PKU-Stanford Joint Forum, 4-5 November 2016 Building World-Class Universities: An Institutional Perspective

SESSION 2

The World-Class Multiversity: Global Commonalities and National Characteristics

Simon Marginson ESERC/HEFCE Centre for Global Higher Education, University of London s.marginson@ucl.ac.uk / +44(0)7876323949

Title slide

[Preliminaries]

In this paper World-Class Universities are understood as internationalized multi-disciplinary and multi-purpose research universities closely engaged in the global knowledge system. The term 'global' refers not to the world and everything in it, but to phenomena, systems and relations that are specifically planetary in scale, such as the world ecology, or knowledge in mathematics. As the session title suggests, the paper is positioned at the intersection between the national and global contexts of institutions, and institutional structures and processes.

Coverage of paper

The paper starts with a disclaimer. In the mid to late 1990s I researched changes in governance and internal university organization and culture in Australian higher education, published as *The Enterprise University* in 2000. Since then my work has been largely on higher education *systems* rather than the inner life of institutions, globalisation and the global higher education environment, student mobility, Asia-Pacific universities, inequality and higher education, and public goods in higher education. This suggests Session 1 or 4 of the Forum, not Session 2. You will probably find that the paper, positioned at the intersection between the context of the institutions and its structures and practices, seems lopsided, stronger on the 'outer' part of the intersection than the 'inner'.

The World-Class University is both a national and a local strategy in the global context. All three dimensions, global, national and local are in play. Global flows of knowledge, organizational templates, ideas, people and capital; global visioning, comparison and ranking; global competition and cooperation, all continually affect higher education but the effects are not identical everywhere and nor is the capacity to affect the global space. But this space in higher education is vectored by nation-state as well as by global flows. This paper will assert the continuing importance of the national dimension, including variations in political cultures, state policies, and educational cultures, in contrast to the simpler analytical picture of higher education as essentially global/local, as a network of individual universities in the global setting.

Method

But what method do we use to understand higher education, which is both common and diverse across countries? The core question here is the relation between general and particular, the question social science often gets wrong. In international and comparative studies there is a natural tension between generalizing theories and arguments, and the contextual understanding of cases. We need common categories and concepts to map the field and compare nations and institutions with others. We need 'sameness' to make

comparisons, but there is a danger the tools we use to theorize the field will obscure 'difference', hiding from view what is contextually distinctive in particular cases (just as global rankings occlude knowledge not published in English). Worse, the generalizing tools used by comparative scholars often simply reflect the norms of the home country of the scholar. This can be called 'single country myopia'.

Global commonalities affect nations and institutions differentially. If we view those global commonalities through the lens of only one national culture we must miss much. For example, as Yang Rui has pointed out, internationalization strategies are a linear virtue in English-speaking systems, in that they bring the world closer without the disruptions of self-transformation. But incorporating an international global or cross-border element into higher education is more double edged in China, where the internationalization strategies of WCUs are partly in tension with national identity and habits.

The way through is to generalize on the basis of a number of different socially embedded national and institutional cases, sorting the globally embedded practices from those that the nationally embedded, or are both together. To do this, scholars from different traditions and using different theoretical sets need to work together, and listen to each other.

Modelling the context: role of the state

There are three main scholarly perspectives on the institutional context. The first is the neoliberal, which emphasizes institutional competition in the global higher education market, a perspective consistent with global league tables of the *Times Higher Education* kind. We are all very familiar with this imaginary. The second perspective is institutional theory, which understands higher institutions as working to a universal organizational script that embodies essentially American practices described as a 'world polity', so that as with the world economic market model, global influences are seen as essentially uniform and predominantly top-down in character. The third perspective can be called critical political economy, which includes scholars such as Stanford's Martin Carnoy, Sheila Slaughter, Gary Rhoades, Susan Robertson and Rajani Naidoo in the UK and Imanol Ordorika in Mexico. Critical political economy brings the nation and the state back in. The state sees universities as primary sources of economic innovation and global competitiveness. While research universities are self-determining actors with agency, and respond to the global setting rather than being blindly moved around by global forces, these universities are also positioned in, and shaped by, state agendas and funding. In other worlds, in nearly all countries where we look the state is as significant a driver of WCU developments as the institution. In addition, and in contrast to the neo-liberal perspective, the critical political economy school argues that higher education does not function like an orthodox market, for several reasons: it produces positional goods, basic research is a public good in the economic sense, and states never let go of higher education. They never really deregulate.

Arguably, nation and state in particular are downplayed by the neoliberal and institutionalist schools, for different reasons. The neoliberal argument emerged at the high point of 1990s deregulation in trade and finance when many observers, not just neoliberal economists, thought the nation had was decisively losing ground in human affairs. That assumption has been knocked from the ring by the course of world politics since 9/11 in 2001. Amid the politics of terror, security, migration, opposition to free trade, war in the Middle East and tensions on the borders of China and Russia, 1990s globalism is looking increasingly frayed. Arguably also, it is a mistake to develop a general theory of higher education on the basis of the American case—even though the US was the first high participation system, has the most

brilliant set of research universities, and in the work of Clark Kerr, Martin Trow and Bob Clark provides us with our only developed theory of higher education. The United States, which has the most limited of the limited liberal states in the John Locke/Adam Smith tradition, has evolved as highly atypical in relation to the configuration of universities, civil society and the state. In America's broad, fecund and creative civil society, American civil organizations, for example the independent accreditation agencies often carry out roles performed in the state sector in other countries. Conversely, universities are defined as autonomous state institutions in most countries but tend to be treated as independent civil institutions in the US. The US strong tradition of separated but interlocking powers enables universities to appear as independent institutions without peeling way from society, or rendering incoherent higher education policy.

American universities are positioned at a long remove from the limited liberal American state, more so than autonomous universities elsewhere. Nevertheless, American WCUs are an important point of reference for government; they are closely affected by law, regulation and budgetary decisions; and they are embedded in the broader American political culture. They share the common patriotism, especially when abroad, and carry out research crucial to the military. They are not the disembedded free-wheeling global actors sometimes imagined in theory. The fact that American WCUs have quasi-imperial reach does not make them less national, or state-free.

Both the national context and local institutional contexts articulate global relations and flows in higher education. The articulation varies by time, nation, institution, by domain of activity, and by whether the state coordination is achieved using legal, financial or episodic political interventions. But the national political, economic, social and cultural context *always matters*. No one in universities anywhere likes undue state inference. At the same time, in most countries it is taken for granted that higher education—including regulated private education in many countries—is a matter of public interest. And 'public' inescapably means politics and the state, as John Dewey pointed out. In particular, in political cultures with a tradition of comprehensive rather than limited liberal states—for example this includes in different ways China, Russia and the Nordic world—higher education cannot be meaningfully separated from the state, any more than it can be separated from society.

High citation papers in mathematics and physical sciences

But the deeper question is not whether states and national variations should be taken into account when we theorize the World-Class University, it is whether there is or can be more than one kind of WCU. The templates for comparing performance, especially rankings, are ferociously homogenizing. It looks as if only one WCU is possible. But we all know that this is not the end of the story. Even the same normative science indicators are achieved in diverse ways.

For example, as the table taken from the Leiden university ranking shows, both China and the US are exceptionally high performers in research in mathematics, physical sciences and engineering. Using as the indicator the number of high citation papers in the Web of Knowledge data, papers in the top 10 per cent of the field by citation rate, Tsinghua is now world number 1 in mathematics and computing. This cautions us against the assumption, widespread in the literature, that only American or 'Western' academic organization, and the notion of academic freedom in Belrin's sense of negative freedom, freedom from constraint by the state, are compatible with stellar creativity on the institutional scale. The US and China differ markedly on state-university relations, internal governance regimes, and

practices of academic freedom, which turn on opposing orientations to the state. In China, academic freedom is understood more in positive that negative terms, as an expression of responsibility and honour in the service of the state, broadly defined. But Chinese and American universities share world leadership in mathematics, physical sciences and engineers. Mathematicians need freedom to create. Are the US and Chinese universities *the same kind* of WCU? That's a question for all of us. I think 'yes' in some respects and 'no' in others. It is already clear that China at the system-level, the Post-Confucian system, is distinctive.

Worldwide tendencies

But let me return to the institutional context .What then are the main features of the institutional context, what are the main configurations of institutions in that context, and how do these factors vary between national systems?

The world higher education environment is shaped by five interacting tendencies: organizational modernization, massification, the WCU movement, globalization and marketization. The first two are the most universal.

1. *Organizational modernization* is the roll out of institutional forms such as executive leadership, performance management, output models, efficiency and budget controls, transparency, accountability and responsiveness to users. It is common not just to higher education institutions but all forms of complex organisation, as institutionalist theory shows. Organizational modernization, the new public management, flows like water across every border like other cross-border cultural movements in the past, from the radiation of agriculture across pre-industrial Eurasia and the Americas, and the world religions, to the spread of cities, communications and youth cultures.

Regional Gross Tertiary Enrolment Ratios (%), 1970-2013

- 2. *Massification*, the growth of tertiary enrolments towards 50 per cent of the school leaver age cohort and beyond, the level of high participation systems, is happening in almost every country with GDP PPP per capita above \$5000 US, and some countries below \$5000. Forty years ago no country was at 50 per cent. By 2014 one third of all national systems, 56, had reached that level of participation in advanced education.
- 3. Because of the cost of research infrastructure, the *World-Class University movement* is not as ubiquitous as massification

Universities with more than 10,000, 5000, 2000 and 1200 journal papers, 2006-09 to 2011-14 (Leiden U data)

but in 2014 more than fifty countries published over thousand papers in Web of Science, a sign of indigenous science capacity, 44 had at least one top 500 university in the Shanghai ARWU, and more would be there if they could. As these data from the Leiden ranking show, the world knowledge system and the WCU movement are driving significant growth in the number of universities producing science papers at each quantity level in the table.

4. *Marketization* is more nationally and culturally specific and less complete in its impact. Business models and quasi-market competition and mixed public/private educational financing, have remade higher education in the English-speaking world, much of Eastern Europe and parts of East Asia and influence emerging countries like India, Brazil and the Philippines. They have less impact in much of Western Europe. Tuition is free or low cost in Germany, the Nordic countries, France, and public education in Turkey and Mexico. The political economy of higher education

- financing is closely affected by history, national political cultures, and the division of labour between state and family. It is *not* universal.
- 5. All national systems and higher education institutions are touched by *globalization*, but the extent to which they are open and shaped by globalization varies from case to case. The most globalized aspects are related to research knowledge, networking, and information flows, including global referencing and ranking using comparative data, all of which by their nature cannot be limited to national containers or blocked at the border. Global people mobility is more open to national regulation. There are also organizational practices that spread between countries and generate a de facto global commonality, led by powerful exemplars, without being constituted by global systems as such—for example convergence in forms of executive leadership, quality assurance systems, outreach activity, and quasi-entrepreneurial roles.

Cross-border isomorphism in organizational practices should not be confused with the impact of genuine global systems, such as are manifest in the science disciplines, research publication, and ranking. Global *systems* are more uniform and homogenizing. Governments have less scope to negotiate global systems, and universities must simply position themselves to advantage within them. In cross-order borrowing there is much more adaptation and nuancing going on. Thus similar looking academic practices, such as the autonomy of disciplinary researchers, are attached to both independent and state-directed universities, in contestable democracies like US or Korea, semi-authoritarian regimes like Russia, one-party corporate states as in Singapore or one-party dynastic states as in China. Of course all isomorphistic practices started somewhere, but cross-border borrowing patterns do not need to be explained by an imagined 'world polity' or other central agency, or domination by one nation. Much organizational change in higher education takes this form.

Configurations of systems and institutions

What configurations of institutions and systems have emerged in this context? Historically, national systems vary markedly in institutional size and design, and in the extent of horizontal diversity, vertical stratification, or both. For example, competitive unitary systems in UK and Australia exhibit modest horizontal diversity and steep informal hierarchy differentiated by research and student selectivity. Nordic and German-speaking systems use horizontal diversity in binary systems though informal vertical differentiation is gaining ground and there are some mergers across binary lines. The US, China, Japan, Korea and Taiwan have complex systems with multiple missions. In China and the United States, institutional classifications order an explicit hierarchy while also managing a mission differentiation with horizontal as well as vertical implications. Some countries house research inside universities, some in separate academies and laboratories. There are also many kinds of specialist institution. Russia still has specialist institutions that service specific industries: the engineering university MISIS in metallurgy is one of these.

Nevertheless, in many countries the landscape is shifting and overall patterns can be discerned. Here I draw on a cross-country project on higher participation higher education systems, in the final stages, that includes United States, Canada, Australia, Ireland, Norway, Finland, Poland, Russia and Japan.

First, the continuing rise of what Clark Kerr called the multiversity, the large comprehensive research university, to a more dominant role within national systems, plus growth in the typical size and scope of multiversities. Second, on the other side of the coin, a reduction in semi-horizontal binary sector distinctions and single-purpose institutions (with some national

exceptions). Is there overall decline in diversity in the horizontal sense? I think 'yes', except in on-line forms and for-profit private sectors, which are peripheral to high participation systems. Third, growing internal diversity within the comprehensive multi-purpose institutions. Fourth, in many countries systems are becoming more vertically stratified, in status and resources.

The global multiversity President

In 1963 Clark Kerr described the features of the multi-discipline multiversity as aggregation of more and more diverse functions and activities, accumulation of social and economic status and resources, external extension and internal heterogeneity. It was powered by differing and often conflicting normative principles, including inquiry and knowledge creation, transmission of ideas and values, pastoral care, community service, collegial fellowship, managerial efficiency, and revenue generation. It was replete with competing internal interests and external stakeholders. It became ever more 'multi' via additional disciplines, fields of training, research agendas and funding, functions, activities, constituencies and personnel. It engaged with business, the professions, the arts, government, cities and local communities. Since Kerr this quasi-corporate form of executive led, strategy driven, performance managed institution, has spread everywhere. States like multiversities. A growing proportion of institutions want to be a multiversity. Existing multiversities expand. It is striking that institutional higher education has developed and continues to develop by growth and combination, rather than the de-bundled missions and nimble specialization suggested by the market imaginary. It is also striking that the vast majority of research intensive WCUs embody the large comprehensive multiversity, a conjunction partly produced by the rankings.

Size, shape and motor of institutions

Why does the multiversity accumulate more size, parts and functions? At a given time, all universities want to grow their social status and prestige. For leading WCUs, resources are the means to the essential end, which is social weight. Though WCUs accumulate and aggregate they also need to sustain student selectivity and concentrate research activity, which sets natural limits on expansion. Both expansion strategies, and concentration generate institutional status. What is striking is that the equilibrium between these two strategies, quantity and quality, is now fixed at a much larger scale. Managed growth—in student numbers, research activity, site and/or buildings—has become central to the strategies of many top flight WCUs, including some of the most elite.

Research multiversities various combinatory forms to secure size and reach, including mergers, multi-site and cross-border institutions. Often more agile and ambiguous structures are facilitated by a shift from state administration to site governance, within the framework of state steering and accountability. Everywhere innovations are supported by the evolution of multi-site and multi-level management, information systems and devolved budgeting.

Some WCUs remain small—in 2016 Caltech has 1001 first degree students and 1251 at graduate level. Yet size is a principal tool of Harvard. The case of Caltech also shows there is more than one path to social weight: Caltech with 2255 students has a research budget the same as that of Toronto with 86,709 students. Institution by institution the two drivers, selectivity and aggregation, combine in varying ways. All follow selective or aggregative logics variously in different parts of the operation. The multiversity form is loose enough to permit that. This variation in strategies, plus variation in the contents of what is selective and aggregated, is key to the individual distinctiveness of WCUs.

Growth is favoured by states, which devolve an increasing number of social and economic functions to universities and are more supportive of inclusion than exclusion. Larger multiversities also have a larger capacity to respond to global challenges, not least the symbolic challenge of rankings.

Conclusions

I have pointed to the centrality of nation and state in the context of WCUs. Institutions are patterned by both the national and the global. It varies by domain. Practices cutting across national systems include global comparison and ranking; research, science journals, structures that embody knowledge such as departments and research centres. Global research competition exacerbates tendencies to the separation of teaching and research. Doctoral education is becoming more global. The Anglo-American PhD is gaining ground.

In internationalization, both national and institutional agents shape global objectives and strategies, for example in the WCU movement itself, and in determining the volume and the type of inward student mobility.

Other domains in higher education are primarily motored at national level, such as academic career structures (hierarchies, relativities, entry, credentials, routes to permanency) but are affected by cross-border borrowing. Relations between state, society and WCUs shape funding and tuition, forms of regulated institutional autonomy, the scope for institutional initiative, and practices of academic freedom. The role of faculty in institutional governance varies within countries and between them. It seems to peak in top flight WCUs. The scope for executive leaders seems greatest in institutions where capacity is being built.