COMPARATIVE AND INTERNATIONAL EDUCATION: A DIVERSITY OF VOICES

The SSCI Syndrome in Higher Education

A Local or Global Phenomenon

Chuing Prudence Chou (周祝瑛) (Ed.)

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The SSCI Syndrome in Higher Education

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WHY THE SSCI SYNDROME IS A GLOBAL PHENOMENON?

Chuing Prudence Chou

A LOCAL OR GLOBAL PHENOMENON?

As a result of neoliberal ideology in the 1980s, a great deal of public investment in New Zealand, Australia, Canada, and many other countries in Latin America, has consistently been allocated to the business and market sectors rather than the education sector. As a result, the practice of reducing government's role in so-called political responsibility led to the curbing of peoples' rights (Chou and Ching, 2012). Consequently, a sharp reduction in public budgets in many countries influenced not only social values and welfare system, but also educational quality. In particular, as the impact of globalization in higher education, many countries in East Asia started urging university reforms, whether in the form of mainland China's 211 project and 985 project, Korea's BK21 program, Taiwan's Five Years Five Top University Program, or Japan's National University of Administrative Corporation, all of which are responses to the process of globalization.

Along with the neo-liberal ideology which emphasizes market economy in higher education, the increasing importance of the competition in global university ranking has also influenced university autonomy, resulting in a paradigm shift in academic governance across the world. Many governments, such as those of Australia, Canada, China, France, Germany, Hong Kong, Japan, Korea, Malaysia, Norway, Singapore, Switzerland, Taiwan, UK, etc., have introduced a range of strategies for benchmarking their leading universities to facilitate global competitiveness and international visibility. A major trend in the changing university governance is the emergence of a regulatory evaluation scheme for faculty research productivity, reflected by the striking features of the recent changing academic profile of publication norms and forms that go beyond the territories of traditional nation-states. In addition, with the world expansion of the higher education system in the last two decades, the maintenance of quality to meet the requirements for international competitiveness has become a critical issue for policy makers and universities.

In current academe, the definition of scholarship is often highly connected with academic publications (Boyer, 1990; Dirks, 1998). University rankings, public funding, and even prestige in certain discipline of studies are all interwoven with the quantity of research articles published in a certain types of journals and their

subsequent citations by later researchers (Anderson, Ronning, Vries, & Martinson, 2007; Keith, 1999).

Furthermore, the recent convenient accessibility of research references brought forth by the availability of the internet technology, has also ignited the evolution of academic work (Chambers, 2004). Instruments such as the Thomson Reuters' ISI Web of Science (WOS) website has also facilitated scholars' access to published articles of interest by replacing the conventional role of library (Thelwall, et.al., 2003).

As a result of this global context, the rise in emphasis on publications indexed in the Thomson Reuters' ISI citation database was clearly observed in Taiwan (Chou & Ching, 2012; Chu, 2009; Chen & Chien, 2009; Huang, 2004 & 2009; Kao & Pao, 2009; Chen & Qian, 2004; Thelwall, et al., 2003). The concept of publish or perish, which signals the importance of publishing research results, has also affected Taiwan's academe. In effect, academics are under pressure to publishing in peer-reviewed journals, preferably those included in the ISI citation indexes, such as the Science Citation Index (SCI), Social Science Citation Index (SSCI), or the Arts and Humanities Citation Index (A&HCI). It is obvious that the number of publications indexed in the ISI citation database are critical from personal and institutional perspective, since these numbers are used as major criteria for research grant approvals, university rankings, tenure granting, rank promotion, over even government funding (Kao & Pao, 2009).

For example, since 2005, the Ministry of Education (MOE) in Taiwan has introduced a series of university governance policies to enhance academic excellence in universities and has established a formal university evaluation policy to improve the competitiveness and international visibility of Taiwanese universities. In so doing, the government has legalized a clear link between evaluation results and public funding allocation. Research performance is now very much focused which is assessed mainly in terms of the number of articles published in journals indexed by SCI, SSCI, and A&HCI and in terms of citation rates and associated (such as impact) factors (Tien, 2007; Huang, Chang, & Chen, 2006). Therefore, evaluation on research performance has taken on an unprecedented quantitative dimension. Despite the efforts of concerned parties to encourage academic excellence in research, the above-mentioned quantitative evaluation indicators have led to bitter complaints from the humanities and social sciences whose research output has been devalued and ignored by the current quantitative indicators. The so-called SSCI- orientated-publication policy regardless of academic disciplines and cultural differences has aroused many controversies among higher education not only in Taiwan but also in many parts of the world.

ORIGIN OF THE ISSUE IN TAIWAN

The higher education system in Taiwan, similar to those in East Asia, has undergone an enormous transformation over the last two decades. Higher education has

interwoven its path with trends of globalization and localization, development of information communications technology, and a set of political, sociological, economic, and managerial changes. These changes altogether produce multifaceted influences on education in Taiwan.

In particular, the ideology of globalization and localization represent not only one of the driving policy agendas in Taiwan, but also the origin of higher education reforms over the last two decades in the island. Although even more importantly, it has generated a "Cross-straitization" trend relationship that seems to come between Taiwan-China, which will eventually drive education reforms to levels yet to be developed (Chou & Ching, 2012). It is also worth noting that Taiwan's higher education overall development concurs with many countries that have also experienced great transformation owing to this globalization/localization divergence coupled with the impact of neo-liberal principles worldwide since the 1980s.

To be more specific, Taiwanese higher education was closely linked to economic development and was subject to government control before the 1980s. 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; appointing presidents, admissions, curriculum, and tuition. The addition of new universities was extremely limited. In 1984 when the average per capita income was only US$4,000, Taiwan had 173,000 university students, only about 0.9 percent of the total population of 19 million (Chou & Wang, 2012). Higher education remained a means to cultivate elites in the country.

After late 1980s, the number of HEIs began to rise to meet the demands from globalization and domestic social and economic changes in Taiwan. Since the early 1990s, there was an unprecedented expansion in both in the number of HEIs and in the number of students. Consequently, the government's public spending on higher education became relatively constrained. In order to control higher education quality, the government amended its University Law and set up the Executive Yuan Education Reform Commission (1994–1996) to launch a reform blueprint enabling universities to move down the road toward deregulation, decentralization, democracy, and internationalization. For example, the Universities Law as amended in 1994 transformed universities from being under the traditional centralized control of the Ministry of Education into more autonomous campus environments, reducing academic and administrative intervention in universities and moving toward more autonomy in terms of admissions, staffing, and tuition policies.

Meanwhile, as Taiwan's government responded to public demands for more high schools and universities and for alleviation of the pressure for advancement, along with a demand to establish universities in local elections, by 2008 (with per capita income of US$17,000 at the time), the number of university students had increased to 1.12 million, a 6.5- fold jump since 1984. The number of universities had increased to 148 (51 public and 97 private); adding in 15 vocational/technical colleges, the total was 163. By 2009, the total number of college and university students had reached nearly 1.34 million (including undergraduates, vocational/technical students, and

graduate students), or 5.8 percent of Taiwan's entire population of 23 million people (MOE, 2011; Chou & Ching, 2012; Chou & Wang, 2012).

The rapid expansion of the higher education system also had some side effects, including an overly rapid upgrade of some vocational/technical colleges into universities, causing a decline in the quality of education. Although the government relaxed its controls over universities, it introduced market competition mechanisms that resulted in the uneven distribution of resources among public/private, and elite/non-elite HEIs, and causing aftereffects such as increased social stratification.

THE GLOBAL DILEMMA OF THE SSCI SYNDROME

There are primarily two reasons behind the pursuit of the world class university rankings. One is to acquire a superior position versus other higher education institutes in budgetary competition; the other is to make university more attractive to perspective students and faculty. Above all, the better faculty research performance, namely, the more publication in the above-mentioned journals, the more resources and social prestige universities will obtain in Taiwan.

One can easily relate to the global condition of the SSCI syndrome based on the insights from the case of Taiwan's academe. Examples drawn from the contributors' chapters in this book can provide evidence of the contradictions in the "indexization" of the notion of quality in universities. Some key issues which have global commonness are obvious and listed as follows:

- The implications of the hegemony of English;
- The conflict between the teaching and research roles of universities;
- The dilemmas of defining research performance outcomes and their measurement;
- The problem of research publication lacking local relevance when the priority is on high stake international journals.
- The overlooking of the value of book publication in humanities and social sciences.

In other words, the inability of Taiwanese academia to develop their own systematic knowledge required approaching major local issues. The formation of neo-academic hegemony and the further proliferation of academic factions have also become serious challenges to be confronted. Many of these dilemmas have created long lasting impacts on the nature of research which has impeded academic autonomy and university quality not limited to Taiwan. But why does this SSCI phenomenon continue to be rampant? Who contributed to this syndrome? Governments, market, or we, the academics?

LOCAL RESPONSE FOR FAIR PLAY

Unlike in Hong Kong, US and many other English-speaking societies, English is a foreign language to the majority of researchers in Taiwan. In order to participate

and survive in the international academic community, non-native English speakers need to strive for overcoming language obstacles and pros and cons in international journals. The legitimacy of English hegemony often ignores different voices from the peripheral, or non-English speaking world. This hegemony of the English language requires a different voice in paradigm shifts from local academic communities.

In addition, Taiwan's fairly even distribution of economic and academic resources is distinct from China and many other Asian counterparts where resources are not evenly accessible, and most higher education institutions (HEIs) lack the academic autonomy and financial resources. This is the reason why authors tend to correspond to displaying the case of Taiwan's SSCI issue to the world as an ideal testimony to observe how higher educational restructuring process can take place in response to the nature of market economy competition; and how Taiwan sets an example for its non-English speaking counterparts which have also undergone and therefore struggled with the bewildering courses of globalization and localization for the 21st century.

As Flowerdew (1999) suggested, English hegemony in scholarly publication has become rampant almost everywhere. Individual researchers should be encouraged to voice out their publication problems from the micro level. In this book, the authors attempt to relate researchers' dilemmas, strategies and impact of SSCI publications from a micro perspective, i.e., Taiwanese academic context, to the interplay between the micro and macro influences from the SSCI issue.

One typical example is that an on-line petition for collective action has been initiated by a group of Taiwanese university faculty since November, 2010. The petition intends to protest the argument with social action which calls for more diverse and reliable evaluation indicators in recognizing the research of different natures and disciplines while creating culturally responsive evaluation criteria for social sciences and humanities in academe (Chou, Lin, Chiu, 2013). With wide support from nearly three-thousand petitioners from academe, endorsement from public forums and research projects, and exposure from news and media, decision makers are petitioned to review and revise their previous higher education policy which has been criticized as favoritism of SSCI.

The book is one of the first case studies in this regard which attempts to demonstrate how the SSCI syndrome prevails based upon examples from Taiwan. It is hoped that this book will serve as a milestone to those are in the common condition and demand for more local voices heard by the international community.

OVERVIEW OF THE BOOK

With these facts in mind, this book explores the evidence of the SSCI syndrome in Taiwan's academe. In this book, "SSCI" will refer to a general term rather than simply being the abbreviation for the name of the index.

First, Ka Ho Mok's "Promoting the global university in Taiwan: University governance reforms and academic reflections" critically examines major policies

introduced and strategies employed by the Taiwan government in improving university governance to compete with other leading higher educational institutions globally. The present chapter reports and analyzes findings generated from fieldwork conducted in Taiwan, with particular reference to examine how academics evaluate the impact of the recent university governance reforms on institutional autonomy and academic profession. The paper concludes that the academic profession in Taiwan and the rest of the Asian region is continually affected by the strong managerial governance and academics are under intensified pressure to benchmark the international practices in the race of global university ranking exercises.

Secondly, Huei Huang Wang's paper "The political economy of quantitative indexes for measuring academic performance" starts with the contextual factors behind such a divergence in measuring academic performance from political and economic perspective in Taiwan. Wang argues the rationale for a quantitative academic evaluation system lies in the need to control the restless academia in the process of rampant and factional democratization after 1990s. Compared with their counterparts in Japan and the U.S., Taiwanese academia have been characterized by factions and lacked the consensus of building systematic and integrated type of research capabilities with local and global features. Nevertheless, the peer-based review scheme or bibliometric methods, such as SSCI, for academic evaluation should not be connected with the question of how to reorient the direction of Taiwanese academic research so that they will become more relevant to solving local issues and more attractive to international audiences at the same time. The author provides a comprehensive discussion of policy debates over the measurement of academic performances in Taiwan. A cross-country comparison (between the U.S., Japan, and Taiwan) of academic governing structures and the relationship between these structures and the measurement of academic performance is also included.

Chan and Lee's "A difficult situation of higher education in Taiwan" indicates that education programs in Taiwan are inclined to be short-term-oriented thanks to the frequent political elections which thus lead to changes of administration and to vulnerability of any long-term programs. Consequently, quantitative criteria are widely employed in university faculty rank promotions, performance assessments, and in various program appraisals. However, this approach to fairness and objectivity conceals the subjective rationale of those who judge them. Today, quantifiable ranking system extends to universities as well as between countries to encourage competition. Universities which gear toward one-dimensional and single-scale ranking system undermine this aim of university diverse characteristics and educational goals. Universities nowadays adopt a solid class structure and as well as competition and elimination according to Social Darwinism. The so-called "Top performers" attract the greatest resources. This phenomenon of concentration of resources in elite groups has been radical in Taiwan and has gradually widened the social gap between classes. Higher education is making matters worse, particularly through the "Plan to Develop First-class Universities and Top-level Research Centers" (thereafter referred to as PDFURC) project, where the core philosophy

is against fairness and equity. Universities should be developed that emphasize different characteristics to replace the one-dimensional ranking structure, while providing subsidized education for disadvantaged groups could reduce the social gap. Support of academic freedom would promote a desire to pursue truth, kindness, and goodwill.

Shao-Wen Su addresses the issue "To be or not to be: Impacts of 'I' idolization" by conducting interviews with twenty Taiwanese faculty in humanities and social sciences, and reveals impacts of "I" Idolization in aspects such as creating academic discrimination of locality; degrading local journals and academic colony of native English-speaking countries; and accelerating academic stratification. The academic reward policy in Taiwan, following the quantitative, "point-tally" "I"-orientation evaluations, has promoted utilitarianism, academic capitalism and hierarchy that aggravate the social injustice and inequity.

This study echoes Gregory Ching's paper on "ISI perceptions and hard facts: An empirical study from Taiwan" which provide readers with a unique outlook on how faculty and students perceived the role of ISI in Taiwan academe. The chapter concludes that the effects of the Thomson Reuters Institute for Scientific Information (ISI) are already deeply rooted in the entire Taiwan academe and its effects have caused both positive and negative implications. The most important factor in the various academic setting and activities is the *Number of publications indexed in ISI* and the *Number of publications indexed in Taiwan Citation Indexes.* While ISI still dominates the majority of the academic settings and activities, the role of *Google Scholar* and of *open access* journals is of great potential in striking a balance with the ISI dominance.

Cheng, Jacob, and Yang's chapter "Reflections from the Social Science Citation Index (SSCI) and its influence on education research in Taiwan" evaluates the quality of international journal publications and their impact on the field of education from global and local perspectives. The chapter juxtaposes the importance of the impact factor (IF) from ISI's Journal Citation Record, the TSSCI Journal Citation Record, and Taiwan Scholars' Evaluation Score to balance the authentic influence that SSCI journals add to the academic field of education in Taiwan. To incorporate the possible influence that all international journals have on the field of education in Taiwan, non-SSCI journals were also included and a formula created to measure their influence. The creation of a citation database for international education journals should be established specifically focused on the Taiwan context.

The privileged status of English in the international academic community seems to be impregnable and solid. Nevertheless, the majority of the Taiwanese researchers are speakers of English as a foreign language. NNES/EIL (NNES (non-native English speaking and English as an international language) scholars, are encouraged to self-align with the privileged discourse to participate in the international academic community to survive. Nevertheless, the legitimacy of hegemonic knowledge industry in English has resulted in diverse voice from the peripheral and inside

academic community which demanded respect of differences in research and publication.

Besides, Taiwan's fairly even distribution of economic and academic resources is distinct from that of China's, where resources are not as transparent and accessible. In "Problems, strategies, and impact of SSCI publication in English: Perceptions and negotiations of Taiwanese researchers," Yi-jun Liu testifies, based on her qualitative research study, that researchers who would like to minimize the non-discursive variables, such as availability of resources, but focus on language issues, the current academia of Taiwan can offer a more congruent and interesting research context.

With a strong determination to do better in these global ranking exercises, universities in Taiwan have attempted to restructure its university system and searched for new governance strategies in order to make its universities more competitive in the globalizing world.

As universities in Taiwan are increasingly subjected to the rationality of the series of interconnected discourses and practices that, in the West, have become known as 'the new higher education' (NHE),Wu and Bristow's "Perishing Confucius: An analysis of a rupture point in the discourse of Taiwanese 'new higher education'" provides a timely and interesting metaphor. In this chapter, Wu and Bristow approach the Taiwanese 3-I syndrome as a local embodiment of the NHE-driven "publish or perish" academic culture that is engulfing global academia. By comparing the discursive field of the Taiwanese higher education (HE) to its Western equivalent, the authors ask whether the existence of strong alternative discourses in Taiwan – such as those springing up around the person of Confucius as an academic role model in the Taiwanese HE sector – can act as an additional inventory of resistance that is lacking in the West but that can stop NHE becoming totalizing in Taiwan (and, potentially, East Asia)? An increased multi-way global dialogue about the NHE and its effects, such as the publish-or-perish culture, would be helpful in terms of evaluating the full weight of consequences of, as well as finding viable alternatives and mobilising more effective resistances to the 3-I phenomenon.

Chuing Pruence Chou's chapter "Has higher education lost its soul?" concludes the critique of SSCI syndrome by initiating public forums for Collective Action in Taiwan. In order to stop government agencies and academic research associations from using the SCI, SSCI, and EI as the best practice for academic research and public policy evaluation, a group of academics collectively urge colleagues to sign an on-line petition concerning the issues such as: stop using SSCI as the best practice for evaluation and funding purposes; urge government funding agencies to expand both the quantity and the variety of academic journals in the worldwide journal citation databases and give concordant weights to publications in social sciences and the humanities.

There is a need to foster a culture of social responsibility and academic professionalism and recognize the intellectual responsibility in producing culturally-

responsive research and academic practice. This requires the creation of culturally-responsive evaluation criteria for social sciences and humanities.

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ENDORSEMENTS

As Taiwan's higher education system, similar to that of some other countries, has been recently devastated by the SSCI-based quantitative evaluations of academic performance in terms of its adverse impacts on the balances between teaching vs. research; qualitative vs. quantitative evaluations; globally oriented, English vs. locally oriented, non-English publications; and publications in academic journals vs. books, *The SSCI Syndrome in Higher Education* is a long overdue study that offers a systematic, comprehensive coverage of the above-mentioned SSCI syndrome on the dynamics of Taiwan's academe. This book definitely helps fill an important gap in the literature on Taiwan's higher education system.

Tsung Chi
Professor of Politics, Occidental College

Prudence Chou's book addresses an academy on crisis caused by the ceaseless hype over university rankings. It further confirms that who comes out on top depends on who is doing the ranking. To save the heart and soul out of the Taiwanese academy, this book makes a cogent argument for culturally-responsive research in the social sciences and humanities.

Gerard A. Postiglione
Professor and Head, Division of Policy, Administration and
Social Sciences Director, Wah Ching Center of Research on Education in China,
The University of Hong Kong

A spectre is haunting almost all universities in the world, including Taiwan—the spectre of "indexization." Academics, particularly social scientists are panting from the pressure of globally spread neoliberal ideology and market-based principles. Collegiality on campus in the good old days has declined, and managerialism gained power instead. Competitive funding and university rankings are excessively emphasized, and research results are required to be internationalized, i.e., published in English. Although this book is a case study of so-called SSCI syndrome in Taiwan, the problems and challenges as well as prescription contained here are common to all academics, especially those in the non-English speaking countries positioned as "peripheral."

Yutaka Otsuka
Professor of Hiroshima University,
President of Japan Comparative Education Society

The danger with SSCI syndrome is that it encourages social studies in nonwestern societies to dissociate themselves from local contexts, reflecting a particular view of what is claimed to be 'universal' that is informed only by the Western (especially English-speaking) world. It raises the question of what counts as 'scholarship' and defines what knowledge is and who may claim competence in it. This volume serves us well as a timely reminder of such a great danger.

Rui Yang
Professor, Faculty of Education, University of Hong Kong

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As global competition from the world-class university rankings intensifies, more and more governments adopt university evaluation policies to enhance university quality. The use of SSCI index as one of the major academic performance indicators has not only increased the unequal distribution of resources between science and social sciences, but also widens the gap between research and society. My colleague, Professor Kai Ming Cheng from The University of Hong Kong, once indicated that Taiwan's academics in humanities and social sciences used to be the most vibrant group in the greater China area, who actively engaged in public policies and social issues for the betterment of Taiwanese people and society. But nowadays, young academics choose to stay in their study rooms to "produce" more SSCI papers at the expense of social relevancy in order to meet the requirement of evaluation criteria set by university and government. Today, academics in humanities and social sciences have refrained from assuming public intellectual roles, and their research topics have become deviant from local needs and book-writing has been no longer a priority due to the demand for publishing international journal articles. Academic freedom and institutional autonomy has been impeded thanks to the hegemony of publication and citations in SSCI journals.

For years, there have been calls from Taiwan to compile works of preceding issues to serve as collective efforts and testimony of the ongoing struggle and protest among academics in humanities and social sciences. I would like to give special thanks to all contributors in this book, and professors Tsung Chi, Ting -Ming Lai, Chilik Yu, Wu- Tien Wu, Kwang-Kuo Hwang, and Yun- Ru Chiu. My assistants, Pei-lun Lee and Kuo-Hui Fu, who have constantly devoted their insightful and assistance with the book project over the past years. Professor Allan Pitman and Mr. Michel Lokhorst have provided timely review comments to make this book possible. Above all, the unconditioned support and love from my family, Dr. Ying-yu, Hao, and Ying Chen and Chou Wan have helped me to break through all challenges in editing this book. Colleagues from the Department of Education at National Chengchi University (NCCU), Taiwan and University of Miami, US, provided me with generous information and support in the course of writing. The financial support from Fulbright Foundation and NCCU also deserves a special recognition.

Chuing Prudence Chou (周祝瑛)
Akita, Japan
July 7, 2013

KA HO MOK

PROMOTING THE GLOBAL UNIVERSITY IN TAIWAN

University Governance Reforms and Academic Reflections[1]

INTRODUCTION

The quest for "world-class universities" and the global university ranking have become increasingly prominent agendas affecting the way universities are governed. In order to better position universities in the globalized world, many national governments, policy makers, analysts of higher education across different parts of the globe have devoted far more attention, resources and energies to search for new governance and strategies in promoting university research with the intention to rank higher in the global university league tables (Mok and Wei, 2008). Realizing the importance of research and development in the knowledge-based economy, Mohrman, Ma and Baker (2008) have rightly argued that an Emerging Global Model (EGM) is developing in response to the growing pressures for the global competitiveness of universities across the world. As Altbach (2007, 3) has rightly suggested, "research universities have emerged on the policy agenda in many developing countries, especially larger nations that seek to compete Check quote in the global knowledge economy". This article discusses how the Taiwan government has reformed its higher education governance and management style and what major strategies have been adopted to enhance its higher education's global competitiveness. The first part of the article briefly presents a policy context for higher education reforms in Taiwan. The second part examines major reform strategies along the lines of incorporation/corporatization implemented in recent years, as well as discussing major strategies in promoting research excellence adopted by the Taiwan government. The third part presents academics' critical evaluations and reflections on recent university governance reforms in Taiwan. The final part of the article compares the Taiwan experience with other Asian university systems dealing with similar challenges.

THE QUEST FOR WORLD-CLASS STATUS AND UNIVERSITY GOVERNANCE REFORM

Economic, social and political developments in East Asian societies, as in other parts of the globe, have been increasingly influenced by the growing impact of globalization (Mok and James, 2005). No matter how we assess the impact of globalization, no one can deny that globalization is creating new potentials and

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limits in education (Marginson, 1999). Hence modern governments have attempted to look beyond their national boundaries to identify good practices in improving the university governance (Crossley and Watson, 2003). With the strong intention to enhance their national competitiveness in the global market place, governments in different parts of the world have started comprehensive reviews of their higher education systems and made attempts to transform higher education governance and management styles. Realizing that the conventional model of 'state-oriented' and 'highly centralized' approaches may not be effective enough in governing higher education, many governments have tried to 'incorporate' or have introduced 'corporatization' and 'privatization' measures to run their state/national universities, believing that these transformations will make national universities more flexible and responsive to rapid socio-economic changes (Mok and Oba, 2007).

Intending to create more quality education for their citizens with only limited financial means, a growing number of national governments have started to change their paradigm of governance by adopting the doctrine of monetarism to replace Keynesianism (known as statist options) (Apple, 2000). Instead of being closely directed by the Ministry of Education or equivalent government administrative bodies, state universities in Asia are now required to become more proactive and dynamic in looking for their own financial resources. Like their Australian and British counterparts, universities in Asia are now under constant pressure to become more 'entrepreneurial' and to look for alternative funding sources from the market, strengthening their partnerships with industry and business (Mok, 2006; Marginson & Considine, 2000). In recent years, governments in Hong Kong, Singapore, Taiwan, South Korea, Japan and Mainland China have started to review their education systems and different reform measures have been introduced to improve the overall education quality in order to enhance their competitiveness in the globalizing economy context (Mok, 2006; Welch, 2007; Morshidi, 2008).

The adoption of corporatization, incorporation and privatization in managing the university sector is part of the reinventing government project, especially when ideas and practices of neo-liberalism are becoming globally influential (Levidow, 2002; Marginson, 1997). Similar to many western countries, public management in many Asian states has been increasingly influenced by the ideas and practices of neo-liberalism, thus private sector management models are introduced to transform the way the public sector is managed and public services are delivered (Cheung, 2008). Trying to embrace the ideas and practices of neo-liberalism, the introduction of market forces and strategies in governing higher education, revitalizing the role of family and individuals and involving the private sector and other non-state actors in education delivery are becoming increasingly popular not only in Taiwan (Mok, 2006a; Tai, 2002; Song and Tai, 2006) but also in other parts of Asia (Mok, 2008; Morshidi and Abdul, 2008). This article sets out in this wider context of political economy to examine what major strategies that the Taiwan government has adopted in promoting better university governance. Let us now briefly discuss the policy context for higher education reforms in Taiwan.

THE CONTEXT FOR HIGHER EDUCATION REFORMS IN TAIWAN

Prior to the reforms in the last two decades, Taiwan used to adopt a highly centralized system in governing its higher education system, because education was employed as an instrument to promote the official ideologies and maintain the political influence of the ruling party (Mok, 2000, Mok and Chan, 2008). Realizing the centralized governance model was no longer appropriate in running higher education, especially when the Taiwan society has to confront the increasingly competitive global world, the government in Taiwan has begun to search for new university governance and look for new management strategies to make its higher education system more responsive and efficient in addressing the ever changing world. It is against this context that higher education governance in Taiwan has been going through processes of decentralization, privatization, and corporatization, particularly as the Taiwan government is particularly concerned with how to run its higher education system in a more efficient and effective way (Mok, 2006a, Mok and Chan, 2008). With a strong conviction to promote her international competitiveness in the knowledge-based economy, the Taiwan government has also adhered to the ideas of neo-liberalism and adopted market-oriented practices and strategies to run its higher education system in a more efficient and effective manner.

In the last few decades, Taiwan has gone through significant changes which resulted from the country's democratization and economic reforms (Lo and Weng, 2005). In order to position its universities higher in the global university rankings, the government in Taiwan has attempted to assert its international status through introducing different reform strategies to drive universities in Taiwan to perform better in research (Chen and Lo, 2007). Realizing the important role of higher education in enhancing global competitiveness, the Taiwan government has tried to concentrate funding on a selected few universities in order to turn them into leading research / academic institutions which could complete globally (Deem, Mok and Lucas, 2008). Having briefly outlined the context for higher education reforms in Taiwan, let us now focus on the major university reform strategies.

UNIVERSITY GOVERNANCE CHANGE AND MANAGEMENT REFORM

Since the late 1980s, the number of private higher education institutions in Taiwan had increased tremendously while the number of public institutions grew steadily for the last decade. The official statistics indicate that the private higher education sector has grown sevenfold since the 1950s in Taiwan (MOE, Taiwan, 2001). As stipulated in the *Overall Proposal on Education* in 1994 and the *White Paper for University Education* in 2001, the Taiwan government openly recognized the importance of the private sector in providing higher education (Council on Education Reform, Executive Yuan, 1995a; 1995b; MOE, Taiwan, 2001). In 1999, among 88 universities and colleges, 46 were private institutions while 42 were public institutions (Lo and Tai, 2003, Table 8.3). Since then, the provision of the private sector has exceeded that

of the public sector in higher education. The significant increase in private higher education in Taiwan clearly shows that the changing role of the Taiwanese state has transformed from a higher education 'provider' to become a 'facilitator' (Lo and Tai, 2003). Other than provision, the private sector has also expanded its role in university administration and curriculum design. For university administration, the *Private Education Institutes Law* and *Implementation Plan of Cooperation between Social Organizations and Educational Institutes* have granted autonomy to private institutions, particularly in school management, by strengthening the role and authority of the directors' board. For curriculum design, the participation of the private sector exists in the form of cooperation between the academia and the industry. Given the growing globalization impact, Taiwan has been aware of the importance of maintaining an adequate supply of quality manpower in the knowledge-based economy era; the Taiwan government has therefore tried various ways to strengthen the links between university education and the labour market (MOE, Taiwan, 2003a). To assure that university graduates meet market needs, the MOE encourages higher education institutions to foster closer connections with industry. With the same scheme in place, the employers have the opportunities to engage with academics from universities in the design of curricula and courses in order to assure that what the students learn would cater for the labour market needs (Lu, 2004, 6-7).

Prior to 1994, the government was the primary funding source of all national universities. Similar to China, the Taiwan government also tried to diversify financing channels to finance its higher education system by replacing the *Public Budget System* with the new *University Fund System*. Under the new system, the national universities are allowed to keep surpluses, hence giving the incentives for the universities to diversify their sources of income through actively applying research grants. Furthermore, the MOE allows 30 per cent of flexibility on public universities' tuition charges. With the introduction of these measures, the Taiwan government hopes to make the national universities more financially independent in a longer term. Nowadays, tuition fees and research grants have contributed a more significant proportion to the national universities' revenue than in the past. In addition, the government once attempted to turn the status of all national universities into 'administrative legal bodies' by introducing university incorporation plans with intention to give national universities a high degree of flexibility and autonomy in their operation and development through empowering them to enjoy more fiscal autonomy and flexibilities in generating revenues (MOE, Taiwan, 2001; 2003b; Lo and Tai, 2003). However, such an attempt has encountered difficulty and now the Taiwan government has tried to find ways to enhance institutional autonomy of universities.

To encourage private universities to compete with national universities on the same ground, the Taiwan government has adopted a new funding policy in the higher education sector by cutting about 20 to 25 per cent of the state financial resources originally attributed to national universities to offer financial support to private

universities based upon a merit and competitive basis. In line of this policy, 20 per cent of the regular income of the private universities has been supported by the MOE since the 1999-2000 academic year (MOE, Taiwan, 2001). The implementation of this funding policy has held private universities accountable to the Ministry of Education and the general public would expect more from private universities and for them to perform better when public money is used to support their activities (Lo and Tai, 2003, 147). In addition, the government also slightly loosened the restrictions on tuition fees by adopting the 'user-pay' principle in order to facilitate universities to get additional revenues to finance their academic programmes and research initiatives (Mok and Lo, 2002). All these measures aim to correct the previous imbalance of funding and promote a competitive culture between public and private higher education institutions for fostering better performance.

In the last few years, public universities in Taiwan have been experiencing significant governance and management changes. In line with the spirit and practices of corporatization and incorporation, the universities and colleges have been granted more autonomy by releasing certain legal restrictions on university governance. The revision of the University Law in 2005 is a good example of the deregulation in higher education governance. Regarding personnel management, the appointment of university presidents had to go through two stages (one university level; one MOE level) in the past. Nonetheless, the newly revised University Law stipulates that presidents of national universities are appointed by a selection committee which consists of members from the universities, external parties and officials of MOE (Article 8), indicating a simplification of the appointment procedures. In addition, the restrictions on the nationality have been removed. Notionally, universities are allowed to appoint overseas scholars to be presidents and other senior positions are allowed to be filled by top talents through worldwide search (see Article 8 and 13). In short, such a legal amendment has facilitated universities in recruiting academic leaders through world-wide search.

Furthermore, universities are given more autonomy in finance. Currently, terms and conditions of university staff are standardized. According to Article 19 of the University Law, 'universities may add rights and obligations of teachers in the academic rules and formulate separate stipulations for the suspension or refusal of reengagement of teachers upon requirements of academic research and development, which shall be implemented and provided in the contracts after being approved by the academic affairs meeting'. This means that universities have more flexibility to adjust the terms and conditions, and therefore the structure of the salary of university staff can become more flexible and performance-based in the future. In other words, universities can use the salary adjustment as a way to reward or punish the staff. The revised University Law also allows universities to develop a more flexible organizational structure. Article 6, for example, allows universities to establish inter-institutional systems and research centres. It authorizes the universities themselves to set the regulations on the organization and operation of the inter-institutional institutes. Moreover, Article 11 provides universities with the autonomy to establish

their colleges or independent graduate schools, while colleges can establish their departments or graduate schools. Universities are also authorized to offer inter-department, inter-institute or inter-institutional qualifications. All these measures show an important step towards university autonomy as well as inter-institutional collaboration and integration. Putting the above changes into perspective, we can see that the revised University Law has indeed changed the university governance from a 'centralized' to a more 'decentralized' and 'corporate' model in Taiwan.

MAJOR STRATEGIES PROMOTING 'WORLD-CLASS UNIVERSITY'

In addition to university governance reform and management changes discussed above, the Taiwan government has realized that globalization has intensified the competition among higher education institutions in a worldwide sense. After a careful assessment, the Taiwan government recognizes that overseas competition, especially competition from mainland China, would become a major challenge to Taiwan's universities because of the technological advancement and rapid flow of human capital in the global age (Huang, 2001, 171-73; Lu, 2002). After Taiwan's accession to the World Trade Organization, overseas universities are allowed to expand their recruitment of Taiwan's students through educational agencies, distance learning, and two track or dual-credit systems. In order to enhance the global competitiveness of universities in Taiwan against the highly competitive world, the Taiwan government began to call for the pursuit of academic excellence of universities in the late 1990s (Lo and Weng, 2005).

In order to enhance the global ranking of universities in Taiwan, the Taiwan government has set a target in 2004 to have at least one local university be ranked among the top 100 universities within the next decade, and at least 15 key departments or cross-university research centers will become the top in Asia within the next five years (Lu, 2004: 9). Intending to improve the quality of university standards, pursuing academic excellence and focusing universities' efforts on developing a selected few areas has become the policy adopted by the government to boost the research profile of universities in Taiwan. In 1998, the MOE and the National Science Council (NSC) jointly launched the Program for Promoting Academic Excellence of Universities (Academic Excellence Program), which primarily aims at improving universities' infrastructure and invigorating research (MOE, Taiwan, 2000). This Program supports four research fields, including humanities and social sciences, life sciences, natural sciences, and engineering and applied sciences. Each research field has a focus of investigation:

1. For humanities and social sciences, the Academic Excellence Program requests research projects to utilize local research materials for arguing against or elaborating theories from the West;
2. For life sciences, the Academic Excellence Program stresses the importance of human physiology and development of biotechnology;

3. For natural sciences, the Academic Excellence Program focuses on atmospheric sciences, materials sciences and earth sciences and expects these disciplines to be recognized internationally as of leading status;
4. For engineering and applied sciences, the Academic Excellence Program highlights the importance of the applied studies of networking technologies, wireless communication technologies and optics and photonics (MOE, Taiwan, 2000).

In addition, the MOE and NSC also formed a panel, consisting of eminent local and overseas academics, charged with selecting research projects for support by the program. In the first round of the Academic Excellence Program, a total of 261 research project applications were submitted. After rigorous review, a total amount of NT$ 4.3 billion were allocated to fund 19 projects, three of which were offered conditionally. The first round of the Program was completed in 2004. To further develop a high quality research culture in Taiwan, the second round of the Program was launched in 2000 until 2006. There were 148 research project applications in this round and twelve projects were granted with a total amount of NT$ 2.1 billion. With a rigorous selection process in place, only 6.1 percent of research project applications were selected to be supported in the first round of the program (excluding the three conditional offers), while 8 percent of applications were funded in the second round. The funded rate of humanities and social sciences projects was even lower (3.2 percent for the second round). Most of the funding went to public institutions, while only two research projects jointly submitted by public and private institutions were funded (MOE, Taiwan, 2003a). After reviewing the various rounds of implementation, the government considers the Academic Excellence Program successful in allowing effective integration of resources to foster cooperation and exchange between outstanding institutions and talented researchers, and boosting research capacity (NSC, 2005). Hence, the Taiwan government has become even more committed to investing in key research areas in order to better place universities of Taiwan in the global map.

In addition to the Academic Excellence Program discussed above, another initiative entitled the Program for Improving University Fundamental Education (Fundamental Education Program) under the Academic Excellence Program was implemented in 2001 to enhance the level of university's foundation and general studies (Lu, 2004, 8). Applications for this program would be divided into five groups, namely, humanities and social sciences, life sciences, natural sciences, engineering and applied sciences. In the first round of the Fundamental Education Program, 112 institutions submitted 432 applications, of which 192 projects from 92 institutions were selected to be funded. In terms of funding, 55.9 per cent of the fund was granted to public institutions, while 44.1 per cent of the fund was allocated to private institutions (MOE, Taiwan, 2004). The MOE has planned to allocate NT$ 1.8 billion for the second round of the Program. When putting the above discussion together, we can easily find that both the governments in China mainland and

Taiwan have recognized the importance of enhanceing the global competitiveness of their universities and various reform strategies have been introduced to enable their universities to rank higher in the global ranking exercises.

We have just reviewed the major reform strategies adopted by the Taiwan government in promoting better governance and internationally competitive performance of universities in Taiwan. The following part critically examines how academics evaluate the impact of the above reforms on the academic community in Taiwan. By adopting a purposive sampling method, the author, in collaboration with colleagues working in selected universities in Taiwan, successfully approached a total of 150 academics working in different universities in Taiwan. All the respondents came from national universities and they serve in different academic disciplines and occupy different academic ranks. After sending out the questionnaires to the respondents identified for the research, we received 113 completed questionnaires for a success rate of around 75.3%. Some of the respondents were selected from national universities in Taipei area, while the rest of them were identified from the middle part and southern parts of Taiwan.[1] Since the present study has adopted a qualitative methodological approach, the sample size is bound to be small (Denscombe, 2007) and the author has no intention to make any claims that the survey findings would represent all academics in Taiwan. Instead, this article offers some useful perspectives generated from the present survey, together with observations based upon field interviews, in analyzing how academics respond to and evaluate the impact of recent higher education reforms in Taiwan.

EVALUATING UNIVERSITY GOVERNANCE CHANGE: ACADEMIC REFLECTIONS

In the survey, we asked the respondents to comment on the impact of incorporation on university governance, especially assessing how the corporatization of national universities has affected institutional autonomy and individual autonomy. The following discusses how academics assess incorporation's benefits to university governance, the impact of university governance reforms on institutional and individual autonomy, and their evaluations of state control over higher education.

Assessing Incorporation's Benefits to University Governance

The following figures indicate that most respondents have assessed the incorporation of national universities quite positively. When being asked to comment on whether the incorporation strategies have benefited the university sector, about 37% of the respondents believe such reform initiatives have benefited the whole university sector, while 35.4% and 11.5% of the respondents hold a more neutral stand or disagreement towards the incorporation reform measures (see Figure 1). When being asked to assess how far the incorporation measures have benefited national universities, around 40% of the respondents see such move as positive, while 46% and 9.7% of the respondents take a more neutral or disagreeing stands respectively

to the same question (see Figure 2). When being asked to comment on whether the same reform strategies have brought benefits to private universities, around 44% of the respondents see private universities have benefited, while about 37% and 17% of them choose a more neutral or disagreeing stands when assessing the impact (see Figure 3).

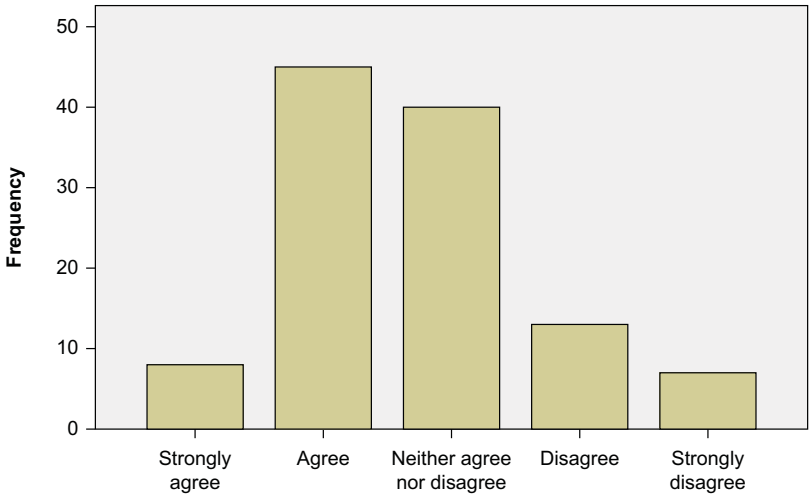

Figure 1. Incorporation benefits the whole HE sector.

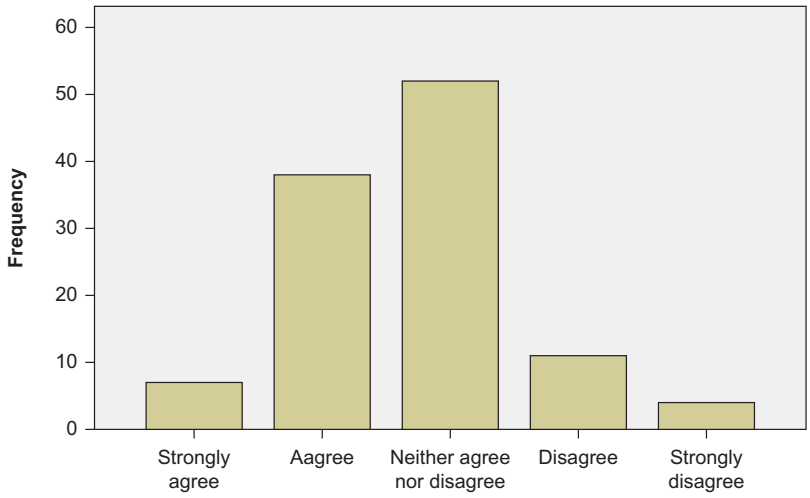

Figure 2. Incorporation benefits national universities.

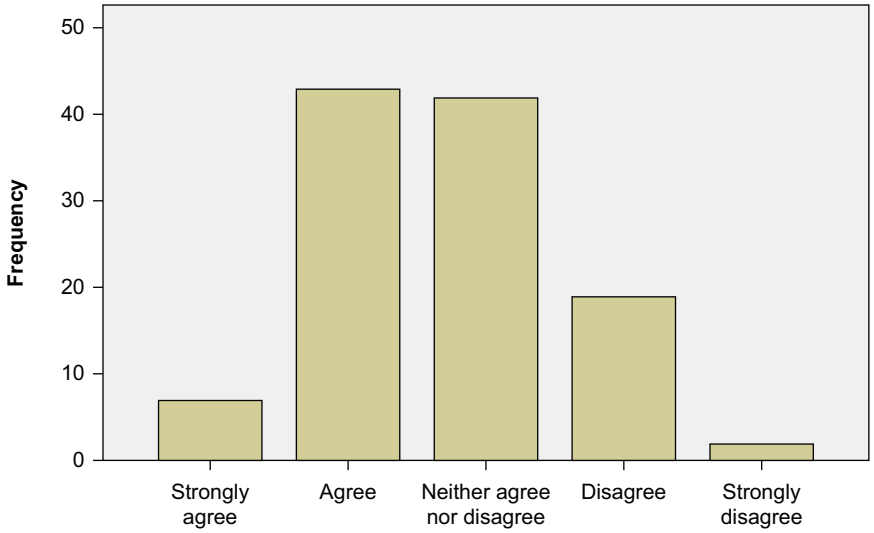

Figure 3. Incorporation benefits private universities.

In addition to the questions related to whether incorporation reform strategies have benefited the university sector, we asked the respondents to assess how far the same reform measures have improved the financial situation and efficiency in university governance. Figure 4 and 5 clearly show about 35% of the respondents consider the incorporation reform measures have improved the financial situation and 70% of them believe the same reform strategies have enhanced the efficiency of governance of national universities. But one point we have to note is that a number of respondents do not consider incorporation strategies would have improved the financial situation of national universities (see Figure 4). Such responses can be easily understood particularly when national universities have been under pressure to generate non-state financial sources through transforming themselves into enterprise universities or entrepreneurial university as Marginson and Considine (2000) and Mok (2005) suggested.

Unlike the old days when the state paid all the bills of national universities, the Ministry of Education in Taiwan has reformed such financial arrangements and now national universities have to compete with both national and private universities. Instead of guaranteed block grant offered by the state, national universities now have to rely more on competitive grants or commercial / private financial resources in order to sustain their development plans (Song and Tai, 2007). It is against such a background that only less than half of the respondents show their support for the incorporation of national universities, while about 50% of the respondents do not support or take a neutral stand when being asked whether they support the reform or not (see Figure 6).

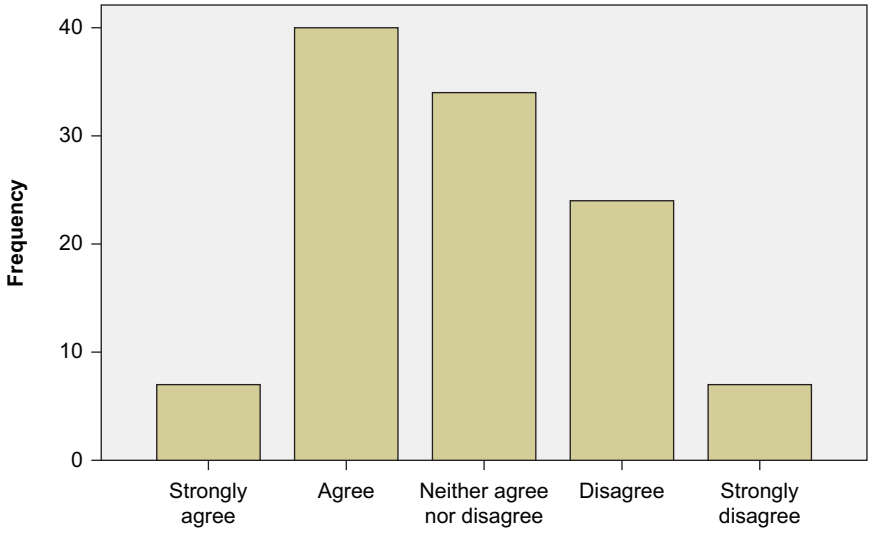

Figure 4. Incorporation improve financial situation of national universities.

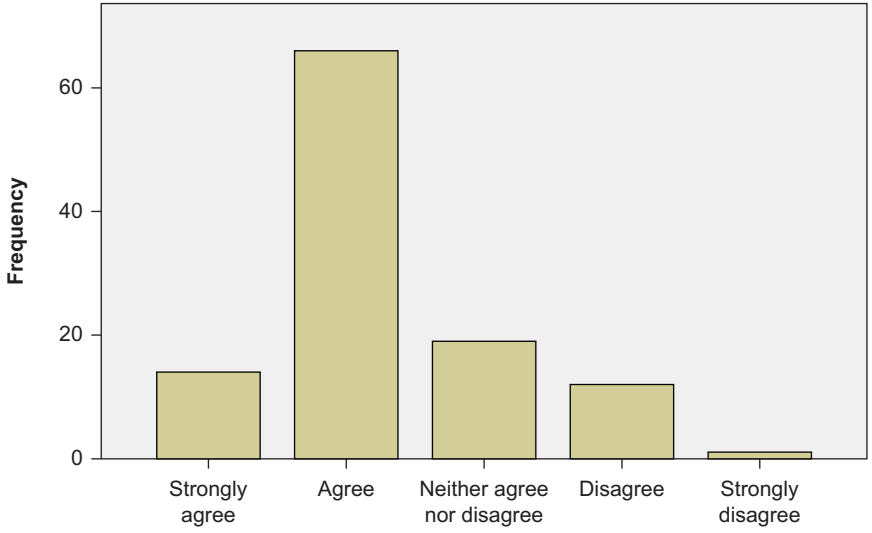

Figure 5. Incorporation improve efficiency of national universities.

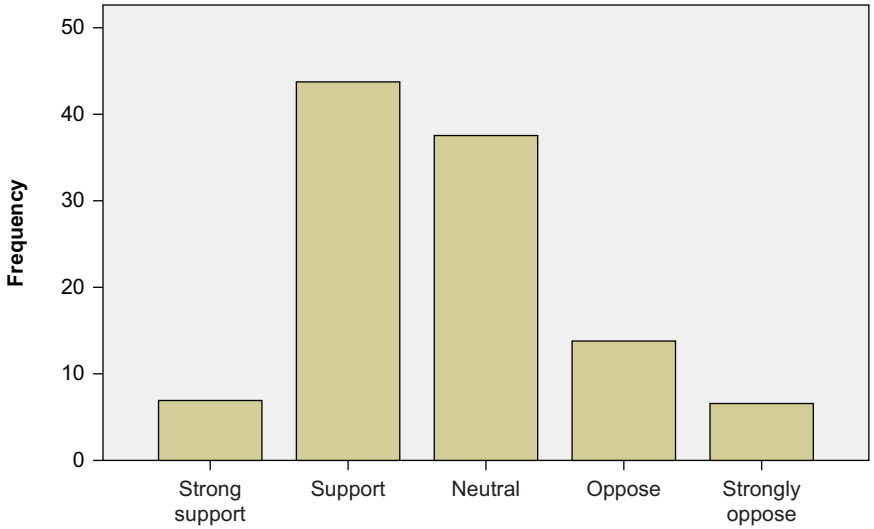

Figure 6. Support to the incorporation of national universities.

Assessing Incorporation and Academic Autonomy

Central to the incorporation reform strategies is to empower universities to become more autonomous, responsive and proactive in tackling rapid social, economic and political changes. In the present survey, we therefore asked the respondents to comment on whether the corporatization of national universities has enhanced institutional autonomy and individual autonomy. When answering the questions, more than 71.7 % of the respondents consider such reform strategies have enhanced institutional autonomy but only 37% consider such reform strategies have enhanced individual autonomy. Contrarily, around 54% of them adopt a more neutral or disapproving stands when assessing the impact of incorporation measures on individual autonomy (Figures 7 & 8).

Such findings are similar to my recent research conducted in Singapore and Malaysia regarding academic autonomy and recent university governance reforms in these Asian societies. Rather than feeling 'empowered' or 'emancipated', many academics in Singapore and Malaysia consider the kind of 'autonomy' granted by the state is never a 'free gift' because the education ministries would not accept 'academic autonomy without responsibility'. When the Asian states have tried to give more autonomy to senior university management, they have expected the universities would produce better performance (Mok, 2008; Moshidi, 2008). Hence, decentralization taking place in the university sector against the context of governance reforms should not be interpreted as an entire withdrawal of state control. When national universities are now given more discretion, they are urged

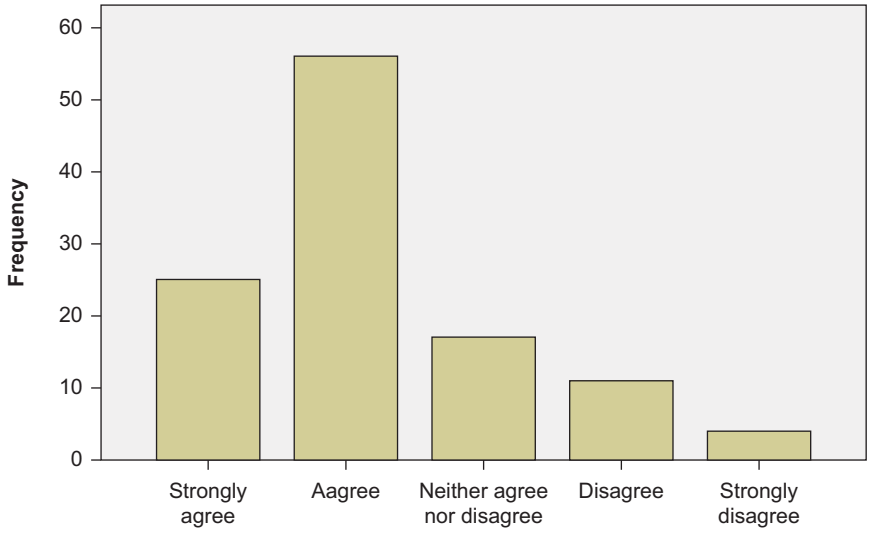

Figure 7. Incorporation increases institutional autonomy.

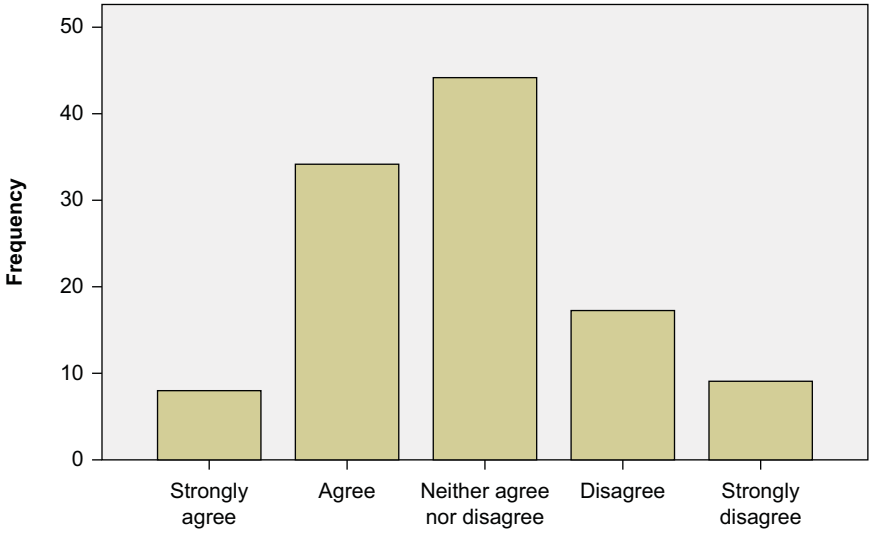

Figure 8. Incorporation increases individual autonomy.

to excel by showing evidence in performance. In this regard, accountability is a concept integral to the university governance reform in Taiwan. Therefore, the majority of respondents (70%) consider incorporation reform strategies have made national universities more accountable (Figure 9). Having financial consequences, national universities have no alternative but to follow government directions in improving their performance in order to secure additional state funding to sustain their academic development plans.

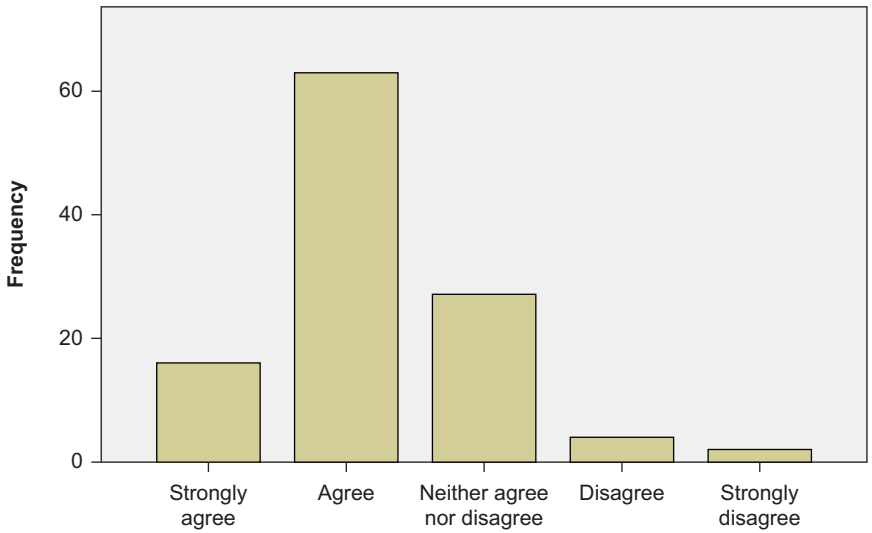

Figure 9. Incorporation increases accountability.

The introduction of more market forces and marketlike strategies in transforming the university sector in Taiwan has inevitably politicized the whole university sector. Since the senior university management is now under increasing pressures to better position their institutions in both local and global university ranking exercises, all universities on the island state are under constant pressures to quest for academic excellence. The assertion of authority in the international academic community certainly requires additional financial resources. It is against such a competitive environment that the incorporation movement has politicized national universities, especially when the appointments of university presidents and other major senior appointments are subject to open elections. One of the major criteria of such appointments is closely related to how extensive are the social networks and official links that the appointees could offer. Instead of considering the academic standing of the appointees, university administration is becoming far more politicized in Taiwan. In addition, academics generally feel that university governance has become more politicized because of keener competition to bid for government funding support

(Field interviews conducted in Taiwan, 2007 and 2008). Such observations are supported by the present survey when the respondents were asked to assess the impact of incorporation (see Figure 10).

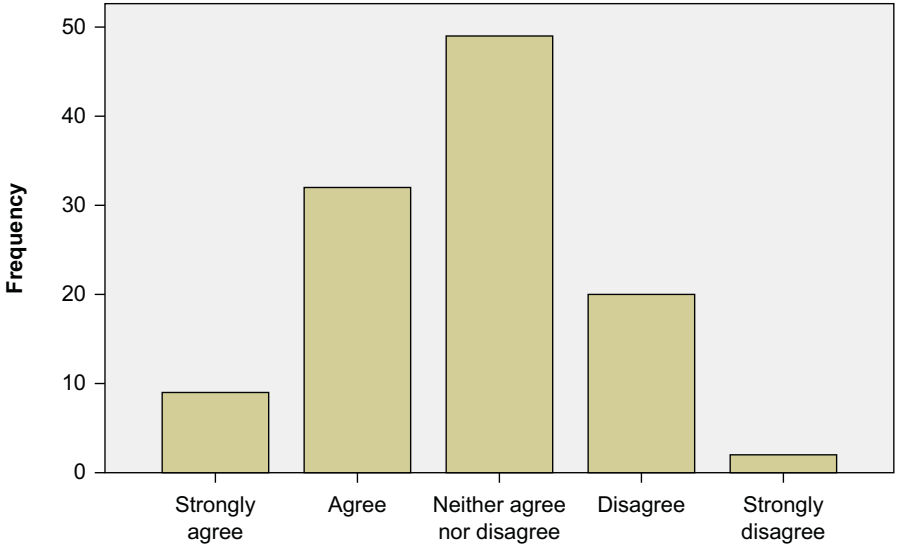

Figure 10: Incorporation politicizes university administration.

After asking the respondents to assess the impact of incorporation on university governance and institutional / individual autonomy, we went on asking how they assess the extent of state control over universities. Figure 11 clearly shows 52.2% of the respondents consider the state still tightly controls over national universities, while more than 36% of them find the state control a fair one. Such findings are consistent to the previous discussion related to the pressures imposed on universities / academics to uphold excellence in research and academic matters. When being asked to evaluate the degree of state control over private universities, around 40% of the respondents see the state control too tight, while 42.5% consider such a control is fair (Figure 12).

When assessing the degree of state control, most of the academics interviewed in the present study consider the Ministry of Education has no longer adopted a micro control over university governance. Nonetheless, they do not feel being 'emancipated' from control because of the heightened expectations for performance and immense pressure for quality assurance and evaluation. In order to promote higher academic quality of its higher education systems, the Higher Education Evaluation and Accreditation Council of Taiwan (HEEACT) was established and commissioned by

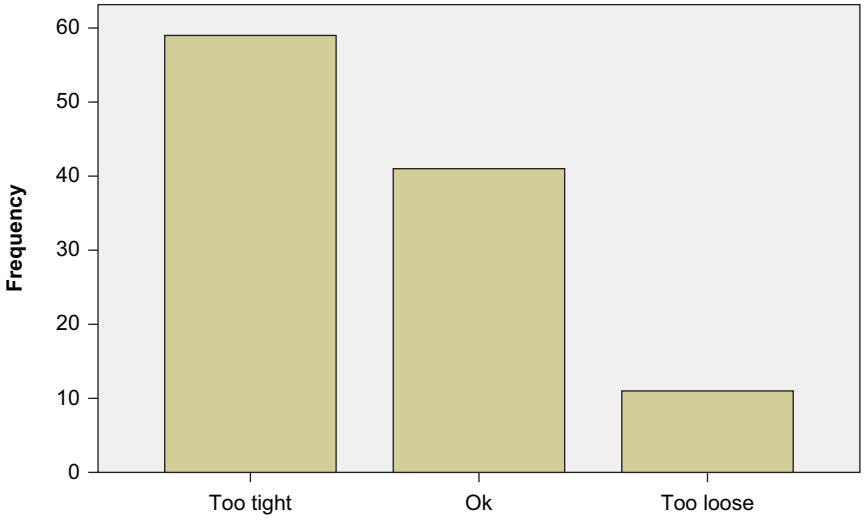

Figure 11: Degree of MOE's control over national universities.

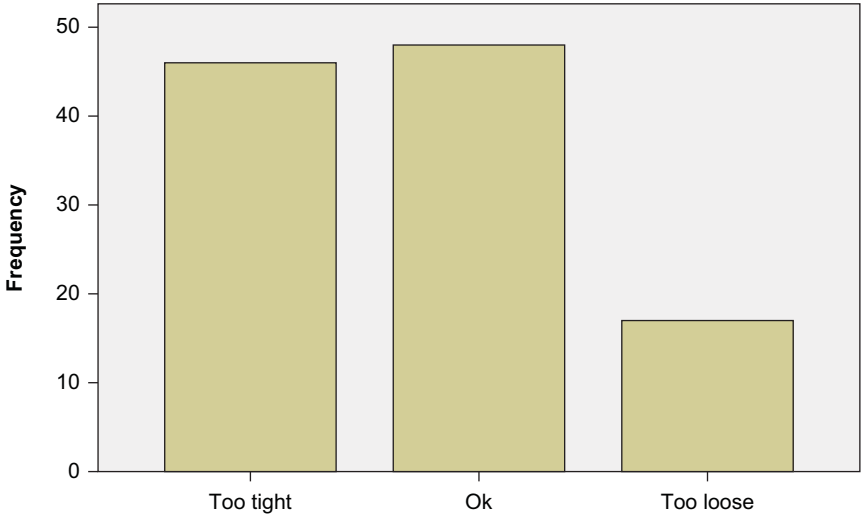

Figure 12: Degree of MOE's control over private universities.

the Ministry of Education to conduct nation-wide university programme evaluation and to prepare the groundwork for promoting a research ranking of universities. The evaluation was started and it will last for a five-year cycle; around 78 comprehensive universities and over 2000 programmes will be reviewed. Meanwhile, the MOE also commissioned the Taiwan Assessment and Evaluation Association (TWAEA), a non-profit organization jointly founded by senior members of the academia and business sectors, to conduct evaluations of higher education institutions at both institutional and programme level. With such these evaluation systems in place, academics in Taiwan feel being pressured to produce better results in teaching and research. Not surprisingly, many academics see that the state reasserts its control over the university sector through the implementation of far more stringent evaluation / review exercises and re-regulation and recentralization is commonly felt by academics in Taiwan (Tai, 2002; Lo and Tai, 2003; Chan and Lo, 2007).

Assessing the Impact of International Benchmarking on the Academic Profession

In order to better position higher education in the global world, universities in Taiwan have been proactively establishing international academic links and engaging in international collaboration. When the author was serving as the Founding Director of the Centre of East Asian Studies at University of Bristol from 2005 to 2007, the author received many delegates from Taiwan for academic visits and exchange. Realizing the importance of internationalization of higher education curricula in Taiwan, the Centre of East Asian Studies at Bristol University has co-organized international summer schools with institutions from Taiwan in order to provide a platform engaging Asian students in appreciating cross-cultural studies in the UK. The College of Humanities of National Chi Nan University (NCNU) is particularly keen to send students to the Bristol summer school. With special financial support offered by the College of Humanities at NCNU, more students from Taiwan could enjoy experiential learning in the UK (CEAS, 2006; 2007). Similarly, The Department of Social Work at National Taiwan University has also been actively promoting international placement to enhance students' international outlook and enrich their overseas learning experiences. Most recently, the author of this article was appointed by the President of National Taiwan University (NTU) as one of the panel members of the International Advisory team to review the academic and research programmes offered by NTU in 2008. During his recent academic visit to NTU in 2008, the author got the chance to meet the senior management, faculty members and students of NTU. Through reviewing the Department of Social Work in terms of its strategic vision and development strategies, student and staff feedback on research and learning experiences, as well as its facilities, the author got to know how keen the department has been in terms of the internationalization agenda. Aligning with the vision and mission of the university and the faculty in internationalization, the department has made concerted efforts to engage with overseas leading universities in co-organizing international conferences, joint-

research projects and other overseas internship / placement. Professor Lillian Wang, Head of the Social Work Department at NTU, openly told the panel members that the Department is serious in benchmarking with top universities in Hong Kong, the USA and the UK. In the last five years, the department has engaged in co-organizing international symposia or conferences with overseas partners, sending out staff and students for international exchange and inviting speakers all over the world to give seminars at NTU (Field observation, June 2008).

Like the role differentiation exercise conducted among universities in Hong Kong (Mok 2005a), the Taiwan government is keen to develop a proper division of labour among universities on the island-state. It is in this context that there has been heated debate whether to stratify the university system of Taiwan into different clusters by developing a better role differentiation among the more than hundred universities (Li, 2008). In recent years, the Ministry of Education in Taiwan has conducted various kinds of academic reviews to promote universities to perform. In order to better position universities of Taiwan in the global ranking exercise, a 'Forum on Taiwan Higher Education' was organized in 2007, distinguished leaders and professors were invited to address the issues related to development plan for world-class universities and research centres of excellence. During the Forum, speakers critically examined the major challenges confronting the higher education sector in Taiwan, debating and discussing ways to promote excellent performance of universities in Taiwan (A Strategic Network Promoting for University Excellence, 2008). Having interviewed Professor Ching-Shan Wu, Executive Director of Higher Education Evaluation & Accreditation Council of Taiwan, the (8381author of this article realizes the pressures felt by academics and higher education institutions in benchmarking with the international standard by publishing in top-tiered internationally refereed journals and peer-reviewed venues (Interview with Wu, May 2008). After a close scrutiny of the international publications in SSCI, SCI and EI venues, Wu believes academics in Taiwan are lagging behind their international counterparts, and is hence proposing that more attention should be given to internationalize research outputs especially in the intensified competitive research environment (Wu, 2008; MH Huang, 2008). Meanwhile, a strategic network has been set up in Taiwan in promoting university excellence in recent years (A Strategic Network Promoting University Excellence, 2008). Having been involved in university ranking and university evaluation research in the last few years, Professor Angela Hou shared with the author that academics and higher education institutions are becoming increasingly concerned with the ranking exercises (Interview with Hou, May 2008; see also Hou, 2007).

Against a highly competitive environment, academics are under immense pressure to excel in research and international benchmarking has dominated the academic discourse in Taiwan. In the last two years, the author got a number of chances to interview academics to explore their critical reflections of the incorporation taken place in Taiwan's higher education. All the academics whom the author interviewed frankly shared with me that the pressures for research performance

have been intensified in the last few years, especially after the introduction of incorporation strategies to reform higher education in Taiwan. Although no single national university is actually incorporated to become an independent legal entity, colleagues working in national universities have felt keener competition resulting from the accountability call. Since research performance, particularly international benchmarking has become a dominant agenda shaping university performance evaluations; all the academics that the author interviewed pointed out the importance to get their works published either in nationally leading journals or internationally indexed journals. In order to enhance their global competitiveness, academics in Taiwan have tried very hard to engage in international collaborations, while academic institutions are becoming very instrumental in student and staff exchanges in order to meet the expected outcomes prescribed by the Ministry of Education in assessing university's internationalization (Mok and Chan, 2008). Against such a highly competitive environment, pressure for producing internationally recognized publications has not been felt only by junior faculty but also by established professors (Field interviews in Taiwan, 2007 and 2008). Feeling unsatisfied with the intensified pressure for research assessment, academics in Taiwan have engaged in heated debates about the assessment criteria, particularly questioning the adoption of criteria primarily dominated by an Anglo-Saxon paradigm, while Asian New Humanities Net (ANHN) was set up to organize the academic community not only to raise concerns / disagreement in relation to assessment criteria but also to unite the academic community to influence policy agendas of higher education (ANHN, 2007; Chen and Lo, 2007).

DISCUSSION: INTERNATIONAL BENCHMARKING AND ACADEMIC PROFESSION

Putting the above survey findings and the field observations discussed earlier together, we can easily see the university sector in Taiwan, like its counterparts in East and Southeast Asia, has experienced accelerated tensions resulting from the conflicts between two powerful reform ideologies governing university reforms, namely state centralism (long embedded in the East) and neo-liberalism (growing in global influence). On the one hand, the Taiwan government is keen to reform its university governance in order to make universities more responsive and proactive to external changes. With a strong conviction to enhance its universities to become more globally competitive, the Taiwan government, similar to other Asian countries, has tried to adopt ideas and practices under the rubric of neo-liberalism in corporatizing and incorporating national universities. On the other hand, the Taiwan government has never attempted to let its national universities 'really go'. As Barr (1993) argued, 'using the logic of the market without actually letting the market in' has become a popular public sector management reform phenomenon globally. The incorporation of national universities in Taiwan gives rise to an interesting phenomenon in its higher education landscape: financially getting institutions more

diversified and gradually less dependent upon the sole support of the state, but these higher educational institutions have never moved away from state control.

Such a development has clearly suggested that state centralism remains as a dominant force in university governance despite the fact that the government has attempted to embrace changes in line with neo-liberalism. The present case study has demonstrated how the nation state can successfully ride over the two worlds, namely, state centralism asserting state authority in university governance and neo-liberalism making market forces and marketlike practices central in university governance. Without taking up excessive financial burdens in supporting both the national and private university sectors, the Taiwan government has tactically reduced its financial responsibilities to drive the national universities to search for funding from non-state sources. More importantly, the same reform process has also empowered the state in steering / controlling over higher education development through various kinds of quality assurance mechanisms to make sure universities would perform and quest for excellence. Adopting such reform strategies is like holding a two-edged sword in achieving the goals of the planned reforms.

When putting the present case study of Taiwan in the context of the higher education reforms in other Asian societies, we can easily find that the academic profession in Asia is under tremendous pressure to benchmark with the international practices which have been primarily dominated by Anglo-American standards. The call for internationalization of universities in general and the quest for world-class universities in particular have inevitably forced academics in Asia to follow the so-called international benchmarks. In order to position higher in the global university ranking, most of the Asian university systems have attempted to internationalize their curricula, strengthening their international academic links with top universities in the West and academics in Asia are under great pressure to publish in internationally refereed journals and venues (Mok and Wei, 2008; Deem, Mok and Lucas, 2008). It is against such a context that the academic profession in Asia has confronted with a growing trend of reduction in terms of 'academic freedom' despite many governments in the region having made attempts to decentralize responsibilities to individual universities to decide their own business. However, the drive for 'world-class university', coupled with the performance indicators and funding formula predominated by the 'international benchmarking criteria', it is not difficult to come to the conclusion that the academic profession in Asia is increasingly threatened by such global and regional trends (Mohrman, Ma, & Baker, 2008).

If we compare what happens to the changing university governance in Taiwan to recent university transformations and changing funding strategies adopted in Europe, the university restructuring that Taiwan has experienced is not entirely unique since many European universities have relied less on state funding but diversified their financial resources through other entrepreneurial activities. Performance-driven funding formulae are becoming increasingly popular and academics are pressured to perform better, especially, for example, when the European Commission is not happy with the overall performance of European universities in the global university

ranking exercises (Ben, 2008). Putting these observations together, we can argue that universities in the East have tried to learn from the West, while similar movement has also taken place in Europe.

CONCLUSION

In conclusion, this article has critically examined policies and strategies adopted by the Taiwan government in response to the growing pressures to internationalize and internally benchmark universities with the very best across different parts of the globe. By adopting reform strategies along the lines of incorporation and corporatization, the Taiwan government intends to drive its national universities to become more responsive and proactive in tackling rapid changes generated in the globalizing world. Although some of the academics being interviewed believe the recent reform measures have improved university governance in Taiwan, many of them raise their concerns of losing autonomy instead of being empowered in the midst of incorporation of universities. How to strike a balance between academic autonomy and accountability still remains an unresolved issue that the higher education sector is facing in Taiwan, which certainly requires mutual understanding between the state and the academic community.

NOTE

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THE POLITICAL ECONOMY OF QUANTITATIVE INDEXES FOR MEASURING ACADEMIC PERFORMANCE

Ever since the 1980s, when governments all over the world faced worsening financial situations that were a result of the exceedingly heated globalization, higher education institutes have been under more and more pressure to manage their organizations and remain competitive. One standard practice for many higher education institutes struggling to establish a wide reputation is to adopt popular academic evaluation measures (Wang and Loncar, 2009:186–188; Huang, 2011:1–3). There are primarily two reasons behind such a choice. One is to acquire a superior position versus other higher education institutes in budgetary competition; the other is to make the school more attractive to perspective students and faculty (Wang and Loncar, 2008:186–188).

When speaking of adopting academic evaluation practices that are becoming more popular, one prominent issue has stood out and aroused the resurgence of debates among scholars in less developed countries, that is: how academic performance, including that of research work, can be fairly and effectively measured? While there are basically two approaches to the measurement of performances of academic works (i.e. peer-based and biblio-metric methods), and while the pros and cons of both have been thoroughly discussed, there has been no consensus in the literature as to which approach should be adopted in what contexts (Milne, 2001:1–5; Huang, 2011:2–6). Even though biblio-metric indexes have been emphatically adopted as the primary standard for academic evaluation in countries like Taiwan, the effectiveness of such indexes in improving the quality of academic research in Taiwan is becoming a question of concern.

DIFFERENT EMPHASIS ON APPROACHES OF ACADEMIC EVALUATION

While higher education institutes all over the world have recently tended to put more emphasis on quantitative measures of academic evaluation, peer-based methods remain the primary approach in advanced countries such as the U.S., Japan, the U.K., and Germany (Leišytė, 2007:83–107; King, 1987; Van Raan, 2000). The question then becomes: what are the contextual factors behind such a divergence in measuring academic performance? Why have countries with leading academic performance been able to rely on peer-based methods for academic review without much controversy, while relying on biblio-metric methods only for reference? Why

C. P. Chou (Ed.), The SSCI Syndrome in Higher Education, 25–38.

has the adoption of biblio-metric methods for academic research caused a seemingly endless stream of controversies in Taiwan?

This paper will attempt to answer the above questions by first examining policy debates over the measurement of academic performances in Taiwan. Then, I will argue that certain approaches of measuring academic research performance are better suited to certain styles of academic governance. Accordingly, there will be cross-country comparisons between the U.S., Japan, and Taiwan of academic governing structures and the relationship between these structures and the measurement of academic performance in these countries. Policy recommendations for Taiwan will be drawn from the results of cross country comparisons and will be based on the features of Taiwan's academic governing structure.

Starting in the late 1990s, authorities on academic affairs and institutes of higher education in Taiwan began adopting biblio-metric methods which were based on quantitative indexes and compiled from academic publication database (e.g. SCI, SSCI, EI, TSSCI) to evaluate academic research performance. After the year 2000, the main criteria of evaluation for tenure and promotion reviews, as well as for reviews of research grants from the National Science Council and the Ministry of Education, have required quantitative indexes of the applicant's academic performance (Wang, 2008:4–5). However, ever since the beginning of their use in academic evaluation, biblio-metric methods have met with vehement criticism. These criticisms have come mainly from academic fields outside of the natural sciences. A significant number of academics from the natural sciences (e.g. medical science, biological science), management sciences, and economics, however, have expressed their disagreement.

THE PROS AND CONS OF QUANTITATIVE MEASURES FOR ACADEMIC EVALUATION

Pros

The first reason academics have argued for the adoption of quantitative indexes is that, in the past, institutes of higher education and academics in Taiwan had lacked a certain level of quality in their work in research and education (Wang, 2008:3). To make it worse, according to those who advocate for quantitative indexes, the quantity and quality of educational facilities and professionals were lagging significantly behind basic requirements in the midst of the explosion in the number of colleges due to the central government's forceful policy push, particularly at a significant number of newly upgraded colleges. Furthermore, due to the rigid central budget system of the Ministry of Education, there came to be fierce competition over resources between colleges and their internal subunits, and even between departments within colleges. This has resulted in academic factions, collegial conflicts and conservative and non-transparent decisions monopolizing college resources (Ku,1998/01/04). Academic evaluations of all sorts were claimed to be full of perjury, nepotism, and black box

operations. The humanities and social sciences were especially plagued by chaotic development and a lack of common vision (UDN, 1996/10/22; Ma, 1993/08/21). All these were serious negations of the utmost goals and values of the large-scale educational reform initiated by the Lee Deng-Huei administration. Therefore, some scholars have argued for a set of objective standards of academic evaluation, without which the aforesaid problems would soon compromise and subsequently destroy the entire system of higher education. They further argued that, based on straightforward quantitative indexes, academic performance and resources could be dealt with on criteria that were more objective, fair, and transparent, and that political conflicts and interference could be eliminated effectively (Ma, 1995/11/02; Ku, 1998/01/04; The Commission on Educational Reform, 1996).

Furthermore, Guan, Zhong-min, as a member of the Academia Sinica, argued that even though quality dimensions in the evaluation of academic research were highly critical, it would be very impractical to insist on measuring the quality dimension of academic work, e.g. adopting peer-based methods. Guan made an argument based on the simple calculation of costs and benefits. He says that if every new hire, tenure or promotional review, reviews of research grants by NSC, and periodic review of departments and schools by the MOE all required reviews through peer-based methods, the operating costs of such procedures would be sky high, and there would be frequent controversies as to whether the results of certain reviews accurately reflected the common value of their respective academic communities. The need for fair and efficient methods of academic evaluation became even more obvious when taking into account the significant increase in the numbers of colleges and their faculty members since the late 1990s (Fan si hui yi gong zuo xiao zu, 2005:355; Yang,1998/03/15; Chow, 2001/03/06).

As a result, the Ministry of Education and National Science Council have started to adopt more systematic and quantitative methods based on indexes related to academic evaluations; indexes such as SCI, SSCI, EI, and TSSCI. This was done so as to place more pressure on academics and colleges to be competitive for resources. Interestingly, while university faculty with natural and engineering science backgrounds have not dissented to quantitative evaluation methods, faculties from some social science disciplines, such as economics and management science, have also proposed the adoption of quantitative indexes. Academics who proposed the adoption of quantitative indexes argued that such indexes are more objective, fairer, and less vulnerable to political intervention even though they also agreed that quantitative indexes might not be helpful with regard to the quality dimension of academic research (Yang, 1998/03/15; Chow, 2001/03/06).

Cons

Scholars who have strongly opposed putting too much emphasis on these types of indexes have also argued that quantitative indexes hardly reflect the true value of academic research work. Even in academically advanced countries such as the U.S.,

Japan, Britain, and Germany, scholars rarely rely on quantitative indexes to measure the quality of peer research. Quantitative indexes are mostly for references. The over-emphasis on SCI and SSCI related indexes will not only restrict academic freedom and pluralism, it will also overwhelm academic research in Taiwan with theories and methodologies with a strong western bias (Chou, 2009/04/02). This may result in significant gaps between the knowledge produced by humanities and social sciences in Taiwan and the major concerns of the indigenous society. They have argued that plural sources of research, including books, articles in compilations, conference papers, translations, and textbooks should also be counted and fairly valued. The decision as to which types of academic output ought to be more important should be left to the consensus of each corresponding academic community. Since scholars opposing quantitative indexes emphasized the quality of academic research as one of the critical dimensions in the evaluation of academic works, they strongly urged authorities of higher education to rely on peer-based methods in the evaluation of academic research performance (UDN, 2004/09/24; UDN, 2004/09/25, Fan si hui yi gong zuo xiao zu, 2005:viii–ix). Since 2000, SCI, SSCI, EI, and TSSCI indexes have been incorporated as critical components in many academic considerations, including: the hiring, renewal and promotion of college teachers; research grants from the NSC; and subsidies to colleges from the Ministry of Education. However, the feasibility and use of these quantitative measures as evaluation criteria has become a heated issue (Fan si hui yi gong zuo xiao zu, 2005).

THE REALITIES

While the pros and cons in the debate over quantitative indexes of academic evaluation may each sound reasonable in their own way, both fail to address the more basic issues that have long plagued Taiwanese academics. Empirically, the adoption of these quantitative indexes has obviously made the allocation of resources in higher education more objective and transparent. Both academics and institutes of higher education have invested more effort into academic research activities since the volume of publications by Taiwanese academic have increased significantly from the early 2000s (Chen, 2005:228–229). However, scholars in the humanities and social sciences have realized that since the year 2000, over-emphasizing quantitative measures based on SCI, SSCI, EI, and TSSCI indexes has caused major indigenous issues to be largely ignored by the humanities and social sciences in Taiwan. Such a bypass has not ameliorated, but rather aggravated many long-term development issues in humanities and social sciences in Taiwan. The first is, the inability of Taiwanese academia to develop their own systematic knowledge required to approach major local issues. Secondly, the formation of a neo-academic hegemony and the further proliferation of academic factions have also become serious questions to be confronted (Fan si hui yi gong zuo xiao zu, 2005; Chou, 2009/04/02). In all, there has been a consensus among scholars who disagree with the over-emphasis of quantitative evaluation methods that groups within the humanities and social

sciences have not achieved a sound status under the pressure of quantitative indexes (Lin, 2005:181; Zhong, 2005:293–294; China Times, 1999/08/30).

There have been several questions raised by Taiwan scholars in rejection of the over-emphasis of SCI, SSCI, and TSSCI based quantitative evaluation methods. But these questions have been presented extemporarily and have so far not been systematically judged. In the following, I will first give a synopsis of these questions and then try to present an integral theory for interpreting how these questions came into existence.

THE CORE ISSUES

1. Why is it that, as mentioned in the pro and con section, scholars from the management sciences, economics, and science and engineering areas seem to have shown significantly less propensity to express their dissent from SCI-, EI-, SSCI-, or TSSCI-based quantitative measures of academic evaluation? Furthermore, the absolute majority of proponents for biblio-metric indexes are academic elite associated with well-privileged research institutes or universities in Taiwan. Long before the dissent was voiced in the year 2000, both the Institute of Economics of the Academia Sinica and the Department of Life Sciences of the NSC had already adopted finely defined SCI-, SSCI- based quantitative evaluation indexes (Chu, 2005:130; Wu, 2001/03/04). One former head of the Department of Humanities and Social Sciences of the NSC has pointed out frankly that competitive pressures exerted by engineering and science disciplines were the major reason for adopting SSCI and TSSCI-based indexes (Chiu, 2007:3). However, the popularity of biblio-metric methods in the past 15 years over the world has mainly been fueled by universities in Asian and other developing countries, and even many less privileged universities in academically advanced countries (e.g. U.S., EU, Japan, Germany, etc.) who have been jockeying for higher worldwide university rankings and recognition. With top universities in the U.S. and other leading countries in academic research, there have been serious concerns of publication overproduction accompanying the popularity of biblio-metric methods. Peer-based research review that is qualitative thick has still been regarded as the major pillar for research evaluation (Butler, 2007; Butler and Mcallister, 2011; Harley and Acord, 2011:3–4, 32–38). Why then does Taiwan, a country that is admittedly behind many advanced countries in academic research, have such a proclivity to over-emphasize the adoption of SCI-, EI-, SSCI-based quantitative evaluation indexes, particularly by leading scholars and top tier academic institutes?
2. Why has research performance from academic communities in Taiwan not been able to develop as fully as that in advanced countries? The under-development of the Taiwanese academic community can be witnessed first by the fact that Taiwanese scholars, particularly those in humanities and social science areas, do not engage in theoretical debates that precede the initiation and development of new literatures. Consequently, there have been no self-made schools or

approaches in the humanities and social sciences in Taiwan. As such, Taiwanese scholars rarely cite one another in theoretical dialogues (Huang, 2005:95–96, 98; China Times, 1999/08/30).This has also led to the unexpected result that the official organization (the Research Center for Humanities and Social Science) responsible for the construction of the Taiwanese version of SSCI, the TSSCI, has not been able to create any meaningful indexes so far. They have had to rely awkwardly on subjective and top-down survey data to rank local academic journals (Huang, 2005:95, 102).

REFLECTIONS ON THE NATURE OF THE PROBLEMS

The nature of the problems that have long been plaguing the Taiwanese academic communities as mentioned above can be succinctly illuminated by comparing behavioral patterns of academic communities with respect to research performance evaluation in Japan and the U.S. through sociological theories of knowledge. Take academic communities in the U.S. for example: even though the majority of them have been enjoying the leading edge in their fields, SCI, EI, SSCI, and TSSCI based quantitative indexes have been taken as one of the many indirect references in research evaluation, not directly as the core criteria of evaluation. Instead, peer-based substantive review has been the major mechanism American academics relied upon for the evaluation of research outcomes (Huang, 2005:92,94,104; Jiang, 2005:146; Yan, 2005:191). However, unlike in Taiwan where the costs of implementing a peer-based substantive evaluation approach will be very costly, the U.S. academics could effectively avoid such costs and how they have been able to do that is a question begging for answers if the Taiwanese academic authorities are resolved in tackling the problem.

The U.S.

In the U.S., professional communities are formed through research processes initiated by professional or academic elites who have pioneered frontier areas of research that are highly related to the enhancement of general social welfare (Carpenter, 2001). Such research efforts have generally been focused on basic research questions whose solutions tend to require wider consensus-building and the establishment of more integrated bodies of knowledge and skills. In other words, such research efforts require team works, intensive communications and negotiations, and tremendous amounts of resources and long-term devotion. If successful, professional elite conducting such research efforts will be rewarded with widely acclaimed social and academic recognitions and other pecuniary rewards. However, if unsuccessful, the resources and devotions invested by professional elite will become nothing, probably with some humiliation and disgrace.

However, ideas, knowledge, and skills still under development in frontier areas are mostly tacit, not well-accepted, not to mention not sufficiently standardized

and still full of uncertainties. Consequently, it is almost impossible to adopt any well-thought out rules to manage the creation and sharing of knowledge and skills, and to allocate the costs and benefits among team members. As a result, the more flexibly constructed dyadic ties based on inter-personal trust are relied upon for building teams and managing the tremendous insecurities involved (Crane, 1969; Crane, 1972).

Furthermore, basic knowledge or skills created in the aforementioned processes are less appropriable since they tend to have wide scopes of application and long lasting influences and are less applicable in instant commercial extensions. This makes original innovators less protective of their intellectual rights except social recognition of their original contributions. Federal government's policies on R&D funding also require the service of public interests and make the disclosure of the resultant information mandatory. Consequently, in the long run, professional or academic elite engaging in such basic innovations have molded a culture among the would be professional and academic elite racing to tackle basic research issues and make public the knowledge they found once they hit a certain breakthrough (Crane, 1969; Kline and Rosenberg, 1986).

Breakthroughs in frontier areas of research and their subsequent popularity basically reflect the fact that major participants have already developed a certain common set of professional values through intensive interactions and mutual adjustments. This also implies a professional community with quite broad-based consensuses as to who made what contributions to certain research questions and what should be the prioritization of further research agendas, potential theories, methodologies, and research methods. Members in the same professional community are familiar and keep themselves closely updated with the literature developed in their profession. As a result of the above reasons, professionals know how to evaluate research works substantively without spending too much time and arousing too much controversy. They also do not have to spend too much time and efforts pondering on the values of research works referred to them, except those for new publications. This has been the main reason why in the U.S. academia focuses mainly on substantive peer-based review, instead of SCI, SSCI related quantitative indexes, which have been used as references only (Evetts, 2003; Horsley and Thomas, 2003).

Similar to the above case of the U.S., academic communities in Japan have also relied upon peer-based substantive reviews for the evaluation of scholarly research work (Huang, 2006: 199). However, the governing patterns of academic communities in Japanese higher education institutes differ quite a bit from that of the U.S. In Japan, universities are ranked hierarchically according to the prestige, resources, and influences they have enjoyed, with public universities such as University of Tokyo and Kyoto University in the top, followed by Hitotsubashi, Keio, and Wasada, the last two being private universities (Adrian and Rixtel, 2002: 66; Shimbori, 2007:627–633).

Japan

In Japan, academic and professional communities are less open and cover a narrower scope of research areas, and span less widely across the boundaries of higher education institutes or corporate organizations than those of the U.S. (Arimoto, 2011:300). Departments of Japanese universities, particularly those in more prestigious schools, are composed of a few chair systems (*gakubatsu*) that specialize in respective areas. Each chair system is dominated by a full professor, with many lower rank professors and graduate assistants following him/her in a quite hierarchical fashion. The chair system has also been the basic administrative, teaching and research unit in the school, not the department as in the U.S. universities (Shimbori, 1981:85). Within each *gakubatsu*, members share the same culture, set their research agendas against similar beliefs, and prefer similar theories and methodologies (Horta et al, 2011:37).

However, the importance of the chair system in the Japanese higher education system does not stop there. The chair system within higher ranked universities tends to colonize other lower ranked universities and form an academic network. Japanese academic communities are dominated by the *gakubatsu* (Horta et al, 2011:37). In turn, each *Gakubatsu* is dominated by a chair (a full professor) from the chair system in the leading university and some other senior professors within the same *gakubatsu.* Universities with higher prestige tend to have higher rates of faculty inbreeding and dispatch their graduates or junior faculties to other lower rank universities (Cummings and Amano, 1977; Horta et al, 2011:38; Shimbori, 1981:85). Similar to academic communities in the U.S., common ethics and values about what are the appropriate research agendas, what should be the matching theories and methodologies, and what contribute to good academic performances prevail within each *gakubatsu*. Academic members belonging to the same *Gakubatsu* also develop rather finely defined, stable, and long-term oriented specializations. In other words, members of the same academic community share quite high levels of consensus on what constitute quality academic work (Huang, 2007:82; Horta et al, 2011:36; Shimbori, 1981:85).

The question, then again, is how did this communal consensus come about? In the early years when the Meiji government introduced the western style higher education system, it aimed at catching up with the advanced western countries by radical emulations (Huang, 2007:84; Shimbori, 1981:76–77). As such, western knowledge, science and technologies that had been larger in scale and required broader integration across different disciplinary areas became targets of emulation by top ranked universities. Ever since then, resources, efforts, and talents for academic development in Japan have been deployed in more radical, concentrated, and systematic fashions. The more concentrated and systematic fashion of the Japanese academic development also implies higher level of insecurity than those of the more incremental type, e.g. Taiwan, a case which I will turn to later.

Corresponding to the larger-scale and higher levels of integration across disciplinary areas, the Japanese government and academic authorities within national universities had adopted a highly collective type of governing regime, which has been based on the so-called chair system, as early as back in 1893 (Horta et al, 2011:38). The organizational character of the chair system matched quite nicely the more radical and systematic academic agendas of Japanese universities, since the latter required not only larger scope of academic (including teaching and research) collaborations but also longer-term regime stability at various levels of higher education institutes (Huang, 2007:82). However, such application-oriented research has also been featured by intensive tacit knowledge. This has been why Japanese academics within the same research community tend to build closer ties among themselves. In addition, as a result of focusing on applied type of research, academics in Japan also tend to be concerned about being caught up by imitators. Consequently, the Japanese *Gakubatsu* has been highly closed academic networks that are composed of personal or private connections that specialize in one area of academic study. No matter what, as a result of the stable and cohesive existence of academic networks like *Gakubatsu* and the common values, preferences of theories and methodologies, Japanese academics also rely mainly on substantive peer-based review for the evaluation of research works. Quantitative measures based on SCI, SSCI related indexes are only for reference.

Taiwan

Compared with the structural patterns of academic governance in the U.S. and Japan, while there are a few large academic groups composed of scholars across different universities in Taiwan, they are mainly formed for political purposes, e.g. National Policy Foundation and Taipei Society. Taiwan has an authoritarian regime after KMT shifted its power base from mainland China to Taiwan. Before democratization, the KMT regime adopted a power structure highly centralized in the hands of the ruling elite. As a formal proxy of governance, the bureaucratic system controls all sorts of critical resources and privileges, including all sorts of large-scale and more systematic type of organizations, e.g. universities, public owned enterprises, nonprofit organizations. Even though in the process of democratization, the hard authoritarian regime has changed into the so-called 'soft-authoritarian' regime, and elected officials from political parties and factions have played a more significant role in policy processes, the controlling role played by the bureaucratic system has not changed much.

However, based on an almost relentless pursuit of the principle of divide-and-rule, authorities, privileges and resources vested in the state bureaucrats are distributed in a highly segmented yet overlapping manner to prevent the formation of powerful groups among bureaucrats from becoming threats to the supremacy of the leading elite. Correspondingly, unless waged by the central ruling elite that have the power

to pull all the resources and talents together, elite groups in both the state and society have hard times in the initiation of large-scale and systematic policy ventures by themselves. On the other hand, unlike the ruling elite of prewar Japan who tended to target at the initiation of large-scale and systematic policy or technological innovations, the KMT ruling elite had adopted a very fragmented and incremental approach in its policy and technological innovations, except in times when the dominant position of the party-state was under serious threat, e.g. immediately after the World War II and the accession of the Peoples' Republic of China into the democratic camp.

Since critical resources and privileges related to academia have also been controlled by the state bureaucracy, academics also have to acquire the recognition from the state apparatus to climb to the top levels of the academic community. Therefore, the state has been one of the core forces shaping the pattern of academic governance in Taiwan. However, the policy and technological innovations initiated by the state have mostly been highly incremental (e.g. borrowed from academic results well-developed in the west) and such innovations are highly vulnerable to copy or imitation by others. Professionals or academics having close associations with the government tend to rely on emotional ties to reinforce or broaden their 'power base.' Such academic factions or networks tend to be small in size. Being highly incremental in their knowledge innovation also means that Taiwanese academic networks are relatively more fragmented from other academic networks than those in advanced countries. They are also highly conservative and closed.

The repletion of small-sized and fragmented personal factions or networks also imply that Taiwanese academia lack community-wise consensus on what are the promising frontier areas, what the appropriate theoretical directions and methodologies, and basic values based on which academic works can be evaluated. Such a lack of collective values and consensus holds not only for whole disciplines but also for sub-areas under them. Before the mid-1990s when KMT still exercised a tight reign, academic status was basically granted by credentialism, with social ties to the ruling elite as extra bonuses. Based on its political hegemony, KMT had built a large network of civil servant, party, and academic cadres top down in areas related to 'the Three People Principle' and the reinforcement of KMT's ruling ideology. However, 'the Three People Principle' had been more political propaganda than a school of thought and knowledge developed through the solution of real world problems confronted by the indigenous society. Up to this time, there has been very little emphasis on evaluation of academic works.

However, ever since Taiwan started its political reform in the mid-1990s, multiple political elite groups have emerged not just between two major political parties but also within them. Even though the state apparatus has been transformed from a hard authoritarian regime into a soft one, it is still authoritarian, only now, multiple political elite groups have gained their access to the resources and privileges under the control of the state bureaucracy from political positions at top layers of the government. Lacking the power to unite others, these elite groups could only

partially mobilize civil servant, legislative representative and academic cadres through personal patronage while they were in power. However, as a result of the mobilization of different political elite groups, legislators, cadres of civil servants and academia all have been segregated into their own factions that are relatively more turf conscious than those in the past.

Consequently, starting from the mid-1990s, under the pressure of significantly expanded number of higher education institutes and not-well-thought-out educational reform, top positions and resources of higher education institutes were even more factionalized than in the past. Not only procedures of academic evaluations were nontransparent and replete with bias of personal ties, reports of plagiarism in academic works were also getting more frequent (UDN, 1996/10/22; Ma, 1993/08/21). There were serious concerns over the fact that the whole system of academic governance was in a rather shaky situation in the late 1990s (Ku, 1998/01/04). Therefore, the semi-official Commission of Education Reform under the Executive Yuan suggested in *The Third Advisory Report on Education Reform* (1996) the adoption of objective and transparent methods for academic evaluation. The Commission's proposal was echoed by many well-established scholars and formally adopted by authorities in charge of higher education affairs (Chen and Chien, 2005:13–14,18). Therefore, starting in the late 1990s, together with the drastic increase in the number of higher education institutes, quantitative measures based on SCI, SSCI, EI and TSSCI indexes became the core of all sorts of academic evaluations.

The adoption of quantitative performance measures and the distribution of academic status and resources accordingly surely have encouraged young scholars' investments in research oriented toward publications with SCI, SSCI, EI and TSSCI. However, even though some younger scholars were able to climb the academic ladder successfully by performing well according to quantitative measures, they can rarely challenge the existing academic faction elite who have already been well-established with power and resources associated with leading national universities and cadres of civil services, particularly in social sciences. The worsening factionalism and fragmentation between academic cadres means the lack of systematic knowledge development, both in *a priori* and *ex post* senses. Without collective values and consensus on what are the promising frontier areas, what are the appropriate theoretical directions and methodologies, and common values, it is impossible for Taiwanese academia to practice peer-based reviews. Even should social science disciplines become rid of quantitative measures and return to peer-based reviews, serious controversies and non-professional maneuvers can be expected to be rampant (Lin, 1997:131; Yang, 2002/06/17; Liberty Times, 2005/02/01).

To make it worse, the introduction of quantitative measures for academic reviews have prompted a more and more serious bias toward minor revisions or local applications of 'western theories and methods.' The Taiwanese academics are still not sure on issues such as whether local or global orientation should be given a higher priority. Or, if the two should be balanced, then what practical steps should be taken to break through the current academic impasse (Chu, 2003; Wu, 2003; Chou, 2010/04/07).

FINDINGS AND CONCLUSIONS

The main goal of adopting quantitative measures for academic evaluation by the Taiwanese higher education authorities lies in the need to control the academia that is getting restless due to the rampant factional and political emulations in the process of democratization. Sound and effective development in academic research hinges significantly on whether political, economic and academic elites are able to form common visions about national development and choose systematic types of research or innovations as their major development strategy. In Japan and the U.S., academia have focused mainly on more systematic types of research, academic communities tend to be larger in scale, more integrated, and associated with stronger collective values and consensuses. In contrast, Taiwanese academia is replete with fragmented factions and is in dire need of building systematic and integrated types of research capabilities, without which it will be impossible for the Taiwanese academia to establish its own features. The issue of whether peer-based or bibliometric methods for academic evaluation should be adopted is just not relevant to the question of how to reorient the direction of Taiwanese academic research so that they will become more relevant to the solving of local issues and more attractive to international audiences at the same time.

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A DIFFICULT SITUATION OF HIGHER EDUCATION IN TAIWAN

INTRODUCTION

During the past twenty years, most higher education policy in Taiwan has been short-term schemes, rather than long-term and on-going projects (Chang, 2008). This occurred because short-term projects are flexible and easier to control. It is simple for the government to schedule short- and medium-term programs to coincide with periods of election campaigning, and so highlight administrative features and performance. For political parties, aligning project completion with election campaigns avoids performance claimed by the competing party. For administrators, the practice prevents competitors, including those within the same party, from claiming undue credit. However, short- and medium-term projects are typically unstable and characterized by uncertainty and incoherency. Authorities, departments, and officers of such projects are often required to demonstrate short-term results. It is difficult to take a long-term perspective, seek long-term profits, or to let society wait for the natural results.

Using projects as a way of political control is not unique to the field of education. It is instructive to compare the distribution of duration of projects across the First Sector (Government), Second Sector (Enterprises), Third Sector (Non-Governmental Organizations), and different countries. The arrangement and distribution of project durations reflect the different philosophies, visions, and time pressures of participating organizations. Additionally, they arise from organizational requirements for change, patience, and balance between long-term and short-term benefits.

QUANTIFYING

The basic model of quantitative management is:

Project → Key Performance Index (KPI) → Assessment.

This type of management approach originated from scientific management theory put forward by Frederick Winslow Taylor and from logical positivism in the philosophy of science. These two classical ideologies were famous in the United States during the first half of the twentieth century (Chan & Wu, 1992; Feyerabend, 1975; Hwang, 2001; Popper, 1934), but were critiqued and challenged by new paradigms in subsequent decades (Kuhn, 1962). However, the application of quantitative KPIs in

C. P. Chou (Ed.), The SSCI Syndrome in Higher Education, 39–50.

higher education institutes is common. Quantitative standards dominate over aspects of lecturer promotion, performance evaluation, and assessment.

Within the education system, those who advocate quantitative management believe firmly that all matters are measurable. However, the process of measurement distorts the nature of the subject. For example, among the three educational objectives: cognitive, emotional, and technical; it is difficult and inappropriate to measure emotional objectives. Emotion is subjective and is influenced by personalized moral belief-systems. The act of measuring emotion may compel the assessed individuals to cheat or lie for personal benefit or for that of the institution. It is important that lecturers and professional academia care for students and society with a broad mind and clear conscience. However, it seems arbitrary and unnatural to measure personality by quantitative methods.

For example, X University decides to include "caring for students" as one of its basic criteria for lecturer assessment; a hypothetical discussion between A and B might be:

A: "How do we measure 'caring for students'?"

B: "We could define a criterion such as caring for students at least three times weekly."

A: "Why care three times, and not more or less?"

B: "We have no theoretical basis; the standard could be set by a superior, or voted for by an appropriate group of people."

A: "A decision made by a superior or agreed to by voting is arbitrary. Even though an arbitrary and unreasonable standard may be tolerated, it quantifies "frequency" but does not define or quantify 'caring'."

B: "Then, we can define 'caring' as a "verbal or physical interaction to help students feel warmth, compassion, and support from lecturers that empowers them to solve problems."

A: "That sounds great, but how do we quantify the students feeling of "warmth, compassion, and support?"

B: "We could formulate a questionnaire titled 'Scale of Perception of Caring' to contain ten questions. Each criterion (warmth, compassion, and support) is assigned three questions, and there is one further question for overall perception. Each question uses a five-point Likert-type scale, so providing a minimum score of ten and maximum of 50. Lecturers would distribute the questionnaire to students immediately after sending caring message to students. To pass the standard, the average score for at least three occasions must be greater than 30."

A: "Why choose 30?"

B: "This could be agreed by experts or by voting."

A: "Ok, let us ignore this problem with irrationality and arbitrariness. Then, when you define warmth, compassion, and support as criteria for the questionnaire, is it a rational quantitative method? Can you show me an example?"

B: "Students might evaluate a statement such as 'Professor C cares about my studies and makes me feel warm' on a scale of 1 to 5."

A: "So, when I interact with students, I must consider whether I make them feel 'warm'. However, similar actions by a lecturer might result in different feelings from different students; feelings are subjective. Even if two students feel 'warm' regarding our interaction, the perceived level of 'warmth' will vary. Is there any relationship between the level of warmness and degree of assent? If so, is the relation linear or quadratic, and how could we determine the relationship type? How can numbers or a score that represents subjective feelings be objective? Does a subjective feeling, once quantified, become objective?"

B: "Such complexity will give rise to an epistemological debate."

A: "It seems arbitrary when 'quantitative' is considered to be subjective without any epistemological self-examination. Moreover, is it sufficient to measure the perception of warmness using just three questions? Is an interaction that is outside of the relevant range, such as a lecturer telephoning parents without interacting directly with the student, an example of caring for the student? If student perceptions cannot be described by feelings such as happiness, shame, calmness and so on, then is a lecturer's interaction considered as caring for the student? How could we quantify these qualities? How is the range sufficient for defining the concept of 'caring for students'? Do you have any theoretical evidence that will allow you to be both subjective and evidence-based?"

B: "It is fine to design more questions or variables, but it is difficult to define a range that would be considered sufficient. However, for quantitative evaluation, we must define a range. Such problems need not be solved here and now, but I believe that all matters can be quantified, and that in future, this will be supported by theory and empirical evidence."

A: "It just like some scientists believe the existence of extra-terrestrial being (ET) and planets appropriated for human to migrate somewhere in the universe. However, they will not strip the fur of a rhesus monkey and compel us to believe that it is an ET! They won't urge that we should travel on spaceship to migrate to right now too."

Some matters cannot be measured; the action of making a measurement changes the nature of the original matter. This is similar to the Heisenberg Uncertainty Principle, which describes how the act of observation changes the characteristics of the thing under observation. This phenomenon is common in anthropology and sociology. When we observe or measure a person, they may notice and alter their behavior

accordingly, perhaps by interacting with the observer or assessor. The observed could increase, diminish, or otherwise alter their behavior to generate a leniency effect, central tendency effect, or polarization effect, for example by lying or providing random answers.

On the other hand, because of the difficulty of quantifying some factors, quantitative management workers may define simple parameters as criteria or standards, and neglect factors that are more difficult to quantify. These practices weaken management and then are not able to meet its targets. For example, the contribution of research findings to knowledge creation and the development of human civilization should be a primary consideration when measuring the contribution of lecturers' research, even though this is difficult to quantify. However, university management has used the "number of words in papers" to evaluate lecturer contributions. More recently, the "number of published papers published" replaced this as either criterion is simple to quantify. The earlier word count criterion caused many lecturers who desired promotion to publish overly prolix and discursive papers, while the latter adopted criterion resulted in piecemeal publication, whereby lecturers would separate a single research paper into several similar and trivial papers for publication by different journals to increase number of published papers. These systems nurture lecturers who are calculating and ready to argue every detail.

Academic departments were reorganized to reflect work area to isolate quantitative criterion standards. Matters deteriorated under systems that encouraged internal competition; mutual trust between departments and faculty was replaced by feud, exploitation, and conflict. One may ask which system is more competitive, a conflict system with mutual exploitation or a system of mutual support that compensates all parties?

RANKING

Many believe that ranking is the best way to stimulate competition and that competition is necessary to motivate improvement. Teachers in primary and secondary schools announced student results as classroom rankings. School authorities ranked all student results. Some authorities even posted student rankings to parents with the intention of encouraging high-performing students, while warning poor-performing students. Today, parents and education experts alike oppose the publication of results, as the practice neglects student dignity and limits the assessment of multi-intelligence to a single criterion that ranks all students with the same measure. Thus, few schools now apply this method. (Humanistic Education Foundation, 2004; Shih & Hsieh, 2004; Yang, 2004)

Ironically, these ranking methods have been applied and developed in higher-education institutes, even at the national level. People in Taiwan show their deep concern about ranking by expressing satisfaction with Taiwan's high World Competitiveness rankings, but are uncomfortable with their low ranking in Happiness

Indices. They also cheered with Taiwan's high World Wealth Ranking, but express embarrassment over the extent of children's tooth decay. Higher education institutes were proud to be counted among the World 100 Best Universities, but later self comforted when their rankings fall. The first stage evaluation report of the "Plan to Develop First-class Universities and Top-level Research Centers" (PDFURC), considered the ranking of National Taiwan University in the World Top 100 as a major achievement. It appears that everyone, from the country's leaders to experts within the field, need explicit affirmation, and are concerned with ranking.

Higher education institutions should hold the broadest vision and range of values to promote a diversity of features among universities. One-dimensional and single-line ranking cause a regression of university standards that results in a single-class structure. For example, in Taiwan, university ranking is by entrance examination score. The Ministry of Education promoted "Choose by course, not choose by school" meaning that students should choose their courses according to their interest in a given field. The intention was to assist universities in developing their own style and character, but this was unsuccessful (Tao, 2004). The Ministry of Education also assisted in the development of institutes of technology as an alternative path for students. However, evaluation and assessment became more prevalent, and now, the publication of research papers garners greater attention in academia. The PDFURC promotes world ranking as its main objective. These factors cause universities to become uniform and exhibit less socioeconomic diversity.

During 2003, the Taiwanese press first reported the objections and critiques to the Engineering Index (EI), Science Citation Index (SCI), and the Social Science Citation Index (SSCI) from academia. However, academic emphasis was on research and the numbers of papers published. This situation, encouraged by several academic journals databases, was irreversible. Reasons included:

1. Mutual-suspicion

Scholars began to worry that they would be evaluated by these criteria. Thus, they began to indicate SSCI, SCI, EI, and others on their resume's list of published papers, promotion documents, personal websites, and other documents. Even though they may have personally disagreed with this kind of assessment criteria, scholars still worked to maximize their assessment scores, and in doing so, abetted the process. Eventually, both the agreed and disagreed ones indicated them and created an interesting but depressing phenomenon. Eventually, the criteria were adopted for assessment even though no one claimed to have initiated it, because no one dared risk failing to meet the publishing criteria.

2. For objectivity

Many scholars criticized academic journal databases as commercial enterprises that contain low quality journals dominated by English language journals,

so-called ‘academic colonization’. Those who agreed with this view argued for its objectivity. Scholars who disagreed with the view proposed other ways of assessment such as extending the list of referenced other journal databases, or introducing quantitative methods and ranking standards. Consequently, most scholars fell into the myth of quantitative ranking. They seldom considered the cost to themselves of pursuing objectivity.

3. Success→Power attainment→Self-replication

Scholars who succeed under the ranking standards system tend to emphasize particular research results. They acquire power in universities and government organizations and want to improve the quality of higher education. To accomplish these goals, they compel others to learn and adopt their own successful strategies to include values, academic standards, philosophy, research methods, and even their fields of study. Such scholars would impose their values implicitly or explicitly. They want to change others to be as good as they themselves are. They may think that the quality of higher education and society would improve if everyone in the universities became as good as they themselves are. Many successful and powerful people unconsciously desire to change others, or to self-replicate. Genesis 1:27 says, “So God created man in his own image…” Thus, the assessment standards of academics stabilize and become less flexible through the attainment of power.

During the PDFURC assessment of several universities, the criterion that attracted the most attention was research performance, despite many other criteria for consideration. There are unwritten standards for research performance that exist in the categorization of statistics and in the minds of evaluators. For example, for acquisition of research projects, a research project gained from National Science Council ranks higher than projects awarded by the ministries or by industry. For presentation of research papers, a paper published in the English language is higher than a paper published in Mandarin. Papers listed in a journal database are higher than non-indexed papers. Papers published by a foreign journal are considered better than papers published in local journals. In turn, local journals divide into more levels and rankings. This academic phenomenon of evaluation combined with the traditional ranking system, using university entrance examination-scores, caused universities in Taiwan to fall into the present singular and linear university ranking structure. At the summit of this structure are the ‘Top-Universities’, followed by universities with accreditation of Ministry of Education Program for Promoting Teaching Excellence of Universities, this hierarchy wrongly suggests that research is more important than teaching. Though there are different types of universities in Taiwan (general university, technology university, normal university, national university, private university, and others), all universities consider research performance as the main guideline for promotion of lecturers, assessment of lecturers, and adjustment of salaries, among others. This implies that all types of universities move towards

becoming research-type institutions. Currently, research performance as an assessment standard dominates all aspects. Universities will lose their specialties, while lecturers become tools to produce papers and their role as "teachers" and "intellectuals who care about society" gradually fades.

SOCIAL GAP

The recent centralization of resources in Taiwan has gradually become critical. Instead of self-reflection and correcting this situation, higher education policy-makers made matters worse by promoting the PDFURC. This philosophy of the project is "against fairness" due to limited resources and funds. In order to advance a few universities to the "World's Best Universities rankings," investment of funds and resources is concentrated on these universities. However, students from the Top-Universities generally have high socioeconomic status. Ultimately, the higher education system and social system deepened and widened the gap between rich and poor.

One disadvantage of the PDFURC's elitist philosophy is differentiation by ranking and level. When combined with the University-Entrance Examination ranking system, universities are trapped into the ranking myth. The project also influenced the social gap in Taiwanese society. Children with greater social rank have more opportunities to develop their talents, while children who are lower in the social hierarchy become labors or are abandoned.

The core value of education should be "never give up on any one." The United States of America, a capitalist country, introduced the "No Child Left Behind" Act (Lee, 2009). In Finland, the country that constantly performs outstandingly in the Program for International Student Assessment (PISA), respects the dignity of the teacher and teaches every child. Taiwanese students perform erratically, possibly because of the distribution. Top Taiwanese students have the potential to win gold medals in the International Olympia Competition and could compete with students from South Korea, Japan, and Switzerland for World No. 1. However, lower level students might perform on a par with Third World students (Yang, 1994). Ground level teachers often discover that students perform differently to each other on English Language tests (Chou, 2004)., an example of "One Taiwan, Two Worlds".

A core function of education is "to guide everyone to explore their talents and to create mobility within society". Unfortunately, in Taiwan during, from the earlier Joint College Entrance Examination system to the latter Multiple Entrance System for universities, children from higher socioeconomic status have a greater opportunity to enroll into top-universities, national universities, and famous universities than those with lower status have. Government subsidizes these universities to educate students to become "talents." These talents become professionals, management level, or policy-makers within government. They accumulate resources and power, and thereafter their children have greater opportunities to enroll into top-universities. This is social class duplication, by which, the poor become poorer and

the rich become richer; the gap between rich and poor gradually widens, although many cheer when Taiwanese billionaires appear in Forbes Magazine (Taiwanese Billionaires in Forbes, 2011).

Differences are a most treasured asset for education as they help us explore the talents and unique characteristics that reflect the unquantifiable diversity of our lives. It is a society with pluralism, not class. It just like we appreciate the amazing and inspiring Earth which consists of flying eagles, swimming dolphins, crawling lizards, pine trees, cactuses and many others. However, we need not measure the intelligence of all creatures to obtain a ranking and thus affirm and provide the most intelligent human with all available resources. We appreciate individual strengths such as baseball, Go (an ancient board game in China), drawing, acting, helping, gardening, repairing, cooking, and many others to form a pluralized and magnificent society. We do not need to grade people according to score, result, or wealth because this magnifies class differences by resource allocation. People are different. Who does not want to be talented? It is potential. It is a human right. If a person cannot develop his or her own talent, they will become a problem for society. Therefore, it should be better that Top-University funding been invested in elementary education, rural areas, disadvantaged groups, universities with specialties, and lifelong learning. Society will improved after the basics for society become stable and strong.

Nature may be cruel, but capitalism with Darwinism is worse. By contrast, humanism strives for a successful path for every individual. To contrast the low birth rate in Taiwan, government should not only encourage fertility, but also help every newborn live with honor and dignity.

"CARROT AND STICK"

To gain projects, improve ranking, compete for resources, and pass assessments, many universities adopt "carrot and stick" or reward and punishment strategies. A combination of reward strategies such as money, entitlement, and title conferment with punishment strategies including limitation of promotion period, performance assessment, and incrementing pay scale differences compels lecturers to produce more papers to keep their jobs. They concentrate on pursuing titles and promotion without the joyfulness of conducting research and caring for society.

Most rewards based on "performance," assume that this is the result of personal effort and ability. Those who contribute effort deserve reward and reward tends to stimulate continuance of effort. What is the problem of this equitable way of thinking? First, it ignores structural factors that cause an inequity of competition. Second, it implies "control", and, third, extrinsic control may compromise intrinsic motivation.

For the first point, individual performance is actually dependent on situation, objective conditions, available resources, and previously spent effort. The percentage of contribution from personal effort and ability varies. The sprint race in a track event is an isolated model. Everyone at the starting line is equal with similar health

conditions and similar clothing. However, the "human sprint race" is different. Everyone's starting line is unique, some are born without breast milk available, and others are born into wealth. There are differences in health as well, as some are fit and strong while others may be handicapped; in the environment that some are born into, have war while others may meditate in a sling chair. Different resources may be available. Some have plenty of money for research, whereas some receive rejected fund applications every year. Thus, are we actually encouraging effort when we reward performance? Alternatively, are we simply rewarding those who started earlier, have a better environment, and more resources? Thus, reward strategies may accelerate the inequity cycle of "the rich get richer, the poor get poorer".

For the second point, although rewards appear to be active and positive, human-made and material rewards (most commonly money) apply control. As a teacher rewards a student, or an employer rewards staff to work harder, then the Government rewards scholars to produce papers. This "control" strategy has existed in human society since antiquity. It is a form of contract or deal. There is an instrumental relationship between those who reward and those rewarded. For example, a King rewards his lords and knights for their loyalty.

The scientific basis provided by behavioral psychologists illustrates the "controlling" function of reward. It also provides a philosophy basis for control. Skinner wrote "Behaviorist Utopia" advocating that if humankind were willing to abandon freedom and dignity to undergo behavioral engineering to ensure desirable behavior through control with reward and punishment, there would be no more war, and there would be world peace forever. The question is who will play God? Who will be the controller? An ordinary human with absolute power will tend towards absolute corruption. Thus, no one will take the risk of handing over freedom and dignity for peace and well-being. Moreover, what is there for peace and wellbeing without freedom and dignity?

For the third point, intrinsic motivation refers to feeling focused, involved, pleasant, meaningful, challenged, sense of achievement, and career enjoyment. Extrinsic motivation on the other hand, refers to someone who works only for external factors such as money, fame, reputation, physical reward, meeting the expectations of others, assessment pressure, and time pressure. These factors are not the intrinsic essence of work, but rather an external toxic coating. When workers have high intrinsic motivation, the feeling of well-being will be strongest. The company or organization needs not provide surveillance, supervision, or even management to employ the most creative, most productive, and most loyal staff. Conversely, when workers are extrinsically motivated, a company or organization could improve production by adopting reward and punishment strategies. The main problem with this is that it destroys intrinsic motivation and reduces the pleasure, meaningfulness, and wellness of working. Employees learn how to take the largest reward for the least cost and effort. They haggle, nitpick, and play "cat and mouse" games with the company or organization. Once an employer withdraws supervision, and reward and punishment strategies, these employees will cease working or minimize their effort.It is fair to say

that lecturers should be intrinsically motivated. Compared to many other occupations, lecturers have more freedom and greater opportunity to explore new things that are advantageous to developing intrinsic motivation (Amabile, 1987, 1993; Collins & Amabile, 1999; Deci, Koestner & Ryan, 2001). Surprisingly however, most higher education institutes strive to employ reward and punishment systems. This may arise because on occasion, government authorities and university assessment committees strongly request that university authorities implement these systems. Advocating the offering of higher pay to increase retention of talented faculty is not equitable. Reward and punishment schemes are based on assumptions, such as: 1. indolence is a part of human nature; scholars only work hard for reward and 2. humans act for utilitarian reasons, i.e. scholars work for salary. These assumptions ignore those scholars that take pleasure in exploring knowledge, hold a passion toward caring for students, and have a sense of vocation for improving our society. An authority might consider that extrinsic reward will increase production. However, this kind of "control" corrupts intrinsic motivation. Moreover, salary is often not the main priority for job selection. Another factor is the social environment, particularly having friendly working colleagues who are interesting, reliable, and supportive (compared to partners who are bored, obscene, crafty, irresponsible, obsolete, power hungry, and one-upmanship). Additional influences include the available research facilities and resources, well-motivated students who show respect for lecturers, the existence of proper facilities for childhood education, job vacancies for spouses in the community, a caring community, and the list continues. People usually assign a higher priority to such factors than they do for salary. While salary is a consideration for lecturers, over-emphasis on a reward system may cause them to emphasize material gains.

CONCLUSION

In this chapter, the authors argue that the over-use of short-term projects as a control strategy in Taiwan's higher education has forced many institutions and individuals to pursue short-term gains. It is difficult for them to extend their vision and achieve lasting effects for the future of society. The assumption underlying is that our world can be fully measured and quantified, and so unconsciously equate "quantitative" with being "subjective." This results in a quantitative management style that is common in higher education institutes for the management and assessment of human resources as well as in other areas. Nevertheless, emotions and moral values are difficult to quantify as the irrational and dogmatic quantification of these elements trivializes them. Interactions between an assessor and those under assessment may generate fake, exaggerate, leniency, diminishment, or reversal reactions that distort emotional objectives in education. Over-reliance on quantitative standards not only introduces bias, and a tendency to select easier to measure quantitative standards, but also neglects moral values that are difficult to quantify.

For those who firmly believe that evaluation with ranking outcome is the best way to encourage competition, may have misjudged individuals and organizations with

the same dimension which discouraged pluralism and self-esteem. Differences are a most treasured attribute in higher education as they help us to explore the talents and uniqueness that mark the unquantifiable diversity of our lives. After all, differences reflect pluralism and respect for the "others." Those who believe in the effectiveness of ranking are usually pro external affirmation. This implies their agreement with domination by an assessor's value system. Consequently, Taiwanese scholars have geared toward research publication, and especially valued the number of papers published. They express a preference toward particular academic journal databases for several reasons, including mutual suspicion among scholarly communities and self-defense in the name of objectivity. Those who succeed against ranking standards and gain the authority to judge the efforts of others, apply the same standards themselves.

Higher education institutes in Taiwan have become trapped in a university ranking structure. A material reward and punishment strategy indicates the existence of an instrumental relationship between those offering rewards and those rewarded. Such relations can cause faculty to haggle and nitpick. In order to win projects, raise their ranking, compete for resources, and pass assessments, many universities introduce "carrot and stick," or reward and punishment strategies. However, this approach ignores structural inequity, and control is implicit. It destroys intrinsic motivations for working. The domination of research-based assessment standards causes universities to lose their specialty features and unique identities. Scholars become tools for producing research papers, while diminishing their roles as mentors and intellectuals. The over-reliance on reward systems, and misconceptions about indolence 'being a part of human nature,' and of human act utilitarianism, corrupts an intellectual pleasure in exploring knowledge and pursuing quality of life. It also diminishes the intellectual mission to care for society.

As a result, it is difficult for middle- and low-ranking universities to develop any specialty and features. Students from high socioeconomic backgrounds have greater opportunity to enroll with top-universities, where considerable resources are invested. Consequently, the higher education system widens the social gap and, eventually, will prevent any possible social mobility in Taiwan.

In conclusion, if higher education policy of the Taiwan Government and the direction of higher education assessment continue to prevent universities from developing their own specialties, but instead, promote all universities to become research-based, then most universities will probably lose their own identity and mission in the long run.

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TO BE OR NOT TO BE

Impacts of "I" Idolization from the Perspective of Humanities and Social Sciences Faculty in Taiwan

INTRODUCTION

Higher education evaluation stipulations originate from the rationale that teachers are researchers (Wu 2007), whereby they not only actualize their critical reflection on their teaching via their research inquiry, but also put their research into practice in their classroom delivery. Embracing undoubtedly logical reasoning, the teacher-researcher ideology seems to be applied in many countries around the world. In recent years, the important role that evaluation plays has been attributed to a number of factors. One of these factors can be traced back to the concept of the capitalist economy that has exerted its influence since the 1990s on higher education all around the globe, reflecting internationalization, marketization, and standardization. Consequently, global academic capitalism has been gradually fashioned to follow the trend of globalization. Another factor is the growing number of higher education institutions and the increasing scarcity of financial resources provided by governments. Faced with the predicament of a scarcity of resources, as a result of resource dilution, which can feed into every institution in higher education, governments have enacted a "competitive rewarding mechanism" that heavily emphasizes "accountability" in order to avoid accusations of "sluggishness" or "investment failure" by the public (Chen 2006 p. 165). The academic capitalism model has been practiced in higher education in western countries in Europe and America for years. Other countries have also introduced this model into the management of their higher education in order to keep abreast of the idea of maximal distribution of educational resources in the era of globalization. In this vein, since the late twentieth century, the Ministry of Education (MOE) in Taiwan has enacted various research projects with government subsidies/grants, for example the Plan to Develop First-class Universities and Top-level Research Centers, research undertakings integrated with projects for research-orientated universities, and National Science Council (NSC) research projects, all of which are incentives for academics to undertake research. In 2003, the MOE in Taiwan officially initiated an evaluation mechanism to appraise all the institutions in higher education, including general universities and universities of science and technology, in relation to their academic performance in order to elevate Taiwan's competitive edge in global higher education. The evaluation practice aims to facilitate universities to reposition their strengths and

C. P. Chou (Ed.), The SSCI Syndrome in Higher Education, 51–80.

to confirm their educational goals. In other words, the practice intends to bring about a positive mechanism for educational institutions to undergo self-scrutinization on their own initiative while providing impetus to their constant self-improvement (Tang 2011).

Unfortunately, among the various criteria and standards in the university evaluation is academic evaluation that places particular stress on international journals. To be exact, its evaluation norms are heavily based on the aggregated number of papers published by all teaching faculty in each institution in Social Science Citation Index (SSCI) and Science Citation Index (SCI) journals, both of which were established by Thomson Reuters and are based in the US.

When this SSCI- and SCI-orientated evaluation mechanism became widespread, the situation was aggravated in 2006, when the MOE in Taiwan initiated a new educational policy, i.e. the "Fifty Billion Dollars in Five Years-Aim for Development of the World-class University and Elite Research Center Project" in an attempt to elevate the research capacity of academics in higher education in Taiwan in the global academic arena. This policy is targeted at cultivating top universities in Taiwan compared to world-class universities such as Harvard, Cambridge, Oxford or Stanford. Since then, in accordance with the MOE's regulation, an increasing number of universities have begun drafting evaluation mechanisms stipulating that teaching faculty undertake research endeavors in addition to their teaching and service commitments. More and more universities in Taiwan have even regulated a "6-year-promotion policy" to goad newly recruited teaching faculty into elevating their research productivity while promoting intra-university teacher evaluation.

However, possibly negative effects are hidden beneath what seems to be justifiable in these evaluations. All of the governmental moves and institutional policies in line with these government moves might result in disproportionately emphasizing research over teaching and valuing theories over practicality, which apparently run contrary to what is supposed to be teaching, research and service, designated as the three main functions/commitments of universities. Equity issues might occur as a result of the disproportionate functions, which need scrutiny. There are also qualms about the SSCI- and SCI-orientated evaluation mechanism; many are skeptical about the policy in terms of whether, as the adoption of SSCI and SCI is monopolistic, it is justifiable, equitable, and accountable when applied to all the divergent fields of specialist knowledge. The "Fifty Billion Dollars in Five Years-Aim for Development of the World-class University and Elite Research Center Project" has also been heatedly debated. In this light, this present study is orientated to this line of debate in order to explore the underlying impacts on higher education.

LITERATURE REVIEW

2.1 Justification of "I"-Orientated Evaluation

The idea of globalization is grounded on the concept of neoliberalism, which places emphasis on beneficial capital investment, optimal resource distribution, and

maximal achievement capacity. From this concept evolves the principle of academic capitalism in higher education (Chen 2006), which refers to higher educational institutions seeking their best advantages in the global market of academia by making good use of their academic achievements. Following this line of reasoning, many scholars deem pursuit of research eminence in the context of higher education to be crucial. According to Professor Yao Cheng, a Taiwanese scholar specializing in nanotechnology who is familiar with the academic worlds of both China and Taiwan, the spirit of big-league universities should take the lead in advancing human beings by scientific research undertakings which might not be favored by the public but will eventually benefit human beings in the future (Chen 2011). This is echoed by the former president of Academia Sinica, Yuan T. Lee, who ascertained that universalization of higher education is beneficial for society, but if a university is not rising to academic prominence, it will be a laggard (Lee 2001).

In light of these endorsements, this "I"-orientated evaluation policy appears justifiable. What seems to be exciting about the fruit reaped, that is, all the academic endeavors tapped into the "I" pursuit policy, is that according to the 2011 QS[1] Asian University Rankings™, there were 11 Taiwanese universities rated in the top 100 universities worldwide, among which National Taiwan University was ranked 21st. This compares with 14 Chinese universities and 26 Japanese universities ranked in the top 100. Although these statistics suggest that there might be room for Taiwanese academia to improve, one might feel encouraged when Martin Ince, an expert in the ranking survey, expresses otherwise. That is, given that Taiwan has a much smaller territory and population than Mainland China and Japan, higher education in Taiwan has in fact performed well (Udn 2011). Similarly, the "statistics of 2012 Taiwan ESI[2] Journal Papers" produced by Professor Mu-Hsan Huang from the Department of Library and Information Science in National Taiwan University indicated that there were 50 Taiwanese universities ranked among the world's top universities, among which National Taiwan University was the most outstanding, rising from 54th place in 2011 to 53rd in 2012. In the world impact factor ranking, National Taiwan University ranked 149th, improving from 165th (Shen 2012). Seeing the statistics, one might feel comforted, if not exhilarated, about the effectiveness of the government policies aimed at cultivating universities in higher education which can rank in the world's top 100 by investing huge financial budgets in the elevation of Taiwan's academic capacity.

2.2 Criticisms of "I"-Orientated Evaluation

There is, however, another line of argument. While seeming both reasonable and justifiable (Tso 2008), this evaluation policy of "I" idolism in fact raises numerous criticisms (e.g., Chang 2010; Chen 2006; Chen 2011; Chou 2003; Chou 2011; Ho 2012; Hwang 2011; Kuo 2010; Lee 2011; Lee 2012; Lu 2010a; Perng 2011a; Tso 2008; Wu 2007; Yen 2004; Yen 2010) as it turns out to be a fallacy that has had large-scale negative impacts on higher education.

The fallacy of the "I" idolism is that some of the top journals are not necessarily SCI or SSCI journals. As reported by Tso (2008), Level A and B journals are in fact not necessarily abstracted and indexed in SCI or SSCI. On average, there are only four journals in each domain or field of specialty that are deemed elite journals, called Solid A. A range of 6 to 10 journals are listed as Level A journals, there are 20 Level B journals, and around 50 Level C journals in each field. The accreditation criteria vary across fields, as they do among journals at Levels A, B, and C according to the nature of distinct fields of specialty (Tso 2008).

Critics (e.g., Chou 2011; Hwang 2011; Lee 2012) have pointed out the serious impacts of the evaluation policy in line with "I" standards on the development of higher education. The chief officer of the Department of Higher Education, Jow-Fei Ho (2012) expressed concerns about five main areas/problems: administrative management, the ranking of the world's top 100 universities, teacher evaluation, wilted local expertise of academics, and the academic achievement of university students degrading to that of high school students, all of which are the results of the evaluation policy mandated in Article 5 of the University Law that deals with related regulations and measures with regard to university evaluation. One might speculate that the situation would not be that grim if the university evaluation were not "I"-orientated, stressing the importance of research over teaching.

Many pungent critiques (e.g., Chen 2011; Lee 2011; Perng 2011b) argue against the "Fifty Billion Dollars in Five Years-Aim for Development of the World-class University and Elite Research Center Project" on the grounds that the project aggravates the academic evaluation based on the number of "3I[3]" publications. What's worse, the five-year fifty-billion-dollar project not only fails to accomplish academic exploits, but also results in some grave outcomes: acceleration of the ruin of Taiwanese academic culture, and coercion of academics to do "favorable" research that turns out to be detrimental to Taiwanese development (Chen 2011). Striking the same chord, Professor Richard Chia-Tung Lee argues that the fifty-billion-dollar policy that aims to encourage professors to produce good papers, in fact, fails to contribute to elevating students' quality and their academic level; it is only a short-cut move (Lee 2011). Professor Chien-Shing Lee (2012), the former head of the Department of Higher Education and the convenor of the Office of Education and Culture at the National Policy Foundation, tilts at the government policies of university evaluation and development of "the World-class University," both of which have ushered in assessment of academic achievement grounded on production of international journal papers written in English, such as SCI, SSCI and A&HCI. This results in a desperate mass production of journal papers by teaching faculty in higher education, which not only seriously harms the development of teachers' academic research, especially in the fields of humanities (H) and social sciences (SSC), but even worse, jeopardizes the passing down of cultural heritage. Unfortunately, professors in higher education are forced to become tools or machines to produce research papers (Chen 2011; Lee 2012). This "I"-based evaluation policy, which aims to urge academics to constantly produce excellent research and to elevate

the level of their academic competence and capacity, results in drastic measures and therefore raises issues of working rights and equity. It seems far-fetched that academics in some of the higher education institutions are laid off according to the university policy (Chang 2010; Chou 2011) due to their failure to publish at least three papers in SCI and/or SSCI, even though they perform high quality teaching (Lu 2010b).

Equity issues also derive from the MOE's unified, standardized "quantification evaluation" system, based on the number count of SCI, SSCI and A&HCI journal papers, which is applied to all fields of specialty. In fact, every field is distinct in its own right among the natural sciences, engineering, humanities, and social sciences. The "quantification evaluation" application results in the marginalization of the academics in the fields of H & SSC and those who endeavor to take up research undertakings concerning local or non-European and non-American cultures (Ho 2012). In general, the work of academics in H & SSC to produce academic publications is slow and laborious when compared with that of natural sciences and engineering; as a departure from their teaching commitments, academic research is a hefty load that some teachers dread undertaking (Wu 2007). It appears that it is relatively effortless for teachers in the fields of natural sciences and engineering to arrive at academic quantity and even quality of research paper production (Tso 2008). More often than not, there emerges an illusion that once they obtain decent experimental data, it is relatively straightforward for them to get their papers published, whereas teachers in H & SSC usually probe into social phenomena or undergo philosophical exploration that takes a longer time to reach not only logical and judgmental conclusions but also philosophical criticism and reasoning. Complicated by linguistic issues, these academic endeavors are as laborious as they are thorny, especially for ESL/EFL scholars (Tso 2008). In this light, it is both unfair and inappropriate to apply "I"-orientated policy to the evaluation of academics' research achievement/productivity of all different domains. Unfortunately, H & SSC are always in an inferior position (Chang 2010) under this policy.

Disproportionate distribution of academic resources is a great concern when publications in SCI and/or SSCI have been given such tremendous emphasis by the MOE, the National Science Council (NSC) and higher education institutions. In the midst of the university evaluation, the tallied number of "I" publications is the crucial determinant factor of whether and how a university is granted research grants and subsidies. Elite universities, which a huge amount of academic resources flood into, are selected above others. Only when there is "I" paper production are academics granted opportunities to possibly be promoted to the next level in their academic career. In addition, there is a higher chance for those researchers whose papers are published in SCI and/or SSCI journals to receive grants for their NSC research proposals.

The adoption of the number of SCI, SSCI, or A&HCI papers, impact factors, and rankings of the journal papers as academic achievement indices to evaluate academics in Taiwan has also incurred various rebukes from a law perspective. The censorious

remarks derive from the fact that the evaluation system pressures scholars in Taiwan to abandon the Constitution which has high expectations of academia and endows it with constitutional protections, while, what's worse, sabotaging local academic research. Therefore, the evaluation system is under suspicion of infringement of the Constitution (Perng 2011a). Chou (2011) argued that the spirit of higher education is either lost or downgraded as a result of "I" idolization in the context of university and teacher evaluations.

In this vein of criticism, the adoption of SCI/SSCI-based evaluation underlies numerous negative effects that remain widely debated when the contribution of teachers in higher education is questioned. The value and contribution of a teacher in higher education are absolutely not only to produce research output but also to cultivate the next generations. That is, as dictated by a Chinese scholar in the Tang Dynasty, Yu Han, in his famous work, *On The Teacher* (*Shi Shui*), a teacher is to propagate the doctrine of moral integrity, to impart professional knowledge/skills, and to resolve students' doubts in the learning process (cited in Tan 2006). However, since "I" idolization has swept the nation, the cultivation of students' professional knowledge has given way to the pursuit of "I" paper production. To keep up with the trend of valuing research over teaching, most of the teachers in higher education might have no choice but to cut down their teaching hours. Unfortunately, those who are willing to take up a heavier teaching load are likely to be considered poor researchers (Chang 2010). Consequently, teaching might be watered down and students' right to be taught overlooked. As a result of the idolization of "I" publications, it is debatable whether teaching faculty are researchers or educators/teachers.

Seen in this light, one might be reminded of a similar situation that occurred in the academic arena in China. In the late 1980s, Nanjing University first introduced an evaluation system based on the number of papers published in SCI journals to higher education in China. Several years later, it had risen abruptly among the universities in China. Taking the lead over the rest of the universities in the area of academic production, it was ranked top for the total number of papers collected in SCI in 1992 and in general academic performance since 1992 (Li 2010). The achievement of Nanjing University was hailed as a scientific sensation; since then, other universities have followed in its footsteps, enacting SSCI and SCI evaluation which connects academics' positions, yearly assessment, scientific funds and grants for research projects, together with reward policies for SSCI and SCI paper publication. It appears that at the initial stage, the evaluation policy and reward mechanism exerted their positive effects in facilitating the elevation of levels of academic research capacity and in encouraging scientific productivity of higher education in China in order to keep abreast of the international arena. According to a Thomas scientific report, "Global Research Report: China," the number of scientific papers produced has exploded since 2004 (Wu 2010). The number of SCI academic papers alone increased from 20,000 in 1998 to 112,000 in 2008; especially, since 2004, the number has doubled (Wu 2010). In 2006, China surpassed Japan, the UK, and Germany. In recent years, China has been second only to the US (Wu 2010). However, a serious

question emerges regarding whether the number of SCI and SSCI publications actually reflects Chinese scientific research capacity, which needs not only to be pondered on but also to be explored deeply. Wu (2010) animadverted upon the academic reward policy based on the number of "I" paper publications because the policy not only has been misapplied but has also run counter to its original intention; what's worse, it has turned out to be an impediment to the development of scientific education in China (Wu 2010).

While the question remains unsolved, numerous oblique occurrences circle around the SCI/SSCI myth that keeps widespread. With the pursuit of "I" papers in vogue in Chinese academic circles, academics crave to publish as many "I" papers as possible, as is also the case in Taiwan. One negative effect of pursuing "I" journals is the desperation of academics to publish, which leads to possible plagiarism and even fraudulent practices (Li 2010; Wu 2010; Yang 2010) that not only seriously jeopardize their careers but also tarnish the prestige and honesty of the universities and the countries. There is a possibility that in order to strain to increase the number of SCI and SSCI papers, academics resort to alternatives such as submitting papers to more than one journal, splitting the content of one paper into several smaller papers, and/or submitting papers to SCI journals with a low publication threshold (Chen 2010). In the context of China, there are phenomenal cases where as many as 70 papers authored by two research teams led by two professors at the College of Chemical Engineering of Jinggangshan University in China were found to be fake and were then officially retracted by the SCI journal, *Acta Crystallographica Section E*, on December 19, 2009 (Harrison, Simpson, & Weil 2010). The authors of the papers have been dismissed from their jobs by the university, and the university itself has been under the scrutiny of the international science world. As a result of the fierce competition and pressure, there has developed an academic paper industry in China where, for example, papers were illegally transacted with a turnover of one billion yuan in 2009 alone (The Epoch Times 2010). Each year, millions of people try to submit papers to "I" journals, but unfortunately fail to get their papers accepted. A high demand for "I" paper publication is the dire consequence of millions of people under the stress of graduation, academic evaluation, and academic promotion every year (Li 2010; The Epoch Times 2010; Wan 2010). In this grim situation, some cannot but resort to the desperate measure of buying academic papers online.

The pursuit of paper production also leads to utilitarianism (Wu 2007). Whether academics are endowed with grants or not and how big the grants are, are determined solely by the quality and quantity of academic publications. However, the equity of how to evaluate academics' academic achievements is at issue. Ideally, the academics should have their research published in the most distinguished journals in the world. If so, they are considered elite professors with all the fame and profits. There is then the likelihood that they might transfer to a better university or research institution with more financial, economic resources where they tend to get higher pay and/or better fringe benefits (Tso 2008). The problem of retention or a high turn-over rate ensues as a result. Highly likely is that teachers in higher education

are urged to become paper production machines. This deviates from what teachers should commit themselves to in terms of actualization of teaching-research practice and the spirit of scientific inquiry. Some teachers choose to place great emphasis on research, devalue teaching and swerve from their professional upbringing to academic undertakings (Lu 2010a) that easily tap into the "I" requirements. Others undergo research commitments for the sake of the research itself, rather than for social concerns, scientific enquiries and problem solving. Worst of all, all of the academic research endeavors are targeted at the pursuit of benefits and fame. As criticisms go, one symptom of "I" publication pursuit is that academic productivity is enslaved by fame and benefits. What is stunning is that in the context of China, universities practice preferential, premium academic rewards as an incentive to encourage/entice teaching faculty to publish "I" papers. The rewards range from RMB 1,000 to 100,000 depending upon the rankings of the international publication. According to the reward policy in Jinggangshan University, a paper published in *Science* or *Nature* is worth 100,000 yuan, in Class A academic journals that are recognized by the University, 5,000 yuan, in Class B journals, 3,000 yuan, and in Class C journals, 1,000 yuan (Office of Scientific Research 2011). It is possible for professors in higher education to obtain RMB 4,000 for each paper publication and 10,000 yuan for a paper published in an SCI journal. A seemingly unbelievable case is that a professor in a college located in Wuhan in Hubei Province, China published 65 SCI papers in 2003 and earned 650,000 yuan (Chen 2010). There is thus the likelihood that professors are able to become millionaires just by publishing "I", especially SCI, scholarship. It would not be difficult to comprehend that the fringe benefits of academic production is as stupendous as it is fabulous[4].

In addition to the high profits linked to "I" publications, the selection of academicians and academic promotion also depends on SCI and SSCI publications (Chang 2003). This situation happens in Taiwan and China, resulting from the phenomenon of "I" idolism which ironically runs contrary to the western academic societies. The Science Citation Index (SCI) is the databank created by the Institute for Scientific Information (ISI)[5] which was founded by an American scientist, Eugene Garfield, in 1958, and aimed at assembling international journals in sciences and collecting information on their editing and citations (Miu 2000). Eugene Garfield himself revealed in an interview in China that the number of SCI journal publications should not be used to appraise the scientific research capacity of academics; instead, a more scientific assessment system should be a frame of reference (Chen 2010; Wu 2010). Likewise, SSCI is also a data bank that collects journals relevant to social sciences, whose function is to monitor whether the accepted papers are published by the journals in a timely manner and whether the journals fall short of papers to be published. As Professor Simon H. Yen in the Department of Finance in National Chengchi University illustrated, there is no absolute guarantee of the quality of the papers published in SSCI journals (Chang 2010). The founder of SSCI once noted that while originally targeting providing a platform for searching for papers, SSCI has become a battleground of academic publication in academia (Chang 2010).

Likewise, according to Professor Chun Ji, a visiting professor both in the College of Political Science and in the Graduate Institute of Development Studies in National Chengchi University, SSCI paper publication is considered in neither teacher evaluation nor promotion of academics in general universities in the US (Chang 2010); it is only used in teaching students how to embark on academic paper writing and how to search for related and necessary information. Ironically, SSCI and SCI have been given a much more tremendous value in the higher education in Taiwan and China than in the US.

As shown above, numerous debates and criticisms have pinpointed the phenomenon of "I" idolization, which links to "I"-oriented evaluation in Taiwan and China, reflecting its impacts, whether positive or negative. However, there has been no empirical study, providing consolidating evidence to prove its impact and to unveil the phenomenon of "I" idolization. In this vein, this present study orientates its endeavors to this rationale. Two research questions are addressed accordingly:

1. How do teachers in the fields of H & SSC in general universities perceive the impacts of "I" idolization (SSCIization and A&HCIlization), if any?
2. How do teachers in the fields of H & SSC in general universities perceive the quantitative evaluation of the academic achievement of higher education academics based on "I" paper production?

METHODOLOGY

A qualitative inquiry by means of interviews was used, with the aim of eliciting in-depth qualitative information/evidence. The targeted subjects were the teaching faculty of 14 general universities who were randomly sampled from a total of 68 general universities across Taiwan. A total of 20 teachers in the fields of H & SSC from the 14 general universities agreed to participate in the in-depth interviews (see Table 1). Semi-structured interviews were conducted from late March to early May in 2011 where two open-ended questions were prepared beforehand to inquire about (1) the impact/phenomenon of "I" idolization, and (2) the issue of quantitative, SSCI/SCI-oriented evaluation of academics' research achievements.

FINDINGS AND DISCUSSION

Only two of the 20 interviewees either took a neutral stand regarding "I"-orientated evaluations or tended towards agreement on the issues. Interestingly, both were English language faculty, whose areas of research interest were related to English linguistics. This denotes that those whose academic background and research preference are closely connected to the inner-circle countries tend to disagree less with "I"-orientated evaluation than those who are not. What is worth reflection is that the reason they did not categorically deny the "I" standard was the lack of a better alternative evaluation norm[6].

Table 1. Demographic Information of the Interviewees (N = 20)

	Frequency	***Percentage***
Sector		
Public	14	.70
Private	6	.30
Location		
Northern Taiwan	12	.60
Central Taiwan	5	.25
Southern Taiwan	3	.15
Domain		
Social Sciences	12	.60
Humanities	8	.40
Area of Specialty		
Law	3	.15
Political Science	1	.05
Education	1	.05
Special Education	1	.05
Educational Policy and Administration	1	.05
Teaching Chinese as a Second/Foreign	1	.05
Language	1	.05
Anthropology	1	.05
Land Economics	1	.05
Public management and Policy	1	.05
Library, Information, and Archival Studies	1	.05
History	1	.05
Cross-Cultural Studies	2	.10
Chinese	1	.05
Foreign Languages and Literature	3	.15
English		

According to the synthesis of the interview data, the impacts of "I"-orientated evaluations are categorized as follows.

4.1 Catering for Preference of SSCI Journals vs. Academic Discrimination Against Locality/Nativism

As many as 65% of the interviewed academics mentioned the hardship of getting their papers accepted by SSCI journals due to readership issues. Four (Interviewees

#3, #9, #11, and #16) specified that these international journals were likely to be interested in research topics or problems particularly relevant to inner-circle rather than outer-circle countries. Only those papers related to internationalized topics are considered for publication (Interviewee #7); otherwise the chance for local[7] issues and topics relevant to Taiwanese literature, culture, history, philosophy, civil/criminal law, and Chinese language to be published in SSCI journals is rather slim.

> If the papers whose research topics are not the preference of the editors of the mainstream journals, i.e. SSCI and A&HCI, the chance of their publication is low. You've got to comprehend the publication protocol in terms of topics and research areas of preference in those journals. (Interviewee #3)

> It is not easy to get your papers published in SSCI journals. If you write something about Taiwan, the papers hardly appeal to a wide readership. It is just that they are not interesting to editors of the international journals or fall out of their expectations and requirements. It is, more often than not, that such papers fail to be accepted by the international journals, despite the fact that they are well written. (Interviewee #2)

> Teachers of humanities and social sciences are often limited when it comes to publication in English. Even though written in English, papers about local issues turn out to be less valuable according to the international standard. (Interviewee #4)

> Teachers of humanities and social sciences are often concerned with local issues whose academic production is not favored by SSCI and A&HCI journals. (Interviewee #19)

> I am afraid that teachers in the field of law face a great problem in keeping abreast with SSCI publication due to the nature of the field itself. Every country has its own enacted law according to its local situation. After all, it is locality, rather than internationalization or universality, which makes it hard to cater for international readership. In fact, in addition to the commitment to cultivating their students to become lawyers and/or members of the justiciary, teachers in law schools mainly take up academic research in relation to the law of their own country. Even if they submit their papers in English to SSCI journals, the international readers would not necessarily be interested in Taiwanese civil law or criminal law; therefore, the chance of getting them accepted is pretty low. That creates a big hassle for most teachers. Take the law school in my university[8] as an example; as many as 90% of the teachers study Taiwanese civil law or criminal law, while only less than 10% are specialized in international law. (Interviewee #7)

> The domain of humanities and social sciences largely involves the underpinning of home problems. Relatively, their academic production fails to be appreciated by SSCI or A&HCI journals. The nature of humanities and social sciences

> differs from that of natural sciences and engineering. The former embraces largely native origin and local traits. Take the February 28 Incident and a field study of "Lukang," a famous historical site in Changhwa County, Taiwan, as examples; the research papers in these directions have to be translated into English in order to submit to English language-based journals. The first question I can think of is who your readers are. My second thought is that it is not easy for international/foreign readers to understand/track issues such as the February 28 Incident, nor are they interested in them. (Interviewee #6)

> As for some fields of study, sadly, time spent on academic undertakings is not necessarily directly proportional to the research achievement. Among the fields of humanities and social sciences, take philosophy as an example; it might be hard for teachers in the field to produce a certain number of SSCI papers over a short span. Under the criteria based on the number of SSCI papers to evaluate teachers' academic commitment, I figure that most academics are weighed down by the stress of "I" publications. It would not be hard to imagine that for those in the fields of Chinese literature and/or history, obtaining SSCI publications is a strain. If a person puts all his/her efforts into researching hieroglyph in Chinese, how can you ask him/her to translate it into English? (Interviewee #8)

> As the social sciences are separate from the natural sciences, I think it is necessary to establish a mechanism only for evaluating teachers of social sciences in terms of their performance. If there is no evaluation at all, problems must ensue. However, it is crystal clear for a great number of teachers of social sciences, even for those senior academics, that journal-based, especially SSCI-based, evaluation is inappropriate. They perceive this as a big problem. I think this evaluation protocol might suit some situations but fail to apply to all cases where, for example, some local issues/topics are relatively unaccepted by international academia. (Interviewee #10)

Whether the papers appeal to a wide readership is one of the crucial factors of getting papers accepted and published in international journals. However, academics in the domains of H & SSC are mostly concerned with local/Taiwanese issues. One might find it frustrating that, more often than not, the papers of high quality fail to be accepted by and published in SSCI journals just because they are outside the scope of the journals. The traits of specialty, particularity, and locality of H & SSC illustrate themselves as detrimental in terms of not only restricting opportunities of disseminating research findings of academic undertakings performed by Taiwanese academics to the global arena, but also preventing the academics from communicating academically with those from all over the world. This does not indicate that H & SSC academics are inferior in terms of their academic achievements. However, in the "I" evaluation standard, it is not the matter of whether the H & SSC academics are disadvantaged, but the consequence of academic discrimination of locality and nativism.

4.2 Partial Development of Academic Research

The SSCI syndrome results in imbalanced development of academic research of teachers in the fields of H & SSC. This in turn results in the situation that the development of peripheral or minor issues and topics of concern in a particular domain of specialty are constrained. One teacher voiced the situation.

> What I want to express is that I doubt the equity of using impact factor as a frame of reference in the evaluation of academics' performance. If the academic circle is very small, for example only four or five people who are specialized in the same field, their publications are not likely to be cited that often. They must become the marginal minority and be disadvantaged by the criterion where citation/impact factor really matters. (Interviewee #11)

An equally grim consequence of abiding by the evaluation leading to the pursuit of "I" publication is that academics swerve from their research concern and/or their academic specialty to catering for the preferences of SSCI journals. As a result, they have to target those issues of interest to the editors of the "I" journals and even tailor their papers to appeal to the readership of the international "mainstream" journals. Three teachers noted,

> Only should you write something, for example issues relevant to international laws, rather than local civil law or criminal law, which could trigger their interest, would your papers have a chance to get accepted in the international journals. Another case is that international audiences might be interested in your papers in regard to jurisprudence in China. Both cases might force academics to engage themselves in studying something unrelated to their scholarly or academic upbringing. A phenomenon that the academic production fails to reflect their actual academic strength is derived, as a result. It is sad, though; the papers written by some scholars with their actual academic strengths are unfavorable. (Interviewee #2)

> It is very important to be noted that we can not focus only on the academic development of core fields of specialty. The symptom of "I" idolization or superstition is to generate a negative impact on the freedom of academic development. Considering the number of publications, the seemingly unimportant, but practically promising fields of study would be neglected. There is also a possibility that consequently their academic development is repressed and even sacrificed. (Interviewee #11)

> Researchers try to match their directions of research with the core journals, for example SSCI, A&HCI, or TSSCI, in order to cater for their readership or audience and to tap into the development of the journals. The academic studies might not necessarily be their academic specialty. The papers have to be tailored to meet the preferences of the journals. Some resort to replicating what has been done in order to get as many publications as possible. It is normally

> called "garbage in and garbage out" which does not make any sense, nor does it make much contribution to the area of academic specialty. (Interviewee #3)

Considering the repressed situation in Taiwanese academia, another four of the teachers recommended developing Taiwanese journals of good quality in order to disseminate research findings, particularly related to local issues.

> I think, in fact, what is the right scenario is that foreign academics should submit their papers to our Taiwanese journals. The academics are supposed to submit their research studies of Chinese literature either to Taiwanese journals or to journals in mainland China. There is no such thing as international journals for this field of study. It would be preposterous to ask the academics in this field to submit their papers to international journals as there is hardly a proper journal worthy of submitting their papers to. (Interviewee #12)

> Scholars who study Chinese literature, Chinese history, or Chinese hieroglyph normally publish their own monographs and/or books in Chinese. Now, they are asked to write papers in English and submit them to international journals just to abide by the MOE's evaluation standard that is in line with "I" idolization. This regulation is to put the cart before the horse. The right thing to do is to create a good environment in terms of establishing good quality journals and a fair submission mechanism for the academics in the fields to submit their papers to, rather than to pander to the liking of the international "I" journals. The right thing is that western scholars should read and refer to the Chinese books published by Taiwanese people! (Interviewee #8)

> We should act in reverse; Western scholars should read and study our books and publications in Chinese! (Interviewee #10)

> What we should do is to produce core journals featuring Chinese areas which international and local academics and scholars can submit their papers to. (Interviewee #13)

4.3 Language Difficulties vs. Professional/Academic Inferiority

In addition to readership problems, as mentioned in Section 4.1, the language barrier is indeed a crucial, if not the most important, drag on success in getting papers published in SSCI journals. This situation does not, however, denote the inferiority of the academic capacity of teachers in H & SSC. There were seven interviewees (Interviewees #3, #6, #7, #9, #14, #15, and #20) striking the same chord.

> Even though I got my Ph.D. in the UK, there is no way that my English can be compared with that of native speakers of English. Language is the constraint that prevents me from having my paper published in "I" journals. (Interviewee #20)

> In terms of English language requirements, it is not fair to evaluate academic achievement according to number of SSCI papers. In general, the level of

English writing required for writing up papers concerning natural sciences is not as high as that for writing up those regarding H & SSC. The mathematical formulas that are the result of research findings of an engineering/natural sciences study are more important than the language writing style. Take the field of education as an example; for the researchers in the field, possessing a good command of English to write up research outcomes in English is a must, in addition to including sound educational theories and concepts in the outcomes. The demand of good English is high; that makes it hard to produce a good paper in English which is able to get accepted by the international journals. (Interviewee #9)

One of the greatest difficulties for people like me who undertake research in regard to Chinese language and Chinese literature, is the English writing constraint. It is very difficult for us to publish our papers written in English in international journals, not to mention getting the papers accepted by SSCI journals. I figure it is the common problem that the people in this field are all dejected by. (Interviewee #14)

English has become a lingua franca, a global language, as a result of globalization. Scholars who undertake studies of alternative cultures have to write up papers in English in order to submit them to international journals. A lot of full professors, including me, do not consider it necessary to do so. The alternative culture is related to a general dialogue between Chinese and Western cultures and belongs to studies of local culture, for instance Chinese literary works of art, Taiwanese literature. Why do we have to translate them into English before submitting them to an SSCI journal? I disagree with having our papers published in international journals, especially SSCI and/or A&HCI journals, in order to be accredited by the National Science Council. Nor do I think we have to write papers in English just to cater to the demands of SSCI journals. I will spend less time studying Taiwanese issues and writing up papers in Chinese accordingly than writing in English. The papers in Chinese I produce could reach a larger audience who share the same concerns and interests. For example, I am currently studying Taiwanese literature in relation to an outcast author who has stayed abroad for his whole life. Both the Taiwanese and Chinese governments consider him a dissident. I mean when I do research about an issue like that, there is no point translating it into English. Each researcher has his/her own research directions and academic contributions and strengths. There is no need to stick to a unified evaluation standard and to pursue SSCI or A&HCI papers. (Interviewee #6)

The language requirements are high in SSCI journals. So, language is one of the crucial problems of getting papers published in "I" journals. You must have a very good command of English, and be capable of reporting your research findings. However, as often as not, it is not necessarily English

> competency that is the hindrance to making "I" publications a reality; rather, it is the matter of academic writing style in English that fits the international journals. Relatively, the academic writing style in English related to fields of natural sciences and engineering is much more universal. H & SSC are usually connected with culture and locality. That makes it hard for academics to properly express themselves/the content in English. Besides, it is difficult for academics and researchers who undertake studies regarding the local cultures to write up papers in English and submit them to international "I" journals in English. (Interviewee #3)

This hampering of the language resulting in the academic inferiority of H & SSC academics is not limited to Chinese, as opposed to English, the lingua franca, which is widely used in international journals. A similar situation happens when the languages used by academics to write up academic papers are those other than English, for example Japanese, French, Spanish, and German. This was illustrated by two interviewees.

> The international SSCI journals that accept papers written in languages other than English, for example Asian languages: Japanese, Korean and European languages: German, French, Spanish, are very few. To pursue "I" paper production for the teachers who specialize in these languages and literature, or those who received their higher education training in countries where English is not the first/official language is relatively difficult. To assess this group of academics in terms of their academic achievements according to the "I" standard is pretty unfair. (Interviewee #15)

> This might be a personal case. I obtained my PhD degree in France where I received my academic training. All my academic research papers are written in French, including references. Now, I have to translate my papers from French to English to be able to submit them to SSCI journals. I might be disadvantaged in terms of writing up papers in English, compared with those who studied their Ph.D. in international law in English-speaking countries, let alone compared with native English-speaking academics and scholars. (Interviewee #7)

According to all the abovementioned testimonies expressed by the seven interviewees, "I" standard evaluations impact teachers in H & SSC in terms of putting them in a disadvantaged and inferior position that in turn creates an equity issue which will be elaborated on later in the paper.

4.4 Academic Colonization of Native English-Speaking Countries vs. Degrading Local Journals

Another consequence of "I" idolization is the degrading of local journals and the freedom to use another tongue in academic production. Two teachers felt concerned in this regard in unison.

> There are always differences between the East and the West in terms of culture and language. We should not use foreign standards to judge the research achievements of academics in the fields of H & SSC as these fields feature nativism and special attributes that are distinct from the western countries. Normally, their studies embrace the local state of affairs, instead of international issues. Therefore, the focus should not be to ask the teachers to submit their papers to international journals; this action is to look down upon ourselves. (Interviewee #13)

> I don't object to the policy of bringing our academic research in line with the international academic world. As far as I know, a lot of academic peers have undertaken research cooperation with foreign scholars. Of course, the language they use is English. However, when it comes to evaluation of academics' research achievements, the MOE and National Science Council should not use international journal papers as the sole criterion of judgment. Unfortunately, in fact, the failure to have papers published in English is a minus and the academics who have straight publications in Chinese are distained. This is a way to scorn our language, and the freedom of using our own language is restricted. (Interviewee #4)

These views echo scholars' (e.g., Chen 2009; Chu 2003; Perng 2011b; Wu 2003) concern for the situation that only SSCI and SCI journal papers being approved is unreasonable, questionable, and problematic.

> Whether a paper is of great academic contribution depends on its content and quality, rather than on whether it is published in "I" journals. The myth of "I" idolization results in belittling research on local issues and local journals; then, it is likely that fewer and fewer people in Taiwanese academic circles will be concerned about their homeland. What is worrying is that consequently, there will be fewer academic dialogues via related research undertakings. (Interviewee #19)

What is distressing is that if the "I" phenomenon is perpetuated, Taiwanese academic circles will eventually be demoted into the academic colony of native English-speaking countries, especially the US. The uniqueness of Taiwanese academia and academicism will disintegrate.

4.5 Equity Issues

4.5.1 Social injustice It might seem far-fetched to accuse "I" idolization of being a source of social injustice. However, when referring to and deliberating on the functions of academic commitment in higher education, which play a crucial role in developing the country, one might not doubt the accusation. As specified in Article 1 of the University Law in Taiwan, the utmost purpose of universities is academic research, cultivation of professionals of expertise, and social service in

order to advance national development (cited in Peng 2006, p.16). Similarly, Article 18 regulates that the teaching faculty in universities consists of professors, associate professors, assistant professors and lecturers undertaking giving lessons, doing research and counseling students (Peng 2006, pp.16–17). According to the Law, the teaching faculty in higher education should be committed to the four missions of teaching, research, social service and counseling, among which teaching is the main, foremost commitment due to the fact that the dissemination of knowledge and cultivation of professionals of expertise and talent are the backbones of the perpetuation of the development of the society and the country. Teachers not only have a great influence on students but also determine whether a country is competitive and even promotes the evolution of human beings. In this vein, one might not be doubtful about the crucial role that teachers play in terms of their teaching. Under the influence of pragmatism, universities, emerging from their ivory towers, ushered in the new development by engaging in "social service," with teachers serving a large mass of the populace in the late nineteenth and early twentieth century. The University of Wisconsin pioneered the educational notion of community service that turned out to be the initiation of continuing education advocated among universities in the US. Especially, since World II, every state university in the US has gradually considered "service" a fundamental function of universities (Peng 2006). "Service" that is closely bound up with teaching and research has become an essential, crucial mission in higher education (Perkins 1996).

However, for long in both teacher evaluation and promotion criteria in higher education in Taiwan, research has been given greater emphasis than teaching and even service. Consequently, teaching and social service commitments are curtailed, giving way to research. The three main tasks of teaching faculty in higher education are disproportional, while the educational spirit of higher education is obliterated. What's more, there is the likelihood that teachers are restrained from bringing their professional traits to their full potential (Peng 2006). Seven interviewees accused the "I" evaluation policy of its inappropriacy, as the pursuit of "I" papers constrains the normalization of social concerns for the disadvantaged in society.

> As far as I am concerned, I can contribute my time to writing up papers related to medical engineering and science education. As long as I know what a particular journal wants, it would not be hard for me to write up good papers. What is interesting is that those who are good at writing up papers would not disapprove of the "I" pursuit because it is beneficial to them. (Interviewee #4)

> SSCI is a data bank of journals and their citations. The government in Taiwan uses SSCI papers as a norm or index for the academic promotion of teachers in the fields of H & SSC and for university evaluation. This policy is itself a myth, which is made by those who are not familiar with academic societies in Taiwan. Top universities are selected by the MOE based on the number of SSCI, SCI and A&HCI journal papers. And then the MOE grants them a huge amount of financial investment. What is ironic is that the behavior pattern that

is the same as the score of the Joint College Entrance Examination yokes higher education. The contribution of the teachers in higher education has become nothing but those "I" papers; it is no longer about teaching and social service. Take my field of specialty as an example; in fact, what we can contribute to society is to practically provide good quality service helping the physically and mentally disadvantaged. I can be partial to "I" paper production by ceasing all the social service and reducing my teaching hours, just to produce as many "I" papers as possible. But it is a shame though; 10% of the total population is physically and/or mentally disadvantaged, needing a lot of care and attention. To tell the truth, the "I" evaluation standard is beneficial to me; all I need to do is to write as many "I" papers as possible, and I would become a person of great achievement and earn more salary. It is not hard for me to write "I" papers each year. I can have as many papers as I want by just making a few changes to each paper. (Interviewee #13)

In addition to journal papers, professional books inform the academic contribution of a teacher in higher education. The concern for the society is also of great value to prove teachers' contribution. Therefore, the standardized evaluation based on the quantity of journal papers cannot be applied to all the teachers in different fields of specialty in higher education. (Interviewee #9)

It (Quantitative evaluation based on SCI and SSCI journal papers) is better to be that way. It is not hard for me to produce journal papers. But this evaluation is not fair for teachers in H & SSC and for those who want to do some good deeds for society. Maybe, the academic contribution of teachers can be assessed by the number of "I" journal papers, but SSCI or SCI can not actually reflect the quality of a paper. A person of conscience would not spend a lot of time and energy writing up papers and spend little time teaching and doing social service. (Interviewee #16)

The real contribution of a teacher to educating students and to social service can never be assessed and represented by "I" paper production. (Interviewee #3)

This evaluation system makes the spirit of higher education lopsided, forcing teachers to keep writing papers rather than to ponder on the practical problems/ issues of their teaching and society. It is just like collecting "special bonus points" provided by department stores or convenience stores, for great rewards in return. Once they have collected the certain number of required points, the teachers can be promoted to the next level up, for example from assistant professors to associate professors, and from associate professors to full professors. The evaluation system replaces the level of quality and dignity of professors in universities with less sense of responsibility. It turns out to be that every professor is playing number games while endeavoring to write papers and count the number of their published papers. (Interview #9)

> The governmental projects, such as the MOE and NSC research projects, can never be compared to the social service done by the charity organizations, like the Buddhist Tzu Chi Foundation, or the Catholic or Christian churches. The social service, for example providing integrated service with assistive devices and technology, rehabilitation and long-term health care in shelters or sanatoriums is in great need of doctors, therapists, and rehabilitation engineers who are really interested in providing these kinds of service. These kinds of service or good deeds cannot be reflected by the "special bonus points". … It is really costly to form a team of such service, including all those people. However, nowadays, doctors in medical centers need to do research. So, the evaluation system forces those doctors, engineers, and people in the fields of H & SSC to develop their career by writing papers instead of doing social service. (Interviewee #5)

"I" idolization leads to utilitarianism that, in addition to neglected social service, in turn, results in an imbalance of higher education where students' educational rights are offset and the competitive edge of the next generations will become a great worry. Four interviewees feared this situation.

> What makes people curious is why academic reputation, salary, and teacher promotion rely entirely on research. This viewpoint is, in fact, completely benefit-orientated. (Interviewee #7)

> In fact, it is not right. The motive of doing research should not be promotion to a full professor position and obtaining a higher salary. (Interviewee #1)

> As long as "I" idolization prevails, I am afraid that most of us will bend the knee in pursuit of "I" papers. (Interviewee #3)

> What is supposed to be highly valued teaching practice in normal universities turns out to have "I" ideology infiltrate into the institutional administration just to abide by the MOE's regulation. Soon or later, the enticements of the "I" ideology and regulation will lure teachers away from placing importance on teaching and even social service. Most of the teachers cannot but help give much weight to research. This is a serious issue. (Interviewee #2)

4.5.2 Inequity of academic position and disproportionate distribution of academic resources Inequity as the result of "I"-based evaluations in line with "I" idolization reflects several social phenomena. Inequitable, disproportionate distribution of academic resources is one of them. Three interviewees raised the issue of gaps between the camps of natural sciences and engineering and H & SSC in relation to obtaining research resources.

> The MOE in Taiwan vigorously promotes academics in the fields of H & SSC to publish their papers in SSCI journals, natural sciences in SCI journals, and

> medicine-related fields in A&HCI journals in order to achieve full integration into the global academia. This policy impacts teachers in H & SSC the most of all the fields, whereas those in natural sciences and engineering impact relatively less in aspects of academic research resources and funds. It is very difficult for teachers in H & SSC to publish their papers in SSCI journals and to obtain the resources, for example research subsidies. Even if there are chances, what they are granted is relatively little. (Interviewee #5)

> The MOE values "I" publication in university evaluation, and "I" publication is also one of the most important determinants of whether one will get National Science Council funds for academic research projects. Unfortunately, H & SSC people are disadvantaged, when compared with teachers in natural sciences and engineering. Even if academics in H & SSC have the chance to obtain funds, the amount is small. (Interviewee #14)

> It is highly likely for teachers in natural sciences and engineering to obtain a project with an over one-million-dollar subsidy, designated by the MOE or NSC, whereas it is normal or lucky for teachers in H & SSC to get a fund between NT$300,000 and NT$500,000. Obtaining a fund of 600,000 dollars or above is considered excellent and outstanding. (Interviewee #13)

The quantification, or so-called "point-tally," evaluation system based on "I" standards results in inequity of academic resource distribution, which in turn leads to desperation and stress that has weighed down H & SSC teachers.

> The adoption of the same standard (quantification) to evaluate teachers in the fields of H & SSC and those in the fields of the natural sciences and engineering results in inequity of resource distribution which is extremely tilted toward the natural sciences and engineering. University evaluation and teacher evaluation aggravate this situation. In this circumstance, most of the academics in the fields of H & SSC cannot but try desperately to write their papers up to the standards of SSCI in order to survive. (Interviewee #9)

> The point-counting evaluation applied to all areas of specialty is questionable. Teachers, particularly, in H & SSC are weighed down by the stress of the evaluation system. (Interviewee #8)

> The environment of higher education has become worse; the level of the happiness quotient of teachers is becoming lower and lower. (Interviewee #5)

The problem of the limited number of SSCI/A&HCI journals available and the long time commitments required for research undertakings are also the embodiments of academic inequity in relation to not only academic resources but also academic promotion as far as academics in H & SSC are concerned.

> There are only one or two SSCI journals related to my area of research, which I can submit my papers to. For me and for the people who specialize in the

> same area of specialty, achieving SSCI paper publication is a very difficult task. (Interviewee #17)
>
> The international journals related to natural sciences are multifarious. As for evaluation of teachers' research performance, the reward points that teachers of natural sciences and engineering can gain are far more than those obtained by teachers in H & SSC, which help a lot with their obtaining academic rewards/ funds and even their promotion to the next level up. Time spent in research is not necessarily in proportion to research achievement in some domains of specialty, especially in H & SSC. Academic production relevant to H & SSC particularly takes a longer time to be accomplished than it does in the natural sciences and engineering. Take the field of philosophy as an example; it is extremely hard for the teachers in that field to produce a lot of academic papers, especially SSCI papers in a short period of time. (Interviewee #8)
>
> A lot of distinguished poets or painters become renowned long after they are dead. They fail to seek the endorsement of their contemporaries in relation to their achievements. It does not mean that they are not outstanding or do not make a contribution. I just drew an analogy for the contributions made by scholars in H & SSC. Especially, studies related to humanities feature deliberation on and interpretation of philosophic theories or exploration of history. These endeavors normally take a long time. There is no way that their contributions are immediate and apparent. Of course, it is a good thing that the academics in the humanities have immediate academic breakthroughs and achievements. However, in fact, submitting and waiting for the papers to be published in SSCI in the review process seems to take ages. (Interviewee #20)
>
> Academics in the fields of natural sciences and engineering might not consider "I" publication a big deal, but it is indeed a big hassle for us. Writing up a research paper takes a long time and a lot of effort, while being laborious and toilsome. The degree of effort and endeavor is no less than for those in the fields of natural sciences and engineering; however, the reward we receive is disproportionate and the academic promotion is relatively tougher. (Interviewee #12)
>
> It takes at least 2 to 3 years to get a paper published in an international journal. The long time consumption is unfavorable to application for research projects from NSC because the quantity and quality of paper publications is an important criterion to get NSC subsidies. (Interviewee #18)

Moreover, following the academic value of western or, to be exact, native English-speaking countries to pursue academic excellence, "I" idolization results in the formation of utilitarianism that derives from academic capitalism (Slaughter & Leslie 1997) and academic hierarchy (Chen 2006). A handful of academic achievers and/or outstanding scholars are the representatives of authority, manipulating and

ruling academic resources when all the fame and glory are riveted on them (Yeh 2003). Unfortunately, in the "I" pursuit, H & SSC academics are marginalized.

> This situation must be aggravated. It is the behavior pattern that the men of invested interest who are in charge of administration and resource distribution would not follow their conscience to change the status quo. They are the immediate beneficiaries. Then, this will form a backward elimination; that is, those who have lower research capacity but are seriously and practically committed in their missions of teaching and/or social service will be weeded out. (Interviewee #6)

> The vast majority of the top administrative officials at natural sciences and engineering-orientated universities have already been promoted to full professor positions. There is a high probability that they would consider teachers in H & SSC to be at a low capacity in terms of academic research productivity, which is detrimental to the institution itself in terms of university status in university rankings. (Interviewee #1)

Seeing all the inequity phenomena that center, especially, on H & SSC academics, four interviewees expressed forthright an outcry against the unified "I"-based evaluation that is applied to H & SSC as well as natural sciences and engineering. There is a desperate need to establish an alternative evaluation system only for H & SSC considering divergent traits between these two camps of specialty and the inequitable phenomena.

> Introduction of the SSCI norms to Taiwan is not fair to scholars in H & SSC, nor is it to other countries. … We need to develop our own university evaluation system that is really suitable for the domain of social sciences in Taiwan. (Interviewee #15)

> Natural sciences are divergent from H & SSC in their own rights. Research related to natural sciences puts more emphasis on quantitative, empirical/experimental evidence and/or material evidence than that of H & SSC. Though a lot of studies relevant to social sciences collect and analyze quantitative evidence, they strongly embrace social concern and ideology. Logical thinking and reasoning of human beings are presented through the interpretation of the quantitative evidence. Therefore, the value of the scientific research concerning H & SSC lies in a conclusion reached, which features judgments on social value and humanities. Although the judgmental conclusion is based on the quantitative evidence, it is actually influenced by social, communal consciousness. So, the achievements and outcomes of academic research regarding H & SSC are not displayed purely through representation of quantitative data. The quantitative evaluation of academic achievements of teachers in natural sciences is not suitable for those in H & SSC. (Interviewee #13)

> In fact, social sciences and natural sciences are totally different fields of study. There is an accurate measurement involved in studies of natural sciences, where no blur appears, or no blur is tolerated when, for example, 1 plus 1 equals 2. However, as far as philosophy is concerned, while 1 plus 1 does not necessarily equal 2, the statistical result through interpretation might turn out to be 1.9 or 2.5 instead. Following this line of thinking, it is impossible to apply the unitary evaluation standard to every field of specialty. (Interviewee #20)

> The specialty of social sciences is rather region-orientated. Take the history field in Taiwan as an example; most of the academics obtained their PhD degree in Taiwan and are specialized in studying issues related to Taiwan and/or China. Most of them submit their papers to local journals here in Taiwan while relatively few people have published their papers in international journals. For those who received their PhD education in foreign countries, there are only a few cases of international publications. Now that SSCI journal publication is the only standard to evaluate teachers in higher education, we have to find every possible way to cope with the situation to survive. But it is just that when it comes to achievement appraisal, more often than not, some might just want to safeguard their dignity. (Interviewee #1)

As illustrated above, the "I" idolization results in several issues of equity in terms of disproportionate distribution of academic resources, inequity of academic promotion, and even working right infringement. As the slogan dictates "publish or perish," those who are less likely to achieve "I" publication receive poor academic resources, stand little chance of realizing academic promotion, and are even deprived of their working rights. Unfortunately, H & SSC academics are the disadvantaged.

CONCLUSION AND SUGGESTIONS

When research undertakings are crucial and, seemingly, no better alternative evaluation norms, which can be candidly and equitably applied to all areas of specialty in terms of appraising academic achievements, are available, the widespread adoption of the "I"-based evaluation system appears to be as justifiable as it is crucial and necessary. However, the "I"-orientated evaluation incurs grave impacts on higher education in several aspects, ranging from academic discrimination of locality/nativism, academic inferiority in the place of the global academic world, and partial development of Taiwanese academic research, all of which derive from language constraints and readership problems, to degrading local journals as a consequence of the latent threat of the academic colonization of the native English-speaking countries.

Intriguingly, these impacts are intertwined, linking to one another, as illustrated in Figure 1. The sweeping introduction of "I" norms to Taiwanese academia informs

several negative impacts that in turn illustrate themselves as the causes of lopsided higher education along with disproportionate distribution of academic resources and inequitable academic promotion. All the impacts followed by the consequences have weighed down on Taiwanese H & SSC academia and jeopardized the university spirit in Taiwan.

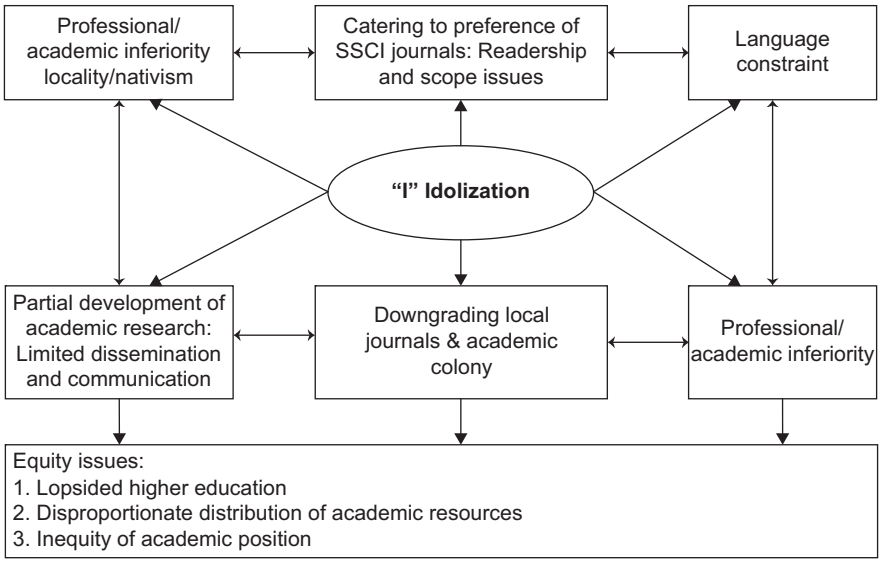

Figure 1. The Impacts of "I" Idolization from the Perspective of Academics in H & SSC.

When we endeavor to pursue "I" paper production and elevate academic performance in the place of international academic circles, the impacts they have had are not a matter of a purely local vs. global dialectic, but entail a dire threat of academic colonization of native English-speaking countries and values. The findings of the present study echo Perng's (2011a) argument that Taiwan is very distinct from the US in terms of social problems, industrial structure, and needs of economic development. The norms of SCI and SSCI reflect a frame of reference in accordance with western countries in Europe and America with the US in the lead. These are not concerned about the issues of social problems which Taiwan faces, the bottleneck of technological and industrial development, and issues of economic development. Therefore, the research papers that focus on Taiwanese issues and needs, more often than not, are considered non-mainstream or are even ranked as the lowest priority. This situation denotes that when all the scholars and academics in Taiwan compete in the chase for journal papers based on SCI and SSCI norms, all the Taiwanese academic elite, following the European and American studies, turn to issues other

than Taiwan's social development. In this light, while obliged by the Constitution to be concerned about society by means of academic, scientific enquiries, academia should be apologetic for the academic freedom endowed by the Constitution, which they are entitled to (Perng 2011a).

The academic reward policy, following the quantitative, quantification, or "point-tally" "I"-orientation evaluations, that is practiced in higher education institutions in Taiwan is indicative of a fallacy. This promotes utilitarianism, academic capitalism and hierarchy that aggravate social injustice and inequity. Various rewards and/or grants-in-aid are given according to academic achievements of journal papers published, especially in SCI, SSCI and A&HCI categories. These are encouragements and/or incentives that urge academics and scholars to put every effort into producing "I" papers, with no holds barred. It is rather unfortunate that this policy reaches a point where "The end justifies the means." and, insidiously, depreciates those outstanding scholars who hold fast to academic ethics and conscience. Those academics who insist on placing equal importance on teaching and research and, especially, those who concentrate on teaching become less popular with students and obtain less academic manpower and funds, as a result. Underlying the government policy of pursuing "academic prominence" is the competition among universities for administrative management where academia suffers a loss of academic research integrity and education persistence (Perng 2011a). What is worrying is that the "I" policies that embrace academic capitalism and utilitarianism drive teachers to produce a great number of papers in return for academic funds and fame. Especially when they are put under great stress of promotion or just try to adapt themselves to the jungle rule of "survival of the fittest," whether the teachers in higher education still maintain intellectual integrity and embrace social conscience and justice is questionable (Lu 2010).

According to Kells and Nilsson (1995), there are three developing trends in the mechanism of national educational evaluation in the main countries in the world: (1) initiative motivation: strengthening extrinsic motivation of universities to perform self-evaluation and practice self-restraint in their basic operational structure; (2) autonomous development: reducing governmental influences and intervention; (3) reflective feedback: valuing stakeholders' feedback in the evaluation and emphasizing the importance of evaluation for improving teaching, learning, service, and administrative management (cited in Tang 2011). It is suggested that the MOE in Taiwan could re-direct its higher education evaluation mechanism to these directions before "I" idolization rots higher education to the core.

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NOTES

[1] Quacquarelli Symonds (QS) is a British higher education investigation company. (Please refer to http://www.topuniversities.com/university-rankings/asian-university-rankings)

[2] Essential Science Indicators (ESI) is one of the most important frames of reference aiming at evaluating the academic research performance of higher education and scientific research institutions in Taiwan on a long-term basis. The evaluation indicators have been developed by the Higher Education Evaluation & Accreditation Council of Taiwan since 2007, which adopts seven appraisal criteria: number of papers, citations, citations per paper, highly cited papers, average number of papers of teachers, activity index (AI), and CPP/FCSm. Besides, the ESI Asian University Ranking was developed in 2010 to understand the ranking of higher education institutions in Taiwan in the Asia-Pacific region (including Australia and New Zealand) in terms of their academic achievements (Huang 2010; Shen 2012).

[3] "3I" refers to journals indexed in three international citation indexes relevant to three domains of academic specialty, i.e. Social Science Citation Index (SSCI), Science Citation Index (SCI), and Arts and Humanities Citation Index (A&HCI).

[4] The number of Chinese papers published in SCI journals amounted to 116,700 in 2008, increasing by 20,000 compared with 2007. Each paper, on average, was cited 5.2 times. The sum of the papers occupied 9.8% of the total number of SCI papers in the world. China was ranked second, just lagging behind the US (Chen 2010).

[5] ISI has accumulated a huge mass of data of around 16,000 kinds of international scientific journals, books and conference papers in multifarious fields, ranging from natural sciences to H & SSC while providing comprehensive services such as searching for a series of key information on enumeration of scholarship, citations, and authors' abstracts in the forms of Print, CD-ROM, and Web of Science, among many others (Miu 2000). SCI has continued to grow to include up to 9,000 academic journals related to natural sciences and social sciences (Chen 2010).

[6] "I don't think using the same evaluation system to evaluate teachers' academic achievements is fair; but we don't know what evaluation mechanism would make the evaluation become equitable, nor do we know how to judge which journal is good while others are of bad quality. SSCI happens to be an international databank, so it is introduced into Taiwan as our evaluation norm. As far as I am concerned, whether SSCI-based appraisal is justifiable is a huge issue, but it seems very hard to make things absolutely fair." (Interviewee #17).

"I know that the academic circles in Europe and American continents do not use 'I' journals as assessment norms for academic achievement. It is because there is no accredited, authoritative organization that can objectively and impartially judge each international journal and clearly define core journals. International journals and domestic journals are uneven in terms of their quality; therefore, we can not but use SSCI, A&HCI as the standard. While receiving a lot of criticisms, this is a reluctant move to get by; after all, we can not come up with something better." (Interviewee #18).

[7] In the present study, "local" refers to something related to the country of inquiry, as opposed to that concerning foreign areas or other parts of the world.

[8] The institution referred to by the interviewee is a national university located in Northern Taiwan.

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ISI PERCEPTIONS AND HARD FACTS

An Empirical Study from Taiwan

INTRODUCTION

Recently, much has changed within the realm of academic publications. The rise in popularity of open access online publications and the proliferation of social media (including blogs) have all together changed the medium of academic scholarship (Curry 2012; HASTAC 2012). Even so, academic scholarship is still much related to academic publications (Joseph 2012; Boyer 1990; Glassick 2000; Dirks 1998). Studies have shown that publications and their subsequent citations are seen as ways to determined university rankings and institutional funding (Hicks 2012; Keith 1999; Anderson et al. 2007; Diem and Wolter 2013; Butler 2003). However, many have started to question the overused and misused of such indicators (Browman and Stergiou 2008).

Within the past two decades, an abrupt increased in emphasis on publications indexed in the Thomson Reuters' ISI citation databases was observed. This phenomenon also holds true in East-Asian nations such as Taiwan (Huang 2009; Chu 2009; Chen and Chien 2009; Kao and Pao 2009; Thelwall et al. 2003; Chou and Ching 2012). The concept of *publish or perish*; signifying the importance of academic publications, have started to peg Taiwan's academe. Many doctoral (including some masters) programs have started to include publications in peer-reviewed journals as part of the graduation requirements. Some even restricting the publications to those journals included in the ISI citation indexes, such as the Science Citation Index (SCI), Social Science Citation Index (SSCI), or the Arts and Humanities Citation Index (A&HCI).

For the faculty, scholarly publications indexed in the ISI citation databases are also quite important. It is an accepted fact that the article counts in ISI citation database are used as basis for research grant approvals (Kao and Pao 2009), university rankings (Huang, Chang, and Chen 2006), and even tenureship and promotion of faculty (Tien 2007). Although the actual weight of such indicators varies from institution to institution, yet, many categorize publications in SSCI journals as the most important determinant in many academic undertakings. In effect, Taiwan educators are quite pressured to publish; preferably in journals indexed in the ISI citation databases.

C. P. Chou (Ed.), The SSCI Syndrome in Higher Education, 81–96.

Looking into citation databases, several changes have occurred during the past few years. Currently, besides the ISI citation indexes, there are several new database that collects and tracks academic publications, such as Scopus, Google Scholar, Directory of Open Access Journals, and many others (Leydesdorff, de Moya-Anegón, and Guerrero-Bote 2009; Falagas et al. 2008). Evidence of increased publications in academic journals is seen in all these databases. Recent data gathered from the ISI citation databases and Scopus ranking website both depicts similar trend of increasing publications throughout the years, while having a significant decreased in the average number of citations per publication (Thomson Reuters 2010; SCImago 2007; Chou and Ching 2012). Suggesting that the high number of academic publications; doesn't necessary mean that all of the articles are being used or cited. In a sense, knowledge production far outnumbers knowledge usage.

With the recent growing sentiment towards the overused and misused of ISI citation databases, the current chapter shall showcase an empirical study on the various perceived meaning, effects, and hard facts regarding ISI usage. Furthermore, this chapter shall also focus on the comparison of the various opinions coming from the different academic background demographics. Such as: faculty and students, and Science and non-Science academic domains. Ultimately, this chapter shall provide the readers with a unique perspective on how faculty and students perceived the role of ISI databases in Taiwan academe.

METHOD

To determine the unique perspective on how faculty and students perceived the role of ISI databases in Taiwan academe; a survey questionnaire was designed comprising of five components. The components are participants' background information; which in most survey will combine nominal data on participants' backgrounds such as gender, age, school types, years of service/study and many others (Weisberg, Kronsnick, and Bowen 1996). This is followed by the citation database knowledge and applications; where in participants are asked regarding their familiarity and the reasons for using the citation databases. Then, the norm practices in the academe are also collected; this section asked participants regarding their perceived role of citation databases within the norm practices in the Taiwan academe. Lastly, the participants' opinions regarding publication practices are also gathered.

An initial pilot testing was accomplished with 10 participants and revisions/corrections were noted and revised. In descriptive studies quantitative surveys are commonly used to gather information at a particular point in time with the intention of describing the nature of existing conditions (Cohen, Manion, and Morrison 2007). Surveys are often administered to a large number of respondents, hence, survey studies are often coined to as quantitative research, which has a high level of structure and low level of researcher involvement with the study population (Axinn and Pearce 2006).

The study also uses the assistance of an *online survey* to collect the insights from the faculty and students participants. Although online surveys have many features in common with paper-based surveys, it also has its own particular features (Cohen, Manion, and Morrison 2007). Watt (1997) noted that one of the advantages of using an online survey are the reduced costs in encoding and processing data. In addition, it also cut-down the time needed to distribute, gather, and process the information collected. In sum, online survey enables a wider and much larger population to be accessed, allowing researchers to reach difficult populations under the cover of anonymity and non-traceability (Dillman and Bowker 2000).

Participants

In order to determine the unique perspective on how faculty and students perceived the role of ISI databases in Taiwan academe the stratified sampling was used to select the participants. Stratified sampling involves dividing the population into homogeneous groups, wherein each group contains subjects with similar characteristics (Cohen, Manion, and Morrison 2007). A total of 300 emails (150 faculty and 150 graduate students) were sent out on March 1, 2012. After 2 weeks, a total of 95 participants or a 32% responds rate are collected. For the internal consistency of the questionnaire the Cronbach's (1951) coefficient alpha was computed to be at 0.88, which is considered quite good (Nunnally and Bemstein 1994).

Table 1 shows the various demographics information of the 95 participants. A total of 44 (46%) faculty and 51 (54%) graduate student participants are surveyed. Among the 44 faculty, 20 are from the public sector, while the remaining 24 are from the private sector. Furthermore, around 23 or 52% of the 44 faculty are assistant professors and 13 or 30% of the 44 faculty are associate and full professors. For the student participants, only graduate students are considered since they are very much involved the current publication issues. Within the 51 students, a total of 82% or 42 of the 51 students are enrolled in public institutions, while the remaining 18% or 9 of the 51 students are enrolled in private universities.

With regards to their field or domain representations, a total of 27 or 29% of the participants are from a scientific field such as the natural sciences and medicine, while the remaining 67 or 71% of the participants are from a non-scientific field such as the social sciences and many others. Since, it is said that the Science and non-Science domains differs much in their publication practices (Wen, Ching, and Tang 2013). Hence, the participants are deliberately selected using a stratified method to gather the perspective of the faculty and students in both the science and non-science domains.

RESULTS AND DISCUSSIONS

The primary objective of this chapter is to provide a unique perspective on how faculty and students perceived the role of ISI databases in Taiwan academe. Data

Table 1. Participants' background demography (N = 95)

Items	*Gender*		
	Female (n = 53)	*Male (n = 42)*	*Total (N = 95)*
Teachers	**16**	**28**	**44**
Institution			
Public	2	18	**20**
Private	14	10	**24**
Rank			
Professor	0	7	7
Associate Professor	6	0	6
Assistant Professor	8	15	23
Lecturer	2	6	8
Students	**37**	**14**	**51**
Institutions			
Public University	34	8	**42**
Private University	3	6	**9**
Academic Field			
Science	12	16	**28**
Non-Science	41	26	**67**

collected from the survey questionnaire are encoded and analyzed with the used of the Statistical Package for Social Scientist (SPSS) software. Results are divided into three main sections, namely: ISI database facts, ISI database perceptions, and role of ISI database.

ISI Database Facts

Within the Taiwan academe, there are various opinions when it comes to the importance or influence of ISI databases. One major issue is the discrepancies between the academic fields; the Science and non-Science domain. Science meaning the fields of Science, Technology, Engineering, and Mathematics or STEM, while the non-Science domains are the Social Sciences, Humanities, Languages, Law, and many others. It is noted that Science or STEM academic domains have more opportunity to publish in ISI journals than non-Science or Social Sciences domains. More important, is that the nature of the language used in Science domains are already in English as compared to non-Sciences, who are mostly in the local language.

To clear up this issue, tables 2 and 3 shows the comparison between the opinions of faculty and students of the Science and non-Science participants. Within this section, faculty and student participants are asked regarding their opinion on the most important factor to consider within the entire Taiwan academe and their own academic domains. Table 2 shows the comparison between the faculty and students with regards to their perceived importance within the entire Taiwan academe as compared to their academic domain. Note that data are cross-tabulated by means of the various background demographics and selections weighted (counted) as follows: 3 for the 1st choice, 2 for the 2nd choice, and 1 for the 3rd choice. Results show that there seems to be no difference between the perceived importance of the academe and academic domain.

In another point of view, results in table 2 suggest that faculty and students perceived the practice or norm of the entire Taiwan academe as similar to their own field of study. Participants rank the two most important as the *Number of publications indexed in SSCI/SCI/A&HCI (ISI)* and *Number of publications indexed in Taiwan Citation Indexes*. Note that the importance of publications in journals indexed in the ISI database clearly outscored the publications in journals indexed in the Taiwan citation index.

The Taiwan citation indexes are established on 1998 and 1999 with three major databases, namely the Taiwan Social Science Citation Index (TSSCI), the Taiwan Science Citation Index (TSCI), and the Taiwan Humanities Citation Index (THCI). Comparable rules and regulations as compared to the ISI databases are used to select journals for database inclusion (Chen 2007; Research Institute for the Humanities and Social Sciences 2012).

Table 2. Comparison between faculty and students (N = 95)

Group	*Items*	*Counts*
	Important in Taiwan academe	
Teacher (*n* = 44)	Number of publications indexed in SSCI/SCI/A&HCI (ISI)	115
	Number of publications indexed in Taiwan Citation Indexes	40
Student (*n* = 51)	Number of publications indexed in SSCI/SCI/A&HCI (ISI)	139
	Number of publications indexed in Taiwan Citation Indexes	82
	Important in academic field	
Teacher (*n* = 44)	Number of publications indexed in SSCI/SCI/A&HCI (ISI)	88
	Number of publications indexed in Taiwan Citation Indexes	48
Student (*n* = 51)	Number of publications indexed in SSCI/SCI/A&HCI (ISI)	135
	Number of publications indexed in Taiwan Citation Indexes	89

Note. Counts are weighted values with 3 for the 1st choice, 2 for the 2nd choice, and 1 for the 3rd choice.

Table 3. Comparison between the science and non-science academic fields (N = 95)

Group	*Items*	*Counts*
	Important in Taiwan academe	
Science (*n* = 28)	Number of publications indexed in SSCI/SCI/A&HCI (ISI)	69
	Number of publications indexed in Taiwan Citation Indexes	39
Non-Science (*n* = 67)	Number of publications indexed in SSCI/SCI/A&HCI (ISI)	185
	Number of publications indexed in Taiwan Citation Indexes	83
	Important in academic field	
Science (*n* = 28)	Number of publications indexed in SSCI/SCI/A&HCI (ISI)	66
	Number of publications indexed in Taiwan Citation Indexes	48
Non-Science (*n* = 67)	Number of publications indexed in SSCI/SCI/A&HCI (ISI)	157
	Number of publications indexed in Taiwan Citation Indexes	89

Note. Counts are weighted values with 3 for the 1st choice, 2 for the 2nd choice, and 1 for the 3rd choice.

With regards to the comparison of opinions between the faculty and students of the Science and non-Science domains, table 3 shows similar trends as of table 2. Table 3 shows that both faculty and students of the Science and non-Science domains perceived the two most important as the *Number of publications indexed in SSCI/SCI/A&HCI (ISI)* and *Number of publications indexed in Taiwan Citation Indexes*. These results suggest that even within the non-Science domains; wherein topic of interests are mostly local in context, publications in journals indexed in the ISI databases (which the majority is in the English language) is still the major considerations of academic activities. In essence, even though that non-Science participants claimed that publication in English is not their norm (Wen, Ching, and Tang 2013); they (the non-Science participants) still strived to have publications indexed in the ISI database.

ISI Database Perceptions

The following section discusses the perceptions of ISI database within the Taiwan academe. Participants are asked regarding their opinion on how they use citation database, their overall familiarity with the various citation databases, and their overall opinions regarding academic publications. Table 4 shows the summary of the top five ISI usages. Here participants noted that ISI citation databases or more precisely the Web of Knowledge (portal for the ISI databases) is used primarily for *checking relevant literatures*. As the core objective of ISI citation database; which is to provide access to current and retrospective multidisciplinary information from high impact research journals in the world (Thomson Reuters 2012), ISI has truly achieved this purpose.

Table 4. ISI usage (N = 95)

Items	*n*	*%*
Check relevant literatures	95	100%
Journal performance (impact factor)	63	66%
Authors' publication count	45	47%
Articles' citation count	44	46%
Authors' citation count	43	45%

Another usage of the ISI database is the *checking of journal performance or impact factor*. Journal impact factor (IF) is a score given by Thomson Reuters' Journal Citation Reports (JCR); which provides quantitative tools for ranking, evaluating, categorizing, and comparing journals (Thomson Reuters 2012). The impact factor is said to be the measure of the frequency with which the *average article* in a journal has been cited in a particular year or period. The annual JCR impact factor is a ratio between citations and recent citable items published. The impact factor of a journal is calculated by dividing the number of current year citations to the source items published in that journal during the previous two years (Thomson Reuters 2012). Hence, looking into a journal's IF would account for the journals' relevancy in that certain academic domain.

Table 4 also shows the other usages of ISI database, such as the *checking of the author's publication count* with 47%, the *checking of the article's citation count* with 46%, and the *checking of the author's citation count* with 45%. These usages are actually quite related to academic evaluation, since frequency of publication and citation are some of the determinants for academic excellence (D'Este et al. 2013; Hilmer, Hilmer, and Ransom 2012; Waymire 2012). These results overall confirms that ISI databases are majority used for research and academic evaluation purposes.

With regards to the participants' familiarity with citation indexes, table 5 shows the top five answers. The highest or the mostly used tool is *Google scholar* with 92%. Studies have shown that *Google scholar* coverage is still far more comprehensive than that of any standalone citation databases today (Wen, Ching, and Tang 2013). More importantly, *Google scholar* is freely available to the public, as compared to other fee based databases such as the ISI databases, Scopus, and the other commercial publishing company supported citation databases. Hence, it is quite accessible for researchers. In addition, table 5 also shows that the participants are quite familiar with the use of the ISI databases (both accessible through the Web of Knowledge) with 71%. This is followed by the use of TSSCI with 69% and ProQuest with 65%. ProQuest is one of the oldest (around 70 years) gateway for dissertations to cultural archives (ProQuest 2012).

Table 5. Familiarity with citation indexes (N = 95)

Items	*Mean*	*SD*	*n*	*%*
Google scholar	3.27	0.84	87	92%
Social Science Citation Index (SSCI)	3.33	0.82	67	71%
Science Citation Index (SCI)	3.21	0.78	67	71%
Taiwan Social Science Citation Index (TSSCI)	3.32	0.73	66	69%
ProQuest	2.53	0.93	62	65%

Besides these citation tools, other indexes asked are Arts and Humanities Citation Index (A&HCI), Book Citation Index (BkCI), Chinese Science Citation Database (CSCD); a non-English Thomson Reuter database partnered with the Chinese Academy of Science created specifically for Mainland Chinese scholars, Conference Proceeding Citation Index (CPCI); a new database established by Thomson Reuter to keep track of conference proceedings, Engineering Index (EI) or Compendex; a database exclusively for engineering fields of study owned by Elsevier, Microsoft Academic, PubMed, Scopus, Taiwan Humanities Citation Index (THCI), Taiwan Science Citation Index (TSCI), and the Directory of Open Access Journals (DOAJ). Elsevier is considered as one of the biggest commercial publishing company. The developer of Science Direct, SciVerse, and Scopus; a database that keep tracks of multidisciplinary bibliometric information, Elsevier claims that they are the current world's largest abstract and citation database of peer-reviewed literature (Elsevier 2013).

One other concept which is currently gaining ground is *Open Access* (OA). OA is a publication model which is said to provide the means to maximize the visibility, and thus the uptake and use, of research outputs (OASIS 2012). OA is quite new, however can be defined as the immediate, online, free availability of research outputs without the severe restrictions on use commonly imposed by publisher copyright agreements (OASIS 2012). One key controversial issue in OA is the concept of the authors paying a publication fee to the journals. Although that most OA are still free to publish, many OA journals are starting to collect or charge authors from 50USD to as high as 3000USD for each publication. In essence, OA removes the financial restriction of readers and provide immediate free access publication. However, the question of how much an author would spend for the financial expenses, such as the computer infrastructure requirement for keeping an online copy of the publications and other administrative expenses are still quite debatable and questionable.

In order to keep track of OA publications, an independent group of organizations established the *Directory of Open Access Journals* (DOAJ). The aim of the DOAJ is to increase the visibility and ease of use of open access scientific and scholarly journals thereby promoting their increased usage and impact. The directory aims to be comprehensive and cover all open access scientific and scholarly journals that use a quality control system to guarantee the content (DOAJ 2012). To date, there

are already 7 journals indexed in the DOAJ database with a registered country from Taiwan. Various rules are also in placed to guaranty the consistency and quality of the journal inclusions.

With regards to the participants' perception towards publications, opinions regarding the various factors of publications such as personal, language, influence, quality, evaluation, and charges are asked. Participants are asked to rank their level of agreement in a five point Likert scale with 1 as strongly disagree, 2 disagree, 3 as neither agree or disagree, 4 agree, and 5 strongly agrees. Table 6 shows the various results with the highest item as the acknowledgement of *English as the global language* (Mean = 4.22) and *publishing in English is inevitable* (Mean = 3.71). However, some scholars believe that it is *inappropriate for non-English first speakers to write and publish in English* (Mean = 3.09). This suggest that although Taiwan considers English as a Foreign Language; wherein publications in English is not an easy task, however, somewhat acknowledges the need to publish in English to reach a bigger audience.

With regards to the influence of ISI publications, ISI is said to *affect the academic fields' research directions* (Mean = 3.64) and *personal research directions* (Mean = 3.55). With regards to the concept of academic evaluation, most participants commented that the *current evaluation policy is unreasonable* (Mean = 3.73). Overall, such results indicate that the effect of ISI is already deeply rooted in the entire Taiwan academe and its effects have caused both positive and negative implications.

Table 6. Factors of publications (N=95)

Items	*Mean*	*SD*
Personal		
Publishing in English is a challenge	3.85	1.18
ISI is only a tool that assists researchers	3.74	0.67
Teaching is more important than doing research	3.72	1.06
Taiwan indexed journals are more stringent (strict) than ISI	3.38	1.03
It is more prestigious to published in ISI than non-ISI journals	3.31	0.96
I have confidence in my English language ability	2.87	1.07
I have Taiwan citation (TSSCI/THCI) indexed publications	2.53	1.66
I have ISI indexed publications	2.07	1.57
Publication language		
English is the Global Academic Language	4.22	1.00
In order to keep pace with the world, publishing in English is inevitable	3.71	1.05
Non-English first language scholars are not suited to use English as a medium of publication (publishing in local language should be encourage)	3.09	1.29

(*Continued*)

Table 6. Continued

Items	*Mean*	*SD*
Influence		
ISI influence the academic fields' research direction (research topics)	3.64	1.07
ISI signifies internationalization	3.59	0.93
ISI influence personal research direction (research topics)	3.55	0.88
Having ISI publications is highly related to personal career development	3.54	0.92
ISI signifies stringent (strict) article review procedure	3.46	0.92
Having ISI publications signifies personal research excellence	3.36	0.91
Quality		
Number of ISI publications signifies institutional (departmental) excellence	3.60	1.27
ISI signifies article (publication) quality	3.56	0.90
ISI signifies journal quality	3.49	0.93
Number of ISI publications can increased institutional (departmental) enrollees	2.49	0.77
Evaluation		
Current ISI dependent evaluation (institutional/department/promotion/ grant application) policy is not reasonable	3.73	1.18
Citation counts (times cited) should be more important than ISI publication counts	3.61	0.84
It is unreasonable to placed additional weights (points) on ISI publications during evaluation (institutional/department/promotion/grant application)	2.82	1.06
Journal charges		
After paying the journal charges (submission fee), I expect my article (paper) to be published	3.00	1.04
Open Access business model is reasonable (Authors pay journal charges, so readers can freely download articles)	2.99	1.01
It is reasonable for ISI journals to ask authors to pay journal charges	2.84	0.97

Roles of ISI Database

This section shows how participants perceived the role of ISI in various academic settings and activities. All of the participants are asked to rank the top three important factors in various academic settings and activities, such as: overall Taiwan academe, and important for their current academic field. For faculties, such as: important for new faculty applicant, important for faculty promotion, important for in-school evaluation, and important for faculty National Science Council (NSC) research application. Data are tabulated with weights given to the rankings as follows: 3 for 1st choice, 2 for 2nd choice, and 1 for the 3rd choice.

Table 7 shows the perceived most important factors in the current academe. The highest or the most important factor is *Number of publications indexed in SSCI/SCI/A&HCI (ISI)* with 254, followed by the *Number of publications indexed in Taiwan Citation Indexes* with 122, and the third is building up *Social capital (network of friends, etc.)* with 57. It is quite interesting to say that in all of the succeeding categories, the topmost answer is dominated by the role of ISI or the number of publications in the ISI databases.

Table 7. Important in current Taiwan academe (N = 95)

Items	*Counts*
Number of publications indexed in SSCI/SCI/A&HCI (ISI)	254
Number of publications indexed in Taiwan Citation Indexes	122
Social capital (network of friends, etc.)	57

Note. Counts are weighted values with 3 for the 1st choice, 2 for the 2nd choice, and 1 for the 3rd choice.

Looking into the rest of the tables 8 to 12, besides *Number of publications indexed in SSCI/SCI/A&HCI (ISI)* as the 1st choice, the remaining top choices are dominated by the following: *Number of publications indexed in Taiwan Citation Indexes*, *Social capital (network of friends, etc.)*, *Number of NSC research grants*, and *Publications' impact factor*. It is sad to say that although the item *Social capital (network of friends, etc.)* scores is not high as compared with the 1st and 2nd choices, it still quite dominant with the various academic settings and activities. Even on later comparative analysis on the various background demographics of the participants, results still shows that *Social capital (network of friends, etc.)* played a major part in the activities.

Other factors such as the *Number of NSC research grants* and *Publications' impact factor* are also two relevant factors in various academic settings and activities. The Taiwan NSC is one of the most competitive research granting institution in Taiwan. Each year around 30,000 scholars would submit a research proposal with a acceptance rate of around 44% (52% for faculty in public institutions and 35% for faculty in private institutions) (NSC 2012). However, the chance of having NSC research grants is also mostly dependent on the *Number of publications indexed in ISI and Taiwan Citation Indexes*. Therefore, it seems that all of the academic settings and activities are inter-related into one vicious cycle.

Table 8. Important in your current academic field (N = 95)

Items	*Counts*
Number of publications indexed in SSCI/SCI/A&HCI (ISI)	223
Number of publications indexed in Taiwan Citation Indexes	137
Social capital (network of friends, etc.)	58

Note. Counts are weighted values with 3 for the 1st choice, 2 for the 2nd choice, and 1 for the 3rd choice.

Table 9. Important for new faculty applicants (n = 44)

Items	*Counts*
Number of publications indexed in SSCI/SCI/A&HCI (ISI)	115
Social capital (network of friends, etc.)	39
Number of publications indexed in Taiwan Citation Indexes	34

Note. Counts are weighted values with 3 for the 1st choice, 2 for the 2nd choice, and 1 for the 3rd choice.

Results also show the importance of the *Number of publications indexed in Taiwan Citation Indexes* as one of the major factor in the various academic settings and activities. It is later mentioned that publishing in *journals included in the Taiwan citation indexes are sometimes far more stringent (strict/harder) than submitting to ISI journals* (Mean = 3.38). To date there are a total of 93 journals indexed in the TSSCI (TSSCI 2011), while THCI have a total of 343 journals indexed (THCI 2012). Ultimately, increasing the number of journals indexed in Taiwan citation database could be an auxiliary citation index for local researchers to gain an overall picture of Taiwanese research (Chen 2004).

Table 10. Important for faculty promotion (n = 44)

Items	*Counts*
Number of publications indexed in SSCI/SCI/A&HCI (ISI)	120
Number of publications indexed in Taiwan Citation Indexes	62
Publications' impact factor	26

Note. Counts are weighted values with 3 for the 1st choice, 2 for the 2nd choice, and 1 for the 3rd choice.

Table 11. Important for in-school faculty evaluation (n = 44)

Items	*Counts*
Number of publications indexed in SSCI/SCI/A&HCI (ISI)	78
Number of patents	45
Number of publications indexed in Taiwan Citation Indexes	30
Number of industry cooperation projects	30
Number of NSC research grants	27

Note. Counts are weighted values with 3 for the 1st choice, 2 for the 2nd choice, and 1 for the 3rd choice.

For the factors regarding faculty promotion and in-school evaluation, table 11 shows that besides the previously discussed factors, additional issues such as *Publications' impact factor*, *Books*, *Number of patents*, and *Number of industry cooperation projects*; are some other relevant items that are being considered. As for NSC research

applications, table 12 shows the additional factor of *Publications' citation count*. It is noted that the impact factor of an article is still based on the ISI database. Since, Thomson Reuters are the one computing and cataloging the citation reports.

As for the citation count, the recent expansion of the *Google scholar* function of tracking publication citation counts has further made this information readily available to the public. Furthermore, it is said that *Google scholar* includes all other citation databases in their computation of *h-index*; a mathematical way of quantifying and characterizing the scientific output of a researcher (Hirsch 2005). Since, a citation count means that another article has cited your work. This would mean that the work has contributed (is of interest) to another study. In essence, although *Publications' citation count* scores is quite low, it can be said that citation counts is a far more transparent and general way of quantifying relevant publications.

Table 12. Important for faculty National Science Council research grant application (n = 44)

Items	*Counts*
Number of publications indexed in SSCI/SCI/A&HCI (ISI)	126
Number of publications indexed in Taiwan Citation Indexes	70
Publications' impact factor	16
Number of NSC research grants	13
Publications' citation count	12

Note. Counts are weighted values with 3 for the 1st choice, 2 for the 2nd choice, and 1 for the 3rd choice.

CONCLUSIONS

The primary objective of this chapter is to showcase an empirical study on the various perceived meaning, effects, and hard facts regarding ISI usage in Taiwan. Furthermore, this chapter focused on comparing the opinions from various demographic information, such as: teachers and students, Science and non-Science academic fields, typical university and science and technology based schools (including junior colleges), and public and private institutions. With the use of a quantitative survey method, a total of 95 participants are surveyed and data collected and analyzed. Although the resulting sample size is not huge and account only for scholars in the northern part of Taiwan, the results can be used as a starting point for further studies.

Results of the survey indicates that the highest or the most important factor in the various academic settings and activities is the *Number of publications indexed in ISI* and the *Number of publications indexed in Taiwan Citation Indexes.* While, ISI still dominates the majority of the academic settings and activities. However, with the current increasing number and increased emphasis of journals indexed in the Taiwan citation database, local researchers could have an alternative based on publishing in the local language. Furthermore, journals indexed in Taiwan citation database is considered to be of good quality and the review process sometimes more rigorous than the ISIs. To sum up, the effect of ISI is already deeply rooted in the

entire Taiwan academe, its effects have had both positive and negative implications. An added finding is the role *Google scholar* and of *open access* journals which are of great potential in striking a balance with the ISI dominance.

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REFLECTIONS FROM THE SOCIAL SCIENCE CITATION INDEX (SSCI) AND ITS INFLUENCE ON EDUCATION RESEARCH IN TAIWAN

INTRODUCTION

Many scholars agree that there should exist a three-fold mission of research, teaching, and service for all higher education faculty members (Altbach, Berdahl, & Gumport, 1994; Astin, 1972; Chen, 2002; Clark, 1973; Hawkins, 2001; Henkel, 2000; Kerr, 1995). Together, these three pillars form a unique identity the work expected of most faculty members worldwide. However when asked to prioritize the three pillars in one's own work, most scholars respond that research takes priority over teaching and service (Clark, 1973; Kerr, 1995). The quality of research then becomes paramount when evaluating the commitment of professors in higher education institutions, including in the traditional promotion and tenure process (Altbach, 1979; Cook, 2011; Sturgeon, 2012). Additionally, an evaluation of professors' research and academic quality could be divided into several layers, including the publication of books, book chapters, journal articles, and conference papers. In the past, an academic goal of each professor was to have a book published by a well-known publisher during their career. Today it is generally more prestigious to publish in a globally-renowned journal recognized by one of ISI's indexes (e.g., SCI, SSCI, or A&HCI) (Mars & Metcalfe, 2009; Rhoads & Torres, 2006; Slaughter & Leslie, 1997). To determine the impact of SSCI in the field of education in Taiwan, the research team first analyzed the development of international journal publications on education across the world. Next they conducted research regarding the impact of SSCI journal articles on education in Taiwan. Conclusions are then described, reflecting the pros and cons of SSCI and international journal publications with regard to globalization and localization in the context of Taiwan.

SSCI JOURNALS AND RESEARCH QUALITY

SSCI was created by Thomson Reuter's Healthcare and Science Division and developed by ISI from the SCI (ISI, 1986). Currently, SSCI's database draws from 2,474 leading social science journals worldwide. This global database covers 50 academic fields and allows subscribers who pay a fee to access the compiled data

C. P. Chou (Ed.), The SSCI Syndrome in Higher Education, 97–107.

analysis via the Web of Science (ISI, 2011). The database provides information to identify the articles cited most frequently, creating a ratio of the citation frequency known as the article's impact factor (IF) (ISI, 1998). The SSCI database then quickly provides researchers, administrators, faculty members, and students with bibliographic and citation information about the journal articles. This information reveals peer reviewed journal articles having the greatest impact by uncovering relevant results, discovering emerging trends, and identifying potential collaborators while integrating the ability to search for specific topics of interest (Klein & Chiang, 2004).

ISI claims that the SSCI provides quick and powerful information for use as a major criterion to aid administrators in institutions of higher education when granting promotions, tenure, and research awards. In Asia and other regions of the world, SSCI becomes the predominant standard to determine the winners of awards in academic fields of the social sciences. It is unfortunate that in regards to the social sciences, SSCI journal articles sometimes ignore the importance of their specific social context and unique local cultures. Most SSCI journal articles are published in English rather than in other local languages like Arabic, Chinese, French, German, Indonesian, Japanese, and Spanish (Klein & Chiang, 2004).

To reflect the "real" quality of journals, Fernández-Cano and Bueno (2002) provide a theoretical framework for journal impact (see Figure X.1). Three key factors determine the reputation of journals, including a questionnaire survey analysis of each journal's reputation, international journal standards,[4] and scientific citation analysis. Unlike ISI and SSCI, the impact factor plays only one-third of the role that journal articles play under Fernández-Cano and Bueno proposed framework.

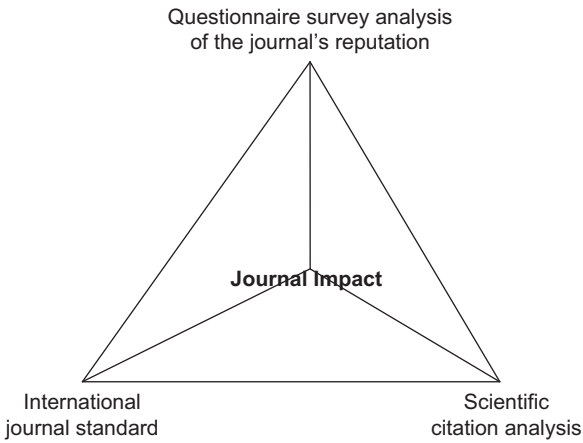

Figure X.1. Model of scientific journal evaluation.

Source: Based on the theoretical framework of Fernández-Cano and Bueno (2002, p. 88).

RESEARCH METHODS

To examine the authentic influence of SSCI journal publications in Taiwan, we collected data discussing the influence of SSCI and other international journals. We first convened a focus group to discuss the list of international education journals including SSCI and non-SSCI journals (see Table X.1 for a list of focus group participants). After the focus group discussion, we selected all 110 SSCI journals under the academic fields of education using the JCR Social Science Edition 2004. We then selected 32 non-SSCI but highly-recommended journals that included German- and French-language journals. The total selected international education journals was 142, we then divided the academic field of education into 17 sub-fields: comprehensive education, philosophy and history of education, educational psychology, curriculum and instruction, educational technology, arts education, early education, special education, vocational education, teacher education, higher education, comparative education, elementary and high schools, adult and social education, educational administration and policies, educational methodology, and sociology of education.

Table X.1. List of Focus Group Participants

Code	*Participant Title and Affiliated Institution(s)*	*Specialty*
A	Vice President, Public Comprehensive University	Educational Philosophy, Comparative Education, Education Technology, and Teacher Education
B	Professor, Department of Education at Public Comprehensive University	Sociology of Education and Educational Methodology
C	Assistant Professor at Public Comprehensive University	Higher Education, Sociology of Education, Comparative Education, and Teacher Education
D	Professor, Public Normal University	Educational Administration, School Administration, Leadership, and Organizational Behavior
E	Professor, Public Normal University	Adult Education, Teacher Education, and Comparative Education
F	Associate Professor, Public Normal University	Educational Psychology, Cognitive Psychology, Special Education, and Digital Learning

Borrowing from Fernández-Cano and Bueno's (2002) theoretical framework, we revised their model in Figure X.1 to also accommodate the three areas of research, teaching, and service as is depicted in Figure X.2. This covers what the international education journals (both SSCI and also non-SSCI journals) consider to be the three pillars of influence. First is the subjective evaluation of each international education

journal by Taiwanese scholars seen as active academic members who have submitted research proposals regularly to the National Science Council (NSC) during from 2001-2005. The second is data focused on IF came from the JCR 2004. And third, we conducted research analyzing the bibliometrics from Taiwan Social Science Citation Index (TSSCI) journals in the field of education. There were 12 TSSCI-recognized education journals as of December 2006 (see Table X.2).

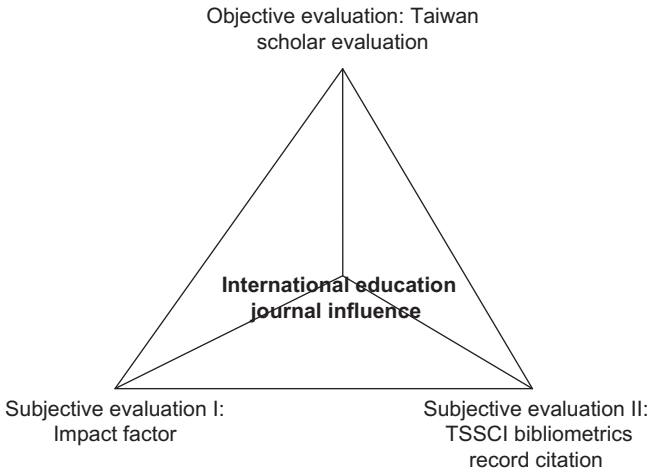

Figure X.2. Framework of the international education journal influence model.

Table X.2. TSSCI Education Journals in 2006

Journal Title	*Primary Focus*
Bulletin of Educational Research	Education
Journal of National Taiwan Normal Education University	Education
Journal of Education and Psychology	Education and Psychology
Contemporary Educational Research Quarterly	Education
Educational Review	Education
Taiwan Journal of Sociology of Education	Sociology of Education
Journal of Special Education	Special Education
Bulletin of Educational Psychology	Educational Psychology
Educational Policy Forum	Educational Policy and Administration
Curriculum & Instruction Quarterly	Curriculum and Instruction
Research in Arts Education	Arts Education

Ranking the influence of international education journals, we created the researchers aim to adopt the following formula using cluster analysis and discriminant analysis which equal the sum of two times the z score of IF, one time the z score of the TSSCI Journal Citation Record, and one time the z score of the Taiwan Scholars' Feedback.

IF z score*2+ TSSCI JCR z score*1+ Local Scholars' Feedback z score*1

From March to April 2006, we distributed 812 questionnaires via the government postal service and received 183 completed questions back via postal return (for a response rate of 22.5%). The initial analysis of scholarly respondents are depicted in Tables X.3 and X.4.

Table X.3. Participants' Research Areas of Expertise

Research Background	*Response (%)*
Philosophy and History of Education	19 (10.4%)
Educational Psychology	32 (17.5%)
Curriculum and Instruction	49 (26.8%)
Educational Technology	8 (4.4%)
Arts Education	2 (1.1%)
Early Education	20 (10.9%)
Special Education	31 (16.9%)
Vocational Education	6 (3.3%)
Teacher Education	28 (15.3%)
Higher Education	11 (6.0%)
Comparative Education	11 (6.0%)
Elementary and High Schools	18 (9.8%)
Adult and Social Education	19 (10.4%)
Educational Administration and Policies	28 (15.3%)
Educational Methodology	28 (15.3%)
Sociology of Education	22 (12.0%)
Others	11 (6.0%)

Table X.4. Participants' Preferred Research Methods

Research Methods	*Response (%)*
Theoretical Analysis and Interpretation	51 (27.9%)
Quantitative Analysis	112 (61.2%)
Qualitative Analysis	87 (47.5%)

Most respondents self-identified as having expertise in the areas of curriculum and instruction (26.8%), educational phsychology (17.5%), special education (16.9%), educational administration and policies (15.3%), and educational methodology (15.3%). The research methodology most frequently used by respondents was quantitative analysis (61.2%), followed by qualitative analysis (47.5%), and finally theoretical analysis and interpretation (27.9%). Due to the relatively low response rate of participants, we decided to use a T-test and ANOVA to test different responses from participants. No significant differences were found among their affiliated institutions, their current positions, countries from which they earned their Ph.D. degree, languages that they used to publish their research findings, and international publications. The results showed high representation from homogenous Taiwan education scholars.

Regarding research quality, the researchers used Cronbach's alpha reliability coefficient to determine internal consistency for each of the variables (see Table X.5). Analysis reveals the correlation between TSSCI JCR and Taiwan Scholar Evaluation to be .207, the correlation between IF and Taiwan scholar evaluation to be .280, and the correlation between TSSCI JCR and IF to be .265. All three correlation coefficients are significant.

Factor analysis was used to evaluate the quality of the research via principal component analysis (see Table X.6). The Eigenvalue was 1.502 and the variance explained was 50.08%. Moreover, after the cluster analysis the fittest cluster was fourth-tier journals, and the result of our discriminant analysis showed that 99.1% of the raw data maintained correct clarification.

Table X.5. International Education Journals Coefficients

	Taiwan Scholar Evaluation	*TSSCI JCR*	*Impact Factor (IF)*	*Total*
Taiwan Scholar Evaluation	1.00	.207*	.280**	.602**
TSSCI JCR	.207*	1.00	.265**	.593**
IF	.280**	.265**	1.00	.868**
Total	.602**	.593**	.868**	1.00

*P<.05; **P<.01; N=110

Table X.6. Factor Analysis of International Education Journals

	Factor I
Taiwan Scholar Evaluation	.695
TSSCI JCR	.680
Impact Factor	.746
Eigenvalue	1.502
Variance Explained	50.08%

ANALYSIS AND DISCUSSION

Drawing from our literature review and focus group discussion findings, we combined subjective and objective evaluations into a new formula that includes IF, Taiwan Scholar Evaluation, and TSSCI Journal Citation Record. This analysis is summarized in the following four tier categorization of journals.

First-Tier Journals

There are three first-tier international education journals including the *Review of Educational Research* (10.53), *Journal of the Learning Science* (8.92), and *Learning and Instruction* (5.66). Two of these journals belong to the sub-field of educational psychology; all three journal IFs rank as the top TSSCI journals. The *Journal of the Learning Sciences* scores high in the Taiwan Scholar Evaluation and also has a high IF, but it performed quite low in the TSSCI JCR.

Second-Tier Journals

There are 27 international education journals which are classified in the second tier from the highest IF score of 6.61 to the lowest score of 0.84 (the average total score is 3.0130). The journals include the *American Educational Research Journal* (6.61), *Journal of Learning Disabilities* (6.46), *Journal of Applied Behavior Analysis* (6.01), *Harvard Education Review* (5.71), *Journal of Research in Science Teaching* (5.47), *Educational Evaluation and Policy Analysis* (5.14), *Sociology of Education* (4.52), *American Journal on Mental Retardation* (3.50), *Exceptional Children* (3.44), *Journal of Teacher Education* (3.19), *Journal of Special Education* (3.05), *Reading Research Quarterly* (2.99), *Mental Retardation* (2.79), *Journal of Intellectual Disability Research* (2.45), *Elementary School Journal* (2.38), *Computers in Human Behavior* (2.13), *Studies in Higher Education* (1.97), *Remedial and Special Education* (1.89), *International Review of Research in Mental Retardation* (1.86), *Topics in Early Childhood Special Education* (1.86), *Language Learning* (1.66), *Journal of Fluency Disorders* (1.2), *Behavior Modification* (1.17), *Journal of College Student Development* (1.09), *Research and Practice for Persons with Severe Disabilities* (1.06), *Annals of Dyslexia* (0.91), and *Gender and Education* (0.84).

In the second-tier journals, there are 14 international journals that focus on special education. These journals maintain a high reputation among Taiwan education scholars and in their IF scores. Regarding the TSSCI journals citation record, we found the highest score of 125 to be *T*he *Journal of Learning Disabilities.* However, the *Journal of Fluency Disorders* and *Research and Practice for Persons with Severe Disabilities* received the lowest score of zero.

Third-Tier Journals

Thirty-nine international education journals are categorized in the third tier of this study. The highest score is 1.48, and the lowest is -1.49. The third-tier journals cover *Research in Higher Education* (1.48), *Journal of Educational Research* (1.43), *Educational Administration Quarterly* (1.38), *British Journal of Sociology of Education* (1.37), *Teaching and Teacher Education* (1.04), *Journal of Philosophy of Education* (1.02), *British Journal of Education Studies* (1), *Journal of Educational Measurement* (0.98), *Journal of Experimental Education* (0.93), *Journal of Educational and Behavioral Statistics* (0.91), *Journal of Higher Education* (0.9), *Comparative Education Review* (0.88), *Research in Developmental Disabilities* (0.85), *Teachers College Record* (0.62), *Journal of Education Policy* (0.59), *Applied Measurement in Education* (0.59), *Instructional Science* (0.5), *British Educational Research Journal* (0.47), *Academic Psychiatry* (0.37), *Journal of Curriculum Studies* (0.32), *Early Childhood Research Quarterly* (0.14), *Higher Education* (0.07), *Learning Disability Quarterly* (-0.01), *High Ability Studies* (-0.27), *Gifted Child Quarterly* (-0.34), *Oxford Review of Education* (-0.52), *Theory into Practice* (-0.55), *Minerva* (-0.63), *Journal of Moral Education* (-0.8), *Review of Higher Education* (-0.81), *ETR&D-Educational Technology Research and Development* (-0.86), *Curriculum Inquiry* (-0.87), *Comparative Education* (-0.89), *Research in the Teaching of English* (-0.98), *Economics of Education Review* (-1.02), *International Journal of Educational Development* (-1.14), *British Journal of Developmental Disabilities* (-1.16), *British Journal of Educational Technology* (-1.44), and *Journal of Intellectual & Developmental Disability* (-1.49).

The third tier of international education journals scored more than 4.0 in the Taiwan scholar evaluations. The highest was 4.51, with the lowest being 4.05. From the perspective of TSSCI JCR, *Teaching and Teacher Education* was cited 70 times, with 13 journals cited less than 10 times. When including the IF proportion in the formula, most of the third-tier journals are under .500.

Fourth-Tier Journals

There are 41 international education journals ranked at the fourth tier including Educational Leadership (0.43), Journal of Creative Behavior (-0.94), Computers & Education (-1.18), Adult Education Quarterly (-1.52), Journal of Social Work Education (-1.63), TESOL Quarterly (-1.68), Quest (-1.78), Educational Policy (-1.82), Teaching of Psychology (-1.86), American Annals of the Deaf (-1.93), Educational Research (-1.94), Educational Review (-2.04), Anthropology & Education Quarterly (-2.07), Journal of Literacy Research (-2.08), Journal of Early Intervention (-2.17), Zeitschrift fur Padagogik (-2.19), Urban Education (-2.28), Phi Delta Kappan (-2.3), Creativity Research Journal (-2.31), Journal of Economic Education (-2.43), Education and Training in Developmental Disabilities (-2.53),

School Effectiveness and School Improvement (-2.57), Foreign Language Annals (-2.58), Teaching Sociology (-2.82), Journal of Adolescent & Adult Literacy (-2.87), Education and Urban Society (-2.88), Journal for the Education of the Gifted (-2.93), Reading Teacher (-3.29), Journal of Geography in Higher Education (-3.3), Journal of Computer Assisted Learning (-3.61), Volta Review (-3.62), American Journal of Education (-3.64), Educational Gerontology (-3.65), International Journal of Art & Design Education (-3.67), Innovations in Education and Teaching International (-3.73), Intervention in School and Clinic (-3.76), Educational Studies (-4.13), Infants and Young Children (-4.14), Russian Education and Society (-4.2), Young Children (-5.25), and Chinese Education and Society (-5.64).

The international education journals listed in the fourth tier received the lowest Taiwan Scholar Evaluation Score which ranged between 3.53 and 4.11. The fourth-tier journals were not cited very often by other TSSCI Journals and 28 of the journals were cited less than 10 times. The journal of *Educational Leadership* was cited 99 times in TSSCI journals, and may deserve more consideration regardless of their lower Taiwan Scholar Evaluation and IF scores. The journal of *Educational Leadership,* first published in 1943 and has more than 700 issues published to date, should have a stronger impact in the Taiwan Academy of Education discipline. However due to its heavy practical emphasis, relatively few articles in the journal were mentioned, lowering its IF and Taiwan Scholar Evaluation scores.

Non-SSCI Education International Journals

The JCR IF is one of the major indicators for selection of journals in this group. Many international education journals are not included in the SSCI journal list and yet have significant influence on education in Taiwan. We used our formula to calculate the IF for these journals. According to this formula, non-SSCI journals were divided into three tiers. The first tier includes two journals: *Educational Researcher* and *International Journal of Educational Research*. The second tier includes *Compare*, *Teacher Education Quarterly*, and *Educational Assessment*. The third tier is comprised of three journals: *Convergence*, *New Directions for Adult and Continuing Education,* and *Psychological Monographs*.

Among the non-SSCI international education journals, there are six journals from the United States, three from the United Kingdom, 10 from Germany, 11 from France, one from Australia, and one from the European Region. According to these results, most of the Taiwan scholars are not familiar with European education journals except the *European Journal of Teacher Education*. Most importantly, the *Educational Researcher* and *International Journal of Educational Research* are not listed in the SSCI journal list, but are cited 61 and 30 times respectively in TSSCI Journal Citation Records.

CONCLUSIONS

Facing an increasing amount of global competition, higher education institutions are placed in the often precarious position of being forced to meet international standards of research excellence recognized across the globe. Along with different higher education institutional ranking systems, international journal publications are regarded as one of the major criteria to evaluate the status of scholars' academic contributions. Many higher education institutions in Asian countries require their faculty members to publish in journals listed in the SSCI, SCI, and/or A&HCI as a highly-influential indicator to determine promotion, tenure, and award consideration for selection of competitive research grants.

In this study, we evaluated the quality of international journal publications and their impact on the field of education from global and local perspectives. We conducted a focus group discussion followed by the administration of a questionnaire to higher education faculty members and administrators in Taiwan. Our analysis juxtaposed the importance of the IF from ISI's Journal Citation Record, the TSSCI Journal Citation Record, and Taiwan Scholars' Evaluation Score to balance the authentic influence that SSCI journals add to the academic field of education in Taiwan. To incorporate the possible influence all international journals have on the field of education in Taiwan, non-SSCI journals were also included and a formula created to measure their influence.

Through this study, we highlight six areas for further consideration in relation to the Taiwan context and based on international trends. First, the influence of international journal publications must be evaluated through multiple academic methods. Second, regular evaluations should be performed on international journal rankings. Third, international journal ranking methods should be developed for non-SSCI journals that have significant influence on the field of education. Fourth, the connection between Taiwan scholars and influential non-SSCI international journals should be promoted. Fifth, an international journal ranking for the field of education would be valuable and we recommend that one be established. And finally, the creation of a citation database for international education journals should be established specifically focused on the Taiwan context.

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PROBLEMS, STRATEGIES, AND IMPACT OF SSCI PUBLICATION IN ENGLISH

Perceptions and Negotiations of Taiwanese Researchers

INTRODUCTION

In the era of hyper information exchange and knowledge development, the government of Taiwan has been promulgating various policies to encourage internationalization of scholarship in order to boost Taiwan's intellectual industry and international visibility. Scholarly publication in international journals, thus, has been inevitably emphasized in Taiwan and has become one of the crucial parameters to evaluate researchers' scholarship. Because of the overabundant information sources and diverse international journals of various levels of quality, journals listed in the Social Science Citation Index (SSCI) have emerged as the target venues for knowledge exchange and professional discussion. The journals indexed in the SSCI database are identified as having the most frequently cited articles.

Thomson Reuters, the company that runs the SSCI database, provides selective data of the world's 2,474 leading journals across 50 social science disciplines. The majority of these journals are issued in western countries, such as the United States and United Kingdom. Only 2% of indexed scientific publications come from developing countries (Salager-Meyer 2008). Indisputably, the major language used for publications in these SSCI journals is English. In Taiwan, papers published in SSCI journals usually are deemed as canonical scholarship in the respective fields and represent an honorable achievement for researchers who publish them. Thus, government institutions and most of the national universities in Taiwan have adopted publication in SSCI journals as one of the core indicators to appraise a researcher's performance determining recruitment and promotion, grants and awards, level of salary, national research project proposal acceptance, as well as resource allocation. The local academic ecology of Taiwan has been dramatically impacted by these SSCI-related practices in various ways, and "SSCI" has been used to describe anything generally related to professional advancement in Taiwan academic life. Likewise, in this article, "SSCI" will be adopted as a general term rather than simply being the abbreviation for the name of the index. This article will first explore the SSCI publication difficulties that Taiwanese researchers usually encounter, then discuss Taiwanese researchers' negotiation strategies, and finally analyze the impact of SSCI on researchers and on the academic culture in Taiwan.

C. P. Chou (Ed.), The SSCI Syndrome in Higher Education, 109–126.

LITERATURE REVIEW

English has been the lingua franca or a major language used by scholars in most of SSCI journals to construct and exchange knowledge among nations. English academic writing for publication in SSCI journals can be a formidable undertaking (Bartholomae 1985). Not only can the academic discourse and the conventions of scholarly publication be daunting challenges to the NES (native English speaking) researchers, also needless to say, SSCI publication puts off-networked NNES (non-native English speaking) and the EIL (English as an international language) scholars at serious disadvantage from participating in the international academic community. These highly demanding genres and linguistic requirements of publication in SSCI journals, on the one hand, have served as a gatekeeper to maintain the quality and control the content of the publications; however, on the other hand, they have raised serious concerns because these culturally and linguistically exclusionary requirements may encourage knowledge exclusion (Canagarajah 1996) and inequality of knowledge creation (Wen and Gao 2007), linguistic impoverishment (Mauranen, 1993), ideological imposition (Canagarajah 1993; Pennycook 1994; Phillipson, 1992) and cultural hegemony (Canagarajah 1993, 1996).

A number of researchers have argued that the worldwide Anglicization of scholarly publication has disadvantaged NNES and EIL scholars in the participation of the mainstream academic community (Braine 2005; Canagarajah 1996, 2003; Curry & Lillis 2004; Gibbs 1995; St. John 1987; Swales 1987, 1990). Besides, many studies also have reported that the majority of NNES scholars perceived themselves as off-networked and disadvantaged due to lack of English proficiency (Cho 2004; Curry & Lillis, 2004; Flowerdew 1999a; Huang 2010; Tardy 2004).

With the increasing pressure to be recognized in quantifiable terms, a great number of NNES and EIL scholars strive to publish in the SSCI journals. The disparities of English writing for scholarly publication have drawn extensive attention. It is reported that NNES writers generally experience difficulties in grammar, adopting citations, interpreting references, developing arguments, organizing information, constructing authorial voice, showing readership awareness, using hedges, and making academically appropriate claims (Dudley-Evans 1994; Johns 1993; Mauranen 1993; St. John 1987; Swales 1990).

In parallel with these studies, Flowerdew (1999) investigated the problems for scholarly publication among Cantonese scholars in Hong Kong. By means of in-depth interviews, he studied 26 scholars' perception of their publication difficulties. He found that NNES scholars perceived themselves to have less facility of expression, take longer to write, have a less rich vocabulary, be less capable in making claims for their research with the appropriate amount of force, be better suited to writing quantitative articles, be interfered by their L1 with their L2 composition process, be best advised to write in a simple style, and have the most difficulties in writing introduction and discussion parts of research articles. Furthermore, the participants reported that academic writing courses had little benefit on their scholarly publication,

and that editing services, which resolved surface errors rather than substance, could be helpful.

Although writing in English for scholarly publication seems to be an obvious challenge for international scholars, some researchers have incongruent findings. Belcher (2007), the editor of *English for Specific Purposes* (*ESPj*), analyzed submissions to the journal from 1998 to 2001 written by EIL and EL (English language) researchers and the 29 reviews written by both EL and EIL reviewers. Nine text features emerged based on her analysis of reviewers' comments: audience, topic, purpose, literature review, methods, results, discussion, pedagogical implications, and language use. Belcher found that "topic" received positive comments from the majority of reviews (72%), and "language use" received negative comments among 90% of the reviews. Belcher also found that the off-networked EL researchers suffered similar disadvantages as the off-networked EIL researchers, such as unfamiliarity with journal expectations in both research design and presentation. In her study, Belcher interpreted the 75% high rate of publication from Hong Kong among the total China-origin papers as its "substantial financial support for research" (p. 17). Not surprisingly, Belcher (2007) suggested that research writing expertise and availability of resources might be more salient factors than language issues. Nevertheless, Belcher's suggestion is contradictory to what she had observed in that 83% of the papers originated from the US were eventually accepted, and only 24% of the China-origin (among the total 75% were from Hong Kong) submissions were accepted for publication (p. 17). In fact, her finding that the majority of the accepted papers originated from the US and Hong Kong has already proven language to be one of the crucial factors determining the success of scholarly publication. In addition, it is questionable to distinguish "research writing expertise" from language issues; it is also problematic to claim that language is less salient in scholarly publication simply because both EL and EIL researchers received similar language comments from reviewers, and EIL acceptance rate has been rising. Besides, it is disputable to mark Hong Kong as an EIL milieu (Flowerdew 1999; Li 1999), as it is a highly internationalized city where English is commonly used in governmental organizations and schools.

Flowerdew (2001) conducted a qualitative research study to explore the publishing issue from the perspective of journal editors. He interviewed 11 international journal editors and found that many journal editors have recognized language as a major issue in academic publication. Most of them agreed that the EIL researchers usually made surface errors in their submissions. Most of the editors expressed their sympathy for EIL researchers and would like to help them if the research was worthwhile. However, in line with Belcher (2007), the most significant problem indicated by these editors about international scholars' submissions was not language use but "parochialism" or failure to show the relevance of the study to the international community.

The "language" issues discussed by Flowerdew (1999) and Belcher (2007) as well as the "parochialism" suggested by Flowerdew (2001) can be problematized

from the perspective of academic literacy. Academic literacy refers to not merely linguistic knowledge but also "knowledge of the textual, social and cultural features of academic written discourse as well as knowledge of English as used by their academic disciplines" (Ferenz 2005, p. 340). According to Barton and Hamilton (1998), academic literacy is a social act, which can be acquired through discourse community practices and interactions between members of the community. Within the academic community, academic literacy can be cultivated through the practice process of knowledge creation and construction. Participating in the academic community practice enables participants to perceive the meta-cognitive knowledge of the community, the intricate trends of the past and future, and the relationships among the members. Thus, community practices and academic literacy afford the participants a sense of membership, which further enables the participants to appropriate discourse, be aware of readership, define issues, negotiate arguments, theorize findings, and lead discussions. Based on Barton and Hamilton's (1998) theory of literacy, language issues of advanced academic writing can be the abstract difficulties at the higher level beyond the surface linguistic usage for NNES and EIL writers. However, with relatively less chance of joining this central academic community due to language barriers, most of the NNES and EIL researchers suffer the process of developing academic literacy, which in turn, creates a vicious circle hindering NNES/EIL researchers' legitimate participation of the academic community of the mainstream.

From the perspective of academic literacy that scholarly writing involves higher-level language issues, the findings that no manuscript was rejected only because of language usage (Flowerdew 2001; Hewings 2002), and the editors could help out with the language problems if the research idea of a manuscript is worthwhile (Flowerdew 2001) have overlooked the complexity of language in advanced academic literacy.

Canagarajah (1996) pointed out that the inequities faced by NNES/EIL writers in the academic publishing industry are not only discursive but also nondiscursive. According to the theory of contrastive rhetoric (Kaplan 1966), NNES/EIL writers' rhetorical knowledge is deeply engrained in their indigenous culture and communicative conventions. Their written texts manifest the discursive structures and thought patterns that are different from the Anglo-American expectations. Besides, the nondiscursive publishing practices, such as "the format of the copy text, bibliographical and documentation conventions, the particular weight and quality of the paper… the procedures for submitting revisions and proofs, and the nature of interaction between authors and editorial boards" (Canagarajah 1996, p.436) also have important implications for scholarly publication, which can become the barriers to exclude the participation of the off-networked researchers. That is, the issues of EIL scholars' "language use" reported by Belcher (2007) may be caused by the influence of their indigenous communicative conventions (Canagarajah 1996; Kaplan 1966). The Hong Kong scholars' self-perception of being academically incompetent may result from the asymmetrical relations

of politico-economic power behind the Western publishing industry. The "Parochialism" indicated by the editors interviewed by Flowerdew (2001) can be what Canagarajah (1996) called the "periphery perspectives" which can provide alternative cultural perspectives and vibrant contributions to the "stable" and "conservative" "centre" (p. 465). The cross-reviewed literatures have revealed the gaps between not only NNES/EIL scholars and journal editors, the peripheral and the center but also theory and practice. Most of the NNES/EIL scholars consider English as their major challenge for scholarly publication; however, most of the journal editors believe that content quality, such as research writing expertise and meta-cognitive knowledge about the academic community including journal expectation or parochialism is more crucial than accuracy issues (Hamp-Lyons 2009). In other words, those journal editors seemed to believe that what NNES/EIL scholars suffer is only linguistic problems; moreover, content quality, research writing expertise and meta-cognitive knowledge about community seemed to be viewed as independent from language and academic literacy. Though theories of academic literacy, intercultural communication and contrastive rhetoric have challenged the monolith of the publication gate of the center academic community, contours of the evolving publication practice for multilingual scholars' knowledge construction are still unclear. Most of the editors within the position of gatekeepers, despite feeling sympathetic to NNES/EIL scholars or helping correct lexicogrammatical errors, have limitation to equalize knowledge creation, distribution and access (Wen and Gao 2007; Nunn 2009; Salager-Meyer 2008). To shorten the gaps, more discussions and research about academic publication of L2 scholars are necessary.

The purpose of this study is to discuss issues of SSCI publication in Taiwan. So far, most studies on Asian NNES/EIL writers' publication issues were conducted in Hong Kong (Braine 2005; Cheung 2010; Flowerdew 1999 a; Flowerdew 1999 b; Flowerdew 2000; Flowerdew 2001; Li and Flowerdew 2009) and China (Cargill and O'Connor, 2006; Cargill O'Connor and Li 2012; Flowerdew and Li 2009; Li, 2002; Liu 2001; Liu, 2004; Shi Wang and Xu, 2005). Taiwan is a unique case of the research of writing for scholarly publication. Unlike Hong Kong, a postcolonial context where people, especially researchers, have considerable English exposures, the majority of the Taiwanese researchers are speakers of English as a foreign language. Besides, Taiwan's fairly even distribution of economic and academic resources is distinct from China where resources are not available evenly, and most "institutions of higher learning lack the financial resources" (Wen and Gao 2007, p. 224). For researchers who would like to minimize non-discursive variables, such as, availability of resources, but focus on language issues, Taiwan can offer a more congruent research context.

Echoing Flowerdew's (1999) suggestion that under the macro picture of English hegemony in scholarly publication, individual researcher's publication problems should be explored at the micro level, in this study, I attempt to explore Taiwanese researchers' problems, strategies and impact of SSCI publications from the micro

perspective by discussing the interplay between the micro and macro influences from the academic context of Taiwan. My research questions are:

1. What are Taiwanese researchers' problems in academic publishing?
2. What are Taiwanese researchers' strategies to negotiate these problems?
3. What are the impact of SSCI publication on Taiwanese researchers and their milieu?

Methodology

A qualitative research study was conducted to explore the problems, strategies and the perceived impact of SSCI publication on Taiwanese researchers. Both etic and emic approaches were adopted to collect and interpret the textual and interview data respectively. To understand Taiwanese researchers' publication problems (research question 1), the collected SSCI reviewers' comments were analyzed from the etic perspective. Furthermore, to answer the three research questions from the emic perspective, following Flowerdew's (1999) social constructionist methodology (Berger & Luckmann 1966; Gergen 1985), I conducted in-depth interviews to obtain participant researchers' perceptions of their problems, strategies, and the impact of SSCI publications on them. The interview data were analyzed from the emic perspective in order to reveal individual participant's perceptions.

Participants

Convenience sampling was used in this research design. To answer research questions 1 and 2 and to analyze NNES researchers' typical problems with SSCI journals, I contacted the researchers that I have known to collect the SSCI journal reviewers' comments that they received, and I requested interviews with the participants afterwards. Some of them declined my request because they felt uncomfortable sharing the reviewers' comments, or they did not archive the reviews. Five researchers accepted my invitation by sending me the reviews via emails and being interviewed individually. Knowing these participants allowed me to conduct a reflective interview and establish rapport with them more easily because the participants might have felt embarrassed to disclose their research weaknesses or complaints.

All five participants were native speakers of Mandarin. Two were in the research line of TESOL, two were in education, and the other one was in business management. To understand the development of academic literacy, the five participants were divided into three groups according to their research competence: experienced, developing, and novice (see Table 1). Their research competence was not based on the number of years of their research but rather the quality and quantity of their publications. SSCI was adopted as one of the quality measures (Flowerdew 1999, p. 244).

Researcher 1 (R1) has about 9 years of research experience; he has published one university press book and 17 papers in international journals. Among his

published papers, seven were published in SSCI journals. R2 has about seven years of research experience and has published 12 articles. Among her publications, nine are international journal articles and one is an SSCI article. R2 also has three papers published in the local journals in English. Both R1 and R2 were grouped as experienced researchers. R3, identified as the developing scholar, has over 15 years of research experience; she has published four articles in local journals in Chinese and three single-authored books in Chinese in Taiwan. R4 has less than four years of research experience and has two papers published in local journals in English. R5 only has research experience for about 3 years; he has published three articles in international journals. All of his publications were co-authored works. Both R4 and R5 were categorized as novice researchers.

Table 1. Information of the Taiwanese Researcher Participants

Group	*Experienced*		*Developing*	*Novice*	
Participants/ Discipline	*R1 Business management*	*R2 TESOL*	*R3 Education*	*R4 Education*	*R5 TESOL*
Research experience	9 years	7 years	15 years	4 years	3 years
International publications	17 (SSCI=7)	9 (SSCI=1)	1	0	3 (co-uthored)
Local Publications	0	3 (English)	4 (Chinese)	2 (English)	0
Book	1 (English)	0	3 (Chinese)	0	0
Total Publication	18	12	8	2	3

Data Collection

To analyze the Taiwanese researchers' writing problems, reviews (N=10) were collected from the five participant researchers (each manuscript had two reviewers' comments). All the reviewed manuscripts were submitted to SSCI journals; three were rejected by the editors, and the other two were recommended to "resubmit after revision."

Interviews were conducted by the researcher through phone calls, emails or face-to-face according to the participants' availability. The in-depth and semi-structured interviews aimed at eliciting participants' reflections of their publication process, problems encountered during the process, negotiation strategies, contextual constraints and the impact of SSCI publication on their professional lives and the larger milieu. Spontaneous questions also emerged during the interactions between the researcher and the participants. The interviews were conducted in Mandarin informally. During the interviews, the participants were encouraged to self-disclose

their related experience, stories or opinions. The interviews, without setting specific time constrain, lasted variously from one hour to three hours until the saturation of information was achieved. Follow-up interviews were also conducted for clarification or elaboration purposes when necessary. On average, each participant was interviewed twice.

Data Analysis & Findings

First, I scrutinized the collected review comments and marked each comment with summary words. I then created categories to group similar comments together. Data were sorted and resorted in order to be categorized. If the existed category did not fit the data, a new category would be created accordingly. Thirteen categories were created inductively: grammar, language presentation, journal selection, lack of elaboration or supporting points, theoretical conception, organization, argumentation, clarity, unclear or unconvincing purpose, inappropriate selections or problematic interpretation of literature review, unclear or confusing usages of definitions/terminologies, unclear method design/research procedure, and unsatisfactory analysis/discussion. The thirteen publishing problems were further grouped into four broader categories: writing skills (e.g. grammar, language structure), community knowledge (e.g. journal selection), domain knowledge (theoretical conception, unclear or confusing usages of definitions/terminologies) and rhetoric (e.g. lack of elaboration or supporting points, unclear explanation of the analysis/discussion). While writing skills refer to the surface level problems, the other categories indicate the higher level problems. Under the umbrella of academic literacy, the four problem types were arranged as a taxonomy to illustrate the hierarchical relations among them (see Figure 1). It is important to note that some of the problems may overlap with or affect one or more categories. The correlations among each problem type are represented by the arrow signs. For example, problems in making appropriate arguments may result from interlaced factors of incompetence in writing skills, in rhetorical knowledge, in domain knowledge or in community knowledge.

I carefully compared and contrasted the reviewers' comments among the expert, developing and novice researchers to identify similarities and differences. The following are the findings:

1. The experienced received positive comments or no comments from the editors about surface language problems. However, the developing and the novice researchers received considerable comments about their language problems.
2. Both the experienced, developing and novice researchers received negative comments on problems of domain knowledge.
3. Both the experienced and novice researchers received comments on submission to wrong journals.
4. Except for the method and conclusion sections, the experienced researchers received negative comments from editors like the novice researchers in other sections of their manuscripts.

Four out of five comments regarding the research topic were positive, which is concordant to Belcher's (2007) finding that the most positive comments received from reviewers is "topic." Among the four topics that were commented on as worthwhile, interesting, intriguing or important, two were rejected and two were requested to revise. None of the four manuscripts have been published yet. This finding suggests that without appropriate academic literacy, worthwhile research may still be neglected.

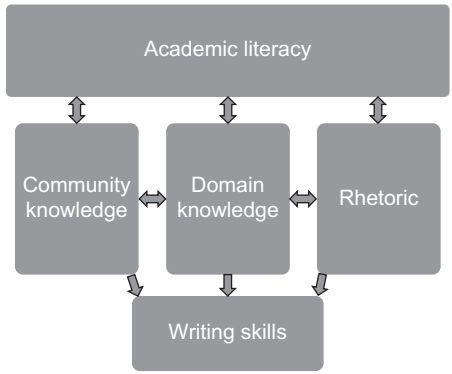

Figure 1. Taxonomy of EIL scholar's publication problems.

Two trained assistants helped me categorize the participants' interview data into three categories: writing problems, strategies, and impact of SSCI publication. They compared their categories and discussed the inconsistent ones with the researcher to reach consensus. The inter rater reliability is 88.5%. The interview categories were triangulated with the thirteen publishing problems to obtain a more holistic view of Taiwanese researchers' perceptions of their publishing process and impact of SSCI. The interview data were transcribed, analyzed, and later confirmed by the participants to ensure consistent reliability.

DISCUSSION

RQ 1 & 2—Publishing Issues and Strategies

Issues of community knowledge. According to the data, Taiwanese scholars may have insufficient meta-cognitive knowledge about the mainstream academic community. Their limited community knowledge may lead to (1) difficulties in choosing appropriate journals for submission and (2) insensitive concern of audience.

According to the interviews, most of the participants reported that the online information provided by the target journals about the journal or what kind of research papers they expect help them little on deciding where to send their manuscripts.

For example, R4 reported, "There are many implicit rules that I don't understand. I submitted my manuscript to one journal that I thought was appropriate, but the editor suggested me submitting my manuscript to the other journal… But the recommended journal editor told me to submit my paper to another journal again..." R1 said, "When I was writing this paper, XXX journal was my ideal publishing venue with my target readership. I had one paper published there already; I thought I was familiar with their expectation, but I have no idea why this paper was suggested to submit to a different journal."

In terms of strategies, R5 shared his opinion of choosing journals for submission, "people said that where the references you adopted the most, the major source journal would be the target journal for submission." R2 suggested, "I only stick with and submit my manuscripts to the journals that I am familiar with. It's risky to choose the journal for submission simply based on the online information posted on their websites."

The data revealed that both the experienced and non-experienced Taiwanese researchers lacked substantial competence for choosing their publishing venues. Though R1 and R2 showed better sense of audience concern or the readership of specific journals, they did not seem savvy enough to pick up on the subtle rules of the academic community. The less experienced researchers, such as R4 and R5, seemed to embrace one or some formulae to help them make a judgment. If the formula did not work well, they might fail at their attempt. All of the participants agreed that through trial and error, they could slowly acquire the insider rules practiced in the academic community. Their feeling of perplexity about the invisible barriers to entering the inner publishing circles is typical (Nunn 2009) for all inexperienced researchers, but with insufficient language proficiency, NNES/EIL researchers may take longer than NES/EL researchers to breakthrough the barriers.

Besides the difficulty in choosing the most appropriate journals for submission, limited community knowledge also affect writers' sensitivity of audience concern or competence of communicating a local issue to international readership. For example, R5 received a comment as the following, "the introduction seems to be written for a primarily Taiwanese audience…but people outside Taiwan, which may be of interest to researchers from Taiwan but not necessarily to those from other contexts… The elaboration… further strengthens the focus on Taiwan and moves away from possible theoretical issues that cut across different contexts." Although R5 targeted his readership on international audience, he failed to address his research from the perspective that could engage the international readers due to insensitivity about the expectation of the community and the community membership.

Issues of Domain Knowledge

The issue of domain knowledge oftentimes is interwoven with the other issues at a higher level, such as rhetoric and community knowledge. For example, one of the comments R4 received reads, "The NES/NNES distinction may make linguistic

differences inevitably…I was quite confused… why you chose to conduct a comparative study across cultures in the first place. It is not self-evident, therefore needs rationale…" Reflecting upon these comments, R4 frankly said, "I don't understand why calling the Taiwanese participants as NNES students and Americans as the NES students made the reviewer think I was comparing them…" To R4, who has been self-identified as an NNES learner or user, "NNES" and "NES" are the generic terms for her to identify different research participants coming from countries where English is a native or a non-native language. However the two labels to the reviewer are not generic but carry strong implication on one's linguistic identity. Setting the two student groups apart, to R4 was for convenient identification rather than comparing participants' linguistic performances. However, to the reviewer, it was a comparative study involving language usage. R4 and her reviewer apparently had different perceptions about the terms. The two terms have carried linguistic and identity distinctions in the academic community; however, without much experience and knowledge about the academic community, R4 could only use the terms based on her personal understanding. In other words, R4's lack of domain knowledge might have resulted from her insufficient knowledge of the community as well.

In another example, R2 received a reviewer's comment, "the author asserted that K's concept is XXX, yet the logic of K's ideas was much more 'vulgar pragmatic' than that." That is, R2 interpreted K's idea in the way that disagreed with the reviewer's. It is unknown whether R2 could not understand K's point of view correctly, or she could not appropriately express her interpretation. That is, R2's problem of domain knowledge might have been entangled with language proficiency.

Taiwanese writers may not be able to comprehend reviewer's comments due to divergent understanding of domain knowledge. One of the comments R3 received was, "At times I think the term XXX refers to a process, but then at other points it is discussed as a static product or stage…" R3 could not understand this comment. After my explanation, she asked me with anguish,

> I don't know which parts of my writing made the reviewer think the term is a process and which parts made him/her perceive the term as a product…it is not my focus to distinguish between process and product in my research; at least, it was not my intention. The worst is that I have no idea how I can successfully use the term without giving the readers the wrong implication.

It seems like R3's reviewer was confounded by the rhetorical variety of the term she used, but R3 could not perceive the different rhetorical implications of the different ways she used it. Therefore, she could not understand the reviewer's opinion, and she was unable to revise based on the reviewer's comments.

Issues of Rhetoric

Advanced academic writing is a rhetorical process (Jolliffe and Brier, 1988; Tardy 2005). One of the common comments that all the Taiwanese participants received is

"clarity." For example, on R3's manuscript a comment stated, "I think this kind of talk is very unclear…it is difficult to follow…the author doesn't really add anything to our understanding of the nature of XXX… your idea here needs to be clarified…" Apparently, the reviewer expected R3 could have written in the way that he/she could follow. But R3 was confused, "From my view, I think my writing is very clear. I don't know what he/she wants to know or how I can make him/her understand my idea." The other comments about rhetorical problems that the Taiwanese scholars in this study commonly received were "lengthiness," "repetition," "overstatement," and "over-simplification." Not only may Taiwanese writers' rhetorical choices hinder international reviewers and readers' reading comprehension, reviewers' comments which carry their own rhetorical logic sometimes confuse Taiwanese writers. R4 honestly confessed that one of the reasons that she could not revise her manuscript based on the reviewers' comments was her limited understanding of the received comments. "…Some of the suggestions are too rhetorical to be explicit for me to follow."

As for strategies to cope with comprehension difficulties of the reviewers' comments, R1 and R2 said they usually re-read the comments that they did not understand a few times, and sometimes they needed to put the comments aside for couple of days and re-read them again later. This issue reflects Gao and Wen's (2009) observation of "the gap between what the reader expects the writer to know about what the reader knows, and what the writer knows about what the reader knows about the writer's context" (p. 700). Gao and Wen (2009) adopted the concepts of "writer responsibility" and "reader responsibility" to explain the rhetorically and culturally embedded differences. They further argued that "it is unrealistic to expect the gulf to be filled before manuscript submission" (p. 701). Thus, they suggested that academic publication should be a process of dialogical co-construction. Editors and reviewers should not simply be the gatekeepers, instead, they should be bridge builders across the gap between authors and readers.

Belcher (2007) pointed out that language use, style and clarity, the most frequently commented issues by reviews, could overlap with issues of lexical items, style, or arguments (p.10). In terms of style, word choice has been identified by the participants to be one of the most difficult issues. R4 was frustrated about a reviewer's comment, "I had trouble reading this paper because the writing style is painfully informal at times, e.g. 'nowadays' I've not seen that word utilized in scholarly prose." R4 said, "I was so frustrated that I even doubt whether my perception about many other English words is correct. I don't know that 'nowadays' is an informal word in English. I perceive the word as neutral. In Chinese dictionaries, it means today or currently, so 'nowadays' simply means today or currently to me." R4's problem suggests that L2 rhetorical knowledge is built up on and embedded in learners' L1. Interpretation of an English word may depend on one's idiosyncratic acquisition and perception of his/her understanding of the particular word. Learning English in the EFL contexts through their L2 languages, NNES/EIL researchers are disadvantaged to demonstrate the "epistemic presentation" pointed by McNabb (2001).

The other participant researchers also reported suffering similar rhetorical problems. R3 complained about being asked to have her manuscript reviewed by native English speakers. She said, "This manuscript had been reviewed over 10 times after its rejections for resubmissions. Each revision cost me about US $250, and it had cost me about US$3000 for paying the native reviewers." R2 reported difficulty in finding qualified native reviewers for her manuscript: "native speakers can only help clean up the surface level mistakes. Only a reviewer that is a native speaker and also a professional in my field can help me fix a few rhetorical problems, but it's very hard to find such a person who is qualified and also have time to help." The shared experiences of R3 and R2 illustrate that though proofreading by native speakers can help a little bit (Flowerdew 1999), it cannot solve rhetorical problems and weed out the written accents because discourse is a socio-cultural construct of the interactions between the writer and his/her writing context (Widdowson 2007).

Academic Literacy

Academic literacy, in this proposed taxonomy, is placed on the top of the hierarchy because it affects NNES/EIL scholars' comprehension, presentation and interpretation. Most of the problems at the higher level categories (domain, community, and rhetoric) are interrelated and can all be emerged from the issue of academic literacy. The following are a few comments involving higher issues of knowledge transfer and literacy: "A and B are etymologically and conceptually related but are not one and the same" (R1); "the definition of XX as a 'way of establishing'.., however, the author uses 'XX-building,' which indicates that XX is something to be built, not the way of building something" (R3); "It is not clear why the author applied notion of community of practice, especially since the author is not discussing situated learning" (R2). R4, as a novice researcher of Education, pointed out, "My English is not very good. Sometimes it is difficult for me to completely grasp the deeper meanings of an ideology that is constructed by the community discourse, not to mention to write and explain an ideology in English based on my understanding from the peripheral context." What the discourse means to the writer may not be grasped by the readers from a different discourse community and vice versa. As Phillipson (1992) and Pennycook (1994) indicated that language is cultural specific and can never be independent from its contexts. EFL writers' perceptions of L2 are developed through their L1 and in their L1 culture. Although contrastive rhetoric (CR) studies have been criticized for their cultural essentialism and over-simplification of Eastern and Western cultures, they afford important implications that discourse is culturally shaped and constructed. The implicit or intuitive knowledge of the underlying publishing structure, such as, the audience and the discourse of the academic community can hardly be "learned" without community practices. While CR studies have been extensively discussed over the past 40 years, and the paradigm of Standard English has been shifting to World Englishes and

pluralism, SSCI publishing continues to follow exclusive language norms to make judgment about which constructed knowledge should be acknowledged.

RQ 3—The Impact of SSCI Publication

Research SSCIization. SSCI publications can extend the visibility of one's scholarship, enhance internationalization, and standardize through evaluation systems in academia. The SSCI offers an objective index to screen through overabundant publications to select the most cited journals. With the objective index, it is easier and establish an impartial evaluation system, which is essential to the stability and sustainability of the various academic organizations. Through the standardized academic genre and the lingua franca, English, information can be quickly distributed, exchanged, and updated. However, this "objective" assessment norm also has brought certain consequences. R3, as the most senior researcher among the five participants, explained the situation in Taiwanese academia about a decade ago. Before SSCI was adopted for academic evaluation, scholarship was recognized more diversely including formal conferences, and reports or articles in meetings, newspapers, magazines, forums, textbooks, research books, and journal articles. R3 said, "ever since SSCI has become the major evaluation parameter, research types have been impacted. Some studies cannot be accommodated in the academic genre required by SSCI journals, and therefore, are excluded from the evaluation system as well as community communication." R1 believed that every genre/form of scholarship has its unique value; however, R3 indicated that, "SSCI has standardized the means of evaluation of scholarship and thus creates a standard value of scholarship in Taiwan." According to R1, the negative impact of SSCI in Taiwanese academia is that "scholarship has been simplified as impact factor and numbers of publications in the SSCI journals.

Research Englishization

English, as the language for academic publication, determines who can access the international community. Only those who have adequate English proficiency can have the passport to enjoy the mainstream membership and participate in academic community practice. The research published in indigenous languages can easily be neglected. However, R1 indicated that "the most cited journals do not always guarantee facilitating knowledge construction, but the other side of the coin is that parochialism may have its value to contribute to knowledge construction and diversification." That is, R3 concluded that "SSCI publications contribute to research Englishization more than knowledge construction and diversification." Under the pressure of publication in English, R4 and R5 were anxious about their research career. They both received their Ph.D. in Taiwan and had no experience studying abroad. They perceived themselves as language disadvantaged in the Taiwanese academia (Li 2002) because they believed that the researchers who received their Ph.D. from the US may have

more connections with the center scholars (Cho 2004; Tardy 2004) or have better sense about the center community. R5 frankly told me that he usually stayed up late in his office until midnight. However, most of his submissions were rejected mainly because of his language problems. Though he was interested in some local issues, he hesitated to investigate them because "Taiwanese local issues may not be interesting to the international SSCI journals and the international readers." Striving for tenure promotion, R4 said, "…getting my paper published is my only concern for doing research at this point. I would not have time to tackle local issues of Taiwan until I receive my tenure." SSCI publication has impacted not only English usage for knowledge dissemination but also the types of research and issues to be studied.

Recession of the Local Journals

When asked about submissions to local journals, R1 honestly said he had never published in local journals because he seldom read the local journals himself. He further stated, "with similar working efforts, publications in the local journals relatively have less visibility compared to the SSCI journals or the other international journals." R2 disclosed that all her publications in the local journals were written in English because all the submitted manuscripts to the local journals were the ones had been rejected by international journals. The local journals' alternative status is in line with what Canagarajah (1996) delineated about the local journals' status in the Third World. R3, who had mainly published in Chinese and had served as a local journal editor, revealed that publications in Taiwan did not win her equal respect as those who published in the SSCI journals. Besides, most of the local journals suffer insufficient submissions and receive poorer quality manuscripts because Taiwanese researchers prefer international journals. She said, "the SSCI publication value has impacted on recession of the local journals in Taiwan."

Overemphasis of Research

When being asked about the impact of SSCI on their personal and academic work, all the five researcher participants agreed that their schools, including both the research oriented national universities and non-research oriented private universities, weighed research over teaching; therefore, in general, they could not but spend more time on research than teaching. The Ministry of Education of Taiwan evaluates all universities by heavily relying on the number of publications of their faculty, which encourages the universities to regard vita lines as criteria for rewards and punishment. Being imposed upon by publication pressure, some researchers indicated a few unique phenomena in academia of Taiwan. R2 revealed that while research is over emphasized and promotion is getting competitive, collaborative research work has been critically reviewed in her university to prevent dishonest publications only in name. Various policies have been established due to this concern; for example, the promotion reviewing board would grade a co-authored article by dividing its credits

by the numbers of the co-authors. The co-authored article that has been used by one's promotion would not be allowed to be used again by the other collaborators' promotion. These policies not only discourage teamwork but also infringe on trust between collaborators and enhance tension among them. Echoing R2, R4 and R5 both perceived that the Taiwanese academic culture has been getting "selfish" and "cold" because of extreme publishing competition, difficulty in finding research friends and a distrustful academic atmosphere.

CONCLUSION

Writing for publication is a complicated issue involving social practice, theories of academic literacy, knowledge construction, and power negotiations between the center and the peripheral. Scholars in Taiwan usually suffer various challenges in academic publishing, such as incompetent academic literacy, and insufficient knowledge of the community, the domain of their study, and rhetoric. Oftentimes, publication issues are complexly tangled with one and another. The common strategies that Taiwanese scholars applied to these problems are hiring proofreaders, re-reading reviewers' comments, collaboration, selecting journals for submissions according to the reference list or personal familiarity. Legitimate peripheral participation (Lave and Wenger 1991) through trial and error seems to be the main approach to acquire academic literacy. To negotiate the overwhelming pressure for SSCI publication imposed by universities, many Taiwanese researchers weighed research over teaching. Many of them strategically make submission to local journals their backup plan; they avoided parochial topics or issues and tended to choose topics perceived as more internationally appealing in order to break into the international academic community.

Though SSCI has brought objective means for scholarship evaluation, it has also given birth to a negative syndrome that has impacted personal research focus and working goals, as well as academic value and culture. Under the SSCI norm, scholarship, which has been quantitatively measured as well as qualitatively restrained, has become standardized and has diverged from what scholarship values-diversity and equality. SSCI also affects the evaluation system of scholarship in Taiwan and the local journal industry. One significant impact of SSCI is that English has become the language used for intellectual discussions not only in the international journals but also in the local journals. Moreover, English proficiency and academic literacy are the most salient problems encountered by NNES/EIL scholars.

The privileged status of English in the international academic community seems to be impregnable and will not be shaken within a short period of time; therefore, NNES/EIL scholars, instead of being marginalized as the peripheral, are encouraged to self-align with the privileged discourse to participate in the international academic community. By participating in community practices, one can negotiate the legitimacy of hegemonic knowledge industry in English, bring in diverse voice from the peripheral, and enhance paradigm shifts from inside the community.

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PERISHING CONFUCIUS

An Analysis of a Rupture Point in the Discourse of Taiwanese "New Higher Education"

"If one remains unperturbed that his greatness is not recognized in his time, is he not a sage?" (Confucius, *The Analects: Chapter 1*)

INTRODUCTION

Like many other Higher Education (HE) sectors around the world (see, for example, Deem & Brehony, 2005; Dominelli & Hoogvelt, 1996; Hayes & Wynyard, 2002; Jary & Parker, 1998; Leung, 2007; Nkomo, 2009; Strathern, 2000), Taiwanese HE has been going through a dramatic transformation. A massive expansion in the number of Taiwanese higher education institutions (whereby the sector has grown from 28 to 162 institutions between 1985 and 2012) has been interlaced with a series of regulatory and institutional changes, culminating in the formation, in 2005, of the Foundation for Higher Education Evaluation and Accreditation Council of Taiwan (HEEACT). With the establishment of HEEACT as the sole body responsible for the conduct of the evaluation of Taiwanese HE institutions and through the PDFURC program, universities in Taiwan are increasingly subjected to the rationality of the series of interconnected discourses and practices that, in the West, have become known as "the new higher education" (NHE) (Jary & Parker, 1998).

In this chapter, we approach the Taiwanese 3-I syndrome as a local embodiment of the NHE-driven "publish or perish" academic culture that is engulfing the global academia. We start the chapter by situating the Taiwanese 3-I syndrome in this global context and raising the question of the potential consequences of its trajectory. We then begin to examine this trajectory in more detail by tracing some of the interrelated discourses and practices that constitute the NHE formation. In particular, we look at aspects of the academic publishing game through which the 'publish or perish' discourse comes to dominate academic practice, as well as the points of rupture in this discourse that enable resisting discourses and practices to take root. By comparing the discursive field of the Taiwanese HE to its Western equivalent, we ask whether the existence of strong alternative discourses in Taiwan – such as those springing up around the person of Confucius as an academic role model in the Taiwanese HE sector – can act as an additional inventory of resistance that is lacking in the West but that can stop NHE becoming totalizing in Taiwan

C. P. Chou (Ed.), The SSCI Syndrome in Higher Education, 127–140.

(and, potentially, East Asia). To this end, we focus on the analysis of a particular protest incident as a rupture point in the discourses of the Taiwanese NHE. This particular incident has acted as a catalyst for the subsequent media and public portrayal of the main protester as an embodiment of a modern-day Confucius-like ideal type of an educator perishing in the context of current HE reforms. We examine the aftermath of the protest and its effects by looking at the media reports and interview data collected from two Taiwanese publishing game players. From this analysis, we suggest that this particular version of symbolic Confucius is too weak to resist the 3-I phenomenon, but that this should not preclude the possibility of stronger versions becoming constructed, perhaps through an internationalization of resistance. In the sections below, we establish a relationship between the Taiwanese 3-I phenomenon and NHE before proceeding to our empirical analysis and finishing with conclusions.

SYNDROME OR SYMPTOM? 3-I AND THE TAIWANESE "NEW HIGHER EDUCATION"

The emergence and entrenchment of the Taiwanese and East Asian 3-I Syndrome is the central tenet of this volume. The 3-I Syndrome refers to a maniac pursuit of academic publications in the SCI, SSCI and AHCI journals resulting in the academic culture of "publish or perish." We postulate that the narrow focus on the measurement of academic performance through the proxy of 3-I publications is better understood as a *symptom* of something bigger – in particular, of the rapidly globalising chain of interconnected discourses and practices that has become known as the "new higher education" (NHE) (Jary & Parker, 1998). As the application of the rationalities of "new managerialism" and "new public management" to the HE sphere, NHE is an embodiment of the neo-liberal governmentality (Foucault, 1991) that over the last decades has been transcending political divisions and national boundaries (Deem & Brehony, 2005; Shore & Wright, 2000a; Strathern, 2000).

NHE is driven by the neo-liberal belief in the power of (quasi-)market mechanisms to regulate performance in HE and has become associated with the 'audit explosion' of academic performance measurement and management (Shore & Robert, 1995; Strathern, 2000; Willmott, 2003). According to Shore and Wright (2000b: 61), the evidence for these developments can be seen, firstly, in "the emergence of new discourses" and the "semantic clusters" from which they are constituted – in particular, the new managerialist vocabularies of "performance", "excellence", "quality", "productivity", "efficiency", "competitiveness", etc. Secondly, it can be seen in the emergence of "new kinds of practices associated with these discourses, and the new institutions, norms, and areas of expertise that they hail into existence, and through which they are implemented". Thirdly, it can be seen in "the effect of these norms and practices – embedded in mundane routines and duties – on conditions of work and thought and… on the way in which individuals construct themselves as professional subjects" (ibid.).

Our argument is that the coming of the Taiwanese NHE can be witnessed in terms of all of the three aspects, which makes it an increasingly totalizing phenomenon. In terms of the emergence of new managerialist discourses and semantic clusters, the series of regulatory reforms, including the enactment of the revised Higher Education Law (大學法) in 1994 and the publication of the Whitepaper of Higher Education Policy in 2001, have progressively introduced into the Taiwanese HE sphere the new managerialist rhetoric of international competitiveness, research excellence, quality and productivity. The regulatory reforms have brought into existence specific organisational arrangements and particular "institutions, norms and areas of expertise" through which they are being implemented. In 2005, HEEACT was established as a means of entrenching the reforms and the US$1.56 billion PDFURC program was launched as its key instrument of academic performance measurement and management. PDRURC has visibly mimicked Western academic research evaluation exercises such as the British Research Assessment Exercise (RAE), now Research Excellence Framework (REF). Like RAE/REF, PDRURC has adopted a 5-year evaluation period and smelted together research excellence and the production of tangible outputs by making the allocation of funding conditional upon the delivery of quantities of publications – ideally, articles in prestigious, international journals (cf. Willmott 2003). Similarly to UK and the RAE/REF, one of the noticeable effects of PDRURC has been the spread of the "publish or perish" culture in the Taiwanese HE. In Taiwan, the "publish or perish" phenomenon has translated into the 3-I Syndrome that is the object of this book. This is subtly different from many Western countries, where the rules of the "publish or perish" imperative have become even more specified – i.e. it is no longer enough to publish just in the 3-I journals, but in journals that achieve particular impact factors in those indices (e.g. more than 1 or more than 2), and/or in journals that appear in particular journal lists and achieve particular scores in subject-specific journal rankings (e.g. a 3 or a 4 rating the British Association of Business School list). As Taiwan is a relatively late adopter of the NHE bundle of discourses and practices[1], it is likely that its version of "publish or perish" is still rapidly evolving, and it is possible that a more specified version of the 3-I Syndrome is yet to emerge in a bid to mirror the earlier adopters.

Whether or not this will happen, it is imperative to look closely at the discourses and the practices that constitute the 3-I Syndrome, as well as to question the trajectory of its possible effects on "conditions of work and thought and… on the way in which individuals construct themselves as professional subjects" (Shore & Wright 2000b, p. 61). This needs to be set in the context of the global debates about detrimental effects of the dominance of citation indices, journal rankings and impact factors on academic work, identity and knowledge (see, for example, Harley & Lee, 1997; Leung, 2007; Macdonald & Kam, 2007; Nkomo, 2009; Seglen, 1997; Willmott, 2011). The growing marginalisation of teaching vis-à-vis research, of non-Anglophone countries, of softer, qualitative subjects and research approaches, the onset of short-termism, the demise of collegiality and blue-sky thinking, the widening gap between elite and non-elite HE institutions, and the commodification, commercialisation and

McDonaldization of academia have been just some of the effects raised in these debates. Unsurprisingly, in the light of this long list, another key debate has emerged over the extent to which the coming of the NHE and its effects should and can be resisted (e.g. Parker & Jary, 1995; Prichard & Willmott, 1997; Trowler, 2001). Given how widespread the academic journal publishing gamesmanship is as an institution, a norm and an area of academic expertise (Macdonald & Kam, 2007), it is reasonable to say that resistance to NHE and its effects, in the Anglophone world at least, have not to date been particularly effective.

One of the questions that this raises in relation to the Taiwanese 3-I Syndrome in particular is whether there is anything sufficiently distinctive and powerful about the chains of interconnected discourses and practices constituting HE in Taiwan that could act as a resource for more effective resistance to NHE than what can be found in the West. In particular, we posit that the set of discourses and practices centered on the person of Confucius, given his cultural influence on Taiwanese education and way of life, is a prime candidate for acting as such a resource. In the next section, we examine the potential strength of this resource by looking at a particular 'rupture point' in the discourses of Taiwanese NHE that involved heavy reliance on Confucius as a source of resistance. We examine the media reports in the aftermath of a Teacher's Day protest incident that have brought NHE and Confucius into a direct confrontation, and also draw on interviews with 2 academic publishing game players as a postscript to the protest incident. We outline some of the features of the Taiwanese 3-I publishing game and draw the somewhat pessimistic vision of the perishing Confucius in Taiwanese NHE.

PERISHING CONFUCIUS: THE GAME AND THE RUPTURE POINT

We now turn to Confucius as the pivotal symbolic figure in our empirical exploration of resistance to the NHE-induced intensification of the Taiwanese "publish or perish" game. The historical person of Confucius has, in many ways, long become inextricably linked to Confucianism – a highly sophisticated ethical and philosophical system of doctrines and beliefs that has evolved out of the teaching of Confucius and has contributed to the shaping of societal and educational values in many East Asian countries, including Taiwan. With its core in humanism (Juergensmeyer, 2005), Confucianism highlights the malleable nature of human beings, who are basically educable and teachable. However, it is the historical person of Confucius as a great role model of a teacher and educator that is central to the resistance incident that we examine here.

Confucius (September 28, 551BC - 479BC) is widely considered as the very first teacher in Chinese history (Fung, 1976). Throughout Confucius's lifetime, apart from serving briefly in the area of politics, Confucius dedicated himself continually to educating/teaching his students. That was the pursuit in which he excelled to the point of earning himself the timeless title of "the Teacher Master and Ultimate Sage" (至聖先師). His educational philosophy of instructing all and rejecting none

(有教無類)[2] was exemplified through his teaching over three thousand students regardless of their social class. Confucius as the Teacher Master is acclaimed over the course of history, surviving into the era of modernity. The ongoing relevance of Confucius to contemporary East Asian educational identity is evident, for example, in the establishment of Confucius Institute (孔子學院) in 2004[3] and the nationwide celebration of the Teacher's Day on Confucius birthday in Taiwan. The cultural power of Confucius as educators' role model is reflected in the historically ingrained norm of the primacy of teaching, instructing and enlightening students throughout Taiwanese educational institutions, regardless of the level of education with which the institution is concerned, or the particular role focus of the academic professional. However, the coming of NHE as the dominant discourse, with the associated prioritization of research and the emphasis on 3-I outputs as part of annual academic performance appraisals, promotion criteria and the HEEACT funding regime, raise the question of what is currently happening to the traditional Confucian, educative values in Taiwanese HE.

THE TEACHER'S DAY PROTEST, THE MEDIA REPORTS AND THE AFTERMATH

The Teacher's Day celebration ceremony in Taiwan is normally the occasion for celebrating the success of the recipients of Outstanding Teaching Awards (OTA) to thank them for their excellence in teaching. Teacher's Day is rich in Confucian symbolism, as it falls on September 28 annually to celebrate the birth of Confucius. On Teacher's Day, across Taiwan, virtually all educational institutions from primary schools to those in higher education hold similar festive activities, of which the awarding of OTAs is normally the highlight. However, at a collegiate ceremony of celebrating annual Teacher's Day in 2010, Professor Guo – an academic in the Politics Department at the National Chengchi University (NCCU) – caused a scene and caught media's attention by wearing a vest inscribed with "Contract not renewed" on one side and "Outstanding teacher" on the other to protest against the enforced end to his academic career despite his teaching excellence as recognized by an OTA award from his university. The protest incident gained wide media coverage the following day. In the public outcry that ensued, Professor Guo came to be represented as a kind of modern-day Confucius figure, ousted by current reforms of the Taiwanese HE. His forced early retirement as an educator who had chosen to concentrate on teaching and persistently resisted the publishing and the associated performance management games (Professor Guo had refused to be evaluated for 18 years prior to his Teaching Day protest) became treated by the public and the media as symbolic of the growing marginalization of teaching and the demise of its historical significance in Taiwan vis-à-vis research and the production of publications. Various media outlets ran very similar stories on the protest, so here we turn for illustration to the journalistic reports of one particular national newspaper.

The United Daily News ran a complete coverage of the incident as well as raising several related issues in follow-up reports. It ran news reports on the protest immediately after the incident and followed with three more news reports including one special report to highlight what was at stake in the protest incident. The reports

told the story of the incident, situated it in its immediate context and placed it in a wider context, i.e. the practice of academic evaluation and promotion in higher education. They included views from the officials of the MOE, and the university's Students' Association and Teachers' Association. From the amount of coverage, as well as the tone and the contents of the follow-up and special reports, it was obvious that the media was supportive of the protest incident and critical of the university and the underlying issues.

In the immediate aftermath, the protest has gathered much momentum by attracting the following: (1) concurrent support for Professor Guo at the Teacher's Day celebration ceremony by some of the ceremony participants, (2) unanimous support from Students' Association of the university voiced by the president of the association, (3) five weekly public forums hosted by the Teachers' Association of the university largely induced by the protest incident and (4) the broad support of media as noted above. The snowballing support represented various-dimensional discourses of local resistance to the marginalization of teaching vis-à-vis research. This was epitomized, in particular, in a key question that reverberated throughout the resistance network following a headline that had asked whether Confucius himself would survive in the present-day academia (Wang, 2010). Wang's special report article (ibid), published two days after the protest incident, questioned whether anyone who, like Professor Guo, chose to focus on teaching at the cost of research and publications could avoid suffering the same fate and what this implied for the future of education in Taiwan. The special report proceeded to claim:

> "大學評鑑制度重研究、輕教學，曾讓大學老師感嘆，如果孔子接受教師評鑑，恐怕也是不及格。"
>
> ("That the evaluation system of universities/colleges placed its focus on doing research and thus not valuing teaching has made university teachers lament that if Confucius received annual evaluation, he would probably not have made it through the evaluation.")

This sentiment was echoed throughout the protest support network. After the incident, the president of the Students Association voiced his views on the association's web pages and asked: why cannot an excellent teacher be allowed to stay in his teaching post? After all, a large proportion of the population in an academic and educational institution was constituted by students. Writing about how he felt about the course of *Chinese Ancient Philosophy* instructed by Professor Guo, the SA president concluded:

> "這樣好的老師不能被續聘，我無論如何是無法接受的，我感覺到我的受教權被剝奪。"
>
> ("As for such a good teacher whose work contract was not renewed, I absolutely cannot accept the result. I have felt that my right to education has been withdrawn.")

In the course of Chinese Ancient Philosophy, Confucius and his teaching would occupy a prominent place. The performance appraisal failure of Professor Guo, a

teacher of Confucius's philosophy and recipient of an Outstanding Teaching Award was thus at once highly ironic and highly symbolic.

Formally, the protest incident and the public outcry have failed to change anything. A Politics professor had dedicated decades of his life to the education of his students and to the resistance to the growing marginalization of teaching and the increasingly publication-skewered mind-set (Giacalone, 2009) of NHE-induced obsession with academic performance measurement. His resistance culminated in the Teacher's Day protest, but, despite the support of the media, the Students' Association and the Teacher's Association, his career ended prematurely. The university responded to the public outcry simply with a statement, saying that every faculty member should abide by the regulations and accept the criteria of the annual performance review. Officials from the MOE stated that they respected the university's decision, which was within the University Law. If Professor Guo were indeed taken to represent a modern-day Confucius-like figure of a great educator and to stand for the importance of HE teaching as a worthy academic pursuit in its own right (as opposed to an increasingly lesser appendage to research activity), we would be left with the sad vision of a perishing Confucius in Taiwanese NHE.

THE TAIWANESE JOURNAL PUBLISHING GAMESMANSHIP: TWO EXAMPLES

To consider whether the protest incident had left any longer-lasting effects on the further-flung parts of the Taiwanese academia, we conducted in-depth, explorative interviews with two senior female professors from different universities and working in the field of Management. We chose Management as another non-STEM subject that, whilst not being in immediate disciplinary vicinity to the sources of the protest incident, could offer some comparison to the fields of Politics and Philosophy, from which the protest had originated. We chose to focus on senior academics because the length of their experiences of the HE sector would mean a more longitudinal view of the NHE-induced changes. Additionally, there is indication from previous literature that senior academics, by virtue of established networks and reputations, as well as the nearing retirement, may be better placed to resist the NHE-induced pressures (Harley & Lee, 1997). In terms of institutional locations and roles, *Interviewee B* was based at a prestigious research-oriented university and *Interviewee A* was based at a mid-ranking university and held a key administrative position in addition to research and teaching duties. Both of them were involved in all three areas of research, teaching and administration.

In each of the semi-structured, 2-hour-long interviews, we asked our interviewees about their experiences of the "publish or perish" phenomenon, including their journal paper submission experiences, because we wanted to understand if and how they played the 3-I game, as well as what consequences the game playing had for their academic practice overall. After all, the issues behind the protest incident have largely to do with the willingness and ability to play the 3-I game successfully. We also asked our interviewees directly for their commentaries on the protest incident,

finishing with the *United Daily News* question of whether Confucius would survive the modern-day academic evaluation.

Interviews Findings

In a nutshell, whereas our Management interviewees were both well-aware of the protest incident and sympathetic towards the sentiments behind it, the momentum of the protest had not led to direct resistance where their own academic practices were concerned. This inertia seemed to be underpinned by their shared belief that any immediate individual resistance to the 3-I phenomenon and to the prioritization of research over teaching was doomed to failure unless structural changes took place at the level of MOE. As *Interviewee A* put it:

> “所以除非教育部改，要不然這就會是一年一年，這樣run下去，升等的關係。結構會影響行為嘛，這些所謂規定，這些遊戲規則會影響到人要怎麼去玩這個遊戲，所以除非教育部改，要不然，這就會是一年一年，這樣 run下去 會越演越烈這樣。”

> “[Things would continue running as they are] unless the MOE makes some changes in terms of academic promotion. Structure change would change the behavior… Those so-called regulations for the [publish or perish] game will affect how game players play the game. Therefore, unless the MOE changes, year after year the game will be continuing and getting even more frantic.”

Both interviewees also shared a dislike of the 3-I phenomenon. *Interviewee A* insisted that, personally, she preferred playing the role of a teacher because it was “far more important than doing research”. “But what is the purpose of the establishment of a university? Isn’t it education? Isn’t it to educate our next generation?” she asked in the interview. Both interviewees stated that the current criteria of evaluation, whether those of the annual performance appraisal or the evaluation of universities, were very biased. *Interviewee A,* in particular, insisted that there was the need for fairer criteria and practice for evaluation of academics based on different attributes of various academic fields. Yet she also acknowledged that the present criteria and practice could not possibly be changed overnight. A key reason given for this was the belief of just how deeply ingrained the 3-I phenomenon has become in Taiwanese HE – in fact, both interviewees saw the focus on SSCI journals as more totalizing than what their academic colleagues experienced in the Western countries:

> “我是比較負面啦！也不是說負面，就是沒有必要玩的這麼過火，聽說SSCI裡面的期刊，就是要能夠放入SSCI的期刊的pool的話，聽說也是要加入會員要繳錢才加進去，但是就我所知歐洲有一些期刊根本不屑於SCCI這個data base嘛，　他們自己很好的話，他們根本不需要成為SCCI的pool，這樣，那用這樣去judge一個學者，我是覺得不完全正確啦。那最近這幾年都玩的很過火啊，尤其是教育界這樣子，就是衝量啊也不管的。”

("I am holding a negative attitude, not entirely negative though. The point is that it is not necessary to play the SSCI game so fervently. I have heard that to join the SSCI pool, a journal would only need to pay a sort of membership fee then it gets to become an SSCI journal. From what I understand, some European journals do not even want to belong to this database. Their own journals are already good enough and it is not necessary for them to join the SSCI pool. So, you see, to judge an academic [using SSCI publications] is, I think, not entirely correct. The thing is that over the recent years, playing the SSCI game has been too much, especially within [higher] education. Only care about the quantities of pushing for scholarly publications.") (*Interviewee A*)[4]

'我認為，這是它marketing的手法啦，那所以搞的變成說，現在就是說，我覺得有一些，國外可能有一些學校，可能它要 face 這樣的競爭的一個環境嘛， 所以，它好像也會去 我覺得它們也有一點點受到影響啦，但是真的沒有像我們這麼瘋狂啦'

("I think this [SSCI-orientation] is a kind of marketing technique. So, the subsequent result has turned out to be like this. I believe there are some, some foreign universities which would be affected [by SSCI-orientation] under the pressure of facing such a competitive environment. But they are not as crazily frantic like us [chasing SSCI index factors].") (*Interviewee B*)

Both interviewees gave examples of their Taiwanese colleagues' 3-I game playing behavior to illustrate the extent to which the publishing game shaped academic work and identities in Taiwan. *Interviewee A* talked about a colleague who said he did not care about the result of the teacher evaluation students gave. As long as he could get his research results published in SSCI, he could then be academically promoted. The rest was not important. *Interviewee B* shared the example of another colleague, who had returned to Taiwanese academia upon the completion of a Doctorate in the US, and whose former, American supervisor submitted their co-authored paper to a new journal with a very strong editorial board. The paper was accepted. The supervisor felt happy about the result and told the supervisee of the acceptance, expecting his supervisee's jubilation. Much to his surprise, the supervisee was devastated upon learning that this new journal was not an SSCI journal and had no impact factor. She complained to her supervisor about submitting the paper to a non-SSCI journal because it was not easy to come up with a paper of good-quality. She literally said "I am finished! I am finished!" because she had no idea when she would produce the next research paper ready for scholarly publication. *Interviewee B* insisted that this example was not an invented joke even though it was tinted with some ridiculous element. She added that she had never met any foreign academics who would place the same sort of emphasis on SSCI journals.

Because both interviewees saw the 3-I phenomenon as totalizing, it should come as no surprise that they both admitted to actually actively playing the 3-I game themselves to the best of their abilities and despite their self-proclaimed personal

dislike of the publish-or-perish culture. The game playing had the consequences of additional demands on time and effort, as well as additional personal expenditure, such as in the case of *Interviewee A*, who had to pay for the English translation of her research papers. Both interviewees shared that they actually started targeting the SSCI journals from the very beginning of their academic careers, because SSCI publications were so central to promotion mechanisms. *Interviewee B* had managed to become more successful in SSCI terms than *Interviewee A,* and they both attributed their degrees of success at least in part to the relative quality of their written English. In respect of the latter, both interviewees felt disadvantaged in the global 3-I game by having to submit articles in English as a foreign language. They developed different strategies to cope with this issue. So, *Interviewee B* always wrote in English herself and never paid for translation services. She did suffer from much paper rejection initially, but managed to eventually improve her acceptance ratio. On the other hand, *Interviewee A* was aware of the weaknesses of her English skills, and partially relied on the services of professional translators. *Interviewee A* also tried to further improve her chances with other strategies, such as co-authoring with her supervisor. *Interviewee A*, in particular, was clearly highly emotionally invested in the publishing game: she talked about the sweet taste of her first high-impact-factor publication success, as well as the feeling of depression brought on by paper rejection.

As for the question in the news headline and the struggle between the 3-I and Confucius discourses embodied in it, our interviewees echoed respondents of Harley and Lee's (1997) study in seeing the growing prioritization of research over teaching as proceeding from the initial 3-I-driven and problematic division between teaching, research and service. Both of the interviewees questioned these divisions (*Interviewee B* suggested, for instance, that "teaching, when you update your teaching materials, … should be considered as a research process"). They saw the wedge driven between the spheres of academic life, combined with the growing pressures on academic time, as increasingly presenting academics with a choice of specialization rather than an opportunity to effectively synthetize the spheres. In other words, NHE reforms were increasingly turning the dynamics between teaching and research into a zero-sum game, where no such game was actually necessary or desirable (cf. Guo & Troy, 2009)[5].

Once the zero-sum game was created, the 3-I-skewered governmentality ensured that research won over teaching in the battle for scarce time and resources, resulting in the marginalization of teaching, which, for our interviewees, led to a concern for equal rights. *Interviewee A* questioned the inequality of the division of the criteria of 70% research, 15% teaching and 15% service in the performance appraisal form, comparing this to "missing the woods for the trees." She emphasized that:

> "有的老師他很會教書，有的老師他就很會做研究，那有的老師就很會social引進了很多計劃進來，那也許他們對學校都是很有貢獻的。"

> "Some academics are good at teaching while others at research or even some others have good connections and thus can introduce a lot of huge projects for the university. Each part should be considered as having equal contributions to the university" (*Interviewee A*)

Interviewee A said that she felt "very powerless" about this devaluation of teaching. Despite being more successful at the 3-I game and the personal preference for research over teaching, *Interviewee B* was similarly concerned about these consequences of the fervent 3-I gamemanship in Taiwan.

In response to the question as to whether Confucius would have survived in the present-day Taiwanese academia, both interviewees answered with the resounding *NO*.

CONCLUSIONS

In this chapter, we have examined the Taiwanese 3-I phenomenon as a symptom of the local arrival of the global interconnected chain of discourses and practices associated with the NHE (Jary & Parker, 1998). We have noted the 3 aspects through which the coming of the NHE is evident (Shore & Wright, 2000b, p.61) in Taiwan, including, firstly, the regulatory reforms that have brought the new discourses and "sematic clusters" of "research excellence", "performance" and "global competitiveness" into existence, and, secondly, the new "institutions, norms and areas of expertise," including HEEACT and PDFURC, that the new discourses and semantic clusters have hailed into existence, and through which they are being implemented. The third aspect, namely the 3-I version of the "publish or perish" academic culture as "the effect of these norms and practices – embedded in mundane routines and duties – on conditions of work and thought and… on the way in which individuals construct themselves as professional subjects," (ibid.) has been the focus of our empirical investigation. We were interested, in particular, in the unfolding trajectory of the 3-I phenomenon and its effects on Taiwanese academic work, as well as in the interaction of the 3-I with the discourses surrounding the figure of Confucius as a traditional role-model in Taiwanese education. We wanted to explore the potential of Confucius as a rallying point for Taiwanese resistance to the 3-I developments.

Empirically, we have looked at the ways in which Taiwanese media reports, published in the aftermath of a 3-I protest incident, have framed the incident as a struggle between the traditional Confucian educative values and the 3-I publish-or-perish values. Key to this framing was the public representation of Professor Guo as a modern-day Confucius-like educator, perishing under the conditions of the contemporary Taiwanese academia. We have discussed the momentum that the protest incident had gathered as a rupture point in the discourses of NHE, but also its ultimate failure to alter the 3-I discourses and practices. This was particularly evident in the fatalistic attitude of our senior Management academic interviewees, who fully supported the sentiments behind the protest, but, despite their shared critical attitude,

personal dislike of and the feeling of being disadvantaged by the 3-I phenomenon, actively played the 3-I game because they saw the phenomenon as totalizing and thus impossible to resist on the individual level and without a significant structural reform.

It is, of course, possible to endlessly speculate (without any conclusive evidence), whether the actual Confucius – had he been alive today – would publish or perish under the modern conditions of NHE. This question is in many ways nonsensical – it presupposes that it is possible to lift an individual out of their historical context and replant them elsewhere in order to see whether they would survive, and without fundamentally altering them in the process. Precisely for this reason, Confucius could not be Confucius today. What is interesting about the protest incident we analyzed was the way in which the Taiwanese media, public and individual academics have reconstructed their own, symbolic version of modern Confucius as a particular ideal academic type – one focused on teaching and rejecting the 3-I game – and embodied it in Professor Guo's protest. Yet, so far, this has proved to be a weak specter, and we are left with the vision of this symbolic Confucius perishing in Taiwanese HE.

It also leaves us with the vision of a bleak trajectory for Taiwanese NHE, in which Taiwanese academics join in the global chasing of citation indices and impact factors, despite their personal values and judgment as to what really matters in higher education. The interpretations by our interviewees of the 3-I phenomenon being "crazier" than abroad are pertinent here, in so far as they are contrary to the experiences and interpretations of many academics in the West. As a point of comparison, Management academics in the UK feel under enormous pressure to hit not just any SSCI journals, but only SSCI journals with an impact factor of over 1 or 2 (depending on their university), and only SSCI journals rated as a "4" or a "3" on the (UK) Association of Business Schools journal list (Macdonald and Kam, 2007; Willmott, 2011). It is possible that at least some of the feeling of academic powerlessness in relation to the publish-or-perish imperative comes from each nation's idea that they, in particular, are the worst affected and therefore their resistance is futile. This suggests that at least some of potentially effective resistance to the 3-I phenomenon is being preempted by the local uncertainties and confusion over what is happening elsewhere in the NHE world. We propose that an increased multi-way global dialogue about the NHE and its effects, such as the publish-or-perish culture, would be helpful in terms of evaluating the full weight of consequences of, as well as finding viable alternatives and mobilising more effective resistances to the 3-I phenomenon. Perhaps a stronger international resistance network would be able to contstruct a more robust and resilient version of a modern-day Confucius – for instance, one that would oppose the NHE short-termism and unsatiable institutional and personal desire for competitiveness, recognition and immediate glory with the timeless horizon of sagedom unconcerned with the lack of greatness in its own time.

NOTES

[1] For example, in the UK the corresponding NHE-inducing regulatory reforms, in the form of whitepapers, government reports and reform acts, were introduced in the 1980s-1990s, the Higher Education Funding Council for England (the HEEACT equivalent) was established in 1991, and the first version of the RAE took place in 1986.

[2] The original text appears in Book 15 of Confucius' Analects.

[3] Confucius Institute, focusing on the teaching of Mandarin Chinese, was established by China in 2004 and has since expanded to 358 branches worldwide.

[4] This quotation highlights the kind of uncertainty that Taiwanese publishing game players experience in the face of the lack of clarity about other local translations of the global 3-I phenomenon, which tends to both distort it elsewhere and exaggerate it in the native context. For instance, the inclusion of journals into SSCI cannot be bought with a membership fee, but often requires persistent lobbying on behalf of editors. On the other hand, Interviewee A is correct in saying that some Western journals do not wish to be included in the citation indices – in fact, the infamous 2008 collective refusal of journal editors of the entire field of the history of science, technology and medicine to take part in a new index – the European Reference Index for the Humanities (ERIH) – is the case in point that journals can successfully resist citation indices. We will return to the point about uncertainty, distortion, exaggeration and consequences for resistance in the conclusion.

[5] We thank the anonymous reviewer who helped us with the clarity of this point.

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CHUING PRUDENCE CHOU

HAS HIGHER EDUCATION LOST ITS SOUL?

BACKGROUND

In 2003, in order to enhance the level of national competitiveness in higher education, the Ministry of Education (MOE) in Taiwan adopted the SSCI, SCI, and Engineering Index (EI)[1], as the gold standard for evaluating the level of research of the nation's 145 colleges and universities. The primary evaluation process involved a counting of the actual number of faculty publications in these three citation indexed databases as to determine the final ranking of each and every college and university (Chang et al., 2009).

THE SSCI SHOCK

Upon the release of the first-round university evaluation results to the media in 2005, some traditionally renowned public, research universities were reported as having been "left behind." National Chengchi University (NCCU), for example, has spearheaded the training of the nation's leaders and top researchers across humanities and social science disciplines over the years, but was now ranked forty-eighth (48/145), based upon the Thomson Reuters SSCI standard (Chou and Ching, 2012). Likewise, most teachers colleges have long been stores of rich cultural knowledge, expertise, and resources needed for the training of the nation's K-12 teachers, but now were receiving ranking numbers near the bottom of the scale (Mok & Tan, 2004; Lai, 2004).

LOCAL PUSHBACK

Critics across Taiwanese academe and society immediately filed motions of dissent, arguing that the citation index databases are not appropriate and fail to serve as an effective evaluation mechanism of the diversified knowledge production and dissemination which are so valuable in the social sciences and humanities curricula (Chen and Qian 2004). The three databases designed by the Thomson Reuters can only serve as a reference to understand STEM (science, technology, engineering and mathematics)-related journals that are being updated in the US. What has been left out, however, includes a broad spectrum of disciplinary knowledge that addresses cultural issues, education equity and social justice, multicultural education, local

C. P. Chou (Ed.), The SSCI Syndrome in Higher Education, 141–149.

democracy, human rights, and education policy studies, just to name to few, that are equally valued in the US academe (Archambault et al., 2006). The citation numbers and impact factors in these three US-based databases cannot at all reflect the research quality and social impact of Taiwanese scholars, researchers, and activists, who are deeply devoted to knowledge creation across the disciplinary spectrum of social sciences and the humanities.

Even in 'industrialized' nations, seldom have colleges and universities used the number of publications counted in these citation databases as the baseline criterion for the tenure review process and/or for program evaluation. In most cases, the tenure review process has been comprehensive in both its nature and scope, and the review committees also take into account the local contributions of the college/university, the diversified approaches to program initiatives, both quantitative and qualitative aspects of student evaluations, and the scholarly contributions to social services of the university, professional associations, and the local communities. In other words, the number of publications in these databases has never been the dominant norm of reference for these institutions, let alone those who have a high regard for the development of well-rounded scholarship and a more holistic, democratic public life. In fact, the "one-size-fits-all" approach to basing a nation's academic evaluations on the number of publications in the Thomson Reuters databases would nevertheless highly skew the substance of contributions from local public intellectuals and their institutions who have dedicated themselves to pushing the disciplinary boundaries for new knowledge that can best address local conditions (Lai, 2004).

Moreover, it is highly problematic when the SSCI has not yet included, at the least, most US and Taiwanese top-tier research and scholarly journals in, for instance, public administration, public policy, law, or science education, which are of equally significance to foster academic learning and cross-cultural exchange of knowledge needed for the advancement of democratic public life[2]. Scholars have continued to assert that the number of scholarly publications in these databases can serve only as a piecemeal approach to understanding a one-sided representation of how scholars have contributed to academic discourse in those journals included by the Thomson Reuters in these databases (Chou, Lin, Chiu, 2013; Yu, 2010). It is then more than deeply problematic when a nation's governing class establishes its evaluation and funding mechanisms on these three databases as a means of judging the quality of multi-faceted disciplinary knowledge which is equally pivotal to inform and enrich the scientific knowledge production.

PUBLIC CALL IN QUESTION

After the release of the first-round university evaluation in 2005, the government's managerial class further promoted the SSCI as the standard for "gate-keeping knowledge" that determines what constitutes valid forms of academic knowledge.

With the saturation of league tables and the "top-down pressure" to comply with the MOE's unprecedented, grand project of the "Plan to Develop First-class Universities and Top-level Research Centers" (thereafter referred to as PDFURC), the new generations of scholars were forced to generate "SSCI, SCI, and EI-only" publications.

The good intent behind such a large scale of investment in higher education, as many scholars have pointed out, may push a nation to enhance the quality of its post-secondary institutions and better prepare its education workforce, and a well-rounded evaluation could have served as a golden opportunity to decolonize Taiwanese academe in the post-colonial, post-Martial Law era. However, the current national evaluation trend, spearheaded by the MOE, has almost brought Taiwanese academic research into a decade of re-colonization. The overt emphasis on the imported, US-based, Anglo-American English-oriented "official knowledge", other than on the ground up knowledge that pays due recognition to the needs of local communities, has had a more than damaging effect on Taiwanese academe. In particular, the situation has significantly degraded the culture-based research production, which has been at the heart of democratic participation and public life.

The controversies over the SSCI 'heat wave' were intensified in a tilt toward the "English-only" policy, when English became the predominant *lingua franca* that dictates the formats of academic presentation and writing for a variety of cultural groups that comprise a majority of the non-English speaking and English as the second language (ESL) Chinese/Taiwanese audience. The blind pursuit of 'objectified' knowledge, with the uncritical reception of the announced 'objective standards' (ones that lump together science, the social sciences, and the humanities), in the alignment with the "World Class Rankings" has discouraged or even marginalized local endeavors by teachers, parents, scholars, researchers, and activists who have had a long-time commitment to local democracy and human rights matters, such as education equity and social justice, cross-border knowledge, and inter-cultural understanding (Academic Ranking of World Universities, 2007).

The top-down pressure to comply with the SCI, SSCI, and EI standards soon became the best practice mandated by the MOE, when it began using the first-round SSCI evaluation as the major source upon which the nation's funding decisions in higher education were based. Later on, the National Science Council (NSC) and some foundations joined the bandwagon, pushing for the SCI, SSCI, and EI as key standards and aligning the objectives of knowledge production with the MOE's push for the nation's major project of PDFURC, its follow-up 'alphabetical soup' initiatives, and the resulting funding competition guideposts. The major initiatives include "Producing World-Class Universities in Five Years with Five Million," "Nationwide Assessment on Post-secondary Institutions and the Key Guidelines on Higher Education Funding," "National Academy Annual Brown Bag Lectures and

Academy Awards," and "National Science Foundation Knowledge Projects". The government's wild pursuit of world-class university rankings was characterized by the ontological, epistemological, and methodological standardization of knowledge production across Taiwan's academic communities (Chou and Ching, 2012).

The PDFURC project has resulted in a large-scale restructuring of higher education's key dimensions of development and knowledge production, and has been found to threaten faculty tenure reviews, performance evaluations, institutional support of research, and pay rate flexibilities. The policy's hegemonic nature and the political economy of restructuring have led the nation's higher education toward nowhere, but quantifiable numbers rooted in the US-based, STEM-oriented SCI, SSCI, and EI databases. Consequently, the effect has been completely sabotaging and "brain-draining" a generation of professors and researchers in the fields of education, social sciences, and the humanities, as institutional priorities and college teaching have suffered in the quest to meet these number-crunching mandates.

Moreover, the over-privileging of the STEM and medical fields, and the forceful co-opting of the knowledge review standards for social sciences and the humanities into the same ontological, epistemological, and methodological criteria have produced a "thin" scientific knowledge that fails to address the cutting-edge of the nation's uniqueness and prestige, a culturally-responsive system of operation that should help a nation to fare well in global competitions. Such dead-end pursuits continue to reflect in the latest release of the MOE's proposal on the "Second-Stage PDFURC", which highlights "Essential Science Indicators" (ESI) as one of the four key standards to evaluate, rank, and fund the academic programs across the disciplines. According to MOE, the newly invented ESI standard incorporates SSCI and SCI, with a downplaying of the significance of SSCI in the composition of ESI in counting what constitutes 'valuable' scholarly contributions. The traditionally renowned dimensions, such as book publications and international recognitions, were cast aside with an even lower point value.

THE PRICE WE PAY

Not surprisingly, after the MOE's higher education promotion policy in research publication, the number of SCI, SSCI, and EI publications in Taiwan grew rapidly. The National Taiwan University, for example, was also 'officially' ascended into one of the top 100 world-class universities. Many departments and schools nationwide have gone to great lengths to refurbish themselves with new assistive technologies and hardware. Policy entrepreneurs are celebrating the following achievements: (1) TEM education has ranked Taiwan in the top 10 publishers of scientific papers in the world; and (2) the citation of Taiwanese STEM papers is now also among the top five in the world (Dutta and Mia, 2010; Chou and Ching, 2012).

However, a great deal negative news has never been reported: when college teaching responsibility fell into a secondary position, giving way to the SCI, SSCI, and EI publications in these years, overall higher education development has gradually lost the interest of a sustainable, long-time investment for students both at the level of K-12 and higher education. Teacher education programs have long been many nations' critical bases for ensuring the quality of pre- and in-service teachers. When the nation is driven to pursue SCI, SSCI, and EI standards, teacher preparation in higher education is no longer the first priority among STEM faculty. In the context of Taiwanese education, previously, instructors on average had devoted more than 70% of their weekly duty hours to making sure they were bringing out the best of their students' potential, but now they face severe challenges to fulfill this promise, as the tenure review process is almost solely dependent upon their number of SCI, SSCI, and EI publications.

The severity of this situation has recently intensified with the emergence of a vicious circle concerning research productivity, teacher education preparation, and the overall quality of K-12 STEM instruction. The "academic job prescription" for professors, pre- and in-service teachers, and K-12 students, respectively, are significantly reduced to a vehement competition to meet the "points" game. Studies have shown that the trickle-down excellence was recklessly endangering the academic fulfillment of K-12 students in STEM subjects when curriculum became a highly standardized chore of teaching to tests. As a consequence, the low academic interests have manifested itself in a gradual decline in student achievement in recent years (Hou, 2012).

There is also a need for a critical assessment of the actual contributions being made by this new wave of SCI, SSCI, and EI publications in terms of the improvement of local economies and communities. If the goal of the PDFURC projects is to boost national competitiveness, it becomes a matter of concern when the visibility of academic cultural intellectuals from the social sciences and humanities has dropped drastically in the Asian-Pacific region of academic public life. Within the current wave of "international cooperation", ironically, it has been found that these intellectuals almost stopped publishing books that had been once emulated and widely circulated within the Asia-Pacific region and beyond (Chou, Lin, Chiu, 2013).

A CALL FOR COLLECTIVE ACTION

I conclude this chapter with the inclusion of a petition presented to Taiwan's government authorities and academic community, and signed by 2,355 leading academics from (humanities, social sciences, and sciences) and people of interest at home and abroad. The full text appears below:

In order to stop government agencies and academic research associations from using the SCI, SSCI, and EI as the best practice for academic research and public

policy evaluation, we collectively sign this petition concerning the following issues http://memo.cgu.edu.tw/yun-ju/CGUWeb/NCCUEdu2010/HomeCosigntory.htm

1. Stop using SSCI as the best practice for evaluation and funding purpose:
   We urge both the Ministry of Education (MOE) and the National Science Council (NSC) to stop using SSCI, or any other index citation databases, as the best practice for evaluating the quality of academic research in social sciences and the humanities in higher education institutions; nor should SSCI, or any other imported index citation databases, serve as the baseline criterion for making major funding decisions related to academic research in social sciences and the humanities. We urge that both the MOE and NSC do not limit to only SSCI journal citation databases, and give concordant weights to publications in social sciences and the humanities.
2. Recognize the rich variety of academic research practices in social sciences and the humanities:
   We urge the MOE and NSC to include book publications and other formats of scholarly contributions in the evaluation criteria for social sciences and the humanities, and to stop using the SCI, SSCI, and EI to oversimplify the academic and social impacts of scholars in the social sciences and humanities.
3. Establish institutional profiles tha recognize the local visions and development of academic disciplines:
   We urge the MOE to recognize both the horizontal and vertical diversities among Taiwanese higher education institutions and the epistemological diversity within and among science, the social sciences, and the humanities. Institution profiles and evaluation criteria should address the ecological complexities of these differences, and especially the seemingly divergent intellectual development between research universities and technology-focused colleges and universities.
4. Foster a culture of social responsibility and academic professionalism:
   We urge the MOE to recognize the intellectual responsibility in producing culturally-responsive research and academic practice. Accordingly, the evaluation process should encompass, at the least, mentoring programs and peer- reviewed mechanisms that encourage the local-based knowledge production that connects academic research to various local communities (i.e., local schools, cities, townships, etc.).
5. Create culturally-responsive evaluation criteria for social sciences and humanities:
   We urge the MOE and NSC to reassess the validity and reliability of the current evaluation criteria (which have appeared scientifically thin and socially irresponsible) and to expand the dimensionalities of citation indexes, as shown in Table One, as an alternative means of administering comprehensive evaluations of programs in social sciences and humanities:

Table 1. Suggestions of Evaluation Criteria for the Social Sciences and Humanities

Index Dimensions		*Contents*
1. Journals	1-1	The number of peer-reviewed journal articles published, nationally and/or internationally[3]
	1-2	The number of serving on journal editorial boards or committees, nationally and/or internationally
	1-3	The number of non-peer-reviewed journal articles published, nationally and/or internationally
	1-4	The number of papers published within one's own home institution
2. Books	2-1	The number of peer-reviewed books published, nationally and/or internationally[4]
	2-2	The number of non-peer-reviewed books published, nationally and/or internationally
	2-3	The number of pieces of creative writing published, academically and/or non-academically
	2-4	The number of books and/or book chapters published and the percentage of contributions made
	2-5	The number of textbooks and/or textbook chapters and the percentage of contributions made
3. Conferences	3-1	The number of papers presented at professional conferences, nationally and/or internationally
	3-2	The number of paper published based on national conference presentations
	3-3	The number of papers published based on international conference presentations
	3-4	Whether serving on the conference executive committees and/or the percentage of contribution on editing the conference publications (i.e., proceedings, newsletters, etc.).
4. Research Projects	4-1	Whether serving as the principal investigator of a national research project (i.e., those sponsored by the MOE or NSC)
	4-2	Whether serving as the principal investigator of an international research project
	4-3	The number of research projects sponsored by professional associations and academic institutions, nationally and/or internationally
	4-4	The number of research projects sponsored by government agencies and/or other types of social organizations (than those listed above), nationally and/or internationally

Continued

Table 1. Continued

Index Dimensions		*Contents*
5. Reviews	5-1	The number of book reviews published
	5-2	The number of textbook reviews published
	5-3	The number of op-ed articles and/or commentary articles published in national and/or international newspapers and magazines
6. Prestige Scores	6-1	The number of serving in national and/or international professional committees
	6-2	The number of awards and other forms of recognition received from international organizations
	6-3	The number of awards and other forms of recognition received from national organizations
	6-4	The number of leading professional organizations
	6-5	The number of invited speeches, performances, and/or expositions
	6-6	Whether serving as a visiting scholar at an internationally recognized university
	6-7	Whether serving as a chair professor or visiting professor at a nationally or internationally recognized university
7. Online Publications/ Citations	7-1	The number of published papers, and /or editorial/commentary articles in Google Scholar citation counts
	7-2	The number of papers in the university archives
	7-3	The number of papers in the Airitilibrary (i.e., CEPS online journals, and CETD publications) and the number of citations indicated by other authors
8. Others	8-1	Whether serving on academic curricular development committees
	8-2	The number of graduate advisees
	8-3	The career development and outcomes of graduate advisees
	8-4	Whether serving as the principal investigator of a governmental project

NOTES

[1] SCI, SSCI, and EI are citation index databases owned by the Thomson Reuters, a for-profit private company in the U.S. www.thomsonreuters.com

[2] According to the Washington and Lee's Law Review Rankings (http://lawlib.wlu.edu/lj), SSCI only includes twenty of the top-fifty law review journals. The database contains only a limited selection of legal journals and law reviews. Prestigious journals such as *Harvard Journal of Law and Technology* and those from Yale University, Columbia University, and UC-Berkeley are not yet included in the SSCI.

[3] In the case of education, SSCI has neglected, among others, the Bibliography of Asian Studies Online, Current Index to Journal in Education, Education Resources Information Center (ERIC) Database, Educational Administration Abstracts, Scopus, and Wilson Education Index.

[4] Project MUSE, for example, serves a better venue for evaluating scholarly contributions. It provides a full-text access to current content from over 400 titles representing nearly 100 not-for-profit publishers. As a collaboration between the participating publishers and Johns Hopkins University libraries, MUSE also includes a wider range of publications from other worldwide prestige publishers and professional associations, such as Oxford University Press, Duke University Press and University of Texas Press, which can serve as a valuable basis for understanding scholarly participation in public life.

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key words: academic colonization, academic performance, academic research, empirical study, higher education evaluation, Humanities and Social Sciences, "I" idolization, interviews, "I"-oriented evaluation, SCI, SSCI, teacher evaluation

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Key words: sci and ssci, peer-based and bibliometric methods, basic research, applied research, imitation, academic networks or communities

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