] seem to have

---

[7] The next six-year "medium-term" begins in 2016 for all national universities in Japan, for which they are required to submit plans for approval by the MEXT, and subsequently evaluated for the achievements during the period of the term (cf. Yonezawa 2012). The performance of each term is clearly tied to funding allocation in subsequent years and/or term.

created a national movement in defense of education and research in the "under-appreciated" disciplines.[8]

While the public and media attention has focused on the future of humanities and social sciences, the government's plan for a "period of accelerated reform" has proceeded. By September 2015, all national universities were classified into one of three new categories—local, specialized, or global—depending on each university's choice. "Local" institutions contribute to the local society through human resource development and solving problems that local communities face, while conducting national and global-level research and education in specialized areas. "Specialized" universities are those that offer fine arts, medicine, foreign languages, science and technology, and other specialties, and pursue nationally and globally competitive research and education in specific areas of their expertise. "Global" institutions are those that can compete with excellent universities overseas and conduct world-class education and research throughout all faculties within the university. All universities will be allocated operational funds and evaluated based on their chosen category. Of 86 total national universities, sixteen chose Type 3, or the global category; ten of those coincide with the "Top Type" institutions selected for the Top Global University project.[9]

The implications and consequences of this new typology for the funding and evaluation of Japanese national universities are yet to be seen. What is already clear, however, is that the new stratification mechanism adheres to global denominators of excellence, a departure from the existing local norms of excellence and prestige. There is no denying that a degree of hierarchy has always existed in Japan's higher education. With the University of Tokyo at the apex, universities are conventionally grouped in progressive tiers of competitiveness (Ishikawa 2009, p. 168). In practice, however, explicit university-to-university comparison or rigid

---

[8] The MEXT vehemently denied the allegation and subsequently released a statement saying that their intention was not to abolish humanities and social sciences or convert them to utilitarian science fields. Rather, it argued these fields tend to be narrow-focused and inward-looking, thus needing a shakeup to meet the demands of students and the society (http://www.mext.go.jp/component/a_menu/education/detail/__icsFiles/afieldfile/2015/10/01/1362382_2.pdf).

[9] They are the universities of Chiba, Hiroshima, Hitotsubashi, Hokkaido, Kanazawa, Kobe, Kyoto, Kyushu, Nagoya, Okayama, Osaka, Tohoku, Tsukuba, and Tokyo, Tokyo Institute of Technology, and Tokyo University of Agriculture and Technology. The underlined are the Top Global University project awardees.

categorization of institutions hardly existed. Locally based institutions or those with specialized areas of strength have played no small role in making Japan's higher education more accessible and affordable for students who live away from the metropolitan areas, some of whom mature into scientists who eventually produce world-class innovations.

The new categorization of universities may risk creating a "compartmentalization" of scholars and their activities, as observed in the Arab East by Hanafi (2011). Divided by the language they use and the social roles they play, elite social scientists in the Arab East have no common fora for encounter or dialogue. While global and "professional" scholars "publish globally but perish locally," becoming alienated from the national society, "public and policy" sociologists who publish in Arabic are condemned to lower social status and publish for the local readership without global access. Japan's new typology of universities may even "engineer" compartmentalization in a national system currently devoid of segmentation by language or type of social responsibilities scholars play. Quests to attain "Top Global" status in Japanese humanities and social science scholarship, if implemented by simply adhering to monolithic norms and values of the world university rankings, therefore "risk rendering professional and critical research more elitist and irrelevant" (Hanafi 2011, p. 298).

CONCLUSION

The study found that humanities and social science scholars in Japan have not changed their prolific yet parochial publishing practices in a significant way over the past two decades, with a traditional commitment to locally relevant research largely left intact despite signs of emergent policy-driven change. Consequently, international bibliometric indicators of excellence, adopted by most ranking agencies, have remained irrelevant, lacking meanings of value for the majority of Japan's scholars in these fields, with the small but growing exception of younger scholars. Facing the recent decline of Japanese universities in global rankings, particularly in the

World University Rankings by *Times Higher Education (THE)*,[10] pressure to "internationalize" targeted, select research universities is destined to mount.

On the other hand, any move to "deindigenize" or "devalue" locally embedded fields is likely to bring strong repercussions as witnessed by mounting criticism of a recent government notice that suggested restructuring and abolishing humanities and social science departments not only from academics but business leaders and the general public. Whether this episode represents the continuation of a steadfast commitment to and autonomy of national-language scholarship, or the beginning of its erosion, is too early to judge. The global convergence in measures of quality assessment, may be, as Weberians argue, an inevitable step toward the growth of bureaucratic authority and the rationalization of universal credentials for professions (see, for example, Posts 2012, pp. 2–3).

On a positive note, initiatives that give more prominence to international publications and international engagements will facilitate communication between Japanese scholars and those in other countries. Improved communication by use of the same language may result in improved regional understanding and convergence, leading to the rise of, for example, East Asian Anthropology as envisioned by Mathews (2015, p. 367).

The prevalence of and adherence to the world university rankings and accountability politics have altered the production of academic articles in many parts of the world. The changes are not only in medium and language, but about the way knowledge is constructed, produced, and disseminated. For countries with long-standing academic traditions such as Japan, vernacular scholarship in humanities and social sciences has ensured the accessibility and relevance of intellectual knowledge not only for the contemporary local readership but also for generations to come. As academic publications convey cultural and social values, to track their subtle yet emerging changes and often perplexing policy configurations surrounding higher education is about understanding core concerns around national identity. Now that identity is, in Amano's (2014) words,

---

[10] In the *THE* rankings released in 2015, almost all Japanese universities again dropped their positions (see Footnote 5). The University of Tokyo fell from 23 to 45, Kyoto University from 59 to 88, and most others disappeared from the list of the top 200 universities, reportedly due to a change in the methodology that evaluates research quality and productivity.

faced with the third moment of *kaikoku* or "opening up" of Japan after the Meiji Restoration in the late nineteenth century and World War II.

Whether or not Japan can open up without compromising the university's responsibility to domestic constituents depends on policy development, and this can only be done with input from Japan's own academic community. As Slaughter and Cantwell (2012, p. 603) have suggested for European higher education, university leaders, staff, and policymakers alike need to seek an alternative path for the university to "withdraw from endless competition and reinvent itself as an intellectual and scientific space" in service of the public good.

References

Alatas, S. F. (2003). Academic dependency and the global division of labour in the social sciences. *Current Sociology, 51*(6), 599–613.

Amano, I. (2014). *Globalization and higher education reforms in Japan: The obstacles to greater international competitiveness*. Retrieved from http://www.nippon.com/en/in-depth/a02801/.

Anninos, L. N. (2013). Research performance evaluation: Some critical thoughts on standard bibliometric indicators. *Studies in Higher Education, 39*(9), 1–20.

Chou, C. P. (2014). Why the SSCI syndrome is a global phenomenon? In C. P. Chou (Ed.), *The SSCI syndrome in higher education*. Rotterdam, the Netherlands: Sense Publishers.

Dolan, C. (2007). *Feasibility study: The evaluation and benchmarking of humanities research in Europe*. Humanities in the European Research Area. Retrieved from http://www.aqu.cat/doc/doc_34869796_1.pdf.

Funamori, M. (2012, March 6). *Nihon oyobi sekai no rombun tōkō jyōkyō no bunseki* (in Japanese) [The status of publication and citation of academic articles in Japan and the world]. A presentation at kenkyu kaihatsu hyoka shimpojium [Symposium on research development and evaluation]. Japan. Retrieved from http://www.mext.go.jp/component/a_menu/science/detail/__icsFiles/afieldfile/2012/05/24/1321315_01.pdf.

Hanafi, S. (2011). University systems in the Arab East: Publish globally and perish locally vs publish locally and perish globally. *Current Sociology, 59*(3), 291–309.

Hayashi, T., & Tsuchiya, S. (2016). Gakumon bunya ni yoru takuetsusei shihyō no tayōsei: tayōna kenkyū seika e no hōshō no hitsuyō (in Japanese) [Diversity in excellence indicators by discipline and the need for differentiated reward system]. In M. Ishikawa (Ed.), *The world university rankings and hegemonic restructuring of knowledge (in Japanese)* (pp. 325–345). Kyoto: Kyoto University Press.

Hazelkorn, E. (2013). How rankings are reshaping higher education. In V. Climent, F. Michavila, & M. Ripolles (Eds.), *Los Rankings Univeritarios. Mitos y Realidades*. Madrid: Tecnos.

Huang, A. H. M. (2009). Science as ideology: SSCI, TSSCI and the evaluation system of social sciences in Taiwan. *Inter-Asia Cultural Studies, 10*(2), 282–291.

Ishikawa, M. (2009). University rankings, global models, and emerging hegemony critical analysis from Japan. *Journal of Studies in International Education, 13*(2), 159–173.

Ishikawa, M. (2011). Redefining internationalization in higher education: Global 30 and the making of global universities in Japan. In D. B. Willis & J. Rappleye (Eds.), *Reimagining Japanese education: Borders, transfers, circulations, and the comparative* (pp. 193–223). Oxford, UK: Symposium Books.

Ishikawa, M. (2014). Ranking regime and the future of vernacular scholarship. *Education Policy Analysis Archives, 22*(30). http://dx.doi.org/10.14507/epaa.v22n30.2014.

Japan Society for the Promotion of Science (JSPS). (2011). *Jinbungaku shakaikagaku no kokusaika ni tsuite* (in Japanese) [Internationalization of humanities and social sciences]. Retrieved from https://www.jsps.go.jp/j-kenkyukai/data/02houkokusho/houkokusho.pdf.

Jöns, H., & Hoyler, M. (2013). Global geographies of higher education: The perspective of world university rankings. *Geoforum, 46,* 45–59.

Kang, M. (2009). 'State-guided' university reform and colonial conditions of knowledge production. *Inter-Asia Cultural Studies, 10*(2), 191–205.

Kariya, T. (2015). Sūpā gurōbaru daigaku no yukue: gaikokujin kyōintō no kōzai (in Japanese) [Japan's plan for "Super Global Universities": The limits of Japanese-style globalization]. *Asteion, 82,* 38–52.

Lee, H., & Lee, K. (2013). Publish (in international indexed journals) or perish: Neoliberal ideology in a Korean university. *Language Policy, 12*(3), 215–230.

Li, Y., & Flowerdew, J. (2009). International engagement versus local commitment: Hong Kong academics in the humanities and social sciences writing for publication. *Journal of English for Academic Purposes, 8*(4), 279–293.

Lie, J. (1996). Sociology of contemporary Japan. *Current Sociology, 44*(1), 1–99.

Lo, W. Y. W. (2013). University rankings as a zoning technology: A Taiwanese perspective on an imaginary Greater China higher education region. *Globalisation, Societies and Education, 11*(4), 459–478.

Mathews, G. (2015). East Asian anthropology in the world. *American Anthropologist, 117*(2), 364–372.

Ministry of Education, Culture, Sports, Science and Technology, Japan (MEXT). (2012). *Infrastructure development for strengthening the capacity of international scholarly communication*. Retrieved from http://www.mext.go.jp/b_menu/shingi/gijyutu/gijyutu4/toushin/1323857.htm.

Ninomiya, A., Knight, J., & Watanabe, A. (2009). The past, present, and future of internationalization in Japan. *Journal of Studies in International Education, 13*(2), 117–124.

Oleksiyenko, A. (2014). On the shoulders of giants? Global science, resource asymmetries, and repositioning of research universities in China and Russia. *Comparative Education Review, 58*(3), 482–508.

Paasi, A. (2005). Globalisation, academic capitalism, and the uneven geographies of international journal publishing spaces. *Environment and Planning A, 37*(5), 769–789.

Posts, D. (2012). Rank scholarship. *Comparative Education Review, 56*(1), 1–17. https://doi.org/10.1086/663834.

Sawa, T. (2015, August 23). Humanities under attack. *The Japan Times*.

Scott, J. C. (2012). *Two cheers for anarchism: Six easy pieces on autonomy, dignity, and meaningful work and play*. Princeton, NJ: Princeton University Press.

Shin, J. C., & Cummings, W. K. (2010). Multilevel analysis of academic publishing across disciplines: Research preference, collaboration, and time on research. *Scientometrics, 85*(2), 581–594.

Shore, C., & Wright, S. (1999). Audit culture and anthropology: Neo-liberalism in British higher education. *Journal of the Royal Anthropological Institute, 5*(4), 557–575.

Slaughter, S., & Cantwell, B. (2012). Transatlantic moves to the market: The United States and the European Union. *Higher Education, 63*(5), 583–606.

Stack, M. (2016). *Global university rankings and the mediatization of higher education*. London: Palgrave Macmillan.

Strathern, M. (2000). *Audit cultures: Anthropological studies in accountability, ethics and the academy*. London: Routledge.

van Raan, A. F. J. (2005). Fatal attraction: Conceptual and methodological problems in the ranking of universities by bibliometric methods. *Scientometrics, 62*(1), 133–143.

Wright, S. (2012). Ranking universities within a globalised world of competition states: To what purpose, and with what implications for students? In H. L. A. J. C. Jacobsen (Ed.), *Uddannelseskvalitet i det 21. Århundrede* (pp. 79–100). Frederiksberg: Samfundslitteratur.

Yonezawa, A. (2012). Japan's university education in social sciences and humanities under globalization. *InTech*. https://doi.org/10.5772/38850.

The Shifting Sands of Academic Output: University of Cape Town Research Output in Education and Social Anthropology (1993–2013)

Crain Soudien and Derek Gripper

Introduction

In this article we investigate the publication strategies and decisions of academics in two key fields, social anthropology and educational policy, at the University of Cape Town, South Africa. We ask how research output in South Africa has been shaped over the last two decades by the increasing priority attached to international rankings and its pressure to publish in internationally recognised and accredited journals.

Structurally, the article begins with a brief description of the contemporary higher education South African landscape and the policies it has developed with respect to publishing. It then provides a brief background of the four academics from the fields of education and social anthropology who were interviewed for the study. As part of this background the article also describes the nature of their fields and the place of these

C. Soudien
The Human Sciences Research Council, Pretoria, South Africa

D. Gripper (✉)
University of Cape Town, Cape Town, South Africa

fields in the higher education landscape. The paper then looks at the data from the interviews and in a final section considers the significance of this data. The intention in this section of the study is to develop an analysis of the trends and patterns that are discernible in the decisions that the academics make over the period under review. Methodologically and consistent with the larger international project with which this research was associated, the article draws on two sources of data, namely publication outputs from three selected years: 1993, 2003, 2013 and interviews with four key subjects. The interviews focused on the academics' experiences of the changing higher education landscape and their responses to it. It looks specifically at their publication strategies in light of the changing expectations imposed on them by their universities.

The South African Higher Education Landscape

The South African higher education system takes its origins from the country's colonial history. It has gone through four major phases of development. Its first phase from 1829 to the turn of the nineteenth century, saw the establishment of at least six institutions which offered training in the major areas of the colony's public life, such as law, education, the arts, the natural sciences and in technical areas such as land surveying and engineering. The system went through a second phase, from about 1905 to the late 1950s when key institutions were either consolidated from the first phase or brought into being de novo. In this phase the essential character of the South African university was put in place. It was white and essentially male and took its curriculum and organisational structure from developments unfolding out of the post-industrial British higher education landscape.

A third phase took shape after 1959 when the apartheid government institutionalised its segregation policy and brought into being a new generation of ethnic universities. The system in the third phase, at the height of apartheid, consisted of 36 institutions essentially divided in two streams, comprehensive universities and more technically oriented institutions called technikons. It was this divided and hierarchalised legacy that the new post-apartheid democratic government confronted in 1994 and which led it to reconfiguring the system after 1996 through a process of mergers and closures. This, the fourth phase of higher education development in South Africa, was marked by a great deal of re-assessment and review (see, *inter alia,* Bunting 1994; National Commission on

Higher Education (NCHE) Report 1996; Department of Education 1996; Council on Higher Education (CHE) 2000; Republic of South Africa (RSA) 1997; Beckham 2000; Cloete et al. 1997; Cooper and Subotzky 2001; Cloete and Bunting 2000; Cloete et al. 2002; Thaver 2003; Mji 2002; Van Heerden et al. 2001; Imenda et al. 2002; Cloete et al. 2004; CHE 2004; Bundy 2006; Steyn and de Villiers 2006). Out of these reviews emerged a system made up of 23 institutions. As can be expected, this last phase has seen the country in a great deal of debate and discussion as it seeks to understand the role of the academy in the reconstruction of the country. How the system balances the challenge of addressing its unequal and discriminatory past, on the one hand, and its key strategic human capacity development challenges, on the other, has been at the heart of the debates.

The significance of these challenges for this contribution was that they required the universities to address two seemingly conflicting structural demands: the inclusion of historically marginalised peoples of colour, and the simultaneous ratchetting up of their capacity to produce high-level scientific outputs, PhD graduates, new scientific patents and not least of all publications in accredited journals. In 1993, just before the new government came into power, participation rates in the historically white universities and technikons were 69.7% and for African and coloured communities they were 12.1% and 13%, respectively (Cloete and Bunting 2000, p. 15). Of the 473,000 students registered in these institutions, 191,000 were African, 223,000 white and the rest coloured and Indian (ibid., p. 18). In addition, Badsha and Harper (2002, p. 17) suggests that the majority of the African students would have been first-generation students, especially those at Historically Black Institutions. The majority of the academic staff would also have been largely white and male (see Cooper and Subotzky 2001; Thaver 2003; Council on Higher Education (CHE) 2004; Kahn 2005). In the current era, while the number of black students in the system has increased dramatically, the number of white academic members of staff is still greater than all the rest put together. In 2013 there were 52,571 academic members of staff in the system of whom the majority, 26,847, were deemed to be white (Council on Higher Education 2015, p. 47) and only 17,753 African. Complicating this basic picture outlined above, is the uneven racial character of excellence in the system. Of the country's 23 major institutions, four are among the world's leading research and teaching universities and all of them are historically white.

Significantly, it is with this basic morphology and all its attendant tensions that the system has come to confront the question of its place in the global arena. This morphology demands that it addresses the imperative questions posed by its local context and history, while, at the same time, it indicates its commitment to high-quality outputs, particularly as these are defined by publications in accredited journals.

PUBLICATION POLICIES IN SOUTH AFRICAN HIGHER EDUCATION

An important exercise that needs to be undertaken in the South African context is to understand how historically disadvantaged black institutions have handled the challenge of publishing and especially publishing in accredited journals. This study is unable to reflect on this question. It focuses, instead, on the advantaged end of the higher education system, i.e. those institutions that would have been classified as white in the apartheid era. These institutions have grappled with the demands of both inclusion and excellence.

Molefe's (2010, p. 1) study on performance measurement in South African Universities reminds us that universities in the 1990s were marked by a "a *laissez-faire* approach to performance management and thus operated on a 'high trust' basis within an ethos that emphasised independence of thought and scholarship, academic freedom and collegiality". There was not much monitoring or assessment of academic staff. This was to change ten years into the new democracy and higher education institutions were expected to "face the economic and social realities and become accountable and more market and consumer responsive to provide 'value for money' to [their] clients" (Molefe 2010, p. 1). Not only were appointment criteria significantly increased in most universities, but they also came to be rigorously applied. Appointments at the median rank of "senior lecturer" in the major universities required the completion of the PhD. Promotion through the ranks required publication in accredited journals. Annual performance assessments for individual academics were based on publication targets in internationally accredited journals set nationally and, on occasion, by institutions themselves. These changes were in part at least due to national policies that they were expected to comply with. The policy demands put pressure on the scope, nature and intensity of academic work while also subjecting academic work to performance management and quality assessment (Mapesela and Strydom 2004).

From about the middle of the 1990s, South African universities have paid a great deal of attention to increasing their output of PhDs, to building their research capacity to what they believe to be international standards, to compete for and win research grants and, to support their members of staff to write for the world's leading research journals.

The situation in which they found themselves after 1994 was that they were producing only a small number of PhDs each year (see Mlambo 2010; Samuel 2012). This number would improve in 2013 to 16,039 registrations and 2051 qualifications but some distance off the target of 10,000 projected for 2030. The value of research grants won increased substantially after 1994 but was still modest compared to improvements recorded in countries of a similar socio-economic status such as Mexico and Turkey. Within the system most researchers depend on government. In 2011, the South African government allocated R2.2 billion (approximately US$200 million) for research (Turrell 2012). The volume of the country's research output also increased. In terms of the 2011 Thompson Reuters National Science Indicators database institutions increased their output from 3617 papers in 2000 to 7468 in 2010 giving the country a world ranking of 33 (see Nombembe 2012, p. 2). In 2013 journal publication outputs increased from 11,035.72 units in 2012 to 11,997.38 (DoHET 2015, p. 11). According to scientometric research by Anastassios Pouris (refer Tongai 2013: para 13), South Africa more than doubled its paper publication numbers, from 3617 to 7468 between 2000 and 2010. The University of Cape Town, the institution to which the four academics interviewed for this study belong, increased its output year by year. The reasons behind this increase are complex and perhaps have more to do with performance management criteria and the changing requirements for promotion, than only the indirect monetary incentives. According to Tongai (2013: para. 29), "[n]ot everyone agrees that incentives for academics drive institutional success". According to Professor Macleod (refer Tongai 2013: para. 31) the incentives system is counterproductive in terms of scholarship as researchers are tempted to, "cut up the research in as thin slices as possible in order to get the maximum number of articles published". These incentives might also, according to Professor Macleod, discourage collaboration and team research. She concludes (refer Tongai 2013: para. 32): "The incentive system is a blunt instrument that serves the purposes of increasing university income rather than supporting scholarship and knowledge production in South Africa". For many this is the kind of managerialism that has emerged elsewhere in the world.

The incentive and reward system for publishing in the country is based on a subsidy model managed by its Department of Higher Education and Training (DoHET). DoHET allocates research subsidies based on unit calculations for approved publications. At the current time, this approved list consists of approximately 300 journals. Institutions receive the equivalent of US$12,000 for every article published in an accredited journal and R1m (approximately US$80,000) for an accepted monograph dependent on its number of pages. The journals have to be ISI (Institute for Scientific Information) and IBSS (International Bibliography of the Social Sciences) accredited journals.

The government also established a grant-making structure, the National Research Foundation (NRF), for all the sciences except the medical field which has its own funding facility in the South African Medical Research Council. The purpose of the NRF is to support the growth of research in a number of strategically chosen thematic fields. An additional incentive mechanism in the national system of innovation is the rating of researchers. Two dimensions of this rating structure have relevance. The first is a general framework applied to all researchers on the basis of which eligibility, depending on rating, for particular levels of financial support is available. The second is the establishment of dedicated research chairs with committed funding to stimulate the production of high-level research. Important about these policy initiatives (refer NRF 2015), especially the rating system, is their purpose. The intention behind them is to encourage researchers to publish in journals with high-impact factors.

These national policies hoped to, among other things, to increase research output in higher education institutions (HEIs). The arrival of managerialism and the subsequent introduction of performance management criteria remains a contentious issue and many researchers consider this business-oriented practice that is incompatible with the objectives of HEIs (Seyama and Smith 2015). South Africa is not unique in this regard.

How has the academic community in the country reacted to these developments? Responses have been mixed. They have been entangled in the contribution of high-performing academics to their institutions' international rankings. Most of the country's leading vice-chancellors have worked hard to steer a middle path for their institutions between

acknowledging the need to operate against the new global pressures and the imperative of responding to the demands to transform their universities to reflect the South African reality (Geach 2013, p. 8). Adam Habib, the Vice-Chancellor of the University of the Witwatersrand announced recently that he would be appointing 30 A-rated researchers: ".... 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). Max Price, the Vice-Chancellor at the University of Cape Town explained the "dangers of the rankings": "...they are designed with an eye on universities in developed countries,... 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). Another Vice-Chancellor, Saleem Badat (2010b, 2010c, 2010a, para 9) at Rhodes University, said that the rankings have "little intrinsic value and serve no meaningful educational or social purpose". Jonathan Jansen, vice-chancellor of the University of the Free State argued that responding to the global pressure to publish in high-impact factor journals would discourage academics from addressing local issues. Jansen (2013, p. 15) made the point:

> What 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?

Badat (2010, p. 4), went on to argue, that "to define the university enterprise by these specific outputs, and to (support)... it only through metrics that measure them, is to misunderstand the nature of the enterprise and its potential to deliver social benefit".

Against this background, it has become clear, as the data and the testimony of the four subjects for this study attests to that the sands have shifted in recent years. As a result of the pressure, it can be argued that

---

[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.

conditions are steering researchers to focus on their own individual trajectories. Sioux McKenna says (2015: paras. 1–3), "[i]t's no surprise that student movements are shutting down university campuses all over South Africa (the country has gone through intense student protests over fees and the perceived lack of transformation in 2015) … It is a reaction to the failure of the human capital model of education".

> Following international trends, performance management has been implemented with a vengeance at many universities. If it can't be listed on an Excel spread-sheet and contribute to a Key Performance Area, it didn't happen. The notion that everything can and should be counted undermines the academic project in multiple ways.
>
> McKenna 2015: para 10.

The Context of the Research

The research that informs this study is drawn from four senior academics from the University of Cape Town. Two of these academics, Alex and Leila, work in the field of social anthropology. John and Peter are scholars in the field of education, sociology of knowledge and education policy. Pseudonyms are used for all four of the subjects. The subjects were selected because of the time they had spent in the institution, alongside the roles they play and continue to play in the Humanities Faculty of the University of Cape Town (Table 1).

Important about these individuals is that they all had significant experience of operating in the higher education sector. Two of them were preparing for retirement as the interviews were being conducted and were serving or had just served significant periods of time in senior research administration positions where they were responsible for administering

Table 1   Participants and fields of study

John: Transcript **J**	Education Policy and theories of knowledge	EDUCATION
Leila: Transcript **L**	Environmental Humanities	SOCIAL ANTHROPOLOGY
Peter: Transcript **P**	Economics and Planning	EDUCATION
Alex: Transcript **A**	Housing and Family relationships	SOCIAL ANTHROPOLOGY

the innovations and the policies described above. They would have had a good understanding of the issues that were raised in the course of this study project. The other two academics were also senior members of staff and had experience of having to operate in and navigate their way through the new funding and publishing environment in the country.

Interesting, also, about the academics, is that they worked in fields, anthropology and educational policy, where the tensions identified at the beginning of this work were and remain intense. In both fields the most immediate questions preoccupying the work of the academics related to both identifying and engaging with the problems of justice, equality and social development. The history of apartheid is a critical factor for and in shaping the intellectual trajectories of scholars in the broad humanities in South Africa. As the interviews will show, the academics had to make conscious decisions about both how they would respond to these challenges and where they would place the products of their research. These questions also bore directly on how these fields would evolve. This particular issue would be a central consideration in the ways in which scholars would come to pose the question of the relationship of the local to the global. What would the cost of the switch from the local to the global in terms of the relevance of their scholarship? What would they have to sacrifice with respect to the local in terms of shifting their gaze towards the global?

Findings

In this summary, the aim will be to extract the dominant themes emerging from these selected academic histories in two departments of the university. The data points for the study were: 1993, 2003 and 2013.

In reflecting on the themes that emerged from the interviews, it is important to distinguish two general trends in the approaches which the respondents would take. The dominant response, especially evident in the testimony of three of the respondents, was an anxiety about the shift from the local to the international. This anxiety was characterised by a sense of loss of the value of working in the local space and the significance that working in the local space provided. There was also, however, as a second theme, some sense of the opportunity provided by beginning to participate in a wider global discussion. This sense, evident in different forms and intensities among the respondents, took the discussion to a nuanced place about the relationship between the local and the global.

For all the respondents there was a clear understanding of how the ground underneath them was shifting in the late 1980s and early 1990s. As Alex (Transcript A) from Social Anthropology would say, the eighties were relatively easy to manage: "in the eighties we, you taught, and if you published, you were kind of patted on the back. You got promoted by getting your PhD, by getting a few more publications out". This culture had shifted dramatically in the nineties. It was most clearly spelt out by Peter (Transcript P), one of the educational policy participants in the exercise. He would say:

I think the early—when I came here it was middle to late eighties, I guess until the early nineties the thrust, certainly in the school of education, was more interventionist/activist if you like so that publication was not under special pressure especially in the faculty as it was then constituted. That has shifted since the move through the nineties and become part of the larger Humanities faculty where the criteria are laid out and the expectations are more formal.

His colleague, John (Transcript J), would say that the nineties "was an awakening of the importance of getting higher degrees and publishing".

Similar changes were taking place in social anthropology. Leila (Transcript L), one of the anthropologists, explained that she had had a sabbatical at Harvard in the nineties and when she came back to South Africa, she was penalised for publishing in local journals:

And so I made the choice when I came back to really focus on options in local journals. And so I got stuff into, er, a couple, ya, a couple of local journals - three, in fact, and um … Social Dynamics, Critical arts and Anthropology Southern Africa which should you know, really, you know appropriate journals and I felt the irony is that Critical Arts is itself an international journal in the,… But when it came for the promotions application that year it was considered a local journal because it's published out of South Africa.

As people who were classified white and who came out of a largely politically progressive position, the shift to a more international focus in the publishing culture of the country was to impact on them all in very direct ways. They all dealt with it, however, in their own way. John would argue that he had actually anticipated the shift himself:

It wasn't the thing in our discipline to, to publish a lot but I became involved in our local journals… perspectives in education. And I published one or two pieces in there. Er, but, and this is where I think I'm a bit unusual, even in the eighties, um, I, er … was interested in international scholarship. So I probably published my first national publication, em, in nineteen eighty-five. Published by Margaret Archer, in a special edition of the Italian journal. Um, and that came about because I was looking to understand what was going on in education and the way I thought to do that was to go and meet people. So I got to a conference that Margaret Archer happened to be at and one thing led to the other. And then I had a sabbatical, um, later in the eighties and I went to the US where I met a whole lot of people. And they were truly generous and they, they invited me to their events and then invited me to contribute. So, um, so for me it was part of the natural order that that's what you did …

John's colleague, Peter, claimed that "I think it's always been the same, in a sense that you publish where you think that you will get published". The social anthropologists, Leila and Alex, decided that they would engage with it on their own terms. Leila said:

I was able to raise funds and bring people in that I wanted to talk to us, but my specific strategy was to get them here …As I wanted them to not just talk to me, me just talk to them, but I wanted them to talk to students, be part of our life here. That was a fantastic way of, of publishing, which meant that I was able to build dialogue with the best of the best internationally but the dialogue was here… and so the outcome of that was that we published our own book and I was very happy that City Press picked it up and they published that as a book containing social anthropology. Which is you know, um, been very widely downloaded and I'm … that it was published as an open source… the strategy then was, was to, to fundraise and, and bring people here as a conscious strategy to, to actually, you know, turn it around. I didn't want to be the one travelling to New Orleans and in fact, I'll tell you the story how I came to that decision, was I had a nine-month-old child and I took myself off to America to a meeting, which in that year was in New, New Orleans must have been two thousand and three, two thousand and four. …then had an eighteen hour flight to Atlanta, change planes, and, you know, it's an absolute nightmare. To speak for fifteen minutes …

The social anthropologists were particularly critical of the effects of the shift away from the local. Alex described the effects of the shift towards

internationally recognised journals and the general climate in research. He observed that it counted against you to do too much administrative work. He also felt that, "[t]he North American style has kind of undermined the local thing and there has been a pressure". In fact, "[t]he bars are now much higher and the consequences are that people are much more individualistic in their efforts to do research—each individual is kind of going out to make their own mark". Alex commented:

> It struck me most clearly in nineteen ninety-three when I went to an American Anthropological Association meeting. They have these big, thousands of people things, every year. First one I'd ever been to, and I was in a session which was a whole lot of Japanese anthropologists presenting really interesting papers, I've forgotten what the theme was. They were really well done but at the end of it I said where is the Japanese twist. These are really interesting, these are really good but I could have heard these at, they could have all come out of a good American university. There were a couple of those, there was nothing which made it feel as if it was Japanese... About Japan or about Japanese scholars. It was just; it was generic anthropology, it was American. It felt generic. Because they'd gone that route. But it was an American imposition, hegemonic way of doing things.

John in educational policy took a more positive view. He, more than the others, argued that it was necessary to work with and to take advantage of the international turn. For him it was the exposure and interfacing with the global that was important to be foregrounding and less the questions of managerialism. Making the argument, he felt that his field of Education research was limited in its outlook. He explained that while his department had a high proportion of international outputs and while this output had increased over the years as emphasis has shifted away from the practice of training teachers towards research, the research and publishing trend in the field was still angled towards what he called a "localising populism". This localising populism was influenced by the anti-apartheid struggle. On the positive side in this dynamic, he argued, the university was still, at this time, in the early nineties, thinking of competence. While the focus of much of the work was on the local, the opening up of South Africa by the mid-nineties helped researchers to see what others were doing elsewhere in the world, broadening the gaze. However, by the 2000s the trend was towards outputs rather than substance. This trend was towards diversification away from the fixed gaze that had developed

under the boycott before the nineties. Competitiveness as an institution has not been a motivating factor, but rather the drive for individuals to be significant to others even though they are still driven by their own positions. The emerging performance management criteria have led to a lot of anxiety and, as mentioned, a shift from competence to performance. These events have certainly led to academics publishing in high-impact journals.

Conflict Between the Individual and the Collective Good

Leila was dissatisfied with the pressures put on where you publish. She felt that publishing in local journals had led to discrimination when it came to promotion. One's research score was adversely affected by publishing in local journals. She was considered not sufficiently active as a researcher to warrant promotion to full professor on the grounds that she had published—her promotion application report explicitly said—"In South African journals". This, she said, was even if you are busy on a South African discussion. Furthermore, the question of open-source journals versus the cost of international access also suggests that the process had not been properly thought through. The pressure to publish internationally came with a price. That price was possibly a weakening of the local discussion and the undergraduate and graduate course content. Leila mentioned that there was a huge risk of the homogenisation of higher education, which went counter to the building of a "southern theory" in the field of social anthropology.

> Trying to be World Class by holding on to the edges of discussions has its price—you can't just quickly frame something in exactly the way that there's a purchase for it … It's very difficult to get money for people to come in. There's money for us to go out and there's money for us to participate … as equals, but we're never really equals. In this light it is really important for us to begin to have the confidence to frame our own intellectual projects.

What emerges from our discussion is that performance-driven research incentives can act against the institution and the individual in many ways. As John says: "By the 2000s the trend was towards outputs rather than substance". This suggests that while output might have increased

in recent years the overall quality of these research articles might have declined. Of course individuals might contradict this suggestion, but these individuals have been placed under unnecessary stress, as Alex says: "[T]here has been a pressure … [t]he bars are now much higher and the consequences are that people are much more individualistic in their efforts to do research—each individual is kind of going out to make their own mark". This suggests that collective effort has been back-grounded in favour of a more individualistic contribution. When it comes to the actual effective running of the institution it has (refer Alex) not been in your favour to take on too much administrative work. Here we have a problem in that this points to a weakening in academic development and this is not surprising as John says: "[E]mphasis has shifted away from the practice of training teachers towards research". This highlights the possibility that research under pressure might result in the lack of quality substance and the shift from training teachers has most likely led to a weakening of the education system itself. This appears, going by recent commentary in local media, to be a thorn in the government's plans to develop and grow the economy. It is of course also disturbing that this shift from competence to performance happened at a time when South Africa had began to normalise the distribution of educational resources. Leila echoes a position that there has been a "weakening of the local discussion and the undergraduate and graduate course content", which must also have consequences for the quality of the research output.

As for a shift, referred to by Leila, that has (refer also to Alex's input) "kind of undermined the local thing" we are possibly faced with the situation that we are not acutely aware of the consequences of the very process of change that we are part of. Again we have focused on the individual, possibly at the expense of the collective good". In South Africa this parallels the choices made at the national level economically and politically where neo-liberalism has forced the country to make choices which are not always in the interests of the South African people. The homogenisation of higher education, as mentioned by Leila has certainly undermined our capacity of "building a 'southern theory' in the field of social anthropology". In terms of our own liberation from the apartheid past this suggests in some sense a loss of vision as to how to develop a new more inclusive politics.

Conclusion: Consequences
for the Individual Researcher

How does one make sense of the impact of the shift in the sands beneath the South African academic's feet? While it is true that academics publish where they think they can get published, the weight of the international discourse on rankings and managerialism has pushed South African academics towards an increased sensitivity to bibliometrics, citation indices and the compulsion to publish in what are perceived to be international journals. But has this, speaking categorically, been a bad thing?

Leila is dissatisfied with the pressure put on a researcher as to where they should publish. She says that, "[l]ocal publishing has led to discrimination when it comes to promotion re: research score". Those who have followed the university guidelines might have advanced themselves but undermined the development of a local discussion. There has, according to Peter "been a shift from interventionist/activist to more formal expectations". In contrast, it appears to Peter that, "[i]n the past twenty years professional work for the government has increased but is unacknowledged compared with the academic work". This is an important and under-explored feature of South African research. While it is not clear, in terms of the volume of this kind of work, whether Peter is correct or not, the more salient point is that bespoke research for the state continues even as the demand to publish internationally has shifted the sands in individuals' research and publication choices.

In making sense of the new environment, while this study might not be able to definitively describe the pros and cons of these trends, it does suggest that accountability moves within the university which steer academics to the global arena might have contributed towards distinct forms of what one might call loss. This loss is the dilution of the sense of urgency that was evident when the South African higher education system entered its fourth phase. That fourth phase was characterised by substantial evidence of collective effort behind and in concert around the country's most pressing questions. What has emerged from the discussion with the four South African academics is that the new incentive and reward system in the country, in favouring the academic who is geared towards the global arena, has had the effect of producing new atomised

scholarship. In foregrounding individual advancement, through empha-sising individual outputs and individual citations, much of the South African work is sacrificing the urgency and relevance of the local.

In bringing this assessment to a close it may easily be concluded that the business model imposed on the university by the DoHET has not been entirely beneficial for the kind of research output that the country has produced, especially in the humanities. Such a conclusion, however, would be too simplistic. Many South African researchers, according to the interviewees, have also learnt to participate in the global research arena. It is how we shift between the local and the global with respect to performance management criteria that remains contested. When we allow a situation to develop where South Africans are unable to promote the type of research that can assist us here in South Africa that the new research reward system could be said to be unquestionably negative. Also, if the advancement of the individual takes priority over the collective we are likely not to develop the knowledge and to lose the skills that encourage collaboration and the need to solve problems. South Africa faces an avalanche of social and educational challenges and these prob-lems need urgently to be discussed and researched at a local level and in the most accessible language available. This has undoubtedly led to tension and competition between colleagues in their attempt to raise the bar—trends that often run counter to the need for social responsibility and professional work to aid government, as well as good administration in the universities. While South Africa's recent political history, especially the post-apartheid government's project to transform education and the social landscape, has impacted on the kind of decisions academics make about what they publish and where, the incorporation of the country into the global environment has produced new pressures for academics. There has been a definite shift from competence to performance.

But, and it is important to be clear-eyed about this, the question of *how* to navigate the new circumstances is what is most crucially required to be faced now. The argument must be confronted that the new globalised conditions are unlikely to dissipate or even to become more sensitive to the knowledge demands of countries in the south in the near future. It is highly unlikely that the urgency of the issues in the countries which constitute the south, on their own terms, will become easily apparent to global journals which will in turn willingly devote both their atten-tion and their interest to what southern countries might contribute to global knowledge. In the short and immediate term, it would seem then

that academics in the south need to be operating in much more strategic ways in engaging the new global conditions. It is here that scholars such as Leila clearly have much to contribute. What they are talking about is how to begin changing the conditions through which the local is brought into much clearer perspective in the global. Leila's approach is to bring the global to the local and through collaborations to begin developing the strategies for showing how and why what is perceived to be local knowledge *has* to be given more serious attention in the global discussion. That the international discourse is so ideologically biased towards its own structures of power and hegemony is a structural reality that must be understood and engaged with strategically. It would seem, and this is the significance of the second trend emerging in South Africa, that dealing with it through the tactic of non-engagement, that is by focusing strictly on the local, has too many of its own localised dangers. The most critical of these, and this is what both Leila and John quickly recognised, is that the quality of the local discussion by itself was not good enough. It needed to be in a robust engagement with the international discussion. South Africans needed the interlocutory dynamic of their own specific insights with the critical lessons of the global discussion to be able to both give and take to the broader discussion. It is the management of this dynamic, however, that requires intense reflection—reflection on who to make links with, where to publish and, most critically, *how* to frame and conduct the discussions when they do happen. It would seem that this is a discussion that South Africans consciously now need to be applying their minds to. They cannot go it alone. This is a self-defeating exercise. They cannot, also, lose their identity and the specificity of their challenges and affordances in the generalised anonymity of a global discussion. It is this that now needs attention.

Bibliography

Badat, S. (2010, April). *Have global university rankings any value for the global south?* Accessed October 3, 2013. http://www.isa-sociology.org/universities-in-crisis/?p=421.

Badsha, N., & Harper, A. (2002). South African higher education: Diversity overview. In *Diversity, democracy and higher education: A view from three nations,* ed. E. Beckham, N., Washington: Association of American Colleges and Universities, pp. 11–32.

Beckham, E. (Ed.). (2000). *Diversity, democracy and higher education: A view from three nations*. Washington: Association of American Colleges and Universities.

Bundy, C. (2006). Global patterns, local options? Changes in higher education internationally and some implications for South Africa. *Kagisano, 4,* 1–20.

Bunting, I. (1994). *A legacy of inequality: Higher education in South Africa*. Cape Town: University of Cape Town Press.

CHE. (2004). *South African higher education in the first decade of democracy*. Pretoria: CHE.

Cloete, N., & Bunting, I. (2000). *Higher education transformation: Assessing performance in South Africa*. Pretoria: Centre for Higher Education Transformation.

Cloete, N., Bunting, L., & Bunting, I. (Eds.). (2002). *Transformation indicators applied to two South African higher education institutions*. Pretoria: Centre for Higher Education Transformation.

Cloete, N., Muller, J., Makgoba, M., & Ekong, D. (Eds.). (1997). *Knowledge, identity and curriculum transformation in South Africa*. Cape Town: Maskew Miller Longman.

Cloete, N., Pillay, P., Badat, S., & Mehojo, T. (2004). *National policy and regional response in South African higher education*. Oxford: James Currey.

Cooper, D., & Subotzky, G. (2001). *The skewed revolution: Trends in South African higher education: 1988–1998*. Bellville: The Education Policy Unit of the University of the Western Cape.

Council on Higher Education (CHE). (2000). *Towards a new higher education landscape: Meeting the equity, quality and social development imperatives of South Africa in the 21st century*. Pretoria: CHE.

Council on Higher Education (CHE). (2015). *VitalStats: Public higher education 2013*. Pretoria: CHE.

Department of Education. (1996). *Green paper on higher education transformation*. Pretoria. Department of Education. Escobar, Arturo (forthcoming) *Encountering Development: The Making and Unmaking of the Third World*. Princeton: Princeton University Press.

DoHET. (2015, January). *Report on the evaluation of the 2013 universities research outputs*. Pretoria: Department of Higher Education and Training.

Geach, C. (2013). UCT still in Global Top 200 Varsities. *Cape Argus*, October 3, 2013, p. 8.

Govender, P. (2013). Wits ready to spend big to get to first lace. In *Sunday Times*, October 6, 2013, p. 13.

Imenda, S., Kongolo, M., & Grewal, A. (2002). Factors contributing to declining enrolments at the University of Transkei. *South African Journal of Higher Education, 16*(2), 122–129.

Jansen, J. (2013). What's in a ranking? *The Times*, October 10, 2013, p. 15.

Kahn, M. (2005). *Access to higher education: Leadership challenges in Florida and South Africa: A qualitative enquiry*. Lanham: University Press of America.

Mapesela, M. L. E., & Strydom, F. (2004). *Performance management of academic staff in south african higher education system: A developmental project*. Presented at the OECD Conference on trends in the Management of Human Resources in Higher Education. University of Free State, Bloemfontein.

McKenna, S. (2015). Five trends South Africa's universities must reject if they really want change. *The Conversation*. Accessed at https://theconversation.com/five-trends-south-africas-universities-must-reject-if-they-really-want-change-49452.

Mji, A. (2002). What influences students to university education? Insight from the horse's mouth. *South African Journal of Education, 16*(2), 166–176.

Mlambo, M. (2010). Concerted Intervention needed to escalate PhD numbers: A comment. *South African Journal of Science, 106*(11/12), 1.

Molefe, G. N. (2010) Performance measurement dimensions for lecturers at selected universities: An international perspective. *SA Journal of HumanResourceManagement/ SA Tydskrif vir Menslikehulpbronbestuur*, *8*(1), Art. #243, 13 pages. https://doi.org/10.4102/sajhrm.v8i1.243.

National Commission on Higher Education (NCHE). (1996). *A framework for transformation*. Pretoria: CHE.

National Research Foundation (NRF). (2015). Accessed website on 31 Dec 2015 http://www.nrf.co.za/files/file/NRF%20Rating%20categories-approved%20EEC%2013%February%2013.pdf.

Nombembe, P. (2012, August). South African Research Up. *The Times*. Accessed November 11, 2013. http://www.timeslive.co.za/thetimes/2012/08/20sa-research-output-up.

Price, M. (2010). Research central to knowledge production and SA's development. Sponsored feature in the *Mail & Guardian*, 2010, November 5–12 2010, p. 1.

Republic of South Africa (RSA). (1997). The South African Higher Education Act. Pretoria, Republic of South Africa.

Samuel, M. (2012). Highest degree needs doctoring. *Getting Ahead, Supplement to the Mail and Guardian*, November 2–8, 2012.

Seyama, S. M., & Smith, C. (2015) "Not worth the sweat": Performance management rewards at a South African university. *Indo-Pacific Journal of Phenomenology, 15*(2), 13 pp. https://doi.org/10.1080/20797222.2015.1101835.

Steyn, G., & de Villiers, P. (2006). *Higher education monitor: The impact of changing funding sources on higher education institutions in South Africa*. Pretoria: CH.

Thaver, B. (2003). Deracialising universities: Reflexive conversations. *South African Journal of Higher Education, 17*(3), 144–158.

Tongai, I. (2013). *Incentives for researchers drive up publication output*. University World News, Issue 280. Accessed October 14, 2015, http://www.universityworldnews.com/article.php?story=20130712145949477.

Turrell, R. (2012). South African Knowledge – University Funding: Government Grants (Research-Publication Subsidy). Accessed October 7, 2013. http://saknowledge.blogspot.com/2012/03/saknowledge- research-universities-dual_04.html.

Van Heerden, E. L., Myburgh, C. P. H., & Poggenpoel, M. (2001). Students' experiences of challenges and threats in changing epistemic contexts. *South African Journal of Higher Education, 15*(2), 159–162.

Audit Culture and Academic Production: Re-Shaping Australian Social Science Research Output (1993–2013)

Anthony Welch

Audit Culture and the Re-Shaping of Academic Production? Australian Research Output in the Social Sciences 1993–2013

There is little doubt that ranking regimes have transformed the world of contemporary higher education, and re-shaped higher education institutions. The proliferation of such regimes is one index of an increasing obsession with their use as an instrument of policy, and force for institutional reform. While the impressively parochial, and quixotically-named *US News and World Report* hasranked US institutions for 30 years or so, later and more global ranking regimes such as the influential Shanghai Jiaotong's *Academic Ranking of World Universities*, The Times Higher Education *World University Rankings*, and QS were only instituted around 2003 and 2004.[1] Further proliferation of indices followed—the

---

[1] In recognition of the need for a more global perspective, and response to an increasing trend for US students to spend time studying abroad, US News began publishing its *Best Global Universities* ranking in 2014.

A. Welch (✉)
University of Sydney, Sydney, NSW, Australia
e-mail: anthony.welch@sydney.edu.au

295

Saudi-based *Center for World University Rankings* has ranked the world's leading 1000 universities annually since 2012, the Spanish-based *Ranking Web of Universities* first published its Top 500 Webometrics Ranking of World Universities in 2009, while the Leiden Ranking that uses Thomson Reuters Web of Science database to rank the performance of 750 major universities worldwide, was first published in 2007. U-Multirank, a European Commission supported exercise designed to boost transparency and performance data regarding universities and research institutes was launched in 2011. By 2013, its multi-level methodology embraced 500 universities from more than sixty countries, including 25% from non-EU nations (Hazelkorn 2013).[2] The Australian based *High Impact Universities* ranking was based on a trial of over 1000 higher education institutions (HEIS) worldwide and 5000 constituent faculties. Results for the top 500 universities and faculties were reported in 2010.

While this does not exhaust the bewildering array of such rankings regimes, it underlines the increasing investment in such attempts, within a climate of increasing managerialism, and accountability in higher education. As a prominent literary critic commented recently, 'the air is thick with talk of auditing and accountancy' (Eagleton 2015).

For increasingly hard-pressed academic staff, such accountability often feels more like an exercise in accountancy (Welch 2005), as publication numbers (if not always quality) are relentlessly tallied, amid rising overall demands for enhanced institutional ranking and reputation. A perceptible audit culture has arisen, which it has been argued, has distorted the traditional trinity of academic functions of teaching, research and service. The intricate technology that now regulates all aspects of academic activity, particularly notable in Anglosphere systems such as the UK, New Zealand and Australia, has pushed academic staff towards 'gaming the system and distorting their output' (THE 2011; Harman 2009), a process that has increasingly accented specific forms of high-status research output, while paying lip service to the other two functions.

The ultimate impact of introducing such intricate regulatory architecture has been pointed out in studies of audit culture:

[2] Interestingly, the *League of European Research Universities* (LERU), representing 21 research-intensive institutions across Europe, including a handful of leading UK HEIs, withdrew its support for the project in January 2013 (amid criticisms that they had most to lose from the new ranking exercise).

> The cumulative effect of these audit technologies has been to create a self-referential and self-reinforcing system, from which it is very difficult to remain unaffected. As audit spreads to new domains, it acquires momentum for colonizing yet more areas of society. The audit phenomenon thus has a dynamic of its own and, like Frankenstein's monster, once created, is very hard to control. (Shore and Wright 1999, p. 577)

The alternative—'a different way of thinking about accountability, one that restores trust and autonomy.., that uses qualitative, multiple and local measures, and is based on public dialogue' (Shore and Wright 1999, p. 571)—remains largely a tantalizing chimera (Shore 2008; Shore and Wright 2015).

Audit culture, in effect a latter-day form of Taylorism, arguably differs from the original in two important ways. Firstly it has been financialized (Shore and Wright 1999, 2015), and secondly, at least in the university sector, it functions according to a neo-liberal technology of governance that is particularly insidious since it depends upon forms of self-surveillance and self-governance, with which individual academics are increasingly complicit, or with which they are pushed to comply. In effect, the ideal is an audit system where each academic is responsible for regulating their own performance, in ever more detailed and intricate ways, an outcome directly at odds with claims accompanying such regimes that the process is participatory and empowering. The supposedly neutral and objective language in which such regimes are presented, can not disguise the fact that it is ultimately about enhancing values of individual and institutional efficiency, productivity and effectiveness, which as Habermas and others have emphasized, are fundamentally economic rationales (Habermas 1977a, b). Not for the first time of course: the underlying rationale of importing private sector business principles of efficiency and effectiveness into universities evoked memories of Taylorist reforms to US higher education (and schools) in the years before World War One (Callahan 1966; Welch 1998, 2013). Then, as now, the rationale was based on a logic of cost reduction and 'efficiency', which was to be accomplished by importing artefacts of financial accounting ('assets', 'cost centres', 'added value') into the internal governance of higher education institutions (Shore and Wright 2015; Welch 1998, 2013).

We are reminded that the core element is financial by Shore and Wright's clarification that most if not all the versions of the term audit

(from the Latin *audire* to hear), such as financial statement, official verification and reckoning or settlement, articulate the public passing of judgement, mostly on financial matters. But the process of scrutiny, which has now spread well beyond strictly financial circles to embrace all forms and arenas of 'quality' 'best practice' and 'performance', including in higher education, also involves a 'hierarchical and paternalistic' power relationship: '"An audit is essentially a relationship of power between scrutinizer and observed…, those scrutinized are seen but do not see; objects of information, but not of communication" (Shore and Wright 1999, citing Foucault 1977, p. 200). What we have here is a new and insidious technology of governance, in which each individual is made responsible for being her own regulator. That this is responsibility without power is clear; but of course unstated.

The rise to prominence of ranking regimes in higher education has helped accelerate the introduction of such technical (and technicist) audit cultures into systems and universities worldwide, notably via research audits such as the Research Assessment Exercise (RAE) in the UK, and successive rounds of the Excellence in Research Australia (ERA) in that country. Such regimes are, unsurprisingly, always based on quantitative measures, rather than more qualitative approaches.

Research, Rankings and Quality

The effects of introducing rankings schemes have echoed throughout higher education systems worldwide. Along with Mission Statements, Strategic Plans and other artefacts of corporate management, totalizing audit systems were introduced into both the UK and other English language system such as Australia in the 1990s (Power 1997). Implemented by newly created agencies such as the Higher Education Quality Council (UK) or the equivalent in other countries,[3] audits ostensibly guaranteed quality via detailed performance monitoring. In the name of 'efficiency', 'performance measurement' and 'output', universities were required to submit detailed, evidence-based data on their own performance, which was then externally scrutinized. Teaching and university systems were early candidates for audit, but by the early 1990s, academic

---

[3] The UK version came with its own Inspectorate, to verify performance data submitted by HEIs. Later, panels of senior academics from each discipline were anointed as 'Reviewers'.

departments in English universities were also being reviewed and rated on their research performance, via the Research Assessment Exercise (RAE). Once again the financial dimension of the audit process was prominent, given punitive provisions that reduced or withdrew funding from those departments whose performance was assessed as less meritorious (Shore and Wright 1999; AUT 1993). As the declaration from the Higher Education Funding Council confirmed at the time, 'An "unsatisfactory" department will be given 12 months to remedy its position – after which core funding and student places for that subject will be withdrawn' (HEFCE 1995). Public accountability was defined in terms of accountability to agencies such as HEFCE or AUQA, but without any guarantees of reciprocal accountability to the institutions that were being audited. The meaning of quality was reduced to quantifiable performance measures, and what could not be (easily) measured, was not counted. Notwithstanding contemporary critiques that such measures would compromise rather than strengthen quality, it was compliance and conformity that was rewarded: performance measures that fell outside the specified guidelines were either discounted, or penalized (Johnson 1994; Halsey 1995).

The current era is now characterized by an increasingly ubiquitous process of governing by numbers; numbers that masquerade as proxies for quality and excellence, including in higher education. Ranking has now become an industry, and those who work within (higher education) institutions have largely been transformed into 'responsible and calculating' self-managing subjects who no longer much question such proliferating technologies of control as audit schemes, but rather become complicit in their maintenance (Miller 2001, p. 380; Shore and Wright 2015; Hazelkorn 2011, 2013).

Ranking Regimes in the Asia Pacific

While much has been written about the impact of such intricate regulatory regimes in the Anglosphere, the impact in both continental Europe, and the Muslim world was also profound, leading to intense questioning of why their institutions were not better represented in world university rankings, and what could be done about it (Guessoum and Osama 2015; Hanafi 2011; Hassan 2008; Welch 2012a, c; Hazelkorn 2011, 2013; THE 2016). The striking absence of universities from the Muslim world, for example, of which only a handful are ranked among the world's

leading 500 in the robust ARWU ranking scheme (and then only in the lower reaches), while of the top 100 HEIs, only 20 were from continental Europe, with a further 8 from the UK, each quickly became objects of concern in their respective contexts. It was a particular concern in Europe, which at much the same time launched the Lisbon Agenda, the explicit aim of which was to make Europe 'the most dynamic and competitive knowledge-based economy in the world' (Hazelkorn 2013; Welch 2014b). Linguistic dominance revealed another clear bias, with 68 of the top 100 in the ARWU 2015 list located within English language systems (Hazelkorn 2011, p. 76).

But it has been within the Asia Pacific that the influence of rankings has been most profound. It should be no surprise, for example, that the first major global ranking exercise (and still one of the more robust and reliable measures of research) originated in China, where a large part of the rationale for establishing Shanghai Jiaotong's original ARWU index stemmed from a desire to have an accurate measure of the competitiveness of Chinese Universities *vis á vis* those from abroad, especially being able to benchmark progress against major Western institutions (Hazelkorn 2013). Earlier national higher education reform projects such as 211 (1995) and 985 (1998) were equally predicated on selecting certain leading HEIs for additional support, in the expectation that they would substantially improve their rankings internationally (Li 2004). This expectation has been more than fulfilled, with a dramatic rise in the number of China's HEIs currently listed in the WRWU. Some 58 Chinese HEIs now merit being ranked among the world's leading 500, compared with only a handful around a decade or more ago.[4]

In the context of widespread regional concern about the underrepresentation of Asian scholarship, other Asia Pacific systems of consequence have now moved to implement similar arrangements that also aim to boost the rankings of at least their top-tier HEIs (Welch 2014b). Over the past decade, Malaysia has used its Accelerated Programme for Excellence (APEX) to dub one of its universities (Universiti Sains Malaysia, or USM) an APEX institution, with both additional resources, and expectations of heightened performance and a lift in its international ranking (Welch 2011). Most recently, Malaysia's High Impact Research (HIR)

---

[4] This compares, for example, with the other Asian giant, India, which despite having around 125 million speakers of English (the major scientific language), had only the Indian Institute of Science listed among the world's top 500 institutions.

programme, implemented at the University of Malaya (UM) from 2011 to 2016, provided significant rewards to those who published in top-tier (ISI/Web of Science) journals (UM, n.d.). Despite expressed staff resistance (on much the same grounds as the criticisms raised above), the programme resulted in a major lift in production of such academic 'outputs', amid wider expectations that UM would be ranked among the top 100 HEIs worldwide, within coming years.[5] As one of the other contributors to this Special Issue shows, Taiwan's efforts to boost output in major journals, and lift the rankings of its HEIs, has led to a programme of benchmarking, and evaluation by the national Higher Education Evaluation and Accreditation Council, that is argued to risk transforming faculty members into 'paper producers rather than public intellectuals' (Chou 2014b, p. 1).

It is important to restate the importance of English language dominance in this process. Two markers of its influence are selected here. Firstly, leading Chinese universities such as Tsinghua have now instituted formal research performance thresholds of their academic staff, even in the social sciences, that insist on publication of 2 SCI articles per year. The fact that, in practice, older academic staff, who have largely spent their entire teaching career teaching and publishing in Chinese, are exempt from this requirement only serves to underline the importance of English language as the key accepted marker of academic 'quality'. The institution of such measures effectively bifurcates the profession into a top tier of younger and often overseas educated academics, who are expected to publish in English, and for whom there is little incentive to publish in Chinese; and an older tier of academics, who only publish in Chinese and whose work, however important, is less likely to be read by international audiences. This bifurcation of the profession broadly parallels the situation pointed out by Hanafi, in a different context:

> Although language is a highly symbolic marker of identity, multilingual scholars have multilayered identities which open the door to more expansive research agendas and a commitment not only to local and regional contexts, but international ones too. (Hanafi 2011, p. 295)

---

[5] Despite investing Rm 590 million in the scheme, the Malaysian government was careful not to specify which ranking scheme. UM is currently ranked below 300, with USM ranked below 400, on the ARWU's leading 500 Index.

The second marker reflects another facet of the same phenomenon. In recognition of the difficulties involved in publishing in English, and as a way of rewarding research conducted in the local language, both China, Japan and (separately) Taiwan have developed their own indices of leading local journals. Thus China instituted its C(S)SCI, Japan its CiNii database, and Taiwan developed the TS(S)CI index of approved journals (Ishikawa in this issue, Chou 2014a, b, p. 8). In both cases, however, the process has been contentious, with resistance from many academic staff. Notably, too, publication in such local journals brings a significantly lower (financial) reward than publishing in internationally ranked (SSCI) journals.[6]

Auditing Australian Academe

If the above is reflective of developments in several Asian systems, how does it relate to the experience of a neighbouring English language system, with well developed connections to Asia? As the only major English language higher education system located squarely in the Asia Pacific, with longstanding tensions between its geography and history, Australia represents something of an anomaly. While small in global terms, with a total higher education enrolment of only 1.37 million in 2014, it is one of the more internationalised systems, with a notably diverse academic staff, and international students comprising around 25% of enrolments (Department of Education 2015). Of these, the large majority stem from the Asia-Pacific region. Tensions between its origins as a British colony, and its increasing integration into Asia are reflected in an at times somewhat schizophrenic stance on a range of policy issues, including in education. In higher education, as illustrated below, Australia is now well connected to Asia, with China as a significant knowledge partner (Yang 2008; Welch 2014a; DSIIRTE 2013).

The architecture of academic audits, however, was largely developed after input from OECD, Europe, New Zealand and the UK (Vidovich 2002, p. 400). The initial foray occurred in the early 1990s in the form of successive 'quality' rounds, that each focussed on different elements of university work. While the initial rounds were voluntary, in practice 'all

---

[6]At one national university, for example, publication of an article in SSCI journals is rewarded with 10,000 Taiwan dollars, compared with 6000 for a TSCI article. Much the same differentials apply at numerous universities in mainland China, although less likely at top-tier HEIs, where increasingly such performance is required, at least for younger staff.

36 public universities participated, in response to the incentives of both money and status resulting from high ranking' (Vidovich 2002, p. 395). Qualitative measures via peer review processes were largely employed in preference to quantitative measures. Later assessments highlighted increasing corporate managerialism, heightened institutional competition and hierarchies, and lowered institutional autonomy, as perceived effects (Vidovich and Porter 1997, 1999). In practice, the much-touted steering at a distance increasingly came to mean more steering, at less distance. The evaluation process undertaken by the subsequent Australian University Quality Agency (AUQA) involved auditing good practices across a range of areas of university activity, including Research, but was more about processes than outcomes (Baird 2010; Woodhouse 2010). Its successor, the current Tertiary Education Quality Standards Agency (TEQSA), as its name implied, took the assessment of academic research as a major element of its brief, as part of the Excellence in Research for Australia (ERA) process. Reflecting a more top-down administrative model, this ultimately involved the allocation of a result for each discipline, at each university, on a scale from 1 to 5, with 1 representing 'well below world standard' and 5 representing 'outstanding performance, well above world standard' (Gable 2013, p. 19; ARC 2011). Although reputation was important, the results that were also linked to national schemes to distribute research funding, provided further incentives, notably for the more research-intensive institutions.

Evaluations of research performance were made against four categories,[7] over a period of years, depending on the specific indicator. Universities were required to collect research activity data from individuals, and align these to eight discipline clusters, in an effort to accurately reflect research activity. Each discipline cluster had its unique Research Evaluation Committee (REC), comprising experienced, senior researchers, as well as a panel of reviewers. In practice, modes of research assessment varied, according to cluster. Whereas natural science clusters employed simple metrics such as citation counts, and journal impact factors, social science panelists read the submitted research itself (eschewing journal rankings and citation metrics),[8] and then combined to

---

[7] Research quality; Research volume and activity; Research application; Research recognition.

[8] Earlier versions of ERA that had initially listed journals as A+, A, B and C were highly contested, revised and re-contested, and ultimately abandoned (Australian 2011).

arrive at a consensual decision, including allocation of grades (Australian 2011). This accords with the arguments of some involved in the gathering of global research databases:

> According to the founder of Thomson Reuters, a more reliable evaluation system should involve actually reading each article for its quality. (Chou 2014b, p. 11, citing Garfield 1994)

Whatever the metrics, or methodologies, however, it is important to be reminded of the overall rationale for the exercise, as the relevant Minister clarified in 2010:

> This is not a curiosity-driven exercise. We are not gathering data for [the] sake of it. We expect … ERA to change the culture and drive reform across the system. Every university in the country should be asking itself how the results of ERA will make it look internationally. If the answer is 'not too flash', then it will be my turn to ask questions, starting with 'What are you going to do about it?' (Carr 2010, p. 3)

Case Study: Sandstone University

In the face of the unrelenting press from audit cultures, how did Australian institutions respond? In order to answer this question, one Australian university was selected for closer analysis, and as with other contributions to this Special Edition, the same two social science departments (Education and Anthropology) chosen for particular investigation. In the Australian system, both disciplines fall within the Education and Human Sciences (E&HS) panel that includes Education, Politics, Sociology, Social Work and Anthropology, in the national ERA research assessment exercise sketched above. As with other contributors, data on academic publications for the two departments was collected for the 3 years 1993, 2003 and 2013, cleaned, and scrutinized for any changing patterns of publication. As with other contributors, specific markers of the effects of the strengthening audit culture were a focus for investigation—enhanced academic output, a greater trend to publish in highly ranked journals, and patterns of publication in languages other than English. A further focus consisted of age, or gender differences, as Hazelkorn found in her Australian research on the influence of rankings:

> ... some of my junior colleagues are influenced by journal rankings (which influence the university rankings) in their decision on where to submit their papers. (Hazelkorn 2011, p. 108)[9]

Sandstone university has long been considered one of the leading universities in Australia, and highly ranked internationally. Overall, and despite being underfunded, the Australian system is, for its modest size, relatively well placed internationally, as underlined in the World Bank's Knowledge Economy Index (KEI) and various global ranking schemes. In the World Bank's KEI 2012, Australia had an overall world listing of 9, with KI of 8.98, KE 8.88, Innovation 8.92 and Education 9.71 (World Bank 2012; Welch 2014a). Sandstone is one of the members of the elite G8 group of research-intensive institutions, that is the structural equivalent of the UK's Russell Group, AAU in the the US, Japan's Top Global University Group, LERU in Europe and C9 in China (Ishikawa in this Special Issue, Hazelkorn 2011, p. 26; G8, n.d.; Russell, n.d.; LERU, n.d.; AAU, n.d.; C9, n.d.)[10] One of the larger institutions, with a comprehensive range of faculties, it showed an enrolment of over 50,000, and total staff of more than 7000. International enrolments exceeded 12,000, and postgraduate enrolments were in excess of 19,000. As a research-intensive institution, in practice more emphasis is given to research than teaching or service functions, although there is at least rhetorical acknowledgement of their importance. This accords well with Hazelkorn's assessment that rankings are primarily based on research, thus driving an emphasis on research, to the neglect of teaching (Hazelkorn 2011, p. 110).

Sandstone's strengths notably embrace the social sciences, including its longstanding departments of Education, and Anthropology. In the Excellence in Research Australia [ERA] (2012) exercise alluded to above, Anthropology was rated at 3 [World Standard], while Education was one

[9] Such age differences are by no means unique to the Australian profession. Ishikawa's research (personal correspondence, and in this Special Issue) shows that while younger (and more vulnerable) Japanese scholars are aware of and affected by journals rankings, and are more likely to respond to the pressure to publish in English, older professors remain largely unaffected. Similarly, older professors in China are in practice largely exempted from the demanding expectations of research performance, notably to publish regularly in highly ranked international journals, in English, that burden their younger colleagues.

[10] The fact that these consortia of research intensive HEIs recently banded together is yet another sign of the importance of rankings, internationally (LERU 2013).

Table 1 Journal language: number of articles and % in English

	1993	*2003*	*2013*
Anthropology	5/5 (100%)	8/8 (100%)	17/20 (85%)
Education	52/52 (100%)	47/48 (98%)	54/57 (95%)

Notes As a result of an earlier methodological decision made by the collective research group, only articles were included
The rising number of articles published in Education is despite the fact that faculty numbers are little more than half those in 1993

of only 3 nationally to be rated at 4 [Above World Standard]. Overall, in ERA 2012, all disciplines reviewed at Sandstone were rated at 3 or above, with a number gaining the maximum rating of 5 [Outstanding; well above World Standard] (ERA National Report 2012). Like a number of other Australian universities, its academic staff stem from a wide range of countries, which underpins a rich and diverse array of international collaboration networks, with a rising influence from Asia (OECD 2010; Chief Scientist 2013; DSIIRTE 2011; Welch 2002; Yang and Welch 2010).[11] Lastly, the authors' long-term engagement in the Australian system, and familiarity with related developments, literature and policies, both national and international, allowed data to be interpreted in context.

Academic Production and Linguistic Bias in the Social Sciences

Analysis of the production of articles in both disciplines confirms that the language of articles published over the period continued overwhelmingly to be English. While an early decision by the wider research group to exclude outputs such as chapters and books meant that a considerable portion of academic output was ignored, their inclusion is unlikely to have altered this pattern of linguistic bias.[12] Table 1 below reveals only

[11] The OECD study of publications *Measuring Innovation* (2010), for example, showed Australia as among the most internationally collaborative of all 34 member systems.

[12] Disciplinary differences are substantial here. While academic publications in the natural sciences, medicine and applied sciences strongly favour articles, it remains the case that production in the social sciences and humanities is commonly in the form of books and book chapters.

a modest amelioration of this linguistic bias in the case of Anthropology over the period, and an even less marked change in Education. This is despite the case that Education has long included faculty members whose first language is either European or Asian. It should also be pointed out that, of the articles published in languages other than English, most were in the form of translation, rather than articles original to that language. The explanation is not hard to find, and bears closely on one of the key questions this project sought to answer. Sandstone university, like other Australian universities, pays lip service to publications in other languages; in effect, however, they count for little in substantive exercises such as promotions processes. In that sense, the experience of this English language academic system is more like that of the US system, and notably different to cases such as China, Japan and Taiwan, particularly in the Social Sciences (Post, Ishikawa, Chou, and Li, in this Special Issue). When challenged some years ago, at a high level university board meeting as to why the university should not give more weight to publications in other languages, the then Vice Chancellor reportedly acknowledged that it was a good idea, 'in theory'. In practice, however, nothing changed. Interviewees provided further evidence of the discounting of publications in other languages, as a senior female researcher in Education explained:

> I've been delighted to publish work in other languages, and have put effort into helping with translations where that was possible. And I used to be (angry) with the auditors because they made it so difficult to have such work counted. After a while I decided that arguing with them was an utter waste of energy. If the University, and the national system, didn't actually practice what they preached - in terms of valuing global outreach and reputation - then so much the worse for them. (Senior Researcher, Education)

Academic Production and Journal Location in the Social Sciences

Does much the same problem afflict decisions about which journals in which to publish? Table 2, following, reveals a trend in both disciplines to publish more in foreign journals. In the case of Anthropology, the rise was 50% over the period 1993–2013, while in Education, the trend was significantly stronger (350%). As seen in the work of other contributors to this Special Issue, the impact on local scholarship can be profound. In

Table 2 Journal origin (number of articles and % international)

	1993	*2003*	*2013*
Anthropology	1/5 (20%)	4/8 (20%)	6/20 (30%)
Education	10.3/52 (19.8%)	23.9/48 (49.6%)	39.5/57 (69.3%)

Notes Corrected for ratio of participation (if 2 authors, one from Sandstone, then .5)
International defined as other than Australia

the case treated here, the effects of ranking journals, evident in the trend towards publishing more in 'International' journals, is particularly influential on scholars of Australian education, or local indigenous cultures, for example, who may well find it more difficult to place their work in listed international journals. Do such local specialists run the risk of publishing locally, perishing globally (Hanafi 2011)?

Once again, the reason for the trend is not hard to discover. The perceptible rise of that audit culture described above in Australian universities over the period, resulted in strong signalling to researchers as to which journals were preferred. Indeed, at one point, as indicated above, journals were specifically accorded either an A*, A, B or C rank in the national ERA 2010 research evaluation process, a highly contentious decision that led to significant complaints from academics, some revisions to the original list proposed, and a formal abandonment of a ranked journal list in the subsequent ERA 2012 (Australian 2011). While for ERA 2012, the former ranked list of journals was replaced with a refined journal and conference indicator that included a profile of journals and conferences for each discipline, ordered by descending frequency of publication, given that the decision to abandon ranking of journals was only taken in 2011, it had virtually no impact on scholarly decisions about where to publish over the period under review, or on ERA 2012 (which reviewed work for several previous years). Moreover, the effects of ranking were hammered home at the institutional level by regular messaging from Research Offices, Deputy Vice Chancellors (Research) and to greater or lesser degree, Deans of Faculties. Effectively, academics were being schooled as to which journals they should choose, and which were less well regarded. At Sandstone, the effects on the social sciences were arguably less substantial than in areas such as the Sciences, Business and Medicine, but the impact is nonetheless clear, as the following quote

from a young female researcher in Education, who confessed to a distinct feeling of insecurity, reveals.

> (I) am aware of a tacit understanding that in order to progress in my career, or even get or keep the job, my publications must 'count', which I understand to mean must be measurable against the Faculty expectations/points, requirements and system, and that are tied to such institutional and external measures. (Junior Researcher, Education)

The perception of surveillance and audit clearly influences decisions about where to publish, as the same researcher acknowledges:

> Even if it may contribute to some greater social cause or principle relating to sharing knowledge more widely in which I believe, I would unfortunately have to, in some ways, perceive (publishing in non SSCI journals) as a luxury that, in my current personal and professional situations, I cannot afford. (Junior Researcher, Education)

But the impact is also clearly differential, as the following response from an older researcher in Education underlines

> I find this surveillance and pressure so objectionable and toxic that I am strengthened in my determination to publish where the relevant audience is, not where the Brownie Points are. (Senior Researcher, Education)

Clearly, as in China and Japan (Ishikawa in this Special Issue), the effects of age and seniority are also apparent in this response, as the same individual pungently acknowledges:

> In this, of course, I'm privileged, having got my promotions at a time when all this bullshit was embryonic. (Senior Researcher, Education)

This lends further weight to the finding reported above that younger and more precariously employed researchers feel a greater need to take account of the new rules of the game, whereas older tenured professors are effectively exempted from such pressure to conform (Ishikawa in this Issue). In effect, the insistent audit culture is helping perpetuate a new academic precariat (Standing 2011).

310 A. WELCH

Gender and Academic Production in the Social Sciences

Lastly, the effects of gender were analyzed, by measuring the number and per cent of articles published by men and women, over the period, in the two disciplines. While it is true in general that both Anthropology and Education are more feminized professions, at least relative to disciplines in the natural and applied sciences, some caution needs to be exercised, as one respondent clarified in the following response:

> … the highest ranked journals in Anthropology are almost all from the science end of the discipline (physical and biological anthropology)… The journals in cultural anthropology are in general ranked lower… the more "scientific" sides of the discipline are more male, whereas cultural anthropology is more heavily female. (mid-ranked researcher, Anthropology)

The evidence in Table 3, below, while limited to articles, reveals a strong trend in Education towards more publications by women, with ratios of publications by women rising from 29 to 61% over the period. The data for Anthropology shows no such trend, but given the much smaller numbers involved, is probably a less reliable indicator.

The gendered nature of academic work was mentioned by all three respondents, albeit in somewhat different ways. While both Education researchers made the point that women carried greater responsibilities for domestic work and child rearing, the situation was seen somewhat

Table 3 Journal articles: number and per cent female

	1993	2003	2013
Anthropology	5/5 (100%)	4/8 (50%)	8.2/19 (43%)
Education	15.8/52 (29%)	20.3/48 (42.3%)	34.8/57 (61%)

Note Corrected for ratio of participation (if 2 authors, one from Sandstone, then .5)

differently in Anthropology (a much smaller academic unit, currently comprising 15 academics, relative to 70+ in the Education discipline)[13]:

> UG teaching ... is fairly distributed among male and female members of staff. We're a very, very small department, so everyone has to pull their weight.... There's simply too few of us for anyone (of either gender) to be a prima donna. (Mid-rank researcher, Anthropology)

By contrast, both Education researchers underlined the significance of gender in both academic and non-academic labour, and its impact on research:

> ... it is difficult to separate both the practical requirements and time tied to caring responsibilities ... from my capacity to spend the time reading and writing that many of my male colleagues have told me they do, both 'after hours' and during official work time. (Junior researcher, Education)

The same respondent also reported a high teaching load as having curtailed her time available for work on research publications.

Much the same view was expressed by an older and more senior female respondent from the same academic unit:

> women have been relied on by universities to keep the home fires burning, i.e. shoulder much of the undergraduate teaching, and that - especially as the weight of compliance with management controls over teaching has risen - has crowded out research. It's on top of the large effect of household divisions of labour on academic careers. Every academic woman needs a wife! (Senior Researcher, Education)

Conclusion

The effects of a perceptibly rising audit culture in Australian higher education are plain. Since their introduction in the 1990s, academic audits have grown in size and sophistication, consuming ever more time, energy and financial resources, and significantly distorting academic activities and priorities. Pushed by both governments and institutional leaders,

---

[13] The department of Social Work joined the Faculty of Education in 2003, forming the current *Faculty of Education and Social Work*. Only academics within the Education discipline were included in the analysis, and staff count, throughout.

hard-pressed academic staff have come under increasing pressure to lift research performance, particularly in highly ranked international journals. That this occurred against a backdrop of worsening workloads, and declining administrative support, as well as rampant managerialism, that now sees all aspects of academic work bristle with intricate administrative requirements, is of no concern either to institutional leaders, or government.

In an English language system, now increasingly well integrated into the Asia Pacific, and whose substantial academic neighbours are all Asian, the effects are complex. Discounting publications in languages other than English does poor justice to the highly diverse academic staff on most Australian campuses, and belies a professed concern for internationalization. Equally, downplaying local journals in favour of highly ranked international journals devalues the work of local scholars in Education, and Anthropology. Lastly, the gendered nature of academic work continues to form a barrier to women in the profession.

But not uniformly: older and more senior staff have greater scope to resist the pressures charted above. Nonetheless, effects are visible throughout the system, undervaluing collegiality and transforming individual academics into self-monitoring subjects.

It may well be that, when historians of education look back at this era in years to come, they will be puzzled at the obsession with rankings, league tables and quantitative measures of performance, seeing it as something of an aberration. In the meantime, sadly, too much academic talent is being wasted, and energy expended, in institutionalising a distorted mission of the University.

References

Altbach, P. (2014, July 18). What counts for academic productivity in research universities? *World University News*, 329.

Association of American Universities. (n.d.). https://www.aau.edu/home.aspx.

Association of University Teachers [AUT]. (1993, November). Letter to council members concerning quality assurance. Circular LA/5061.

Australian [The]. (2011, May 30). End of an ERA: Journal rankings dropped.

Australian Research Council. (2011). *ERA 2010 citation benchmark methodology*. Canberra: Australian Research Council.

Baird, J. (2010). Accountability in Australia: More power to government and market. In B. Stensaker & L. Harvey (Eds.), *Accountability in higher education: Global perspectives on trust and power* (pp. 25–48). London: Taylor & Francis.

Callahan, R. (1966). *Education and the cult of efficiency*. Chicago: University of Chicago Press.

Carr, K. (2010). Speech at RMIT University. http://archive.industry.gov.au/ministerarchive2011/carr/Speeches/Pages/AustralianTechnologyNetworkofUniversities.html.

Center for World University Rankings. http://cwur.org/2015/.

Chief Scientist. (2013, August 14). *Partners in influence: How Australia and China relate through science*. Speech, Australian Centre for China in the World, ANU.

Chou, C. (2014a). *The SSCI syndrome in higher education: A local or global phenomenon*. The Netherlands: Sense.

Chou, C. (2014b). The SSCI syndrome in Taiwan's academia. *Education Policy Analysis Archives, 22*(29), 1–17.

C9 League (九校联盟). https://youruniversityguide.wordpress.com/east-asia/china/c9-league-九校联盟/.

CWTS Leiden Ranking. http://www.leidenranking.com/ranking.

Department of Education. (2015). *Higher education statistics 2014*. https://docs.education.gov.au/system/files/doc/other/2014_student_summary.pdf.

Department of Industry of Industry, Innovation, Research and Tertiary Education [DSIIRTE]. (2013). *Science and research collaboration between Australia and China*. (Canberra DSIIRTE).

Eagleton, T. (2015, April 6). The slow death of the university. *Chronicle of Higher Education*.

Excellence in Research Australia [ERA]. (2012). *ERA national report 2012*. http://archive.arc.gov.au/file-search/ERA?level_1=ERA&level_2=2012&level_3=National%20Report&sort=asc&order=Document%20Name.

Foucault, H. (1977). *Discipline and punish*. London: Penguin.

Gable, A. (2013). *ERA and the performance regime in Australian higher education: A review of the policy context*. University of Queensland, Social Policy Unit.

Garfield, E. (1994). *Linking literatures: An intriguing use of the citation index*. http://wokinfo.com/essays/linking-literatures/.

Group of Eight. (n.d.). https://go8.edu.au.

Guessoum, N., and Osama, A., eds. (2015). *Science at the universities of the Muslim world* (Report of the Zakri Task Force). http://muslim-science.com/wp-content/uploads/2015/11/Science_at_Universities_of_the_Muslim_World.pdf.

Habermas, J. (1977a). *Technology and science as ideology: Toward a rational society* (pp. 81–122). London: Heinemann.

Habermas, J. (1977b). *Knowledge and human interests*. Boston: Beacon Press.

Halsey, A. (1995). *The decline of Donnish Dominion*. Oxford University Press: Clarendon.

Hanafi, S. (2011). University systems in the Arab East: Publish globally and perish locally vs publish locally and perish globally. *Current Sociology, 59*(3), 291–309.

Harman, G. (2009). National assessments of research excellence and impact: UK and Australian experience. In P. Clancy & D. D. Dill (Eds.), *The research mission of the university* (pp. 153–176). Rotterdam, The Netherlands: Sense Publisher.

Hassan, R. (2008). *Inside Muslim minds*. Melbourne: Melbourne University Press.

Hazelkorn, E. (2011). *Rankings and the reshaping of higher education: The battle for world-class excellence*. Palgrave Macmillan: London.

Hazelkorn, E. (2013). *Europe enters the college rankings game*. http://www.washingtonmonthly.com/magazine/september_october_2013/features/europe_enters_the_college_rank046894.php?page=all.

High Impact Universities. http://www.highimpactuniversities.com.

Higher Education Funding Council of England [HEFCE]. (1995). *A guide to funding higher education in England*. HEFCE: Bristol.

Johnson, N. (1994). Dons in decline: Who will look after the cultural capital? *Twentieth Century British History, 5*(3), 370–385.

League of European Research Universities (LERU) www.leru.org/ League of European Research Universities (LERU). (2013). *Hefei statement on the ten characteristics of contemporary research universities announced by AAU, Leru, Go8 and C9*. http://www.leru.org/files/news/Hefei_statement.pdf.

Li, L. (2004). China's higher education reform 1998–2003: A summary. *Asia Pacific Education Review, 1*, 14–22.

Miller, P. (2001). Governing by numbers: Why calculative practices matter. *Social Research, 68*, 379–396.

Organisation for Economic Cooperation and Development (OECD). (2010). *Measuring innovation: A new perspective*. Paris: OECD.

Power, M. (1997). *The audit society: Rituals of verification*. Oxford: Oxford University Press.

QS Top Universities. Worldwide University Rankings, Guides and Events. http://www.topuniversities.com/qs-world-university-rankings.

Ranking Web of Universities. http://www.webometrics.info/en.

Russell Group. http://russellgroup.ac.uk/.

Shanghai Jiaotong, Academic Ranking of World Universities. http://www.shanghairanking.com/#.

Shore, C. (2008). Audit culture and illiberal governance universities and the politics of accountability. *Anthropological Theory, 8*, 278–298.

Shore, C., & Wright, S. (1999). Audit culture and anthropology: Neoliberalism in British higher education. *Journal of the Royal Anthropological Institute, 5*, 557–575.

Shore, C., & Wright S. (2015). Governing by numbers; audit culture, rankings and the new world order. *Social Anthropology/Anthropologie Sociale, 23*, 122–128.

Standing, G (2011). *The precariat: The new dangerous class*. London, Bloomsbury.

Times Higher Education, World University Rankings. https://www.timeshighereducation.com/world-university-rankings.

Times Higher Education. (2011). *No plaudits for audit culture*. https://www.timeshighereducation.com/news/no-plaudits-for-audit-culture/417819.article.

Times Higher Education. (2016). *Top 15 universities in the Arab world announced*. https://www.timeshighereducation.com/news/top-15-universities-arab-world-results-announced.

U15 Group of Canadian Universities. http://u15.ca/.

U15 Group of Canadian Universities. (2014). *Global research, global affairs*. http://u15.ca/what-we-are-thinking/global-research-global-affairs.

U-Multirank. http://www.umultirank.org/#!/home?trackType=home.

University of Malaya. (n.d.). *High impact research*. www.hir.um.edu.my.

US News and World Report, Best Global Universities. http://www.usnews.com/education/best-global-universities.

US News and World Report. National Universities Rankings. http://colleges.usnews.rankingsandreviews.com/best-colleges/rankings/national-universities?int=994d08.

Vidovich, L. (2002). Quality assurance in Australian higher education: Globalisation and 'steering at a distance'. *Higher Education, 43*, 391–408.

Vidovich, L., & Porter, P. (1997). The recontextualization of 'quality' in Australian higher education. *The Journal of Education Policy, 12*(4), 233–252.

Vidovich, L., & Porter, P. (1999). Quality policy in Australian higher education of the 1990s: University perspectives. *The Journal of Education Policy, 14*(6), 567–586.

Welch, A. (1998). Education and the cult of efficiency comparative reflections on the reality and the rhetoric. *Comparative Education, 34*(2), 157–175.

Welch, A. (2002). Going global? Internationalizing Australian universities at a time of global crisis. *Comparative Education Review, 46*(4), 433–471.

Welch, A. (2005). Accountability or accountancy? Governance and university evaluation systems in an era of performativity. *Comparative and International Education Review, 5,* 116–144.

Welch, A. (2012a). Seek knowledge throughout the world? Mobility in Islamic higher education. *Research in Comparative and International Education, 7*(1), 70–80.

Welch, A. (2012b). Locating Indonesia within the emergent regionalism of Southeast Asian higher education. In J. Hawkins, K-H. Mok, & D. Neubauer (Eds.), *Higher education regionalization in Asia Pacific: Implications for governance, citizenship and university transformation* (pp. 91–115). New York: Palgrave Macmillan.

Welch, A. (2013). Making education policy, Connell, R., Welch, A., et al. *Education, change and society*. Oxford University Press (3rd revised ed.), 186–212.

Welch, A. (2014a). Richer relations? Four decades of ASEAN-Australia relations in higher education. In B. He & S. Percival Woods (Eds.), *The Australia ASEAN dialogue: Tracing 40 years of partnership* (pp. 145–166). London: Palgrave Macmillan.

Welch, A. (2014b). A new epistemic silk road? The Chinese knowledge diaspora and its implications for the Europe of knowledge. *European Review, 23*(1), 95–111.

Woodhouse, D. (2010). *When will Australians get a proper perspective and a proper standard?* Paper presented at the Financial Review Higher Education Conference June 8–10, Sydney.

World Bank. (2012). *Knowledge economy index 2012.* http://siteresources.worldbank.org/INTUNIKAM/Resources/2012.pdf.

Yang, R. (2008). Transnational higher education in China; contexts, characteristics, concerns. *Australian Journal of Education, 52*(3), 272–286.

Yang, R., & Welch, A. (2010). Globalisation, transnational academic mobility and the Chinese knowledge diaspora: An Australian case study. *Discourse: Studies in the cultural politics of education, 31*(5), 593–607.

Global Research Productivity Rivalry: A Comparative Case Studies of Two Latin American Public Universities

Gustavo Gregorutti, Marcelo Rabossi, and Hugo Casanova

Summary

In the last two decades, a growing tendency has been established to relate the quality of higher education with the rankings. This has created tensions in departments and areas, such as social sciences and humanities, that tend to publish less in international journals in the English language, which is a key factor in the weighting of university rankings. Thus, this study explores the way in which the academics of the departments and

G. Gregorutti (✉)
Andrews University, Berrien Springs, MI, USA
e-mail: ggregoru@andrews.edu

institutes of Anthropology and Education at the University of Buenos Aires (Argentina) and the National Autonomous University of Mexico have reacted to the pressure to publish more to achieve greater visibility and thus improve in the rankings.

This study used a comparative and descriptive mixed method between 1993, 2003, and 2013. The qualitative part examines professors' perceptions of their productivity in connection with the rankings. The results show mixed reactions, with some level of endorsement toward engaging in global ranking competition as the department carries research. The work concludes with a discussion.

The Quantifying Trends

The first part of the twenty-first century is trending toward social development based on an economy driven by the innovation of knowledge with impact. This occurs within the framework of neoliberal policies and a globalized economy through which countries compete for technology, markets, and the development of the best human resources (Gaffikin and Perry 2009; Vietor 2008). In this context, the production of cutting-edge knowledge brings the university at the center of the debate for global leadership (Hazelkorn 2017).

This global and boundless competitiveness has generated a leaning toward one of the three central university functions, namely research (Altbach and Balán 2007; Kehm and Shin 2013). Thus, the higher education sector becomes crucial in generating and transferring ideas to facilitate the development of a country (Hanushek 2005). This brings new challenges for the university because its activity is not limited only to training and generating relevant, discipline-centered knowledge, but it is increasingly pushed and pulled to be one of the engines of social and economic transformation (Hazelkorn 2016; Slaughter and Leslie 2004).

M. Rabossi
Universidad Torcuato Di Tella, Buenos Aires, Argentina
e-mail: mrabossi@utdt.edu

H. Casanova
Research Institute on University and Education, National Autonomous
University of Mexico (UNAM), Mexico City, Mexico

Furthermore, this adjustment of its traditional core missions toward knowledge innovation is becoming a hallmark for quality and a mechanism used to attract resources and compete in the global race for "world class universities" (Salmi 2009). Consequently, leading universities are required to compete to produce regional and international impact, a trend that rankings have been reinforcing during the last two decades (Barron 2017; Dill 2006). Rankings differ from typical higher education classifications, since they issue judgments based on previously defined quantitative indicators, allowing institutions to be compared against an arbitrarily created mathematical index (Pérez-Esparrells and López García 2018). In the case of the classifications, the goal is to group the central characteristics to understand the institutional similarities and differences without determining its value against a scale (Bernasconi 2006).

Within the growing internationalization of higher education, rankings are exerting an important and considerable influence in many areas of the academic world, such as strategic decisions (Hazelkorn 2017). A clear evidence of that is the redistribution of resources allocated for research, with new financing policies to facilitate research support as a mechanism of institutional positioning (Altbach and Balan 2007; Kehm and Shin 2013; Rauhvargers 2011; Rauret 2013). The priority has shifted from humanities to expand the areas of health and hard sciences, as well as applied technology, since they improve, to a greater extent, citation in scientific and academic ranking indexes (Ordorika and Lloyd 2015; Salmi 2009). All this is happening within the framework of the Anglo-Saxon model of research in which northern countries lead (Post and Chou 2016).

Consequently, the phenomenon of rankings has become a tool for measuring quality, which universities use to differentiate themselves in the context of increasing global competition (Eff et al. 2012). That is to say, rankings are seen and interpreted as instruments to advance a particular institution's positioning, a fact that accentuates the academic capitalism that has been reconfiguring universities worldwide (Ordorika and Lloyd 2015; Slaughter and Leslie 2004).

This almost uncritical acceptance of the rankings has created isomorphic mechanisms that shape departmental units, modifying their practices to compete even within their institutions and positioning themselves in this model of simultaneously regional and global rivalry (Hazelkorn 2016). In general, this is carried out through enhancing scientific production, expanding international collaboration, and increasing the number

of academic appointments of researchers. These strategies skew higher education functions as they are realigned toward the quality parameters that rankings advance (Gregorutti and Svenson 2018; Salmi 2009).

This phenomenon is paradoxical because the indicators of these are limited in the evaluation exercise. It is controversial to assume that the quality of a higher education institution can be captured through an index scale. However, the current trend, in the context of an increasing use of rankings as marketing tools, is positioning rankings as valid measures of quality, overlooking the methodological flaws and assumptions on which they are built (Docampo 2008; Federkeil et al. 2012; Fernández-Cano et al. 2018).

The Problem

As previously indicated, research with technological or biomedical applications are the ones that have stood out during the transfer of innovations as they tend to have the most significant economic impact. At the same time, those disciplines are clustered under academic units with the greatest impact in the rankings, which are not a minor detail when compared to university assets (Yudkevich et al. 2016). In the case of social and humanities sciences, there are fewer resources available because their products do not follow the logic of market-driven transfer of inventions and patents, even though they have a significant knowledge contribution in their fields as well as human capacity. This creates a disadvantage in terms of their influence on the rankings.

Specifically, little has been studied about the impact of multiple rankings in disciplines such as education and anthropology. The influence of the rankings in departments and areas dedicated to these disciplines has not been analyzed either, let alone their adaptation to the competition policies generated in the league of the most visible institutions in Latin America (Post and Chou 2016). Therefore, this study seeks to explore the perceptions of academics (professors and researchers), in the disciplines mentioned, at two, major, state-funded, Latin American universities in order to understand the influence of rankings in the production of publications, particularly international journals.

Data Collection

This research focused particularly on the departments of Education and Anthropology at the University of Buenos Aires (UBA) and the Institute of Research on University and Education (IISUE),[1] as well as the Institute of Anthropological Research of the National Autonomous University of Mexico (UNAM). These two universities were selected due to the strong impact of their academic work in the region, their large departments, and regional coauthors who participated in this study.

With records available over the last 20 years, a mixed method was employed. In common with the other case studies, three data points in 1993, 2003, and 2013 were employed in order to standardize the data collection. These dates and departments were also chosen as part of the development of a major international comparative education project, presented in Beijing at the XVI World Congress of Comparative Education Societies in 2016. As already mentioned, the study sought to understand how the two units of analysis at both universities evolved in their publications as the rankings assumed greater national and international prominence.

The first quantitative part of the results shows a comparison of the type and quantity of publications in three measurement periods in the Anthropology and Education departments of both universities. Findings on how the publication of papers in these two fields evolved would allow us to determine whether rankings had influenced departments and faculty members' productivity. To that purpose, a qualitative database was collected through interviews with professors from both units and universities in order to gain insights into their perceptions of the changes over the 20 years of comparative data.

The following three research questions guided the interviews: (1) Over the last 20 years, do you perceive a trend toward more publications in your department? (2) If so, what are the factors that you think have an impact on the increase in publications? (3) Do you see any relationship between rankings and the growing pressure to publish in international publishers and in English? These questions were followed by subsequent ones to further clarify some of the opinions the interviewees shared.

---

[1] As of 2006 under this denomination and before that Center of Studies on the University. For more information, consult: http://www.iisue.unam.mx/iisue/quienes_s omos.php.

Four professors from UNAM were selected to be interviewed—two from Anthropology and two from Education. In the case of the UBA, seven professors participated—three Anthropologists and four from the Education department. The interviews are presented by university, with unit and scholar to differentiate them. The interviewees consulted were full-time with tenure, with at least five years of experience in their respective academic units. The database was collected in the months of June and July 2016.

Results

Gathering statistics of scholarly productivity at each department was only possible in the Mexican institution. In the case of the UBA, there were no comprehensive publication reports for the first two comparison periods (1993 and 2003), making the parallel unviable. The generation of knowledge in the UNAM clearly shows that, in the discipline of education, professors were progressively publishing more, both nationally and internationally. Figures 1, 2, and 3 display, respectively, that growth.
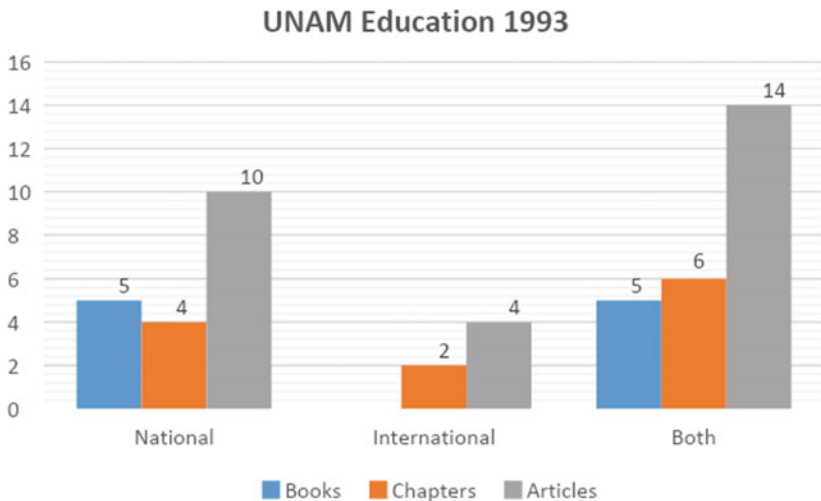
Fig. 1   Research productivity, 1993, at the IISUE (Former CESU [CESU stands for Center for University Studies (Centro de Estudios sobre la Universidad)])—UNAM
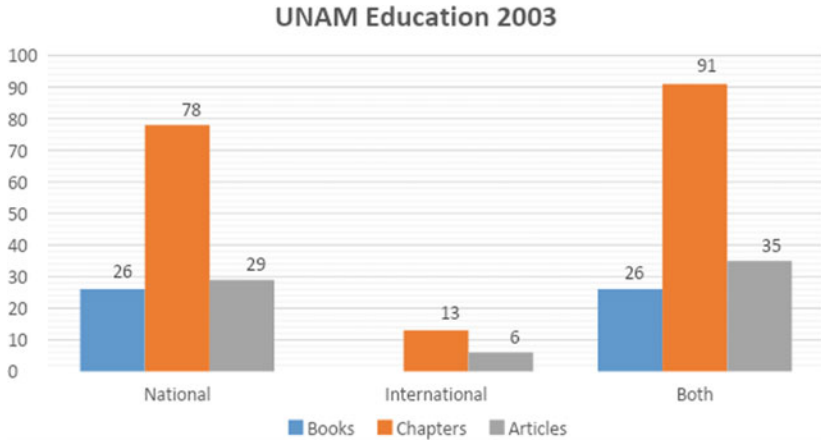
Fig. 2 Research productivity, 2003, at the IISUE (Former CESU)—UNAM
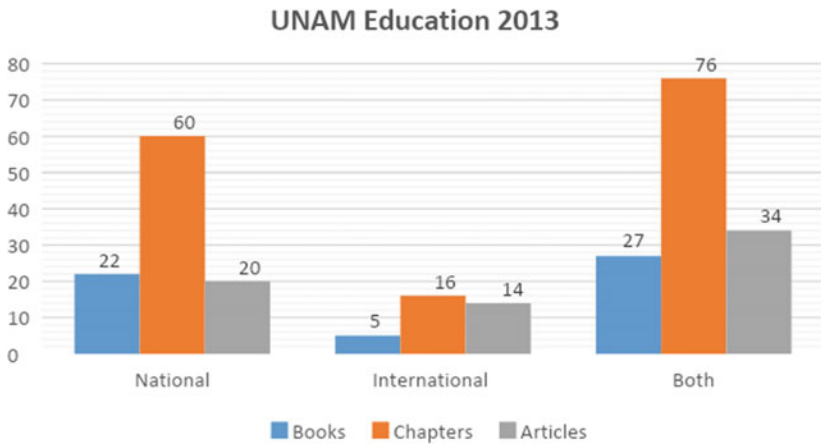
Fig. 3 Research productivity, 2013, at the IISUE—UNAM

In the first measurement of 1993, faculty members had a production of essentially national publications. This trend was relatively constant during the following decades, although there was a gradual increase in international publications, as can be seen in Figs. 2 and 3.

Between the years 2003 and 2013, international productivity showed a noticeable development in the publication of books, chapters, and articles. The most visible increase was in book chapters in 2003. Likewise, in 2013, there was a considerable increase in the publication of books and international articles, as the latter seems to play a more influential role in promotions and worldwide rankings. For the three productivity measures in education, the national scholarly outputs have been larger.

For Anthropology, as can be seen in Figs. 4, 5, and 6, the national production of articles, books, and chapters was higher in all the compared measurements as well. However, the 2013 data show a dramatic increase in the publication of articles and chapters with international publishers.

Between 1993 and 2003, the production of both national and international research remained at similar levels, with more publications in the form of articles and book chapters, although the national outcomes are significantly larger.

Figure 6 clearly shows that the publication of specialized chapters in coordinated volumes, at a national level, is the one that grew the most in 2013. A similar tendency was observed in the Institute of Research on University and Education of the UNAM. However, both in the IISUE and in the IIA of the UNAM, the national production was always higher than was the international production. These three graphs indicate that articles published internationally were consistently larger than were books and book chapters.
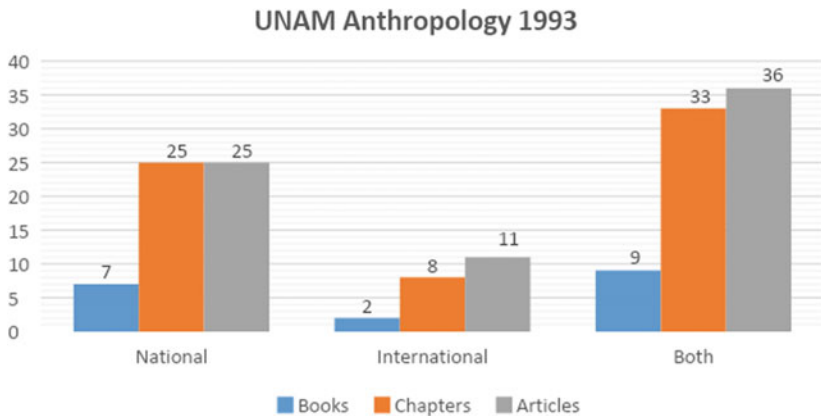
Fig. 4 Research productivity, 1993, at the Institute of Anthropological Research (IIA)—UNAM
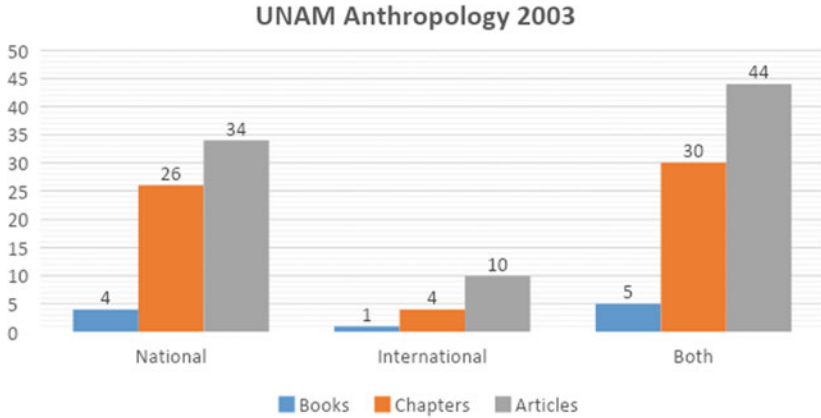
Fig. 5 Research productivity, 2003, at the IIA—UNAM
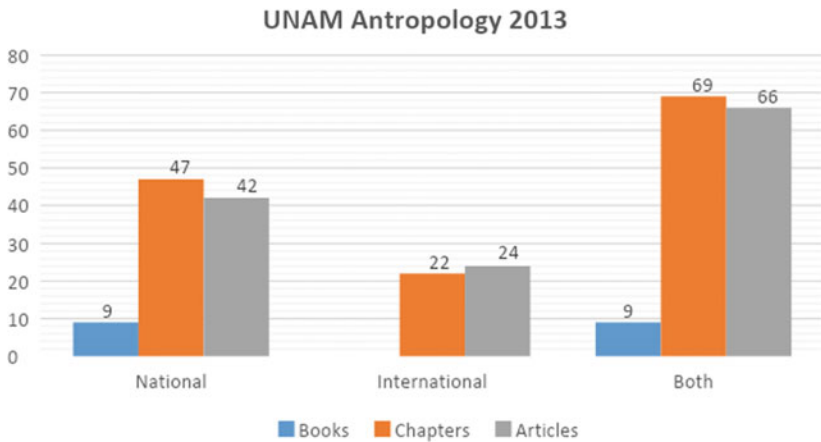
Fig. 6 Research productivity, 2013, at the IIA—UNAM

Since the UBA had no available comprehensive records of publications for the first two periods of comparison (1993 and 2003), the authors of this study turned to the Scopus[2] database. Rankings frequently use

---

[2] For more details, see: www.scopus.com.

Scopus as a source in order to compare productivity. The three compared publications and dates, shown in Figs. 7 and 8, pertain to social sciences and humanities. These broad areas of knowledge include Education and Anthropology, but they extend to other disciplines as well, thus posing a data accessibility limitation for this study. Even though that is true, it is here assumed that they can be used to track scholarly outputs.

According to Fig. 7, in both institutes of the UNAM, a numerical growth of publications in articles was reported. The values of the three
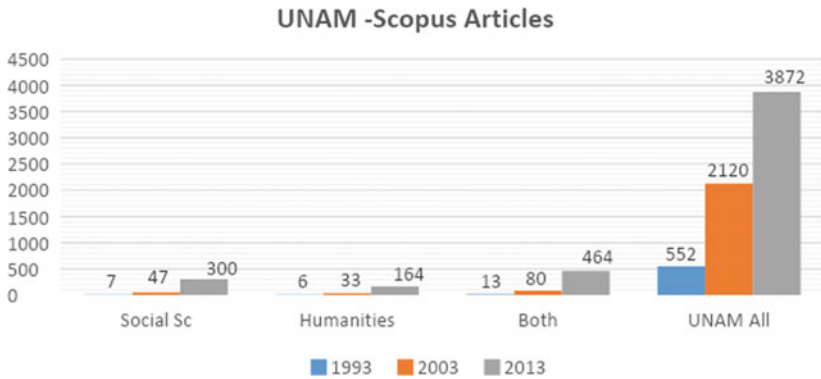
Fig. 7 Research productivity in articles for both institutes (UNAM)
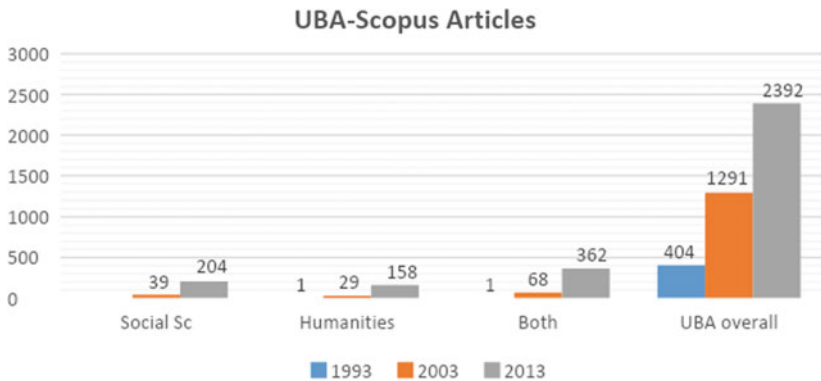
Fig. 8 Research productivity in articles for both faculties (UBA)

periods show that in 2013 productivity grew exponentially. This trend is also observed across all levels for UNAM. Of the two broad fields, the field of social science increased its publications by a larger proportion, a fact that may be attributed to the trend of publishing articles in social sciences. While humanities disciplines have had substantial growth, books and book chapters are a common outlet for these publications.

In the case of the UBA, intellectual productivity trends were very similar to those of the UNAM, in both disciplines, as can be seen in Fig. 8. Evidently, the generation of knowledge published in refereed international journals for these disciplines was not a strong priority in the 90s, or even at the beginning of the 2000s. This finding may show, to some degree, the impact of national policies to advance knowledge and innovation, a trend that was probably reinforced by rankings.

If the UNAM reports are taken as a reference, it is observed that both institutes (Education and Anthropology) showed an increase in the production of books, chapters of books, and articles at a national level. This trend has been growing more in recent years, coincidentally with the emergence of rankings that weigh international publications substantially more. However, a greater quantity or volume of publications cannot be attributed exclusively to rankings, since the wave of generation of ideas also conforms to policies implemented in the years prior to the rankings (Gregorutti 2011).

Interviews

From examining the perceptions of the interviewees and their interpretations related to the factors that promoted the growth of knowledge over the last 20 years, in the context of the growing influence of the rankings, two major theme categories emerged. The first grouped two central subthemes and the second three.

Increased Productivity

When asked if there has been an increase in faculty research productivity within the 20-year period, professors from both universities and disciplines agreed and expressed the following factors as central:

Funding with expectations. In order to carry out successful completion of complex research projects, it is necessary to have time, extra funding to hire researchers, materials, travel, and all the expenses that final reports

may demand. For the professors interviewed, belonging to organizations that group and finance researchers is essential, as this researcher at the UBA expressed:

> The ones who publish are, in general, part of research programs or research projects. These projects are generally subsidized; the UBA has a policy to financially support research projects. The CONICET (National Council of Scientific and Technical Research) also has a policy of grants for research projects. Most researchers are related in one way or another to these framework programs. (Interview 1, Education)

As the same interviewee clarified, this process of funding research extends "both to Education and Anthropology." The university and CONICET facilitate processes for professors to generate publications. There was a close relationship between funding and the generation of scholarly publications, according to the fourth interviewee, in the UBA's Education department: "Most of what we have are projects funded by the university. This internal funding policy has helped to advance production, especially since 1983."

This happened gradually, as explained in the same interview: "There was a change in trend direction, the number of scholars increased as well as the type and number journals (in which) we publish, and participation at conferences" to give more time and opportunities to produce ideas. This is in the context of clear research expectations, as interviewee #2 stated (Education, UBA), "Here in our faculty, they force you to be a researcher as well as a professor."

In the case of the UBA, there are two types of "framing" that receive subsidies in order to conduct research. Professors belonging to CONICET have more pressure to generate research, as this interviewee explains:

> The CONICET is much more aggressive than the UBA in that sense, because it asks for more annual publications and has a different level of demand in relation to these research products. The UBA, perhaps has more interest in the applied part that derives from research. (Interviewee 1, Education)

The research productivity in the two institutes of the UNAM is also affected by government funding through the National System of Researchers (SNI), which directly subsidizes professors through institutional recognition and salary bonuses, thus recognizing and stimulating faculty research productivity. The SNI is part of the National Council of Science and Technology of Mexico (CONACYT), which promotes the creation of knowledge and innovation throughout the country. In addition to these incentives, UNAM established an institutional program for this purpose in 1993, known as the Premium Program for the Performance of Full-time Academic Scholars (PRIDE in Spanish). As one professor of Education explained:

> I think one of the factors that has to do with publishing more is that of belonging to the National System of Researchers and, to a lesser degree, although (still) important, the other system of the university, the PRIDE. So, there is a certain pressure between the SNI and the PRIDE to keep you always as productive as possible. I think that that pressure has kept the productivity in constant growth. (Interview 2)

This creates cycles of pressure on professors who wish to maintain the extra time and resources that both universities and national entities grant them. Belonging to any government or institutional funding agencies in both countries requires highly committed professors who intend to produce publications.

New paradigms for research productivity policies. It is important to underscore that the previously mentioned funding systems that advance research have been in action before the rankings began to exert influence. However, the emphasis on incrementing publications is rather new, as this UBA Education researcher points out:

> We experience all kinds of pressures that have to do with teaching and research categorization. These types of incentives were particularly introduced since the 1990s. For you to be re-categorized on the academic ladder, it is necessary to show publications. I mean scientific outcomes. The same happens when a professor applies to obtain a teaching appointment. Altogether, these requirements are external variables that have been useful to increase productivity. (Interview 4, Education)

A similar scenario can be seen for the UNAM case:

> In the last twenty years, I believe, SNI and PRIDE have been functioning as assessment systems requiring publications in journals and, in particular, to do so in international journals. For instance, I've received feedback from the SNI evaluators, as I applied for status change, and they told me, '…your productivity is good, but we recommend you to publish more in international journals.' I consider that criterion as foreign to Humanities and Social Sciences; it came from outside and it has been increasingly imposed. (Interview 2, Education)

An anthropologist from the UNAM explains how the new research productivity push derives from following the "hard sciences" paradigm that CONACYT has been promoting as a norm to measure productivity in the social sciences: "With the natural sciences or the hard sciences criteria, I remember the first reaction against these benchmarks, when applied to the social sciences and anthropology in particular" (Interview 1). The same professor also comments on the reaction of the community of anthropologists, clarifying that "we need to generate standards that respond to the characteristics of the humanities, or social sciences, and we cannot mechanically apply these criteria; I think there has been a process of transformation, adaptation, from CONACYT, without losing the productivity logic."

The other anthropologist from UNAM adds, "In the area of humanities … people publish more book chapters than articles in journals, but journals are the main publications taken into consideration for rankings" (Interview 2), a factor that can cause tension among scholars. Similarly, a professor of Education from the UBA describes the tension between natural and social science research paradigms:

> I do not want it to look like a disregard for the exact sciences or medical or physical sciences or whatever. However, the truth is that this is something that is an eternal discussion that we have in this struggle between the humanities and the applied sciences. In the hard sciences, an experiment is made, published, and it is published with long lists of twenty authors and it is not questioned so much who did what. In the human sciences our research projects, to really make them happen, they take more time. (Interview 3)

This has created an uncomfortable research paradigm for social scientists who do not work with the same knowledge generation techniques. As a UNAM Education professor responded, "Yes, there is a greater demand,

without doubt from my institution itself and the country, proposing new rules for academic work" (Interview 2). In short, there is considerable pressure for more publications, especially in the form of articles, and neither of the disciplines analyzed here seemed to adapt easily to that paradigm.

Knowledge That Becomes More International

In the following section, the interviewees mention some key factors that are driving the internationalization of their publications. Those causes seem to gain increasing influence in the context of new demands that are associated with ranking regimens. This theme has yielded three related subthemes that are explained below:

Why and where to publish. While the pressure to publish has been growing at public universities, that also conforms to a "tradition of publishing, which remains beyond any particular funding provided," as underscored by a Professor of Education at the UBA:

> Being productive has to do with how you position yourself in your field of expertise, and that is related to your professional (curriculum) vita as well; with the way you compete to get an appointment. ...if you do not have publications you prevent yourself from performing and compete in the academic world. (Interview 1, Education)

This interviewee is referring to a well-established culture of faculty research productivity that permeates Latin American public universities to a great extent. However, at the same time, faculty members are experiencing an increased pressure to publish more in international journals, as his Education colleague affirmed: "An international article is always privileged, very much, yes … there has always been a tendency to value more the international journals than the national ones" (Interview 2, Education, UBA). This also has an impact on academic promotion, as this Anthropologist described: "The directors look at Scopus to find out who is the one asking for a promotion, they put him in Scopus and they look there" (UBA, Interview 1). Scopus is a database of essentially international journals that are mainly written in English.

According to the following professor of Anthropology at the UBA, this pressure has motivated his colleagues to publish more: "This increasing productivity has spurred our department, as one of the most research

productive in the Faculty, along with hard sciences, a fact that makes us happy" (Interview 3). Another scholar from the same department revealed that this pressure also affected individual staff strategies: "Yes, based on my own experience with CONICET, I check to see if certain journals are in Scopus" (Interview 1).

These preferred assessments emphasize the importance of publishing through foreign publishers with academic prestige and high visibility, since they are reflected in indexes such as Scopus. A professor of Archaeological Anthropology corroborated the trend, affirming that "our Archeology journal is, for me, an open access national journal, but with international projection. This is what we are looking for and that is why we are in Scopus" (Interview 2, UBA). A similar situation was perceived in the UNAM, as this Education researcher comments:

> Look, I've heard it from some university leaders, especially here at the Institute where, I mean, not in a very top-down way, but they do suggest that it would be better to publish more in international journals. They even promise support to hire people to translate the papers or even, sometimes, to conduct workshops to explore specific criteria required by some international journals. So, yes, there is a certain leaning toward that, but I would say as a suggestion to, somehow, guide researchers into that new trend. (Interview 2, Education)

These opinions show how publications with international visibility are of special relevance to the universities' strategic activities. However, on the other side, as another professor from Education stated, "Sometimes we publish in national universities' journals because we have to do it! It does not matter if they are *ranked*, we do not care" (UBA, Interview 1). This means that researchers from social sciences must spread their ideas at a national level because that is where their constituency is generating a different type of impact. This is especially true for public institutions, like the two reported in this study.

The language issue. Interviewees had different reactions when asked about the fact that most well-known rankings list publications in English almost exclusively. They tended to lean toward publishing in their local language as a priority, as a professor from Education explained:

> Regarding the specific question of which language we use to publish, our research team decide to publish in Spanish, whether through networks, a pdf, any virtual media, interactive books, it does not matter. We choose to publish in Spanish and not in English. (UBA, Interview 1, Education)

The motivation to do so was explained as follows: "Since we are Argentinians and our language is Spanish, we decided to publish on the web in Spanish. That does not mean that she [referring to her colleague present at the interview] may go to an 'English speaking' conference and speaks in Spanish" (Interview 2). The following Anthropologist added a more technical reason for the challenges they face when trying to publish in English: "A native leader speech, say, when translated to the English loses strength, value, meaning, and even more if a native uses words from his or her mother tongue" (UBA, Interview 1).

However, the same professor admitted that publishing in English was enforced as part of their new pressures, "But we do what the system tells us to do, otherwise, we may die in the attempt to resist it … we have to submit to these pressures." Professors have to manage and navigate some tensions around publishing in other languages like English. Another UBA education professor adds, "In general, I don't publish in English. It's not important, since it's difficult to write in what's a foreign language for us, and nobody told us to publish in English. The university does not encourage publications in English; it is not part of an institutional issue" (Interview 3).

This shows a certain ambivalence regarding the existing policies the university endorses while seeking greater "visibility" through foreign publications. The following Anthropologist from the UNAM expressed a similar ambivalence: "There is evidently a resistance, although more and more young people are already participating in international conferences, presenting papers in English, but in general there is great resistance, it seems to me at least" (Interview 1). The same professor continued, underscoring that:

> At an international level, we know that major international journals are subject to mafias, that is to say, a group that controls access to publications and does not want to do it using scientific quality criteria, but rather controlling topics, authors, etc. There is a negotiation, let's say, not explicit, that makes it not easy to publish in many journals, even if you translate the text in English. This is due to their policies, the ones that each journal has … the great knowledge centers, that publish the journals,

disdain, in general, anthropology issues published in Spanish. (Interview 1, Anthropology)

However, the Mexican National System of Researchers (SNI in Spanish) accords greater value to publications in English, as this Education professor clarifies:

The National System of Researchers recognizes publications in English more. We should ask ourselves what is the point? I do not think it is better to publish in English or in another language than in the original one, in this case Spanish! But, anyway, in pragmatic terms, researchers are now looking for more ways to publish in English. (UNAM, Interview 1)

The following Anthropologist, from the UNAM, seems to have a syncretic view that he reinterprets through the persistence of the two models of idea production—that is, the local and the emerging international:

It seems to me that we have to do both, yes expose our research in journals published in English, but without abandoning our own language, so we can strengthen our own journals. Otherwise, for what purpose do we publish here? ...some institutions are already publishing in English, which is the language everybody's already reading everywhere. (Interview 2)

The same professor underlined, "I believe that this is something that continues to be a problem, splitting faculty members on what to do" clarifying that "I believe that in social sciences and humanities, we support more publications in our own language; in hard sciences scholars tend to publish more in English." Researchers from the UBA shared a similar view on the trend toward bifurcation and resultant tensions.

Rankings, reactions, and challenges. This section attempts to represent the perceptions that professors, from both disciplines and universities, expressed about the growing influence of rankings on their research outputs through their local academic units. How have rankings impacted professors? The following statement from an Education professor from the Argentinian university is particularly enlightening: "In the case of the University of Buenos Aires, perhaps with the exception of the President who is looking at rankings, in our department the impact is nil." She continued by saying that rankings do not have an impact on her research performance:

I mean, we are not pending what rankings do, but if a publication appears in the newspaper, we may look at it and analyze it. We try to see what was considered, what was not pondered, who was included, who was left out. That is, we make an analysis of that information, but it does not directly impact on our behavior as researchers. (Interview 1, Education).

In other words, this interviewee was aware of rankings and their influence, but not to the point where it redirected her research praxis. From the same university, an Anthropologist noted that there was no clear policy that would favor publishing in journals with greater rankings impact:

There is no institutional policy, although sometimes it is suggested from a research group leader who says, "'... check out this magazine, try to publish here and not in that one ...'" meaning that the latter takes that much of time to publish or does not have all the useful indexes. (Interview 3)

Another anthropologist from the UBA indicated something similar when noting, "Well, the university President said, in a radio interview, that one of the things they had been working on was to ask their researchers to add the university's name on their publications."[3] This trend was also shared by another professor:

Lately, the UBA asks us for information, although I don't know the names and methodology followed by rankings. For example, at the faculty [Philosophy] level I was told to add my affiliation, UBA, when I publish. Before, it was not a big deal, but now the pressure came from the faculty [Philosophy] and the department [Education]. But nobody mentioned the rankings issue. (UBA, Education, Interview 3)

This evidences something that seems like a double discourse, since faculty members do not seem to approve much of the behind-rationale rankings, as this researcher from the UBA says: "Rankings do not matter to us, they are not relevant. Moreover, we have a contrary political view of them. They are not something positive; they are pro market" (Education, Interview 4).

---

[3] Rankings identify a specific publication as an outcome of a particular institution, only when researchers specify their academic affiliation in an unequivocal way.

In the case of the UNAM, the assessment of the weight that rankings occupy can be described as bifocal: while the governing body place(d) great emphasis on meeting its indicators, academics maintained a critical position toward them. The following faculty member put it this way:

> Yes, without a doubt the UNAM has, since, easily, fifteen or twenty years, a concern, and at times an obsession, with rankings. We pay close attention to what *The Times* says or to what the Shanghai ranking says, and UNAM's place within each is discussed, and if it has gone up or down, as if that would change our everyday lives! Rankings depend on many whims that companies have when they make them! The truth is that the UNAM has expressed, for at least the last fifteen years, a great concern to check how it is positioned, whether on international or regional rankings. (Education, Interview 1)

On a personal level, the same interviewee shared a point of view very similar to those from the Argentinian university, when responding that "rankings provide a benchmark for action, they force us to ponder where we are and how we are moving within that scale. But I find the comparison of rankings between different institutions perverse." A Mexican anthropologist from the same university made a comment similar to the ones expressed at the UBA: "I think that in general, among professors, there is not much concern. It is rather at the administration level, it is from the management, the administration that much of the insistence to achieve a relevant position comes" (Interview 2).

Along the same lines, the following Education professor at the UNAM considered that the rankings were limited in their evaluation benchmarks: "There are criteria that are not taken into account, for example: how do you assess social impact? What kind of contribution does a university make to its country and community? That is not measured and I do not know if it possible to measure it" (Interview 2). He went on to argue that the most selective institutions tend to benefit themselves, "but let's say that some universities are very selective, they work for themselves or for the international community, but their surrounding communities or even their country benefits very little from what they do." The same professor indicated that, by contrast, "there are other institutions that are service-oriented, or even social service, service to society, and that is not taken into account in the rankings"—a common criticism directed toward

the rankings that is evident in several studies (Hazelkorn 2016; Post and Chou 2016). The following UNAM interviewee went further:

> I think those most interested in general are those in the area of natural sciences, hard sciences, what they call hard sciences. They are more interested in having a place … because they are focused on science, physics, chemistry, that have an outsized development in the great geopolitical centers. That is, the dominance is carried using knowledge, as happens in the United States. There is a concern to channel research towards geopolitical interests, and I think that has led to the idea of rankings. (Anthropology, Interview 1)

This respondent saw rankings as gauges to funnel dominance, as rankings are useful to give precise measures of positioning in a scale. However, they can be used manipulatively and as a control resource at different levels. Another challenge that some professors saw in the rankings was associated with the quality and impact of publications, as this faculty member from the UNAM commented: "Having more publications does not mean that things are better, it mean that is growing, and we must ask ourselves if this relates to a suitable performance" (Education, Interview 1). Confirming this perception, a professor from the UBA adds, "This trend is prioritizing the quantitative and not the quality of the product" (Education, Interview 4). In short, academics from both universities tended to take the assessments of the rankings with caution, understanding that they can provide useful information but should be put into perspective.

Conclusion

This study provided a window in how the push for rankings implemented in the global north has directly impacted the way research is conducted at academic units that traditionally produce research that is regionally oriented in local languages. The data showed an increasing number of publications reported in Scopus, with an international visibility very much needed to interact with the dominant Anglo-Saxon model of scientific knowledge production. The three data points, covering 30 years, evidenced a remarkable increase in international publication, mainly in English, especially over the last period of comparison, which created an important shift in both academic units at each university.

It would be naïve to assume that such a shift in productivity could be mainly attributed to the policy changes that rankings initiated. Rather, the trend has been reinforced and stimulated by the isomorphic forces that rankings have facilitated. Over the same period, Argentina and Mexico have advanced significant policy changes to enhance research, mainly through CONICET and CONACYT.

Interviewed professors mentioned how the long-standing promotion policies have pushed faculty members to move within the academic rank system and produce more publications. However, they pointed to the emergence of new elements in the push to publish. This sort of new global university model, which northern universities encouraged in the richest countries, created an inconsistent trend that is distressing the local and regional missions of Latin American universities. This is particularly true for Anthropology and Education, disciplines that have been traditionally more attentive to developing knowledge with local impact.

These tensions and contradictory trends are consequences of the assumption that knowledge is a powerful engine to generate growth in today's society. Therefore, big universities, like UBA and UNAM, may see themselves as capable of "fighting" for a position in the global competition for knowledge, a hope that rankings seem to be fueling. It isn't only about visibility or obtaining a place; it is about competing for the best human and financial resources available, both locally and globally.

However, professors that were interviewed seemed to be caught in the middle of a "crossfire" between local or regional needs and the pressure to compete for a global position. Faculty members from both institutions and departments showed a certain tension between the values they hold and the direct or indirect pressures they receive from their leaders to produce global publications. In the case of UBA, there was a growing but still modest tendency to adopt the international logic of production as a new rule for regional and international positioning. Meanwhile, scholars from Mexican respondents openly expressed concerns regarding the impact of the rankings as a new paradigm that somehow weakened the regionalization of knowledge, although they were relatively willing to navigate within the new trends.

Professors from both universities showed degrees of difficulty and even acceptance of publishing in English, since it is used as a means toward a better global positioning. In the eyes of some interviewees, this picture worked best for the "hard" sciences, which are less concerned with social

issues that impact their regions. In the UBA case, a certain differentiation between professors from Education and those from Anthropology was observed with a more inward-looking research agenda for the first group. In Education, the emphasis was placed at the local level over the academic global competition of research that crosses national borders. Publishing a book by a local publisher to influence the behavior of teachers or their school curricula might be more relevant than publishing in an international, peer-reviewed journal that can later improve rankings.

Although it is true that the interviews revealed a certain ideological stance that regarded rankings as a phenomenon that in some way legitimizes the commercialization of higher education institutions, it is possible to attribute that to differences in epistemological foundations for each discipline—Education and Anthropology. In other words, these differences may play an explanatory role in the reactions to being more or less open to international trends and agendas. In this sense, it is not surprising to note a less local positioning from Anthropologists, given a certain universal character of their research. On the other hand, social and legal restrictions that educational reforms require make the discipline of education a science that plays a more local game, with less influence on what happens in the international arena.

As already mentioned, faculty members regarded rankings with some suspicion, attributing it to agendas imposed by the north. In general, the interviewed academics disagreed with the parameters implemented by rankings as a means to determine the global university positioning. However, institutional and even national policy framing prevents them from escaping those trends. It is therefore necessary to ask whether publishing in English and having a global positioning is the best way to improve the two sampled universities and their respective countries. How much of that competition really benefits local economies? Perhaps studies like these may prompt policy makers at government and university levels to deeply rethink the collateral or undesirable effects of projects such as rankings. This does not mean ignoring the benefits of globalized knowledge, but acknowledging that applicability and relevance to the local problems is also a must.

References

Altbach, P., & Balan, J. (Eds.). (2007). *World class worldwide: Transforming research universities in Asia and Latin America*. Baltimore, MD: Johns Hopkins University Press.

Barron, G. R. (2017). The Berlin principles on ranking higher education institutions: Limitations, legitimacy, and value conflict. *Higher Education, 73*(2), 317–333. https://doi.org/10.1007/s10734-016-0022-z.

Bernasconi, A. (2006). La difícil tarea de clasificar universidades [The difficult task of classifying universities]. *Quality in Education, 25,* 81–96.

Dill, D. D. (2006). Convergence and diversity: The role and influence of university rankings. In *Keynote Address presented at the Consortium of Higher Education Researchers (CHER) 19th Annual Research Conference* (Vol. 9).

Docampo, D. (2008). Autonomía universitaria y garantía de calidad - Rankings internacionales y calidad de los sistemas universitarios [University autonomy and quality assurance—International rankings and quality of university systems]. *Revista de Educación,* 149–176. https://dialnet.unirioja.es/ejemplar/198337.

Eff, A., Klein, C., & Kyle, R. (2012). Identifying the best buys in U.S. higher education. *Research in Higher Education, 53*(8), 860–887. https://doi.org/10.1007/s11162-012-9259-2.

Federkeil, G., File, J. M., Kaiser, F., Ziegele, F., & van Vught, F. (2012). An interactive multidimensional ranking web tool In F. Ziegele & F. A. van Vught (Eds.), *Multidimensional ranking: The design and development of U-Multirank* (pp. 167–177): Dordrecht: Springer.

Fernández-Cano, A., Curiel-Marin, E., Torralbo-Rodríguez, M., & Vallejo-Ruiz, M. (2018). Questioning the Shanghai Ranking methodology as a tool for the evaluation of universities: An integrative review. *Scientometrics, 116,* 2069–2083. https://doi.org/10.1007/s11192-018-2814-7.

Gaffikin, F., & Perry, D. C. (2009). Discourses and strategic visions: The university as an institutional manifestation of neoliberalism in a global era. *American Educational Research Journal, 46*(1), 115–144.

Gregorutti, G. (2011). *Following the path from teaching to research university: Increasing knowledge productivity*. Newcastle upon Tyne: Cambridge Scholars Publishing.

Gregorutti, G., & Svenson, N. (2018). *North-south university research partnerships in Latin America and the Caribbean*. Cham: Springer.

Hanushek, E. (2005). The economics of school quality. *German Economic Review, 6*(3), 269–286.

Hazelkorn, E. (2016). Globalization and the continuing influence of rankings—Positive and perverse—On higher education. In M. Yudkevich, P. G. Altbach, & L. Rumbley (Eds.), *The global academic rankings game: Changing institutional policy, practice, and academic life*. New York: Routledge.

Hazelkorn, E. (2017). *Global rankings and geopolitics of higher education: Understanding the influence and impact of rankings on higher education, policy and society*. Abingdon, UK: Routledge.

Kehm, B., & Shin, J. C. (2013). *Institutionalization of world-class university in global competition*. Dordrecht: Springer.

Ordorika, I., & Lloyd, M. (2015). International rankings and the contest for university hegemony. *Journal of Education Policy, 30*(3), 385–405. https://doi.org/10.1080/02680939.2014.979247.

Pérez-Esparrells, C., & López García, A. (2018). Los rankings de las instituciones de educación superior: Una revisión del panorama internacional [The rankings of higher education institutions: A review of the international panorama]. *Calidad En La Educación, 30,* 328–343. https://doi.org/10.31619/caledu.n30.184.

Post, D., & Chou, C. P. (2016). Preface: Measuring up for what cause? *Higher Education Policy, 29*(4), 423–429. https://doi.org/10.1057/s41307-016-0023-7.

Rauhvargers, A. (2011). *Global university rankings and their impact*. Brussels: European University Association.

Rauret, G. (2013). Los rankings y las prioridades académicas [Rankings and academic priorities]. In V. Climent, F. Michavila, & M. Ripollès (Eds.), *Los rankings universitarios, mitos y realidades* [University rankings, myths and realities]. Madrid: Editorial Tecnos.

Salmi, J. (2009). *The challenge of establishing world-class universities*. The World Bank. Retrieved from http://hdl.handle.net/10986/2600.

Slaughter, S., & Leslie, L. (2004). *Academic capitalism: Politics, polices and the entrepreneurial university*. Baltimore, MD: Johns Hopkins University Press.

Vietor, R. H. K. (2008). *Como Compiten los países: Estrategia, estructura y gobierno de la economía local* [How the countries compete: Strategy, structure and government of the local economy]. Barcelona: Deusto S.A. Ediciones.

Yudkevich, M., Altbach, P. G., & Rumble, L. E. (2016). Global university rankings as "Olympic Games" of higher education: Citius, altius, fortius? In M. Yudkevich, P. G. Altbach, & L. Rumbley (Eds.), *The global academic rankings game: Changing institutional policy, practice, and academic life*. New York: Routledge.

Scientific Journals of Universities of Chile, Colombia, and Venezuela: Actors and Roles

Jorge Enrique Delgado

Introduction

In the last two decades, science, technology, and innovation (STI) in Latin America have made notable progress. This development resulted from an increasing emphasis given to research, which has been traditionally carried out in universities, mostly public (Delgado 2011a; Didriksson 2008; Fischman et al. 2010). As a result of the increased attention to research, scientific journals, that is, those that publish research and evaluate manuscripts through peer-reviewing, have grown qualitatively and quantitatively (Delgado 2011a; Fischman et al. 2010; Holdom 2005; Red Iberoamericana de Ciencia y Tecnología [RICYT] 2007).

This situation has been favorable for the growth of journals due to the intersection of several factors. The first factor is the development of electronic publication and open access (OA) initiatives (Alperín and Suhonos 2007; Alperín et al. 2008; Delgado 2011b; Edgar and Willinsky 2010; Farga Medín et al. 2006; Fischman et al. 2010; Hedlund et al. 2004; Holdom 2005; Willinsky 2006). It also is caused by the creation

J. E. Delgado (✉)
University of Pittsburgh, Pittsburgh, PA, USA
e-mail: jed41@pitt.edu

343

of institutional, national, and regional repositories and bibliographic analysis services, such as Latindex, SciELO, and RedALyC that serve the Iberic-American region (Aguado López et al. 2008; Cetto et al. 2010; Charum 2004; CNIH et al. 2006; Colciencias 2006; Delgado 2011a, b; Farga Medín et al. 2006; Landinelli 2008; Meneghini 2002; Rodríguez Sánchez et al. 2010; Steenkist 2008). Another factor is the growth of doctoral programs and faculty members with doctoral degrees in universities (Aupetit 2007; RICYT 2010). There is also a role played by the implementation of salary incentives for publication in indexed journals as part of policies that promote productivity and innovation; the development of accreditation systems. The popularization of university rankings has been important as well (Bernasconi 2008; Pires et al. 2008; Post 2012; SCImago 2013). Finally, there is a growing need to disseminate research relevant to the region in the most frequently spoken languages, Portuguese and Spanish (Alperín et al. 2008; Borrego and Urbano 2006; Buela-Casal et al. 2006; Meneghini and Packer 2008; Steenkist 2008; Utges 2008).

The most accomplished and recognized scientific journals in Latin America are mainly published by academic units within universities (Bernasconi 2008; Cerda Silva 2009; Colciencias 2012; Fischman et al. 2010; FONACIT 2009). This type of publisher differs from other regions in the world, like Europe and North America, where journals are more commonly published by academic associations and/or corporate publishers (university press units in those countries have developed as corporate publishers) (Altbach 2005; Delgado 2012). The dynamics of journal publication between publishers are unique in Latin America. University journals in Latin America do not necessarily have a subscriber list, nor do they count on a referee base used in scientific societies. They also lack the management capacities of commercial publishers. In addition, they have been transitioning from print to OA electronic publication with an increasing pressure to be indexed by the most prestigious bibliographic services (Albornoz 2009).

With an increased focus on productivity, measures of research outcomes are frequently used to determine impact of publications. Different types of citation analysis are carried out to make decisions related to funding, inclusion in bibliographic indexes, and institutional/journal rankings (Alperín et al. 2011; Borrego and Urbano 2006; Delgado 2011a). There is limited research published on the policies, management, and dynamics at the institutional level associated with

the publication of university journals in Latin America (Cerda Silva 2009; Delgado 2011a; Fischman et al. 2010). This study focuses on the actors and roles involved in the publication of journals in major Chilean, Colombia, and Venezuelan universities. These three countries have comparable higher education systems, close research outputs, and mechanisms to evaluate and/or finance national journals. This study analyzes the roles of actors involved in the publication of scientific journals in universities from Chile, Colombia, and Venezuela, in order to identify trends in journal management for this type of publications when they are published in universities.

Methods

Within a social constructivist epistemology (Crotty 2003; Paul 2005), the methodological approach of the study is qualitative and combines data from interviews and other sources such as websites and institutional documents. In-depth, semi-structured interviews (Neuman 2006) were conducted with key informants from selected universities (journal editors and university authorities) and experts in the fields of higher education and information/science studies in Chile, Colombia, and Venezuela.

The study uses *institutions* as unit of analysis. It looks at the roles of actors involved in the publication of scientific journals in twelve major universities from Chile, Colombia, and Venezuela. As it was mentioned above, most research originates in public universities and a few private universities in Latin America (Arocena and Sutz 2005), which was the criterion used to select institutions for the study: one traditional private Catholic and three public universities from each Colombia and Venezuela, and three traditional (one public and two private) and one Catholic universities from Chile (Table 1). Why focus on these elite institutions? As one informant stated, "Here in Chile, like in the rest of Latin America, research is highly concentrated in a small number of universities. Those are national and traditional universities that have received over time greater government support." The universities in the study had the largest number of journals in the national journal lists: SciELO Chile that is managed by the Chilean National Commission for Scientific and Technological Research—CONICYT (data from 2011), the National Bibliographic Index Publindex of the Colombian Department of Science, Technology, and Innovation—Colciencias (data from 2012), and the Venezuelan National Fund for Science, Research and Technology—FONACIT (data from 2009).

Table 1   Number of interviews by country, informant/institution, city/campus, and ownership (2009–2010, follow-up 2011–2012)

Country	Informant or institution	Number of interviews	City/campus	Ownership
Chile (n = 9)	Expert/national authority	2	–	–
	Pontificia Universidad Católica	2	Santiago	Private
	Universidad de Chile	1	Santiago	Public
	Universidad Austral	2	Valdivia	Private
	Universidad de Concepción	2	Concepción	Private
Colombia (n = 7)	Expert/national authority	1	–	–
	Pontificia Universidad Javeriana	1	Bogotá	Private
	Universidad Nacional de Colombia	2	Bogotá	Public
	Universidad de Antioquia	1	Medellín	Public
	Universidad del Valle	2	Cali	Public
Venezuela (n = 9)	Expert/national authority	1	–	–
	Universidad Católica Andrés Bello	1	Caracas	Private
	Universidad Central de Venezuela	2	Caracas	Public
	Universidad del Zulia	2	Maracaibo	Public
	Universidad de Los Andes	2	Mérida	Public
Total		24		

The decision to include these universities (Table 1) was based on their position in the SCImago Institutions Ranking that analyzes scientific publications using the Scopus database (SCImago 2013). At the country level, Chile, Colombia, and Venezuela have relatively consistent scientific output indicators. The three countries also have (or had until recently) similar journal evaluation and/or funding systems. First, the Chilean STI system has a university ranking that measures, among other indicators, research productivity; a competitive line of funding for projects that journals can apply for; and the coordination of Latindex and SciELO—that is the equivalent to a national journal core list—by CONICYT (Bernasconi 2008; Prat 2001). Second, in Colombia, university salaries reward productivity—public universities through salary increases and private institutions mainly through one-time bonuses, in a system that uses the National Bibliographic Index Publindex as source of

information. University accreditation also includes publications as indicator of quality and research outcome (Charum 2004; Charum et al. 2002; Gómez 1998; República de Colombia et al. 2006a, b). There is no public funding for journals in Colombia. Third, in Venezuela recent government actions have restricted funding for STI that do not contribute to national development (López and Odremán 2010; República Bolivariana de Venezuela 2010). Until 2009, the country had a Program for the Promotion of Researchers—PPI (acronym in Spanish for *Programa de Promoción al Investigador*) that granted salary bonuses for publication in indexed journals. Also, there used to be a master journal list that provided funding for the inclusion of journals in SciELO (Delgado 2011a). PPI was later changed by the Program for the Stimulus of Innovation and Research—PEII (acronym in Spanish for *Programa de Estímulo a la Innovación y la Investigación*) with some changes in the evaluation criteria. Professors from Venezuelan public universities also have received incentives for productivity, but they are more like one-time bonuses. The specific contexts of these three countries show different research outcomes (Delgado and Weidman 2012).

Interviewees were chosen mainly through snowball sampling (Trochim 2006). Table 1 shows institutions and number of interviews in the study. Interviewees from Chile included a national expert in higher education, a national expert in communication of research, six journal editors, a school director of research and publications, a university journal coordinator, and a library director. Interviewees from Colombia were a national expert in sociology of science, three journal editors, an assistant editor, two university journal coordinators, a vice dean for research, and a SciELO employee. The interviews from Venezuela were conducted with a national expert in science and technology studies, four journal editors, two university journal coordinators, two research council directors, and a coordinator of publications. In some cases, an interviewee had more than one role.

Audiotaped interviews were conducted in Spanish, and then translated. The data analysis aimed to identify recurring themes allowing creating analytical categories. The supra category of this report, *actors*, explores which and how university authorities and key actors/university units are involved in decision-making and support for the publication of journals. This supra category is divided into three subcategories: *university leaders*, *institutional actors*, and *journal editors*. The subcategory "university leaders" has as indicator the existence of a director/coordinator of university

journals and the university unit where that person would belong to. The subcategory "institutional actors" identifies university units and personnel involved in the publication of journals and their role. The subcategory "journal editors" looks at different roles and characteristics that editors may have within the institutions. Actors and their roles are summarized in Table 2 (Appendix). On the one hand, an etic approach was used to determine the analytical categories; on the other hand, an emic approach was helpful to identify the key process and management trends developed by universities to publish their journals.

Findings

University Leaders in Public Universities

In general, the 12 universities included in this study are complex institutions with different governance, organization, and administrative structures. However, the findings in this study showed some patterns. For instance, the largest and most prestigious public universities in each country, *Universidad de Chile*, *Universidad Nacional de Colombia*, and *Universidad Central de Venezuela* are highly decentralized institutions, whose schools, departments, and centers are autonomous academic units regarding decision-making and budget allocation. A warrant for this argument comes from the question that a key informant from the *Universidad de Chile* asked during the interview, "How do you manage to talk about policies when Chile has 90 universities, and within the largest ones each department has its own policies?" The next excerpt serves to support this argument for the *Universidad Nacional de Colombia*,

> The University does not have a policy to fund its journals. Each school has to determine in its budget the funding for journals and each journal must consider selling advertisements, subscriptions, etc. Basically, all the journals of the university depend on the department, institute, or unit that publishes them. At the moment there is not any university policy to support print journals. … A need for editorial policies emerged, but it is not being done as a university but as a school. For example, at this moment, the school of medicine already created an editorial committee with policies, and I believe that each unit is contributing three percent of its resources to this committee.

Among the three largest public universities in the study, the *Universidad Central de Venezuela* (UCV) is the least centralized in terms of organization and policy. There is not a unified policy for the publication of journals, and when there have been attempts to create one, they are aborted as a result of changes in commissions and university authorities (elected positions for specific periods). This is more complicated with the current political context in the country. A journal editor stated,

> One of the reasons [for the failure of some journals] is that we do not have a university policy for the publication of journals. I have been here since 2000 and every time new commissions are created but they do not achieve anything ... they change again, because there are elections every four years, and everything starts again. Funding, lack of policies, and the political problem... The UCV has 17 press units, with different levels of consolidation among schools and research centers. This kind of things happens all the time also because of the size of the UCV. In some cases, they [publications] do not meet even minimum criteria like [having] ISBN [meaning ISSN]. [It happens, for instance, in the schools of] humanities, and law and political science. Many schools do not provide funding for their own journals, such as humanities that has 14 journals. I do not know how they do it.

These three universities do not have an overarching authority/position to coordinate university journals. However, within academic units a person responsible for publications may or may not exist. For example, the *Universidad de Chile* School of Social Sciences has a director of research and publications who establishes general criteria and provides some funding for journals; however, individual departments within the school are autonomous to determine their organization and criteria to develop their own journals. As the interviewee from *University of Chile* expressed,

> There is not a unique unit within the university. Each school generates its own journals and publications. The School of Social Sciences has its own coordination of research and publications. We try to promote that every study is published. Besides the [six disciplinary] journals, there are books. There are departments like Sociology that have their own journals and books; they are working in partnership with a [external] press unit that publishes all their publications.

Among the other public universities of this study, the *Universidad de Antioquia* (Colombia), and the *Universidad del Zulia* and the *Universidad de Los Andes* (Venezuela) have a specific person/unit in charge of developing journals. In the case of the *Universidad de Concepción*, which is private traditional, the coordinator of journals is also the editor-in-chief of one of the oldest journals in the country. He is also the director of the university press unit that is a unit within the university library. The focus in this university has been to support the top-ranked journals that have been first included in the Thomson Reuters' Web of Science (WoS) and SciELO,

> The university press unit supports SciELO and ISI [WoS] journals, basically with the editing and printing expenses… We have supported some journals that without being [in the indexes] have some possibilities. The problem is that many of them publish one or two issues and then disappear.

Regarding the other two countries, in Colombia, the *Universidad de Antioquia* has a leader of the journal editor committee who serves as a liaison between the committee and the office of the Vice Rector for Research. At the *Universidad del Valle*, there is some coordination by the editorial committee. On the other hand, Venezuelan public universities have units called "Councils for Scientific, Humanistic, and Technological Development." These Councils take charge of promoting research. The council at the *Universidad de Los Andes*, the CDCHTA ("A" for the arts), has an expert in library science as coordinator of journals who has created a strategy to develop the institution's publications. Likewise, the council at the *Universidad del Zulia* is called CONDES, whose director and staff make and implement the policy to develop the university journals. They have emphasized open access publication and getting their journals included in the most prestigious indexes, mainly those of the WoS. As the director of CONDES commented, he was proud to have seven journals indexed,

> There are 28 journals at the LUZ [Universidad del Zulia]. … In 2008, the LUZ had seven of the nine Venezuelan journals included in the SCI [part of the WoS]. … This effort that started in 2001 makes us have the majority of the mainstream journals in Venezuela.

University Leaders in Private Universities

Three large private Catholic universities were included in the study, the *Pontificia Universidad Católica de Chile*, the *Pontificia Universidad Javeriana* (Colombia), and the *Universidad Católica Andrés Bello* (Venezuela). The *Pontificia Universidad Católica de Chile* did not have a position assigned to coordinate journal publication. However, the office of the Vice Rector of Communications and Continuing Education is in charge of establishing some standards for the publication of journals. When they realized there were several journals at the university, they worked with the schools and created a section within that office to create some publication guidelines. They are more like standards for uniform institutional image than norms for publication; journals are autonomous to develop their own management systems.

The Vice Rector for Academic Affairs of the *Pontificia Universidad Javeriana* in Bogotá created the position of coordinator of scientific journals that is affiliated to the university press. This person is in charge of the technical development and strategic positioning of the university journals. The journal coordinator explained the history,

> [In the] early 2000s, [journal editors were unhappy due to] the amount of work and the excessive workload that Publindex implied. … This was heard by the Vice President for Academic Affairs. … A weakness of Javeriana was the lack of clear processes for the publication of scientific journals. [There were] more meetings with editors at the university, some supported by the [Colombian] Observatory of Science and Technology, and some by the university library in [indexing] processes with EBSCO and SciELO. With the help of a couple editors, psychology and management, statistics and results of what was happening and trends were shown to the deans at the University Academic Council. They started to seek the best, effective and viable solution. There are universities that, from the office of the Academic Vice Rector, have people hired to work exclusively with editors on these issues; it was also perceived that it was a work that should be developed at the university press unit. And that work should be geared to many university units in order to really work. The decision of the vice rector was to create a position.

On the other side, the *Universidad Católica Andrés Bello* is mainly a teaching-focused higher education institution that has grown and developed some research in recent decades. Research and publications are incipient in this institution and they are coordinated at the university

press. Most journals, however, are the result of efforts by individual editors.

To summarize, the involvement of university authorities/leaders in the development of scientific journals varies from one university to another. These variations may be related to institutional factors such as the institution's structure and organization, centralized/decentralized governance, and research tradition. In more complex and democratic universities (*Católica de Chile, Chile, Austral, Nacional de Colombia, Antioquia, Valle,* and *Central de Venezuela*), governance is more decentralized and authorities supporting the development of journals might be found in more local units such as schools, centers, or departments. In institutions with more centralized authority or maybe more leadership of central units such as councils of research and development (*Zulia* and *Andes*) and vice rectors for academic affairs or research (*Javeriana*), it may be possible to find a specific person/position in charge of providing guidance and support for journals. Personality (*Javeriana, Zulia,* and *Andes*), journal publishing experience (*Concepción, Javeriana,* and *Andes*), and qualifications, including library science (*Antioquia* and *Andes*) and management (*Javeriana*), are characteristics that can contribute to the work of those in charge of supporting journals. In institutions with less research tradition (*Andrés Bello*) involvement of authorities at any level to support the publication of journals may be small.

Given the nature and characteristics of the publishing work, it could be expected that journal editors and editorial committees have the autonomy to develop their own publications. The role of university authorities/leaders on the publication of journals is more oriented to guarantee university uniformity standards (*Católica de Chile*) and to meet national and international academic and publishing standards (*Concepción, Antioquia, Javeriana, Zulia,* and *Andes*).

Involvement of university authorities in the development of journals varies among institutions. However, a pattern consisting of an office or a person/position in charge of supporting institutions' journals was identified among some universities in this study (*Concepción, Javeriana, Antioquia, Zulia,* and *Andes*).

Institutional Actors: University Press Units

The previous section analyzed how university leaders are involved in the publication of journals. The second subcategory, "institutional actors,"

identifies university units and personnel involved in the publication of journals and their role. Besides editors and their editorial teams, and possibly some authorities/leaders, there are other institutional actors who participate in the publication of journals. One is the university press unit. In most of the universities, the press provides editing, typesetting, formatting, printing, and distribution services. University presses focus mostly on the publication of books.

At the *Universidad de Chile*, even though there is a press unit, it was not seen as an important actor involved in the publication of journals. The role of the press unit could be mostly related to editing and distribution, but not to the management or development of journals. Similarly, in Colombia, the *Universidad del Valle* also has a press unit and its role seems to be more important for the publication of books. This unit also participates in the design of journals, and provides the guidance for journals to meet the Publindex criteria. Also in Colombia, the press unit of the *Universidad de Antioquia* emphasizes book publication (activity that occupies most of its capacity) and journal editors conduct the publishing process on their own. However, it is recognized that the press participates providing material to the printing unit to develop the layout of journals. As the interviewee from *Universidad de Antioquia* explained,

> Each journal at the University is managed differently because the *Universidad de Antioquia* press has too much work and we would have to be in line a couple of years to get a material published. Therefore, each journal has an independent editorial process. The only thing they do is to provide the electronic version of documents to the press unit for layout.

There are, however, some exceptions. One example is the *Universidad de Concepción* press in Chile that supports the publication of highly ranked journals. This unit offers funding as well as proofreading and layout services, but not printing. Printing is outsourced outside the university and electronic publication is done mainly through SciELO. The interviewee from the *Universidad de Concepción* indicated that,

> The Sello Editorial [university press unit] was born in 2000. Before, there was a sub direction of university publications. The creation of the Sello implies the creation of a policy. ... The Sello collaborates [with the journals] doing the layout, proofreading. We do not have a printing unit. We outsource with an external printing company... that has cutting edge technology. But we have a pre-print office where we do layout, turn texts into

PDF format, and send them to the printing company for printing. We have a chief editor in charge of this process.

As mentioned above, the *Pontificia Universidad Javeriana* press coordinates editing, layout, proofreading, and printing services; it serves as a bridge between the journals and the legal unit, the information and communication technologies (ICT) unit, and the library; it also coordinates strategies to make alliances with indexing organizations and works in collaboration with the office of the Vice Rector for Academic Affairs to develop policy for journal publication and even faculty salaries. This university also has a printing unit (Javegraf) where most journals are printed. Javegraf also offers editing, layout, and proofreading services to some journals, competing with the press unit by offering this kind of technical services.

Also, as it was mentioned before, the *Universidad Central de Venezuela* is a special case because it has 17 press units, including the one that is part of the Council for Scientific and Humanistic Development—CDCH. The need for the policy is considered urgent but the size and complexity of the university makes it a difficult task to achieve.

Institutional Actors: University Libraries

Another institutional actor associated with the publication of journals is the university library. Besides managing the collections, acquiring databases, and exchanging journals with other institutions, libraries have gained relevance with the development of open access electronic publication and the increased search for inclusion in indexes and repositories. In universities such as *Austral* from Chile, *Javeriana* and *Antioquia* from Colombia, and *Andes* from Venezuela, libraries support journals by doing metadata processing (preparation and markup) for bibliographic systems such as SciELO. It is a process that uses markup language to prepare files for electronic publication by indicating elements (titles, authors, addresses, abstracts, body of a document, references with all their components, etc.) that will be used for internet search and analysis (SciELO 2000). This can be appreciated with the following excerpt from an interview with a journal editor from the *Universidad Austral de Chile*,

> Currently, the central library is in charge of library exchanges and tech-nology issues. They also support the journal. One of the technical processes to publish the journal in SciELO is carried out by the library. We have a very good relation with them and they do part of the technical work that we could not do because of lack of time. Also [the library develops] some of the relationships with other journals.

In other cases, university libraries are in charge of open access repositories of institutional documents and/or journals. This type of electronic document warehouses is important for archiving and preservation. All the universities in this study have an online portal that lists their journals. However, there are specifically journal repositories at the universities of *Chile*, *Austral de Chile*, *Javeriana*, *Nacional de Colombia*, *Antioquia*, *Andrés Bello* (digitalized journals), and *Zulia*. Universities whose repositories are managed by the library system are *Chile*, *Austral de Chile*, *Nacional de Colombia*, *Andres Bello*, and *Zulia*. Table 3 (Appendix) shows the journal portals/repositories of the universities included in this study, the academic units responsible for them, the links, and the number of journals included.

In synthesis, two institutional actors were considered important by the interviewees in the development of journals in addition to their editors and university authorities: university press units and libraries. With the exception of two universities (*Concepción* and *Javeriana*), it seems that press units have a more important role in the publication of books than journals, even though they provide some technical support. However, the university library role is being re-dimensioned with the advances in electronic publication and the importance of bibliographic services. One way libraries can contribute to the growth of journals is developing of journal repositories (this study provides interesting examples). Another way is providing data processing services for inclusion of journals in key bibliographic indexes like SciELO and LiLACS (*Literatura Latinoamericana en Ciencias de la Salud* from the Pan-American Health Organization, Regional Medicine Library—BIREME). Surprisingly, other possible actors were barely mentioned during the interviews, such as legal offices and ICT departments. One might have expected that legal offices had a role creating a framework for copyright, and one might have expected more involvement by ICT departments in the development, use, and storage of electronic journals.

Journal Editors

Editors of university journals are usually faculty members. With the increasing demand for indexation of journals, and the linking of university professors' salaries to productivity, responsibilities of journal editors have increased. In this study, most interviewees agree that the role of the editor is crucial for a journal's success. But, for many reasons, their work is challenging, and their position is undervalued in all the institutions studied in the three countries. A first factor affecting the work of an editor is a combination of the time allocation and effort that is required to publish a journal; the second is the payment in salary and/or bonuses assigned to the editorial work. This practice varies from one university to another and even within the same institution. Concerns about salary and workload are confirmed by a journal editor from Venezuela, where the national system recognizes faculty productivity but assigns a very low weight to the editorial work; the most important/valued products are publications,

> The [university] pays the salary, [provides] the name and the location, but does not release the editor from other work load or pays her/him the [editing/publishing] hours. [Institutional] statements declare the importance of editors but they do not get at least a bonus. Since the salaries are very low, we have to be constantly doing research and publishing in order to get the academic monetary bonus that is very small and that used to be paid quarterly and it is also delayed…

Some editors work *ad honorem* and some do their editing work as part of their workload; however, hours devoted are usually insufficient. It is difficult to determine how much time an editor requires to publish a journal but it often comes close to a full-time job. The next excerpt from an interview with an informant from the *Universidad de Los Andes* in Venezuela exemplifies how difficult it is to consider paying the editors because this job is not valued in productivity-based systems,

> There is neither a salary bonus nor a workload release. In 2006, I tried to get that recognition [for the editors] at least a few hours, but I could not gain support for it…. In this country, [editorial work] is still a voluntary military service. I am a peer reviewer for the PPI commission. It is only marginally considered when the reviewed is going to ascend to the highest level of the [salary and seniority] ladder. That work is not valued where it is

being evaluated but is highly recognized in the academic context. Rankings do not consider relevant the work of the editor. We value it but the score is very low, because when a person seeks to be included in the PPI, what counts is his/her production.

As can be appreciated, the national and institutional policy context helps determine whether a professor is released of some hours to perform the editing job. For instance, at the *Universidad del Valle* in Colombia, a university authority states,

> We have something very good in Univalle, Resolution No. 022 that allows a professor to be released from workload up to half time to work on research. That would include administrative activities related to research, which can be the case of journals. Even though there is not an explicit policy, this is something interesting.

The management and editing of a scientific journal competes with teaching, research, and administrative commitments. Time constraints are usually complicated with the lack of supporting personnel. In many cases, journal editors have to perform most, if not all, the duties themselves. This happens when a journal is just starting, not yet indexed, and/or recognized by the academic community. For instance, a journal editor from the *Universidad de Antioquia* says,

> The problem is that we have to add teaching mostly undergraduate classes. I am worried about the excessive time I have to spend with the undergraduate program, which I love but it is too much. We should have funding in order to not to have to do secretarial work.

In a few cases, when a journal has reached a high reputation (usually associated with indexation) and enjoys some financial leverage, universities are able to hire administrative personnel. This could range from a secretary/assistant to small teams. Assistant or associate editors are in charge of technical processes. Position names also change from journal to journal. The following excerpt from an interview with a journal editor from the *Universidad Católica de Chile* illustrates that point, In

> 2001 [the journal] was included in ISI [WoS]; it was the first journal of the *Universidad Católica* to enter. [The inclusion in] SciELO, I believe was in 1997. ... There is a shift in the focus ... Currently, the director of

> the journal has half of her workload assigned to the journal and the other half is to teach classes. … I am the editor [a kind of associate editor] and work 11 h a week. And there is the secretary, who, in my opinion, does most of the work.

In universities such as *Javeriana*, *Antioquia*, and *Valle* in Colombia, and *Andrés Bello* and *Central de Venezuela*, editors complain about the growing responsibilities to publish a journal. It includes indexation seeking, journal management, and network development. Universities are slow to recognize it and to provide the resources necessary to achieve goals and meet demands.

In summary, the role and work of the editor is deemed essential for a journal to be successful. Editors give journals the ability to meet the criteria required to be included in key indexes, databases, and repositories. However, the growing demands for a better management, the creation of networks of referees, authors, and readers, and the efforts to get journals included in bibliographic databases and indexes imply an increasing workload for the editors. The number of people doing editorial labor ranges from the lonely editor who does most of the work to an editorial team, which could consist of an assistant/associate editor and/or a secretary. Payment for the editorial labor also varies from the editor who does the work entirely *ad honorem* to that who works paid hours. In many cases, the editor can assign hours from her/his workload but they are often insufficient due to, as it was explained above, the increasing demands of the editorial processes. In very few cases universities hire professional editors to publish the journals. The responsibility of the editor is very high, but the actual credit given to him/her at the national and institutional levels is low. Salary systems do not promote the editorial work either, since they mostly recognize products such as publication in indexed journals, but not who publishes those journals. Often, the publication of a journal is tied to a specific name. This poses a risk for the continuity of the publication when a new generation of editors is not trained. If the editor leaves, the journal might fall because there are not incentives for the new generations of scholars to do editorial work. Given the complex and increasing demands of the editorial work, editors should be professionals, that is, being paid fulltime and trained.

Figure 1 summarizes the issues associated with the work and role of the journal editor. It includes valuation, workload, existence of a journal management team, and salary. A call for professionalization of the journal editor work is emphasized.
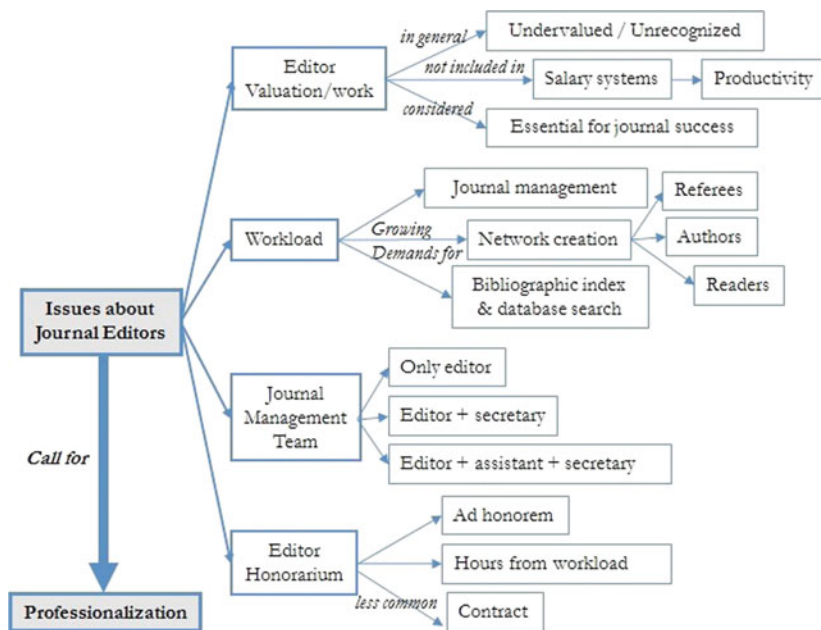
Fig. 1 Factors associated with the work and role of the journal editor

DISCUSSION AND CONCLUSIONS

Current trends in scholarly communication are generating new processes and management demands on scientific publications (Delgado 2011a; Fischman et al. 2010). Since most journals in Latin America are published by academic units within universities, the present study analyzed the actors and roles associated with the publication of university scientific journals from Chile, Colombia, and Venezuela. The ultimate goal was to identify management and organizational trends in the publication of journals. Semi-structured in-depth interviews were carried out with experts, journal editors, and authorities from 12 universities (three public and one private in from Colombia and venezuela, and one public and three private from Chile).

The main findings of the study show how some universities have developed different strategies to coordinate and support institutions' journals. It is interesting to see how the position of university journal

director/coordinator emerged in some universities, when the number and reputation of journals grew to become more visible. However, the level and type of involvement varies from institution to institution. In some cases, the coordinator is a leader journal editor (*Universidad de Antioquia*). Elsewhere, that person works from the university press to provide technical assistance, develop publication standards, and create a strategy to pursue the indexation of journals in the most important national and international bibliographic services (*Universidad de Concepción*, *Pontificia Universidad Javeriana*).

The current trends in journal publication and indexing have redefined or given new roles to some institutional actors within universities. With few exceptions, university press units have not been very involved in the development or positioning of journals. They mostly continue to provide technical support regarding journal editing, typesetting, formatting, printing, and distribution. The latter two roles are decreasing as Open Access electronic publication has gained ground (Hedlund et al. 2004; Holdom 2005; Willinsky and Mendis 2007). Claudio Rama (2006) confirms these findings because university presses focus on the production of technical and scientific books to basically meet the needs of higher education. However, Latin American university press units lack marketing policies, studies for catalogue development, administrative and professional autonomy, administrative and financial flexibility, and distribution and commercialization mechanisms. In addition, they have bureaucratic decision-making processes (Rama 2006; Uribe 2006). University libraries have a more important role in their creation of institutional repositories and supporting journal markup processes for indexation in services such as SciELO, LiLACS, EBSCO, and Publindex. The importance of each role depends on the organizational structure of each institution (González Guitián and Molina Piñeiro 2008). Something that would require further inquiry, because it was not explored in this study, is the role of ICT units and legal offices. The former are important as journals need electronic platforms for publication. The latter have a critical role in copyright.

In this context, the role of the journal editor is the most critical. Charum et al. (2002) affirm that editor involves more than merely the technical process of receiving manuscripts, assigning them to referees, and sending them to press units for proofreading and publication when they are approved. More important, the editor supports the editorial committee, defines policies and organizes the process of knowledge certification. This study shows why responsibilities of journal editors are

growing. Editors need to increase the number manuscripts received and published, in order to have a larger citable base of articles. The quest for visibility also demands for the inclusion of journals in repositories and all kinds of bibliographic services, ranging from lists and databases to indexes. As journals grow so do editors' responsibilities. Even though editors' work is valued, institutional and national systems fail to recognize it, for instance, providing administrative personnel and salary. With the attention focused on research products, it is risky for the sustainability of journals to ignore editors. Often, journals are tied to an editor. If the editor leaves, the publication of the journal could be interrupted because there are not incentives and training for the new generations of scholars to do editorial work. This is similar to what Fischman et al. (2010) found in a study carried out in several Latin American countries with editors, journal staff, librarians, and other informants: a few editors receive a monetary incentive for their work, others receive non-monetary incentives; around a fifth do the journal work as part of their job description and a majority do not receive anything in return other than the personal satisfaction.

Scientific journals are still the most important publications for the circulation of new knowledge produced through research. Traditionally, the publication of books has also been important in the social sciences and the humanities. However, the worldwide trend in productivity systems is to give more value to journal articles than books because of the weight of citations in different rankings, among other reasons. Researchers and journal editors from these fields complained during the interviews about pressures to publish in journals and specific types of articles.

Universities and societies in Latin America are starting to recognize the value of journals and some institutions, like the ones included in this study, are working to create the organization and provide the support for their consolidation and survival. More attention and recognition are required about the roles and needs of journal editors. Questions for further analysis about the role and importance of journal editors are: Why would editors work for free? What do they gain if the workload is so big but the compensation or the retribution is so little? How does the latter relate with the growth of small journals in Latin America?

Appendix

See Tables 2 and 3.

Table 2 University actors involved in journal publication

Country	Subcategory	Indicators	University			
			Pontificia Universidad Católica	*Universidad de Chile*	*Universidad de Concepción*	*Universidad Austral de Chile*
Chile	Authorities and journal coordinators	• Centralized journal coordination • Unit responsible—undertakings	• Yes • Division of Communications—funding, standards	• No at central level • School, department—funding, standards. Varies	• Yes • Director, University Press Unit—funding, technical processes, indexation, training • Schools, departments—varies	• Yes • Division of Research and Development—funding • Schools, departments, varies
	Institutional actors	• Unit/personnel involved in journal publication—role	• Editor/editorial team • University press unit—eventual printing	• Editor/editorial team • University press unit—eventual printing, distribution • Library—journal repository	• Editor/editorial team • University press unit—policy, funding, technical processes, SciELO markup	• Editor/editorial team • Library—SciELO markup, journal repository
Colombia	Subcategory	Indicators	University			
			Pontificia Universidad Javeriana	Universidad Nacional de Colombia	Universidad de Antioquia	Universidad del Valle

Country	Subcategory	Indicators	University			
			Pontificia Universidad Católica	Universidad de Chile	Universidad de Concepción	Universidad Austral de Chile
	Authorities and journal coordinators	• Centralized journal coordination • Unit responsible—undertakings	• Yes • Coordinator of periodical publications, University Press Unit—technical and strategic processes	• No • School—funding, standards. Varies	• Yes • Leader, committee of journal editors, representative to office of Vice Rector for Research funding, standards	• Yes • Editorial committee—funding, standards
	Institutional actors	• Unit/personnel involved in journal publication—role	• Editor/editorial team • University Press Unit—technical processes, strategic work, training • University printing unit • Library—markup for SciELO and other indexes • Office of the Vice Rector for Academic Affairs - policy • ICT office—platform, server • Legal office—copyright, open access	• Editor/editorial team • Academic unit authorities—policy, funding • School of Medicine Department of Public Health—SciELO markup • Library—journal repository	• Editor/editorial team • Vice rector for research—funding • University press unit—eventual printing, distribution • ICT office, Vice rector for Teaching—journal repository • Library—SciELO markup	• Editor/editorial team • Vice rector for research—policy making. Vice deans for research—policy execution

Table 2 (continued)

Country	Subcategory	Indicators	University			
			Pontificia Universidad Católica	Universidad de Chile	Universidad de Concepción	Universidad Austral de Chile
Venezuela	Subcategory	Indicators	University Pontificia Universidad Católica Andrés Bello	Universidad Central de Venezuela	Universidad del Zulia	Universidad de los Andes
	Authorities and journal coordinators	• Centralized journal coordination • Unit responsible—undertakings	• Yes • University Press unit—funding, standards	• No • School	• Yes • Consejo de Desarrollo (CONDES)—Funding, standards, policy	• Yes • Journal coordinator, Consejo para el Desarrollo Científico (CDCHTA)—funding, standards, policy
	Institutional actors	• Unit/personnel involved in journal publication—role	• Editor/editorial team • University press—technical processes, distribution • Library—journal digitalization, repository	• Editor/editorial team • University press units: CDCH plus other 16—Varies	• Editor/editorial team • Library—journal repository	• Editor/editorial team • ICT office—Saber ULA, REVENCYT • Library—SciELO markup

Table 3 University journal portals/repositories and university units in charge

University	Unit in charge	Number of journals	URL Journal Repository/Portal/Listing	Comments
Pontificia Universidad Católica de Chile	Vice President for Communications and Continued Education, Office of Publications	35 periodicals (18 journals)	http://investigacion.uc.cl/Revistas-UC/revistas-uc.html	Portal includes scientific journals and other academic periodical publications, some outdated or not published anymore. It includes 35 titles organized by schools, not by field
Universidad de Chile	Vice President for Academic Affairs, Information and Library Service System	104	Portal de Revistas Académicas http://www.revistas.uchile.cl/	Portal and repository with most journals using an adaptation of OJS, created in 2011 as part of 2008–2011 University Modernization Plan. It includes 104 titles from 17 schools and other academic units
Universidad Austral de Chile	Vice President for Academic Affairs, Library System	12	Revistas Electrónicas UACh http://www.biblioteca.uach.cl/biblioteca_virtual/revistas_uach.html	Portal and journal repository using SciELO methodology. It includes 12 titles not classified by academic unit or knowledge field
Universidad de Concepción	Library Director, University Press	7	Sello Editorial http://selloeditorial.udec.cl/	Portal includes titles and tables of contents of journals supported by the university press. It includes 7 journal titles and 3 other types of publications
Pontificia Universidad Javeriana	Vice President for Academic Affairs, University Press, Office of Information Technologies	27	Catálogo de Publicaciones en Línea http://revistas.javeriana.edu.co/	Journal repository includes all periodicals, which are published using OJS Journal list and links to journals' pages. It includes 27 titles organized by areas of knowledge
Universidad Nacional de Colombia	Vice President for Research, National Library System UN	58	Portal de Revistas UN http://www.revistas.unal.edu.co/	Portal and journal repository using an adaptation of OJS. It includes 58 titles not classified by academic unit or knowledge field
Universidad de Antioquia	Vice President for Teaching, Program for Integration of Technologies into Teaching	44	Sistema de revistas UdeA http://aprendeenlinea.udea.edu.co/revistas/	Portal and journal repository using an adaptation of OJS. It includes 44 titles not classified by academic unit or knowledge field

(continued)

Table 3 (continued)

University	Unit in charge	Number of journals	URL Journal Repository/Portal/Listing	Comments
Universidad del Valle	Vice President for Research, Editorial Committee	25	Revistas y boletines https://revistas.univalle.edu.co/	Portal includes scientific journals and other academic periodical publications, some outdated. It includes 25 titles of periodical publications (not only peer reviewed) not classified by academic unit or knowledge field
Universidad Católica Andrés Bell	Library	13	Revistas digitalizadas http://revistasenlinea.saber.ucab.edu.ve/	Portal and repository of digitalized journals by issue, not by article. It includes 13 titles digitalized by issue
Universidad Central de Venezuela	Vice President for Academic Affairs, Council for Scientific and Humanistic Development	48	Open Journal Systems (Revistas) http://saber.ucv.ve/ojs/	Institutional repository (Saber UCV) that includes journals, which are published using OJS. It includes 48 titles not classified by academic unit or knowledge field
Universidad del Zulia	Vice President for Academic Affairs, Library and Information Service System	33	ReviCyHLUZ http://luz.edu.ve/index.php?option=com_content&view=article&id=83&Itemid=478	Portal and journal repository using an adaptation of OJS (has been unavailable). Includes 33 titles organized by schools
Universidad de Los Andes (Mérida)	Computing Council; Council for Scientific, Humanistic, and Technological Development. Merida's Technological Park, Teleinformation Center	86	Revistas http://saber.ula.ve/revistas_electronicas	Institutional repository (Saber ULA) that includes journals, which are published using OJS. It includes 86 titles not classified by academic unit or knowledge field

References

Aguado López, E., Rogel Salazar, R., Garduño Oropeza, G., & Zúñiga, M. F. (2008). Redalyc: una Alternativa a las Asimetrías en la Distribución del Conocimiento Científico [RedALyC: An alternative to scientific knowledge distribution asymmetries]. *Ciencia, Docencia y Tecnología, XIX*(37), 11–30.

Albornoz, O. (2009). El Tema del Desempeño Académico de los Profesores Universitarios [The issue of academic performance of university professors]. *Revista Informe de Investigaciones Educativas, 23*(1), 89–99.

Alperín, J. P., & Suhonos, M. J. (2007). Publicación en Línea con Open Journal Systems (OJS): Aspectos Importantes [Online publication with Open Journal Systems: Important aspects]. *RevistaeSalud.com, 3*(12).

Alperín, J. P., Fischman, G., & Willinsky, J. (2008). Open access and scholarly publishing in Latin America: Ten flavours and a few reflections. *Liinc em Revista, 4*(2), 172–85. Available online at: http://www.ibict.br/liinc.

Alperín, J. P., Fischman, G., & Willinsky, J. (2011). Scholarly communication strategies in Latin America's research-intensive universities. *Liinc em Revista, 4*(2), 172–85. Available online at: http://www.ibict.br/liinc.

Altbach, P. G. (2005). Patterns of higher education development. In P. G. Altbach, R. O. Berdahl, & P. G. Gumport (Eds.), *American higher education in the twenty-first century: Social, political, and economic challenges* (2nd ed., pp. 16–37). Baltimore and London: Johns Hopkins University Press.

Arocena, R., & Sutz, J. (2005). Latin American universities: From an original revolution to an uncertain transition. *Higher Education, 50,* 573–592. https://doi.org/10.1007/s10734-004-6367-8.

Aupetit, S. D. (2007). Assessment of scientific productivity and restructuring of university research systems in Latin America. *Educación Superior y Sociedad* (UNESCO-IESALC), *12*(1), 1–18. Available online at: http://ess.iesalc.une sco.org.ve/index.php/ess/article/view/23.

Bernasconi, A. (2008, February). Is there a Latin American model of the university? *Comparative Education Review, 52*(1), 27–52. http://dx.doi.org/10.1086/524305.

Borrego, Á., & Urbano, C. (2006). La Evaluación de Revistas Científicas en Ciencias Sociales y Humanidades [Evaluation of scientific journals in the social sciences and humanities]. *Información, Cultura Y Sociedad, 14,* 11–27.

Buela-Casal, G., Perakakis, P., Taylor, M., & Checa, P. (2006). Measuring internationality: Reflections and perspective on academic journals. *Scientometrics, 67*(1), 45–65. https://doi.org/10.1007/s11192-006-0050-z.

Cerda Silva, A. (2009). *Políticas Editoriales de Publicaciones Académicas en Chile* [Publishing policies for academic publications in Chile]. Santiago: ONG Derechos Digitales.

Cetto, A. M., Alonso Gamboa, J. O., & Córdoba González, S. (2010). Ibero–American systems for the dissemination of scholarly journals: A contribution

to public knowledge worldwide. *Scholarly and Research Communication, 1*(1), 010104–16. Available online at: http://www.src-online.ca/index.php/src/issue/current.

Charum, J. (2004). La Construcción de un Sistema Nacional de Indexación, el Caso de Publindex [The construction of a national system of indexation, the Publindex Case]. *Convergencia, 11*(35), 293–309.

Charum, J., Murcia, C., Usgame, D., & Silva, A. (2002). *La Búsqueda de la Visibilidad a través de la Calidad: el Reto del Editor* [The search for visibility through quality: The challenge for the editor]. Calidad de la Educación Superior 2. Bogotá: Instituto Colombiano para el Fomento de la Educación Superior –ICFES.

Colciencias. (2012). *Indicadores Generales Publindex 2002–2011* [Publindex general indicators 2002–2011]. Bogota: Colciencias.

Colciencias, Servicio Permanente de Indexación de Revistas CT+ I Colombianas. (2006, August). *Base Bibliográfica Nacional – BBN Publindex. Índice Bibliográfico Nacional Publindex – IBN Publindex* [National Bibliographic Database—BBN Publindex. National Bibliographic Index Publindex—IBN Publindex]. Bogotá: Colciencias.

Consejo Nacional de Indexación y Homologación (CNIH), Colciencias, & Observatorio Colombiano de Ciencia y Tecnología (OCCyT). (2006). *Servicios de Indexación y Resumen Utilizados para los Procesos de Indexación y Homologación de Revistas de CT+I 2003–2006* [Indexing and abstract services used for the processes of indexation and validation of ST&I Journals 2003–2006]. Bogotá: CNIH, Colciencias, OCCyT.

Crotty, M. (2003). *The foundations of social research: Meaning and perspective in the research process*. Thousand Oaks, CA: Sage.

Delgado, J. E. (2011a). *Journal publication in Chile, Colombia and Venezuela: University responses to global, regional and national pressures and trends*. Doctoral dissertation, School of Education, University of Pittsburgh, Pittsburgh, PA. Available online at: http://d-scholarship.pitt.edu/9049/.

Delgado, J. E. (2011b). Role of open access in the emergence and consolidation of referred journals in Latin America and the Caribbean. *Educación Superior y Sociedad* (UNESCO-IESALC), *16*(2). Available online at: http://ess.iesalc.unesco.org.ve/index.php/ess/article/view/407.

Delgado, J. E. (2012). Academic journals, scientific associations, and the aademia. *Universitas Odontologica, 31*(66), 15–17.

Delgado, J. E., & Weidman, J. C. (2012). Latin American and Caribbean countries in the global quest for world class academic recognition: An analysis of publications in Scopus and the Science Citation Index between 1990 and 2010. *Excellence in Higher Education, 3*(2), 111–121. https://doi.org/10.5195/ehe.2012.73.

Didriksson, A. (2008). Global and regional contexts of higher education in Latin America and the Caribbean. In A. L. Gazzola & A. Didriksson (Eds.), *Trends in higher education in Latin America and the Caribbean* (pp. 20–50). Caracas: UNESCO IESALC.

Edgar, B. D., & Willinsky, J. (2010). A survey of the scholarly journals using Open Journal Systems. *Scholarly and Research Communication, 1*(2), 1–22.

Farga Medín, C. A., Bojo Canales, C., & Hernández Villegas, S. (2006, Enero-Febrero). Pasado, Presente y Futuro del Proyecto *SciELO* en España [Past, present and future of SciELO project in Spain]. *El Profesional de la Información, 15*(1), 23–28. http://dx.doi.org/10.3145/epi.2006.jan.04.

Fischman, G. E., Alperín, J. P., & Willinsky, J. (2010). Visibility and quality in Spanish-language Latin American scholarly publishing. *Information Technologies & International Development, 6*(4), 1–21.

Fondo Nacional de Ciencia, Tecnología e Innovación (FONACIT). (2009). *Registro de Publicaciones Científicas y Tecnológicas Venezolanas de FONACIT* [Registry of Venezuelan Scientific and Technological Publications of FONACIT]. Caracas: FONACIT. Retrieved May 11, 2009, from http://www.fonacit.gob.ve/publicaciones/indice.asp.

Gómez, Y. J., Andukia, J. C., & Rincón, N. (1998, July–August). Publicaciones Seriadas Científicas Colombianas [Colombian Scientific Periodical Publications]. *Interciencia, 23*(4), 208–217.

González Guitián, M. V., & Molina Piñeiro, M. (2008). Las Bibliotecas Universitarias: Breve Aproximación a sus Nuevos Escenarios y Retos [University Libraries: Brief approach to their new settings and challenges]. *Acimed, 18*(2), 1–32. Retrieved July 7, 2011, from http://scielo.sld.cu/pdf/aci/v18n2/aci02808.pdf.

Hedlund, T., Gustafsson, T., & Björk, B.-C. (2004, July). The open access scientific journal: An empirical study. *Learned Publishing, 17*(3), 199–209. http://dx.doi.org/10.1087/095315104323159621.

Holdom, S. (2005). E-journal proliferation in emerging economies: The case of Latin America. *Library and Linguistic Computing, 20*(3), 351–365. https://doi.org/10.1093/llc/fqi033.

Landinelli, J. (2008). Scenarios of diversification, differentiation, and segmentation in Latin America and the Caribbean. In A. L. Gazzola & A. Didriksson (Eds.), *Trends in higher education in Latin America and the Caribbean* (pp. 149–171). Caracas: UNESCO IESALC.

López, H. K. C., & Odremán, R. J. G. (2010, December 16). *Comparativa LOCTI 2005 y LOCTI 2010* [Comparison between LOCTI 2005 and LOCTI 2010]. Retrieved from http://www.locti.co.ve/.

Meneghini, R. (2002). SciELO (Scientific Electronic Library Online) project and the visibility of "peripheral" scientific literature. *Quimica Nova, 26*(2), 156.

Meneghini, R., & Packer, A. (2008). Is there science beyond English? Initiatives to increase the quality and visibility of non-English publications might help to break down language barriers in scientific communication. *EMBO Reports, 8*(2), 112–116. https://doi.org/10.1038/sj.embor.7400906.

Neuman, W. L. (2006). *Social research methods: Qualitative and quantitative approaches* (6th ed.). Boston: Pearson, Allyn and Bacon.

Paul, J. L. (2005). *Introduction to the philosophies of research and criticism in education and the social sciences*. Upper Saddle River, NJ: Pearson Merrill Prentice Hall.

Pires, S., Lemaitre, M. J., Trindade, H., Trebino, H., & Ali, E. (2008). Higher education accreditation and assessment systems in Latin America and the Caribbean. In A. L. Gazzola & A. Didriksson (Eds.), *Trends in higher education in Latin America and the Caribbean* (pp. 287–305). Caracas: UNESCO IESALC.

Post, D. (2012). Rank scholarship. *Comparative Education Review, 56*(1), 1–17. Retrieved February 28, 2014, from http://dx.doi.org/10.1086/663834.

Prat, A. M. (2001). Evaluación de la Producción Científica como Instrumento para el Desarrollo de la Ciencia y la Tecnología [Evaluation of scientific production as an instrument to develop science and technology]. *Acimed, 9*(suplemento), 111–114. Retrieved July 9, 2011, from http://bvs.sld.cu/revistas/aci/vol9_s_01/sci16100.pdf.

Rama, C. (2006). *La Tercera Reforma de la Educación Superior en América Latina* [Third higher education reform in Latin America]. Buenos Aires: Fondo de Cultura Económica.

Red Iberoamericana de Ciencia y Tecnología (RICYT). (2007). Estado de la ciencia [Status of science]. In *Ibero-American Network of Science and Technology Indicators*. Buenos Aires: RICYT. Available online at: http://www.ricyt.org.

República Bolivariana de Venezuela. (2010, December 8). *Ley Orgánica de Ciencia, Tecnología e Innovación* [Organic law of science, technology and innovation]. Caracas: Asamblea Nacional.

República de Colombia, Ministerio de Educación (MEN), Consejo Nacional de Acreditación (CNA). (2006a). *Lineamientos para la Acreditación de Programas* [Guidelines for program accreditation]. Bogota: MEN.

República de Colombia, Ministerio de Educación (MEN), Consejo Nacional de Acreditación (CNA). (2006b). *Lineamientos para la Acreditación Institucional* [Guidelines for institutional accreditation]. Bogota: MEN.

Rodríguez Sánchez, Y., Crespo Ramírez, R. J., Piloto Rodríguez, R., & Guerra Avila, E. (2010). Revistas Científicas de Ciencia e Innovación Tecnológica: Metodología para la Evaluación de Publicaciones Científicas [Scientific journals in science and technological innovation: Methodology for the evaluation

of scientific publications]. *Ciencias de la Información, 41*(1), 21–26. Available online at: http://www.cinfo.cu/Userfiles/file/Cinfo/CINFO2010/abril2010/Articulo%203.pdf.

Scientific Electronic Library Online (SciELO). (2000). Documentation for DTD module version 3.1. Sao Paulo: FAPeSP, Bireme, OPAS, GMS. Retrieved July 7, 2011, from http://www.scielo.org/local/content/pdf/dtd_scielo_en.pdf.

SCImago Research Group. (2013). *SCImago institutions rankings*. Spain: SCImago. Retrieved November 6, 2013, from http://www.scimagoir.com/pdf/SIR%20Iber%202013.pdf.

Steenkist, R. M. (2008). *Open access: A chance to increase the academic publication in Latin American countries?* Unpublished master's thesis, Leiden University, Leiden, the Netherlands.

Trochim, W. M. K. (2006). *Research methods knowledge base*. Retrieved from http://www.socialresearchmethods.net/kb/sampnon.php.

Uribe, R. (2006). La Edición de Libros en las Universidades de América Latina y el Caribe [Book publishing in Latin American and Caribbean universities]. In C. Rama, R. Uribe, & L. de Sagastizábal (Eds.), *Las Editoriales Universitarias en América Latina* [University Press Units in Latin America]. Bogotá: Instituto Internacional para la Educación Superior en América Latina y el Caribe–IESALC-, Centro Regional para el Fomento del Libro en América Latina y el Caribe–CERLALC-.

Utges, G. (2008). Visibilidad, Calidad y Relevancia. Desafíos y Oportunidades para nuestras Revistas en Tiempos de Cambio [Visibility, quality and relevance: Challenges and opportunities for our Journals in Times of Change]. *Tecne, Episteme y Didaxis,* (Spec Issue), 35–46.

Willinsky, J. (2006). *The access principle: The case for open access to research and scholarship*. Cambridge, MA: Massachusetts Institute of Technology.

Willinsky, J., & Mendis, R. (2007). Open access on a zero budget: A case study of postcolonial text. *Information Research, 12*(3). Available from http://informationr.net/ir/12-3/paper308.html.

In League: The Brave New World of Higher
Education

In League? The Brave New World of Higher Education: Conclusion

Anthony Welch

The preceding chapters that chart the rise of league tables and ranking regimes, and their impact on social science scholarship are indications of a troubling transformation in the academic world. They speak to a cultural shift that is pushing universities to focus narrowly on their institution's rankings on such indices as *Times Higher Education* World University Rankings (https://www.timeshighereducation.com/worlduniversity-rankings), QS (http://www.topuniversities.com/qs-world-universityrankings), or the Academic Ranking of World Universities [ARWU] http://www.shanghairanking.com/#. Scholars, too, including in the social sciences, are now being schooled to focus on a narrow band of leading international journals, almost all in English that are widely read and highly cited. Overall, as argued some years ago, 'rankings are part of a global movement that is redefining accountability, transparency, and good governance in terms of quantitative measures … they diminish the salience of local knowledge and professional autonomy, they absorb vast resources, and they insinuate and extend market logic' (Sauder and Espeland 2009, p. 80).

A. Welch (✉)
University of Sydney, Sydney, NSW, Australia
e-mail: anthony.welch@sydney.edu.au

375

This shift of emphasis often leads to substantial contradictions. Universities serve various functions, including addressing major concerns and questions at the national level: climate change, non-communicable diseases, economic problems such as unemployment and under-employment, or issues stemming from urbanisation and regional disparities. But this often conflicts with the drive to compete in the global higher education marketplace. The former emphasises local engagement, the latter a focus on international recognition and reputation, and in practice entails subscribing to prevailing Western canons of what counts as research, and Western geographic priorities (Welch 2019, 2020a). Most major US journals, including in the social sciences, are biased towards US based research and concerns, often with little if any attention given to non-US research.

This leads to a pressing dilemma for non-US-based researchers. The old maxim of 'Publish or Perish' has now been radically transformed, as so sharply expressed by the Beirut based sociologist Sari Hanafi: 'Publish Globally and Perish locally, or Publish Locally and Perish Globally' (Hanafi 2011). The dilemma is by no means limited to Arab scholars in the social sciences, but applies equally to those from higher education systems worldwide. It is especially pressing for younger scholars, attempting to climb the academic ladder (or at least get on to one of the rungs), since promotions and tenure processes now often depend on an academic profile which marks out a presence in major Western journals, in English.

The horns of Hanafi's dilemma were brought home to me sharply in recent discussions held with two Chinese colleagues at one of the country's leading universities (one of the 'Double First Class' *shuāngyīliú* 双一流 category). Both colleagues were young (each in their 30s, with two young children), female, ethnic Chinese, and had taken their Ph.D. at a major research university in the Anglosphere, before returning home, to each take up an academic post. 'Lili' worked in the Business School, and, on the basis of her English language proficiency, was teaching subjects, in English, to international M.B.A. students. The second colleague, 'Mei', worked within the School of Education. Each were keenly eying promotion prospects, within what is an intensely competitive academic system, with high expectations of research performance, particularly of young returned, bi-lingual scholars at leading universities within the system. The fact that formal annual publication thresholds exceeded those at many Western universities (where present), and that promotional opportunities

were very limited, intensified levels of competition between colleagues within the same department or discipline.

Like all academic staff within the Business School, Lili was well aware of the existence of the list of preferred journals that was provided to each academic staff member in the Business School as an indication of where they should aim to publish. Somewhat curiously, while the list contained some journals that would be widely recognised as leading their field internationally, there were others whose rationale for inclusion was much less clear (perhaps reflecting the fact that the list had been compiled from a well-known international business newspaper, rather than being strictly based on academic quality criteria). Nonetheless, when asked where she sought to publish, her answer was clear: 'I would not dream of publishing anywhere else'. While, like her colleagues, she was privately critical of the list and pointed to examples of leading journals in the field that were not present (and others that were on the list, but her professional judgement suggested should not be), she recognised the rules of the game. Publications in journals outside the list would count little, if at all, towards the prized goal of promotion. Hence, however worthy a number of outside contenders were, and however uncertain the status of some journals that were on the list, her attention was sharply focused on publication in the listed journals.

In the case of Mei, the dilemma played out somewhat differently. The School of Education had also developed a list of preferred journals, and, while there were disagreements about exactly which journals should and should not be present, it was felt to be based on generally sound academic criteria. But, when questioned regarding her publication strategy, her response reflected the complex practical difficulties raised by Hanafi's dilemma. In fact, her response suggested that it was not a matter of one or the other; but both. Mei clearly accepted that she needed to publish internationally, in highly regarded international journals, in English, as a means to both secure her international reputation, and to gain promotion within her institution. So, she was clearly committed to publishing in the leading international journals that made up the list. At the same time, however, she argued strongly that she also needed to publish in major domestic Chinese language journals. This was for two reasons. Firstly, because most of the leading figures in her field (older males for the most part) only published in Chinese, and had limited command of English, so her international publications would not be known to domestic leaders in her field. But it was not just these few leaders in the field who were important to

her. So, secondly, she argued that (mirroring Chou and Chan's findings 2016, on Taiwan), without publishing in her native tongue, 'no-one in China would know who I am'. In some ways, she represents an example of the tensions referenced by Curry and Lillis, as well as Gregorutti et al. (2020), that are experienced by bi-lingual colleagues faced with competing demands for both international publications in English, as well as publications in the local language; and the coping strategies they adopt in response. Bi-lingual, and more quantitatively based colleagues are in effect advantaged, at least in terms of their international profile and promotion prospects. But there is both a greater burden of expectation, and an associated cost, as underlined in the Taiwanese case study: 'Those with a quantitative background and fluent English tend to receive more academic recognition through English-medium papers, but they are less well known at home' (Chou and Chan 2016, p. 440; see also Gregorutti et al., in this volume).

Differential Impact

Gender

These two examples illustrate something of the differential impact that ranking regimes have on academic staff. It is important to remind ourselves that academic systems are pyramidal in shape, and in most systems, female academics congregate more at the more numerous, lower levels, and are still relatively less well represented at the highest levels (Stiver Lie and O'Leary 1990; Welch 1997, 2005b) This is not always the case—in some parts of Asia, for example, female academics form the majority, including at the higher levels. Myanmar presents a striking example, where in 2017, 85% of academics, at levels up to and including full Professor, were female, in a system where poorly paid public sector jobs provide women with job security, whereas the obligation to earn bigger salaries is still largely seen as part of the male domain (World Bank 2018(?); ADB 2013).

But this is unusual. In most systems, female academics are still less commonly found at the higher levels, and are less likely to be tenured (Allan 2011; Winslow and Davis 2016). Often, this goes with a greater responsibility for household work and childcare, and, in a number of systems, care for the elderly. In effect, then, ranking regimes and the pressure to publish in leading academic journals, often in one's second

language, form a greater burden on female academic staff, as one such interviewee acknowledged:

> … it is difficult to separate both the practical requirements and time tied to caring responsibilities … from my capacity to spend the time reading and writing that many of my male colleagues have told me they do, both 'after hours' and during official work time. (Welch 2016, p. 529)

Rank

Rank,[1] too makes a difference, as evident in findings from East Asian systems, such as Japan and China. As Ishikawa and Sun (2020) indicates, and practice in China, Taiwan and elsewhere in Asia confirms, older, senior professors, who in many cases have worked and published all their lives in their native tongue, and thus have limited or no proficiency in English, are effectively exempted from the expectations to regularly publish in major international journals, that apply to younger and more junior academic staff, especially returnees. Once again, the weight of expectations falls disproportionately on the shoulders of young (returnee) scholars, who often also have higher teaching loads, as well as, often, responsibilities for the care of young children. In addition, particularly in Confucian heritage societies, the added responsibility of caring for aged parents forms a further expectation. This disproportionate burden on younger scholars can lead to an 'inter-generational gap, clash and friction' (Ishikawa and Sun, 2020; see also Chou and Chan, 2016). But the differential also applies well beyond Asia, in English language systems, as the analysis of similar patterns in the Australian case underlines (Welch, in this volume).

Discipline

A further differential occurs along disciplinary lines, where a combination of strong traditions in indigenous social sciences, especially in East Asian systems, together with the greater gap in conventions of writing and argumentation between Western and Eastern social sciences, make establishing a profile in major Western social science journals a complex and difficult

---

[1]Which can sometimes be a proxy for age. As several of the case studies reveal, older and more senior professors are less.

task. For Engineers, Physicists and Chemists, a broadly common terminology and set of widely accepted interpretive frameworks means the gap in both language and theoretical frameworks is much narrower and easier to bridge. Hence publishing in major international journals (ISI-indexed) located in the metropolitan Anglosphere is somewhat easier. Together with the fact that technology and the sciences are a higher priority in the countries of East Asia, for example, the lives of young scholars in the social sciences, in Asia, Latin America and elsewhere, are not made easier by the pressure to meet expectations of research output in major league international journals, mostly in English. In effect, as Ishikawa's research in this volume highlights, vernacular scholarship is imperilled by the unrelenting drive for 'world class' universities: the global contest between nations and institutions to boost their presence in the top 100 or so makes them 'look as much like Olympic medal counts as a "beauty contest"' (Ishikawa, citing Cantwell and Taylor 2013, p. 201).

In both China and Japan, for example, patterns of English language publication tend to be 'bi-polar'. Notwithstanding growing pressure to publish in major Western journals, in English, the weight of social science scholarship is still expressed in the local language. Both systems are large enough to sustain this pattern (unlike smaller nations with less developed higher education systems, such as most of the ASEAN member states, for example). While it may be argued that this preservation of the local language, and, perhaps too, indigenous interpretive frameworks and scholarly traditions, and attention to local research context, is a welcome response to the tidal wave of English language publications, it does not solve the rankings problem. Tensions exist between the demand to publish in international journals in English, on the one hand, and the desire and need to contribute to local, vernacular scholarship, on the other (Ishikawa and Sun, 2020; Flowerdew and Li 2009).

In response, many higher education systems, in both Asia and Latin America, have introduced two-level incentive schemes. Publication in an SSCI journal yields a higher reward; publication in a major domestic journal in the local language, returns a lower inducement. For such a system to operate, it is necessary to develop a parallel list of local journals, in each case. As Chou and Chan illustrate, Taiwan provides an example (Chou and Chan, 2016), developing a domestic TSSCI list of local journals. China has an equivalent (CSSCI), and has also developed a wide range of English language journals, such as the *Frontiers* series, that

are supported by Higher Education Press, or Western publishers such as Brill, or Springer (Brill 2020; Springer 2020). But, as Chou and Chan also point out, the introduction of schemes to boost research output by favouring SSCI journals, in systems such as Taiwan, dramatically skews output towards those journals, at the cost of fewer outputs in local journals. It can also skew hiring practices, towards the more quantitative sub-fields of social science disciplines—such as Educational Psychology, Science Education or Educational Technology, with a consequent loss of depth and capacity in areas such as Educational Philosophy and History of Education (Chou and Chan, 2016).

Such disciplinary differences in English language publications in Japan are starkly illustrated in Ishikawa's reference to Osaka University, one of Japan's most eminent. Drawing on a colleague's survey of institutional research output over the years 2003–2005, she reveals that more than 80% of all papers in the natural science, Engineering and Medical faculties were in English. By contrast, within the faculties of Letters, and Law, respectively, 91 and 87% of the total academic papers produced during the same period were written in Japanese (Ishikawa and Sun, 2020).

In both China and Japan, such patterns continue to be sustained by large, well-established local scholarly communities, and numerous domestic journals, each of which provide a solid base for local language publications. But, of Japan's 2000 journals overall, of which 400 are in English, only 16% of the latter group are in the humanities and social sciences. In effect, then, the global reputation of universities in both systems is largely dependent on output in the natural and technological sciences, and health disciplines, in English. Social science scholarship is significantly discounted in this exercise, which also deprives the rest of the world of much fine scholarship expressed in the local language. It simply remains invisible to the outside world. Hence, in both China and Japan, the top-tier research-intensive university category is largely distinguished by their strengths in the natural sciences and technology, rather than in the social sciences and humanities.[2]

---

[2] To some extent, this bias is compounded by the methodology used by various rankings schemes. See for example, http://www.shanghairanking.com/ARWU-Methodology-2019.html although some allowance is made for institutions specialising in the Social Sciences.

Governing by Numbers: Audit Culture and Its Effects

But the whole technology of rankings and league tables did not just spring forth, fully armed. Rather, it was enabled by a cultural shift that, while by no means limited to the higher education field, was promoted there enthusiastically from the 1990s, and has profoundly affected its operations since. As a result, an intricate regulatory architecture now infects almost every major function within higher education, including the work of producing research. Justified by appeals to accountability, the results feel more like an exercise in accountancy, to harried, hard-working academic staff (Welch 2005a). A proliferating panoply of online systems now regulate, in detail, the everyday realities of academic life, including the production of research and its output. "…(I)n effect a modified, and more sophisticated, latter-day Taylorism, (it) differs somewhat from place to place; nonetheless… is increasingly being seen as relevant to the lifeworld of contemporary higher education worldwide" (Welch 2016, p. 513; see also Welch 1998, 2018; Shore 2008, p. 279; Shore and Wright 1999, 2015). Sharply dissected in Michael Power's *Audit Culture* (1997), and his earlier *The Audit Explosion* (1994), its explosive spread into every walk of life is laid bare:

> In addition to financial audits, there are now environmental audits, value for money audits, management audits, forensic audits, data audits, intellectual property audits, medical audits, teaching audits, technology audits, stress audits, democracy audits and many others… (Power 1994, p. 1)

Accountability, as he argues, has been transformed into 'elaborately detailed policing mechanisms' (Power 1994, p. 1), exacerbating differences between academic staff and the proliferating managerial class, and intensifying alienation and mistrust within universities. Introduced in the name of 'quality', the work of eponymous agencies such as the UK's Higher Education Quality Council (HEQC), and Australia's Australian Universities Quality Agency (AUQA), and its successor, the Tertiary Education Quality Standards Agency (TEQSA) expanded, becoming ever more detailed and consuming more and more institutional resources. This includes the research portfolio, which is often now led by a Vice President, or Deputy Vice Chancellor, and a swelling number of hard-working administrative staff, charged with both boosting research output, and enforcing conformity to detailed regulations governing most aspects of the research exercise. The resultant explosion in costs to the institution

is regularly lamented by their leaders, who however, do nothing to halt the trend. The ultimate aim of the audit process is to mould academics into self-monitoring subjects, engaged in forms of self-surveillance and self-governance:

> the ideal is an audit system where each academic is responsible for regulating their own performance, in ever more detailed and intricate ways. (Welch 2016, p. 515)

Conclusion

The rise to prominence of league tables and ranking regimes is re-orienting higher education systems and institutions worldwide, to differing degrees (Gable 2013). In the process it is not merely distorting the research mission, by giving greater weight to international publications in English, at the cost of local scholarship, in local languages that focus on local issues of importance. But, by placing the research mission above others (to which some ranking schemes pay formal homage, while others ignore), it implicitly devalues the other core functions of the university, of teaching and community service. In effect, the rise of ranking regimes is contributing to the neo-liberalisation of the contemporary university, at the cost of its public good function. Complying with this new regime is increasingly onerous:

> A large proportion of an academic's working life is now spent in compliance activities, principally creating documentary evidence that they are doing their job in a manner that will satisfy external audit… (Harris 2014, p. 73)

The rising reliance on technicist systems of quantification, audit and (self) surveillance is replacing collegiality; values and practices of individualism and competition are replacing more collective ones. The challenge to reverse these trends, which are not unique to the higher education field, but have distinct contextual elements, will not be easy, at a time when neo-liberalism apparently holds wider sway (Connell 2019; Welch 2005b; 2020b). In both higher education, and more generally, the risk is to develop an elite tier of departments, institutions and academics, at the cost of excluding, or penalising, others (*The Guardian* 2002).

Yet, at the same time, there is hope. There is increasing recognition that neo-liberalism is a failed discourse, replete with contradiction, and leading to democratic deficit. It is not the only alternative, including in higher education:

> The world is full of alternatives and choices. Neo-liberalism's real power came from convincing us that we had none. We do, and making them is the democratic role of citizens - not the technocratic role of economists …. (Denniss 2018, p. 77)

References

Allan, E. (2011). Women's status in higher education: Equity matters. *ASHE Higher Education Report, 37,* 1.

Asian Development Bank [ADB]. (2013). *Myanmar comprehensive education sector review phase 1: Rapid assessment: Technical annex on the higher education subsector*. Retrieved January 16, 2020, from https://www.adb.org/sites/default/files/project-document/79491/46369-001-tacr-04.pdf.

Brill. (2020). *Frontiers of Literary Studies in China*. Retrieved January 16, 2020, from https://brill.com/view/journals/flsc/flsc-overview.xml.

Cantwell, B., & Taylor, B. (2013). Global status, intra-institutional stratification and organizational segmentation: A time-dynamic tobit analysis of ARWU position among U.S. universities. *Minerva, 51*(2), 195–223.

Chou, C., & Chan, C.-F. (2016, Forthcoming). Trends in publication in the race for world-class university: The case of Taiwan. In A. Welch & J. Li (Eds.), *Measuring up: How university league tables and rankings are re-shaping knowledge production in the global era*. London: Springer.

Connell, R. (2019). *The good university: What universities actually do, and why its time for radical change*. Melbourne: Monash University Press.

Denniss, R. (2018). Dead right: How neo-liberalism ate itself and what comes next. *Quarterly Essay*, No. 70: 1–79. Retrieved January 18, 2020, from https://search-informit-com-au.ezproxy1.library.usyd.edu.au/documentSummary;dn=655966511180393;res=IELLCC.

Flowerdew, J., & Li, Y.-Y. (2009). English or Chinese? The trade-off between local and international publication among Chinese academics in the humanities and social sciences. *Journal of Second Language Writing, 18,* 1–16.

Gable, A. (2013). *ERA and the performance regime in Australian higher education: A review of the policy context*. University of Queensland: Social Policy Unit. Retrieved January 17, 2019, from https://espace.library.uq.edu.au/view/UQ:318772.

Gregorutti, G., Rabossi, M., & Casanova, H. (2020, in this volume). The increasing influence of rankings: A comparison of two Latin American public universities. In A. Welch & J. Li (Eds.), *Measuring up: How university league tables and rankings are re-shaping knowledge production in the global era*. London: Palgrave Macmillan.

Hanafi, S. (2011). University systems in the Arab East: Publish globally and perish locally, or publish locally and perish globally. *Current Sociology, 59*(3), 291–309.

Harris, B. (2014). Corporatisation, managerialism and the death of the university ideal in Australia. *Journal of Politics and Law, 7*(2), 63–80.

Ishikawa, M., & Sun, C. (2020, Forthcoming). The paradox of autonomy: Japan's vernacular scholarship and the policy pursuit of "Super Global". In A. Welch & J. Li (Eds.), *Measuring up: How university league tables and rankings are re-shaping knowledge production in the global era*. London: Springer.

Power, M. (1994). *The audit explosion*. London: Demos.

Power, M. (1997). *The audit society: Rituals of verification*. Oxford: Oxford University Press.

Sauder, M., & Espeland, W. (2009). The discipline of rankings: Tight coupling and organizational change. *American Sociological Review, 74*(1), 63–82.

Shore, C. (2008). Audit culture and illiberal governance: Universities and the politics of accountability. *Anthropological Theory, 8*(3), 278–298.

Shore, C., & Wright, S. (1999). Audit culture and anthropology: Neoliberalism in British higher education. *Journal of the Royal Anthropological Institute, 5*(4), 557–575.

Shore, C., & Wright, S. (2015). Governing by numbers: Audit culture, rankings and the new world order. *Social Anthropology/Anthropologie Sociale, 23*(1), 22–28.

Springer. (2020). *Frontiers of education in China*. Retrieved January 16, 2020, from https://link.springer.com/journal/11516.

Stiver Lie, S., & O'Leary, V. (Eds.). (1990). *Storming the tower: Women in the academic world*. London: Kogan Page.

The Guardian. (2002, July 18). *The wrong result*. https://www.theguardian.com/education/2002/jul/18/highereducation.researchassessmentexercise. Accessed 2 Dec 2019.

Welch, A. (1997). The peripatetic professor: The internationalisation of the academic profession. *Higher Education, 34,* 323–345.

Welch, A. (1998). 'Education and the Cult of Efficiency: Comparative Reflections on the Reality and the Rhetoric', *Comparative Education, 34*(3), 157–176.

Welch, A. (2005a). Accountability or accountancy? Governance and university evaluation systems in an era of performativity. *Comparative and International Education Review, 5,* 116–144.

Welch, A. (2005b). Challenge and change: The professoriate in uncertain times. *The professoriate: Profile of a profession* (pp. 1–20). Dordrecht: Springer.

Welch, A. (2016). Audit culture and academic production: Re-shaping Australian social science research output 1993–2013. *Higher Education Policy, 29,* 511–538.

Welch, A. (2018). Making education policy. In A. Welch et al. (Eds.), *Education, change and society* (4th Rev. ed., pp. 263–304). Melbourne: Oxford University Press.

Welch, A. (2019). Higher education in Asia. In J. Rury & E. Tamura (Eds.), *The Oxford handbook of the history of education* (pp. 302–315). Oxford: Oxford University Press.

Welch, A. (2020a). The shift to the east and the changing face of internationalisation. In J. Thondhlana et al. (Eds.), *The Bloomsbury handbook of the internationalization of higher education in the Global South*. London: Bloomsbury.

Welch, A. (2020b). Neoliberalism in comparative international education: Theory, practice, paradox. In T. Jules, R. Shields, & M. Thomas (Eds.), *The Bloomsbury handbook of theory in comparative and international education: Theory and practice*. London: Bloomsbury.

Winslow, S., & Davis, S. (2016). Gender inequality across the academic life course. *Sociology Compass, 10*(5), 404–416.

World Bank. (2018?). *Tertiary education, academic staff (% female)*. Retrieved January 10, 2020, from https://data.worldbank.org/indicator/SE.TER.TCHR.FE.ZS.

INDEX