

# Global imaginings and strategies in higher education

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**Abstract.** The paper focuses on the creation of global spatiality by higher education systems and institutions. After a preliminary discussion of the worldwide higher education setting, it reviews strategies including national investment in innovation, research capacity concentrations, commercial marketing of international education, knowledge hubs and university/city synergies, region-building as in Europe, networks and alliances, e-delivery and off shore campuses. It then considers two meta-strategies with differing implications for global creation and forms of regulation: the WTO/GATS modelling of higher education as a world trading system, and global university rankings. The paper notes that all of these moves can be variously observed as acts of the imagination, acts of production and acts of regulation; and considers relations between them, noting the paradox of global openness/closure that often seems to attend particular global spacing making ventures in higher education.

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**CV and publications**

[http://www.cshe.unimelb.edu.au/people/staff\\_pages/Marginson/Marginson.html](http://www.cshe.unimelb.edu.au/people/staff_pages/Marginson/Marginson.html)

**Current books**

Marginson, S. (ed.) – *Prospects of Higher Education: Globalization, market competition, public goods and the future of the university*, Sense Publishers, Rotterdam (2007) <http://www.sensepublishers.com>

Peters, M., Marginson, S. & Murphy, P. - *Creativity and the Global Knowledge Economy*. New York: Peter Lang (2009) <http://www.peterlang.com>

Marginson, S., Nyland, C., Sawir, E. & Forbes-Mewett, H. - *International Student Security* (forthcoming)

'By the practical, I mean everything that is possible through freedom'.

Kant, *Critique of Pure Reason*, 828

## Introduction

If a single global space of research and higher education can be observed then it is a global field in constant motion. This mobility is fragmented and uneven. The global field exhibits gaps and closures, and is vectored by hierarchies and concentrations of resources and authority. Every research university in the world is now visible to every other but the global flows across national boundaries, and between institutions with different missions and agendas, are uni-directional as well as reciprocal. This global dimension of research and higher education is constructed, the site of bold strategies for re-imagining space and identity; the increasingly numerous projects designed to form, manage and exploit global connectivity in the 'knowledge economy'. Some projects are grounded in government. Some are driven by the money-making and status building ventures of universities. Others are the outcome of research initiatives and knowledge systems. They vary in scale and scope. But all are transformative.

The paper focuses on the creation of global spatiality by higher education systems and institutions. After a preliminary discussion of the worldwide higher education setting, it reviews strategies including national investment in innovation, research capacity concentrations, commercial marketing of international education, knowledge hubs and university/city synergies, region-building as in Europe, networks and alliances, e-delivery and off shore campuses. It then considers two meta-strategies with differing implications for global creation and forms of regulation: the WTO/GATS modelling of higher education as a world trading system, and global university rankings. The paper notes these moves can be variously observed as acts of the imagination, acts of production and acts of regulation; and begins to examine relations between these acts, noting the paradox of global openness/closure that often seems to attend particular global spacing making ventures in higher education.

## The worldwide higher education setting

### A note on the 'global'

In this paper the '*global*' dimension of action refers to a worldwide or planetary dimension; to spaces, systems, relations, elements, agents and identities constituting of and constituted by the world as a whole or large parts of the world. For example it includes the worldwide system of English-language research publication. 'Global' rests on a particular configuration of general/ particular. The global dimension does not mean total or universal. It does not necessarily include all national and local elements, only those part of the constitution of the world as an integrated world. *Globalization* refers to processes of convergence and integration on a world or large regional scale, in any domain of human (Held et al., 1999) and natural activity. While international relations can involve just two nations ('inter-national'), globalization may involve many nations and tends to draw the local, national and global dimensions together (Marginson & Rhoades, 2002). The effects of globalization are not constant

but vary over time and between different parts of the world. Europeanization can be understood as one form of globalization. It is useful to distinguish between global convergence and global integration. Convergence means coming into proximity without blending into one system. With integration a single system is formed.

Understandings of global phenomena are bedevilled by the reifications that litter the discussion. Some still see globalization solely as a neo-liberal ideology or social imaginary, and/or a process of world economic marketization; though these ideas are not as influential as they were. Others interpret global phenomena through the prism of a global/local dyad driven by outer to inner effects. But globalization is much more than this. Expectations by 'glocal' theorists that globalization would sweep away the nation-state were misplaced; for example in higher education where national funding and regulation remain crucial. Nevertheless globalization has altered the potentials and agendas of national governments and generated new kinds of local-global-national configurations. For example, it is associated with the partial 'disembedding' from the nation-state of institutions that raise incomes offshore, establish campuses outside their nation of origin, or seek accreditation from governments other than their own (Beerens, 2004; Marginson & van der Wende, 2007). Globalization is also associated with the growing potential of global public goods produced outside national frame, such as the unfunded contribution of research in one nation to other nations and to the collective global system (Marginson, 2007b). In sum, the effects of globalization are mediated by local and national factors. Both vice versa also apply.

It is necessary to interpret the space-forming initiatives in the context of what we know about the worldwide higher education setting. The next section of this paper will briefly discuss the content of the 'global knowledge economy', reflecting how the nature of knowledge has shaped the outcome of neo-liberal influenced reform in a more global era, and the implications for regulation; the worldwide growth and pluralization of research capacity; global academic mobility, the worldwide growth of tertiary student participation, and the growth of global student mobility.

### **Regulation and the 'global knowledge economy'**

For most of the last two decades policy interpreted the 'global knowledge economy' as a field of direct value creation and capital accumulation, as a huge set of business opportunities where much was happening but curiously, much came to naught. The failure of the Internet to fit the capitalist imaginary was passed over (not without thoughts of privatizing it). The standard trope about universities and research was that they were becoming centres for the production of intellectual property. That's what the 'knowledge economy' was about, turning science into a saleable commodity. Basic academically-controlled research needed to be socialized and incentivized into its destiny as platform of the IP-creation chain, by modelling it as a mini-market economy of its own. The point about global connectivity was that it expanded the possible sales. Much energy was expended on New Public Management reform of innovation systems and universities consistent with this vision. The NPM introduced tighter state controls based on devolution, selective freedoms that increase the entrepreneurship of agents along pre-determined lines, combined with the specification of outputs and the use of accountability and audit systems to sustain external control. This vision of an IP-led knowledge economy was shared by the critical literature on 'academic capitalism', which said both that the commodification of

knowledge was inevitable, and that it should be resisted (are we doomed to endless reiterations of Gramsci's wry remark inside the fascist prison, about pessimism of the intellect and optimism of the will?) and (unlike the courageous Gramsci) tended to read global developments through the prism of national rather than global systems.

Actual developments have turned out to be rather different. While the role of IP and direct value-producing knowledge has grown, without doubt, there has been a spectacular expansion of both non-market communications and freely accessed knowledge in the economic form of not market commodities but public goods. With world-wide Internet use at 1.5 billion (Internet World Stats, 2009), bringing an incalculable extension and intensification of communicative relations, and the new potentials for unregulated imaginings and productions that are emerging, it has all morphed beyond the reach of the 1980s Thatcher imaginary (it might be breaking through the cultural limits of economic capital itself, like discarding an old skin). It is true higher education is the ultimate point of origin for much commercializable IP but the relation is scarcely one of linear cause and effect. Only a minority of the economically sexy knowledge is initiated by companies that use universities as incubators. Sometimes university companies or partnerships capture the value of IP, but this is the exception not the rule, and largely confined to sectors such as biotechnology and electronics. The data show that despite strenuous efforts to reorient university research to commercial IP production, higher education's role in the direct creation of saleable knowledge remains modest. In national innovation systems, even the USA, income for research purposes rarely covers more than 5-6 per cent of the costs of university research.

Significantly also, quasi-markets based on centrally managed competitions have been more widely practised than genuine economic markets. State control has been remade in terms of market labels and market-like instruments, sourcing the recurring justifications from visions of a commercial k-economy together with the reading of globalization as global economic competition, and in the process state direction has achieved an unprecedented potency in many nations. But because the IP-led knowledge economy has turned out to be a paper tiger the universities have never been reformed to fully conform to it. Of the elements that comprise actual capitalist economic markets the only ones that have been widely introduced into higher education and research are the product format, and competition between producers. Tuition prices remain capped, student numbers are more supply driven than demand driven, there is no open entry to university markets, many activities are subsidized, etc. Also, while public utilities, transport and communications have been privatized in many countries, the privatization of health and education on a major scale has been limited to a much smaller group. No nation has privatized basic research. But neo-liberal versions of NPM continue to provide ideological cover for fiscal restraint and are variously used to legitimate traditional bureaucratic rule, declining fiscal support and the downward transfer of political responsibilities for outcomes and 'quality'.

Knowledge regulation is not going to go away, public goods can always be annexed for private purposes, and the collective interest is shaped by states as well as by production and society outside states. There will also be continuing efforts to alienate bits of the common communications architecture for the purpose of charging unproductive rents, or for political control. But regulation is being rethought and it maybe that the neo-liberal paradigm is decisively losing ground (though the NPM is not). What the OECD calls 'open science' connects to the capitalist value chain in

many industries at many points, but these instrumental economic connections can rarely be fully anticipated. Open source knowledge, sourced through research publication or papers posted directly by the creators, feeds into the innovation programs of business, states and NGOs and is often used for purposes never envisaged by the original creators. The OECD (2008a) argues that privatizing the IP early tends to retard the contribution of innovation to capital accumulation, and NPM'ing university research might be bad for creativity. This is a major shift.

Stiglitz (1999) argues, convincingly, that in economic terms knowledge is primarily a 'spill-over' and a public good. It can sustain a property regime only between the point of creation and initial dissemination, the period in which there is first mover advantage. Once disseminated, knowledge remains useful but it is non-excludable and non rivalrous and its market price is zero. This decisively shapes the potentials and limits of research in relation to business and industry. A similar but more qualified point can be made about teaching in higher education. Teaching combines potentials for both public and private goods. The credential can be marketized; but the knowledge that is acquired through teaching and learning is a public good creates that lifelong benefits for the individual, and social benefits for all, that no human capital equation ever captures. In developing education as an export commodity, the Anglo-Westminster countries have found a way to directly secure economic value from it, in the face of the part market failure of teaching as a market commodity. This is a remarkable achievement, one that might be considered the highpoint of neo-liberal regulation in education, though it depends on a tightly structured set of barriers and incentives (e.g. the Australian system, which is so well organized that education generates 6 per cent of national exports), and on underfunding and partly emptying out the public good benefits. It also rests also on the maintenance of a pre-global discriminatory boundary between citizen nationals and foreigners. This is why full commercialization has never been applied to all domestic students, anywhere in the world, though it is considered good enough for a large bottom tier in nations such as Brazil, Japan and the Philippines. (Presumably the education provided in diploma mills is considered to have no spill-over benefits).

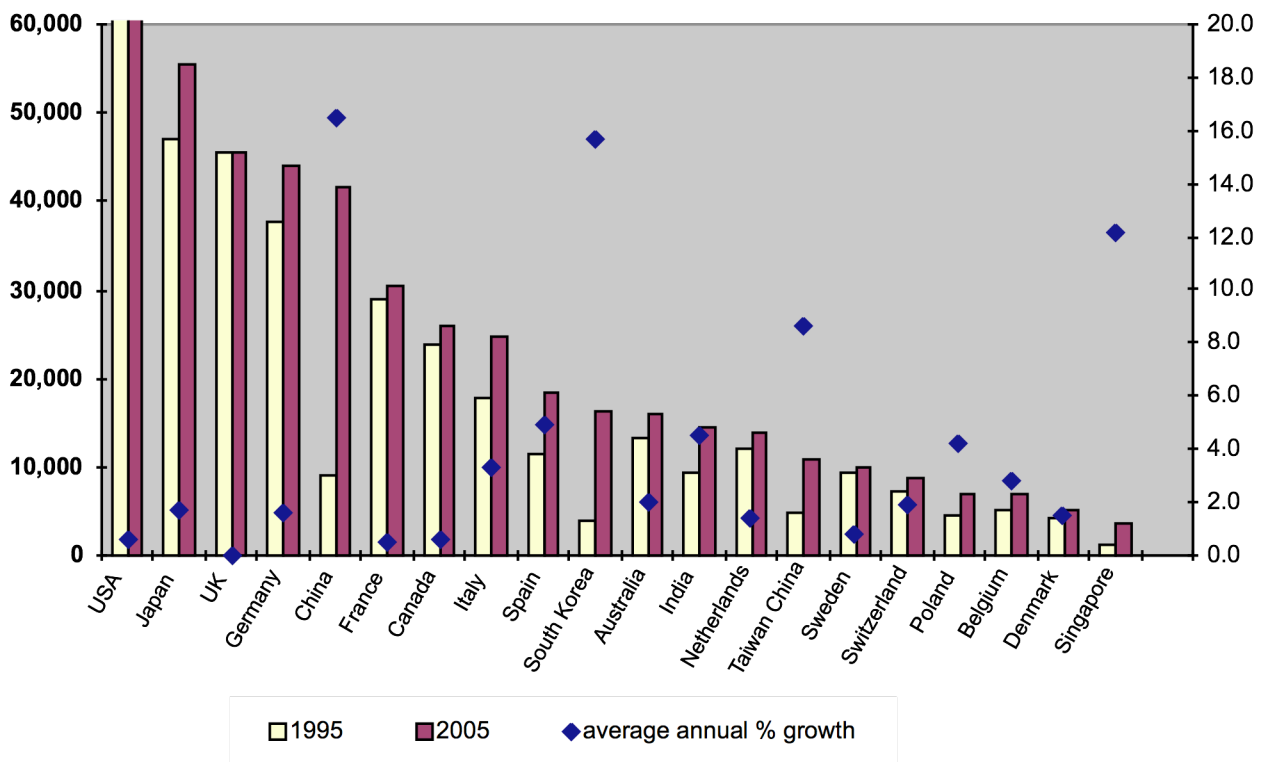
In other words, in both teaching and research, the indirect economic role of higher education – its contribution to conditions capital accumulation in other sectors of the economy – is more important, than its role in directly creating economic value in its own right. This is because knowledge is most of time a public good. And this political economy of knowledge is an exogenous factor that national and meta-national regulation must deal with, if they are to augment their materiality, their capacity to marshal forces and part shape outcomes and agents, as the OECD wants them to continue to do. A related point can be made about the role of status and positional factors in research and universities, and the tendency of both great academies and newer university enterprises to pursue their own interests regardless of the ins and outs of regulation. Always touched by government, they are never wholly reducible to it, especially when reaching beyond the national border. (Below I expand on this point, and its growing salience amid communicative globalization).

### **Growth and pluralization of research capacity**

As well as the global dissemination of knowledge through primarily English language publication (the downside for cultural diversity will not be discussed in this paper but

is significant), the last decade has seen a notable growth and pluralization of basic research capacity in the sciences. Above all this is the story of the rise of a national knowledge economy in China but it extends also to other 'Confucian' regimes. From 1995 to 2005 the annual number of scientific papers produced in China rose from 9061 to 41,596. Between 1995 and 2005 China's annual output of papers rose by 16.5 per cent per annum. The annual rate of growth in South Korea was 15.7 per cent, in Singapore 12.2 per cent and Taiwan China 8.6 per cent (NSB, 2008). In 2003 Singapore invested 2.24 per cent of GDP on R&D, a higher figure than Canada (World Bank, 2008). In contrast, between 1995 and 2005 the number of papers produced by nations in the EU rose by 1.8 per cent per annum, with rapid growth taking place only in weaker outliers such as Portugal and Turkey; and in a small number of rising knowledge economies such as Finland. Papers produced in the USA increased by just 0.6 per cent per annum. In the UK the number did not increase (Figure 1). These nations already had an established research capacity.

Figure 1. Growth in annual number of scientific papers, selected nations, 1995-2005



Note: USA total papers 205,320 in 2005. Source: NSB, 2008.

As with outputs so with inputs. Between 2000-2005 R&D investment in China rose by 18.5 per cent per year. In the process, even though the bulk of the investment goes to R&D in the state enterprises, universities in China have been transformed. They have been augmented also by an equal rapid growth in student numbers (see below) and state investment in buildings and facilities. In contrast Finland led R&D

investment in the EU at 7.8 per cent growth per year. Investment in Germany rose by 2.5 per cent and France 1.3 per cent per year (OECD, 2007b). Between 1996 and 2005 China's investment in R&D as a proportion of GDP rose from 0.57 to 1.35 per cent (World Bank, 2008). In 2006 China became the world's number two R&D spender. Maddison (2007) has prepared a long run study of the share of world GDP by region, for OECD. In 1700 China and India produced 46.7 per cent of world product, reflecting their rural demography, with 21.9 per cent in Western Europe including the UK and 0.1 per cent in the USA. In 2003 the USA was on top with 20.6 per cent of world GDP. By 2030 China is expected to return to its historic position with 23.4 per cent of world GDP, compared to 17.3 per cent in the USA, 13.0 per cent in Europe and 10.4 per cent in India (Maddison, 2007, 103). In its investment in knowledge production, India is not in the same category as China. Between 1995 and 2005 the rate of growth of scientific papers in India was 4.5 per cent per annum. Total papers production at 14,608 in 2005 was one third that of China (NSB, 2008).

The rise of research and higher education in China does not challenge the globally dominant role of US higher education. This has been amassed over a long period; is applied with coherence of purpose and supported by the USA's leading position in the military, political, economic, technological and cultural spheres; and feeds into self-beliefs about intrinsic superiority and exceptional character, which when applied from a position of hegemony are reproductive of that hegemony. The hallmarks of dominance are scale, resources, the concentration of research capacity, the ability of US institutions to attract global talent, and the advantages accruing to an English language nation. The United States has the world's third largest population, much the largest GDP, and a GDP per head above \$40,000. The next higher education nation, Japan, has less than half the population, one third the GDP and per capita income of just over \$30,000. The USA also spends a higher proportion of GDP on tertiary education than any other nation, 2.9 per cent in 2003. This was about \$360 billion in 2005 in Purchasing Power Parity (PPP) terms. Japan spent \$51 billion, Germany, Korea and India each \$27 billion, France \$26 billion, Canada \$25 billion, the UK \$21 billion and Australia \$10 billion (Marginson, 2008b. Data for China are not available). In other words, US investment in higher education is *seven times* that of Japan and 17 times that of the UK. From this position the USA operates as a global graduate school, subsidizing two thirds of its foreign doctoral intake of 100,000 students per annum with American university scholarships (IIE, 2007) and providing work opportunities as graduate teaching and research assistants. Many foreign doctoral graduates enter post-doctoral programs and become academic migrants. American universities are more flexible and open than those of most other nations.

US researchers retain a very strong role in the core discipline groups. In 2008 European nations aside from the UK housed 88 of the top discipline groups as measured by the Shanghai Jiao Tong University Institute of Higher Education. The UK had 50, the USA had 308. There were just ten in China, nine in engineering. (However there is a lag of up to a decade between changes in relative research outputs and change in rankings position, due to measurement-related factors).

**Table 1. University discipline groups in the world top 100, by nation, Shanghai Jiao Tong rankings, 2008**

	Physical Sciences	Engineering	Life Sciences	Medicine	Social Sciences	total
USA	59	49	62	61	77	308
UK	9	7	11	12	11	50
Canada	2	6	5	6	7	26
Germany	7	1	6	6	0	20
Japan	7	7	3	2	0	19
Netherlands	1	3	2	5	4	15
Switzerland	3	2	4	2	0	11
Australia	1	3	4	3	1	10
Israel	4	2	2	2	0	10
China	0	9	0	0	1	10
Sweden	2	3	2	2	0	9
France	5	2	1	1	0	9
Belgium	0	2	3	2	1	8
Italy	2	3	0	1	0	6
Denmark	2	1	1	1	1	6
South Korea	1	3	0	0	0	4
Singapore	1	2	0	0	1	4
others	1	2	1	3	1	8

Source: SJTUIHE, 2008

## Global academic mobility

There is a strong discursive bias in favor of cross-border academic and student mobility in governmental, university and public policy discourses. The Organization for Economic Cooperation and Development (OECD) is a quintessentially global advocate for the easing of the cross-border passage of skilled labor, including faculty. For the OECD, global mobility is at one and the same time an ideal to be achieved, a modernization strategy that some nations carry out more effectively than others, and an already existing economic and social reality that must be accommodated. Pro-mobility arguments are consistent with professional norms, and are 'largely diffused and taken for granted in many higher education and research public policies, so that specific measures and devices are developed by many countries in order to promote academic mobility' (Musselin, 2004, 56). And it is true that while mobility carries with it the danger of brain drain, national system closure is not an option. The dilemma for nations is that people cannot be stopped from leaving without decoupling the nation from the global innovation system; and the more the national system is open to incoming talent, the more it can compensate for outward movement.

This near universal enthusiasm in favour of personnel mobility; echoing as it does but in a weaker manner the actual fluidity of ideas and academic knowledge, which know no border; is nested in assumptions about the internationalized character of universities, about the freewheeling transferability of intellectual capacity and doctoral training, and about the contribution of mobility to innovation and competitiveness. The

assumption that mobility is *desirable* blends into common sense perceptions that mobility is *increasing* that can mislead scholars, university leaders and policy makers. However, despite the discursive bias in favour of mobility, in many nations there are barriers or partial to inward passage by non-citizens into the career structures of national innovation systems. Mobility is uneven by nation and academic category. It is clear that academic mobility is increasing in some areas but not necessarily in others.

Data collected by the American National Science Board in the USA reveal an almost universal trend to growing cross-border collaboration in research (NSB, 2008). This is confirmed by individual country studies in Europe and elsewhere (e.g. Enders & de Weert, 2004). In the last two decades there has been significant growth in short term cross-border movement for academic purposes; research, conferences and short exchange visits; and recruitment and teaching in the cross-border degree market (OECD, 2004a). At the doctoral level many governments subsidize foreign PhD experience, while some universities that once recruited all doctoral candidates locally are now active on the national and the international planes (Enders & de Weert, 2004, 146). To what extent does temporary academic mobility become permanent? The Anglophone countries and some others have 'relaxed their immigration laws to attract qualified and highly qualified foreigners, including students, to sectors where there were labour shortages' (Tremblay, 2005, 197). However, according to Enders and de Weert (2004, 146-147) intra-European cross-border mobility at the post-doctoral stage is probably stable. This would suggest that while doctoral populations are becoming more cosmopolitan this is not (yet?) associated with greater cross-border mobility at the later stages of faculty employment. One clear exception is the United States where the last two decades have seen growing inward movement at all levels. US higher education is the only unambiguous beneficiary of global mobility in the sector (Marginson, 2008a)

Is academic mobility confined to cross-border passage between national labour markets or has globalization promoted a distinctive global system of R&D labour as the OECD has argued, partly subsuming national labour markets? National academic career traditions are robust and often distinctive, particularly in larger self-sufficient systems such as France and Germany (Musselin, 2004; 2005); and in some European systems it is almost impossible for non-nationals to establish a permanent position. The last applies also in Korea, Malaysia and Thailand. National academic career structures are more conservative than those of many other professions, as indicated by the slow feminization of the professoriate. Despite these limitations the small global element of academic labour is growing and is pushing beyond the logic of national systems. Some academic staff have expertise and reputation that confers superior opportunities in many countries, including researchers at the peak of their fields and globally transferable teachers in finance, accounting and, until recently, computing. Global researchers are strategic for national governments and research universities, with the potential to augment both the national innovation system and the position in university rankings. It is important not to exaggerate the size of the global pool. 'One can expect international careers to primarily include a few top academics. Most others, and especially young candidates, still develop national careers' (Musselin, 2004, 72), with or without international experience.

A global mobile pool of high quality researchers does not in itself constitute a single global labour market with standardized conditions, remuneration and career structures. Rather, what we have is an American labour market that is global in reach

and sets upper benchmarks for salaries and research infrastructure. Other national research systems are pulled towards the American benchmarks by market pressures, stratifying the academic professions between a small globally mobile upper segment and the much larger group of nation-bound researchers. Singapore has set out to create a globally competitive higher education system with expatriate faculty paid at US levels. Hong Kong China is also able to fund globally competitive salaries. In mainland China a small number of academic salaries are now globally competitive, though lack of global salary comparability in the sciences remains a problem in many universities. In China's universities investment in people lags behind the spectacular renovation and new site building programs and the investments in facilities.

### **Student participation and mobility**

There is a near universal tendency to growth of participation in higher education at school leaver age and all subsequent year levels. So much so, that the recent OECD study of the demographic effects of higher education is sanguine about the effects of ageing populations on total student numbers. It is expected the fall in absolute numbers in the school leaver age group will be largely compensated by rising participation rates, including mature age growth (OECD, 2009). Between 1995 and 2006 in the average OECD nation, the educational participation of 15-19 year olds increased from 74 to 82 per cent. The participation of 20-29 year olds rose from 18 to 25 per cent (OECD, 2008b, 344). Participation in China is also expanding at all levels. Between 1990 and 2005 tertiary student participation rose from 3 to 20 per cent of that age group (World Bank, 2008). The most recent figure is 22 per cent. Between 1998 and 2005, enrolled tertiary students multiplied by 4.5 times and the number of tertiary graduates multiplied by 3.7 times (Li, et al., 2008, 5).

There are early signs of a common 'flight to education' in the global recession. Reports indicate that in the USA in 2009 both domestic and foreign student numbers have risen sharply, despite the effects of declining state-sourced revenues on supply in the public sector. In Australia domestic student applications to higher education rose by 3.5 per cent this year, after 15 years of no growth or slow growth; and early indications are for continued growth of international student numbers. If education proves to be recession proof in this sense it may reflect decline in forgone incomes, and individual strategies to build long term advantage in the job market, but also indicates the exceptional resilience of the secular trend to growth in participation regardless of the conjunctural downward movement in average private capacity to pay. Regulatory responses are mixed. Early indications are that some governments, e.g. China, will expand absolute and relative investments in education and training, and research and development, during the next few years. Others like the US state regimes will cut back spending because of declining revenues. Many governments will give priority to training programs that soak up unemployment. Regardless of fiscal policy most nations will make increased use of education in the next period.

Worldwide the number of cross-border international tertiary students is growing at 8 per cent per year, twice the rate of growth of students as a whole. From 1995 to 2006 it rose from 1.3 to 2.9 million (OECD, 2008a; 2008b). The trend is driven by the globalization of job opportunities and educational provision, by desires for migration, and by policies in sending and receiving nations that are designed to encourage mobility, including the commercial marketing of places by the UK, Australia and New

Zealand. About half of all global movement consists of movement of students from Asia to English speaking nations and another one quarter is movement within Europe.

## Creation of global spatiality

Does the state tend to monopolize the organization of space? If this was true, it is decreasingly true, and less true in a setting vectored not by corporeal territory but by ideas. No doubt the intention to regulate all space is there. But globalization, with its partial disembedding of research universities from the nation and unregulated flows of communications, information, knowledge and often people, has cut the ground from under attempts at *comprehensive* regulation of global spatiality in higher education. The absence of a global state does not help. It is true that at least one such attempt at comprehensive regulation has been made, through the WTO/GATS process; but this has not been very successful in achieving open trade (see below). Also consider the 'virtual absence' of measures for regulating the Internet delivery of degrees. In a Hobbesian world of separated, territorially-defined zones the nation remains the site of much of the political economy and most of the politics. The nation state remains powerful in making the global. But it no longer sets the horizon of the global.

By 'creation of global spatiality' I mean the construction of the global dimension as a set of spatial relations. I do not mean the 'discovery' of a new set of natural relations, borders, territories etc that has been put in place by globalization. Even if globalization was so predictable, spatiality is always constructed by human agents. Heidegger remarks in *Being and Time* (1962, 135) that the world is not 'present-at-hand in space'. There is geographic, planetary space that can be measured in kilometres but this is not spatiality; and global space-time compression means it is less decisive in setting limits. Space is given but spatiality is made. Space making in this sense involves distinctive, observable acts of economic and cultural production. It also can derive from governmental regulation. In global spatiality, where the potentials are relatively novel and the ontology is more open than at national level (Appadurai, 1996; Marginson, 2008a), it often also involves acts of radical imagining.

The more open the ontology; the less rigid (the less the unfreedoms) of causality; the more that agency, which is itself so changeable in the global setting, comes into play. The potentials of the global recall Kant's notion of transcendental freedom, the power of spontaneously originating a state, of creating an environment (Heidegger, F, p. 16). The global era offers universities and nations an enlarged scope for conscious acts of self-determination which are themselves vectors of the emerging global.

Facing the prospect of remaking themselves as global - there is no way nations and universities can block all global transformation for very long - by the same token, they have been given the opportunity to so remake themselves. To write their own recipe. Consider the way that Singapore has used knowledge economy policy to remake its national capacity and trajectory. It has securing greater autonomy and room to act while entrenching control over its active identity, which Sen (1985) calls 'agency freedom'. Globalization, and the fecund global flows, offer humans and institutions as agents an enlarged freedom from determination by geography and history. Though it must be added that both still matter in higher education, especially inherited capacity.

The paper will now briefly review each of the main forms of global space making in higher education. First, a preliminary note on how these are interpreted. We can apply several analytical criteria to the space making strategies. We can consider the extent to which they constitute innovations, new global relations. We can consider the extent they directly work the global space itself; or are largely positioning devices for individual regional/national systems or institutions, with some flow-ons in the shaping of global space. We can consider whether they are triggered by the deliberate actions of government; or alternately of higher education institutions, and/or smaller units or other agents located in them. More generally we can consider whether these strategies are regulatory projects, or annexed by regulation or have other implications for regulation. Lastly we can consider their potency, their transformative potentials in and through higher education and knowledge. All these aspects will be discussed.

### **Nation building policies**

Building national capacity in education and research to secure international competitive advantage is a strategy that is at least a century old. Since 1960 policies of nation building through education have been framed in the language of human capital theory. It is believed that competitive advantage can be created by expanding educational participation, by improving educational standards and the qualities of graduates, by importing high quality skilled labour from abroad, and by increasing research outputs and the take-up of research in industry innovation. Globalization has now raised the stakes and quickened the pace of these nation-building policies; and triggered not just national but regional strategies in Europe. There are signs that a global 'arms race' in spending on innovation is emerged. The Lisbon goal of Europe as the world's leading knowledge economy is one expression. China, Singapore, Korea, Malaysia, India and others are openly positioning themselves on the basis of claims to be a global knowledge economy; and the first three nations have invested heavily. It is likely that China's trajectory will trigger a competitive American response.

These approaches are still partly locked into commodification narratives, where the holy grail that floats tantalizingly out of reach is the mobilisation of education and research for the direct creation of value. Thus China arguably invests too much of its research budget directly in industry R&D, where much of it is squandered, and at the price of compromising market impulses in knowledge-intensive firms; and Singapore judges the potentials of research investment too much in terms of IP indicators. At the same time, the willingness of some Asian nations to hyper invest, and the emphasis in Europe on public fiscal outlays, suggests that the Anglo-American bloc no longer sets the parameters and the heyday of neo-liberal 'doing more with less' has passed.

This kind of global space making is the least innovative. It is triggered primarily by governments, and facilitates new regulatory strategies; though it also benefits educational institutions in material terms. And it is primarily a national positioning strategy rather than a strategy that sets out to directly construct global spatiality. Despite this, its global transformative potentials are considerable, precisely because fosters it a continuing round of mimetic investments. Leapfrogging moves flow from country to country on a global scale. A general growth of nation building investments advances remakes the world as a set of contending knowledge economies; and this has the incidental effect of expanding the zone of global commonality through a qualitative expansion in the weight of English language research and teaching; for it is

above all in these activities that national capacity and performance are compared. This tends to standardize global relations and monochrome the global spaces.

### **Research concentrations**

A subset of the nation building investment policies is the emphasis on concentration of research capacity, often associated with increased public investments in research, the creation of new regulatory instruments for shaping research activity, and the more intensified application of those tools. Research rankings and the innovation agenda together have highlighted the potential of research concentrations in the eyes of economists and government. The policy logic is force-fed growth. Research capacity and talent tends to attract more research capacity and talent, especially cross-border talent. Research strong universities are resource strong and can buy more talent.

The Lisbon goal of devoting 3 per cent of GDP to R&D provides a favourable policy climate for such initiatives, as concentrations are more readily pursued through increased funding to selected institutions, not redistributions. Through the German *Exzellenzinitiative* investment of 1.9 billion euros the designated universities may lead the regeneration of German capacity in higher education and research. France is pursuing a high cost merger plan that will push French institutions up the rankings. China is building a cohort of strong research universities with special funding (Li et al., 2008, 11). In the United States the winner-take-all higher education market, in conjunction with federal research funding, constitutes a de facto concentration of resources, research power and status power; so that the USA has 17 of the world's top research universities in the Jiao Tong ranking. The British research assessment exercise and the concentration of research support in leading institutions has enabled a de facto concentration; though in some national systems such as those of Australia and the Netherlands research capacity is broadly distributed with less stellar institutions at the top. Other countries such as Canada, Sweden, Denmark and Finland have fostered a small number of outstanding institutions and as in Australia and the Netherlands there are no moves to increase concentrations at this stage.

This again is not exactly a novel strategy; but as research is quintessentially global in form and effects, the common accumulation of research capacity is more transformative than, say, the worldwide expansion of student numbers. It constitutes expansion in the common pool of knowledge and intellectual reflexivities, and all else being equal this must expand the potentialities of global relations long into the future. As discussed above the peak of the research labour markets is becoming more globalized in some respects. The regulatory tools take on a common appearance, advancing the global convergence of knowledge; and constructing the 'main game' in worldwide higher education as a competition/cooperation of networked research institutions that each pursue similar priorities to those of all the others. Nor are all these priorities articulated through the prism of national interest. The global research system crosses borders. Both institutional interests and freer disciplinary interests are at play. This does not mean that global relations are necessarily less competitive.

### **International marketing**

Commercial international education, in which the part-public good of teaching and learning is produced as a private good, was pioneered by the Thatcher government in

the UK. Australia enrolled its first full fee paying students in 1987. New Zealand, the Malaysian private sector and Singapore have since followed. Other commercial providers of cross-border education include Masters programs in some European universities, English training colleges in many countries, and vocationally oriented for-profit institutions such as the University of Phoenix, which has branches in Mexico, India and Western Europe. The US doctoral sector subsidizes international education, which is treated primarily as a branch of foreign policy and research provision rather than a revenue-generating venture; but commercial approaches are used in some public institutions. In all about one third of all cross-border students are educated in commercial programs: the UK 12 per cent, Australia 10 per cent, New Zealand 2 per cent, Singapore 3 per cent and Malaysia 2 per cent, and students in the USA and other nations, including China (Verbik & Lasanowski, 2007). The worldwide value of the industry has been estimated at \$40 billion dollars USD (see Table 2).

**Table 2. Exports of education services, English-speaking nations excluding Singapore, 2000-2005 (US dollars)**

	2000	2001	2002	2003	2004	2005	growth 2000-05
	\$s million	\$s million	\$s million	\$s million	\$s million	\$s million	%
USA	10,350	11,480	12,630	13,310	13,640	14,120	36.4
UK	3766	3921	3891	4709	5627	6064	61.0
Australia	2259	2528	2897	3925	4872	5563	146.3
Canada	615	699	784	1014	1268	1573	155.8
New Zealand	257	343	632	925	998	1000	289.1
<i>total of above countries</i>	<i>17,247</i>	<i>18,971</i>	<i>20,834</i>	<i>23,883</i>	<i>26,405</i>	<i>28,320</i>	<i>64.2</i>

Source: Bashir, 2007, 19

The combined effect of these individual (primarily English speaking) nations, in organizing higher education for foreign students as a commercial enterprise, has been to constitute a global economic market of more than one million students. This is both a global market of individual institutions – the main such global commercial market in higher education - and a market of nations competing for world market share in the economic revenues and national prestige that accompanies it. This market is a direct product of government, meticulously crafted by the structuring of economic incentives. Again, a globally potent innovation, albeit another where the global spatiality has accumulated more on a de facto than de jure basis. For example, the market provided an empirically-based legitimation for the WTO/GATS regulatory project of remaking education as a commodity subject to global free trade (below); and teaching market potentials underpin global hub strategies (immediately below).

### **Global knowledge ‘hubs’ and global knowledge cities**

The next set of strategies are again centred on building of national or regional roles in the global setting, but rest on explicit imaginings of the global. These are more

complex than the notion of a global market, and more novel in the spatialities they generate, though they depend in part on the realization of marketization goals.

The global knowledge hub was pioneered in Singapore as the 'Global Schoolhouse' strategy. The nation-state has invested heavily. The strategy was conceived by policy makers in awareness of the growing global flows of knowledge, people, technologies and capital; the new importance of global partnerships and networks; the revenue generating potentials of commercial degrees and intellectual property; and the need for Singapore to position itself in relation to those flows and where possible to direct, influence and exploit them to its advantage. The objective was to attract not just revenues but talented expatriates capable of augmenting Singapore's capacity in the knowledge economy, will spill-over effects in the building of capacity at Singapore's own universities. As is well known, the Singapore government invited selected foreign providers of business education or research into defined knowledge precincts, providing them with strong financial incentives to do so. Its partners included Wharton, the leading business school in the USA, the Chicago Business School and MIT, which was joined in the Singapore-MIT Alliance for Research and Technology (SMART) Centre. Singapore also brought in a small number of foreign providers to provide mass tertiary education for both local and foreign students, though negotiations with the universities of Warwick and New South Wales were unsuccessful. The hub strategy now appears to be in a second stage. Excess local student demand has been absorbed and some foreign providers have cancelled their contracts. There appears disappointment in Singapore about the contribution of certain partners. Overall commitment to the strategy remains strong; though as noted above, one suspects the potential for direct value creation, which was partly shaped by neo-liberal imaginings of the knowledge economy, has been exaggerated. It is likely that Singapore will face a hard choice about whether to maintain the present level of subsidies or to pare back foreign partner involvement, which would mean abandoning the Global Schoolhouse strategy in its present form.

More recently the hub approach has been replicated in the Gulf States. Again it is driven by high levels of state investment, in this case fuelled by oil revenues. Large scale 'knowledge villages', global hubs and like minded projects have been created in Qatar, at Dubai and Abu Dhabi in the United Arab Emirates and elsewhere. Again, foreign providers have been invited in with offers they cannot refuse, supported by locally financed infrastructure and high quality buildings and facilities. Compared to Singapore there is a greater reliance on the foreign providers, less focus on research and development, and the attractiveness of the new precincts to fee-paying foreign students is more important if the revenue projections are to be realized. To the extent that the business plans assume a transition from government subsidies to self-funding, they appear highly risky, as there is no sign whatsoever that high levels of fee income will ever be generated. Why would foreign students attend a university in the Gulf states in preference to the USA, UK or Europe, for example? The Gulf is less likely to provide a stepping stone to future migration or business opportunities. The exception is Muslim students from the Middle East, Africa or Southeast Asia but this market by itself is insufficient to sustain the role imagined for the global hubs.

This points to a more general problem with global hubs. They are only likely to work in major global cities, which tend to be cities of economic and demographic passage, often littoral cities (Murphy, 2009); highly attractive places to live, study and work. Such cities typically offer many synergies between education, work and

migration; and their domestic educational capacity is stable and of high quality, and a long-established research capacity that is largely publicly financed. The knowledge economy industries surrounding the education and research hub are typically market competitive, rather than living off the subsidies provided to the universities. Examples are San Francisco, Paris or Shanghai. Other cities might become front rank global cities and potential incubators of education hubs in the future, for example Amsterdam, Vancouver or Seoul. Singapore is halfway to such a global status and the only hub so far with a real chance of success. Even so, the hub strategy is an expensive method of drawing high skilled labour to the island. The hubs in the Gulf states look like expensive education theme parks that are premised on false assumptions: that the main economic role of higher education is the direct creation of value and it can be readily turned to production of private goods at scale, anywhere; that well known university brands out of local context will attract students in their own right; that R&D capacity located away from the industries it plans to serve can be readily made competitive against the world's main existing centres of R&D activity.

The global hub strategy was highly original when it emerged in Singapore, though this has become clouded by the mimetic behaviour in the Gulf states. Because it creates new locations, and a new kind of site, its direct space building role is obvious, though the viability of these artificial precincts has not been established. These are nation-centred projects but the dependence of the strategy on assumed global activity is striking. Yet the particular form taken by this dependence also constitutes a weakness, in that the strategy underplays the need for local/national capacity, which is always a crucial condition for global practices in the national interest. The hubs are global projects, but not global projects. The imagined hubs are abstracted from their conditions of possibility. The hub formula looks coherent on paper but lacks purchase in the real higher education world, much as happened earlier with the global e-U's (see below). The strategy is also dependent on a high level of regulation and government funding and is bedevilled by recurring crises of institutional capacity. Hub institutions, rarely self sustaining, are locked in to a welfare dependence on the regulatory settings. The partnership arrangements are unstable, indicating that foreign institutions have difficulty making it work for them despite lucrative subsidies.

In that respect the global hub is a very different strategy to on one hand the concentration of research capacity, on the other hand the building of a commercial export industries. These forms of global space building are somewhat more modest and less imaginative in their global forms but augment the agency and capacity of individual institutions. Given that institutions themselves are often better placed than governments to develop many of the potentials opened by globalization, because of disembedding effects, commercialisation and research concentration are more able to create global transformations that are self-reproducing. Hubs do not look as potent.

The more fruitful strategy is likely to be that of the global knowledge city, which requires more modest subsidies and less comprehensive regulation to succeed, is centrally dependent on institutional capacity and viability as well as (and sometimes in place of) states, and more effectively factors in the limits of history and geography. Effective higher education institutions flourish best in open regions/cities which welcome outsiders. City liveability is important. Low taxes encourage inward flows of financial capital, and entrepreneurship, but human capital is often attracted to a good and stimulating environment with better services ... In principle, any place with an Internet connection can participate in a knowledge-based global economy. However,

innovation continues to cluster in specific regions and the tendency for innovation to coalesce is becoming more pronounced' (OECD, 2007c, 20 & 41; see also Florida, 2005). Whereas industrial economies needed expansive production sites and located industries on the edge of cities, 'post-industrial' knowledge activities benefit more from proximity to key services, transport and communications. This favours industry/university agglomerations at city centres in which cross-field and creativity/capital synergies can develop. In high-technology and scientific manufacturing, media, finance, cultural and fashion, 'there are advantages in both clustering and in global access to knowledge' (OECD, 2007c, 60). Diverse knowledge workers concentrate, coming 'constantly into communication with each other in ways that help to unleash diverse innovative energies. Studies show that this process of communication is a critical factor in the generation of new ideas, sensitivities, and insights' (OECD, 2007d, 295). Global knowledge cities offer the potential for many localized global innovations. There is also much scope for glonacal synergies, if the nation-state can put its weight behind city development. Globally connected cities are already primary nodes in the evolution of the global. Knowledge city strategies build on that and amplify the effects. They are steadily transformative.

## **Regionalization**

Meta-national regionalization in higher education is also more strongly grounded than are the hubs. Potentially, it offers a major role for each of the regional level, nation, national higher education system, locality, and institution. It is regulation dependent; though the formation of the European Higher Education space demonstrates also the potentials of local initiative within a framework that encourages cooperation. Given the scale of the USA, the EHEA and China, small to medium-sized higher education nations have a limited set of global options. Where feasible, regionalization of higher education capacities and structures seems logical. Yet only Europe has moved with vigour to develop the global potentials of regionalization in higher education. Argentina, Brazil, Paraguay, and Uruguay have extended educational cooperation within MERCUSOR to other South American nations. This is the most active region outside the EHEA, the potentials augmented by the shared Spanish/Portuguese heritage. Regionalization rests on geographical proximity, a degree of cultural coherence, and political will. All three conditions are present only in Europe.

Region building is an original departure in the global setting, one that reshapes global spatiality in fundamental ways. It foreshadows a much greater level of convergence and integration than hitherto and one suspects that in the longer term it will further free the individual institution from its historic ties to the nation-state. It must be said that this process has yet to advance far in Europe. Under some scenarios, adding the extra layer could multiply and complexify regulation in the long term.

The case of Europe also suggests that regionalization can impose limits on the global imagination. The Lisbon strategy sets out to establish Europe as the leading knowledge economy region in the world by building on, developing and where appropriate, integrating the strengths of European higher education and research. The Lisbon objectives have been joined to the Bologna process of standardization of programs, nomenclature, equivalences, credentialing, credit transfer and quality assurance to facilitate the process of European system building while sustaining national diversity. They also dovetail into the formation of the European Research

Area, the partial integration of research budgets, growing research collaboration across European borders; measures to encourage student and researcher mobility in Europe; and continued reform of national systems and institutions (de Wit, 2008). All of this, premised on the notion of a common European interest, has fostered a preoccupation with the difficulties and tensions engendered by Europeanization at the expense of a larger global awareness. Thus in Europe there is broad awareness of the role of the USA in higher education; the USA is the benchmark for comparison, but for the most part there is indifference to the extraordinary developments in Asia. While there is much attention to European architecture in the sector, little thought is given to global architecture. By comparison American universities are more insular in their valuation of higher education but more creative in their global engagements.

### **Networks and consortia**

The formation of international partnerships was the second global space building strategy that was widely taken up in higher education, after national capacity building. It became widespread in the early 1990s. Significantly, this was soon after the take-up of the Internet; and related to this, it happened at a time when institutions gained increasing local and national kudos for being seen to pursue international activity. Higher education all over the world was an early adopter of the Internet, ahead of national governments and much of business and industry. In rendering all institutions directly visible to each other on a continuous basis, the Internet enabled the global sector to be 'observed' (i.e. imagined) holistically for the first time. Partnerships, and later, consortia of institutions, provided an immediately accessible mechanism for dealing with the moves to competition and to cooperation that this new global vision suggested. The partnership strategy also provided rich opportunities for global tokenism. Signing a cross-border memorandum of understanding made both parties feel that they were doing something, even if (as was mostly the case) nothing ever happened. Many dead agreements were made, and are still made. At times it is a matter of creating a large number of potential international options knowing that only a few would ever be taken up. At times it is symbolic activity as an end in itself.

Many institutions invested and continue to invest significant executive time in establishing bilateral agreements. A smaller number are in cross-border consortia in which the members engage with multiple partners. International agreements are designed to secure quasi-concentration benefits in research, privileged routes of student passage, perhaps jointly badged degrees, on-going staff exchange, transferred prestige or simply the appearance of being internationally engaged. All nations have institutions that stand out for the level of international cooperation, such as Tsinghua in China and Leiden in the Netherlands. Some partnerships and consortia lead to tangible, ongoing activity of importance to all partners, for example in student exchange. Institutional partnerships have been instrumental in the commercial degree market, such as 'twinning' programs whereby students complete one part of the degree at home and the other part in the export nation. The National University of Singapore (NUS) is a byword for global competence. It has built a range of active partnerships with major institutions in Asia, Western Europe and the English-speaking countries, in both education and research; plays a leading role in consortia such as the Asia-Pacific Rim Universities; and hosts regional and global meetings.

Partnerships are direct moves in global space making that position the institutions concerned as global agents with globally-defined interests, which are seen as in conjunction with their local interests. They are a strategy of autonomous institutions in which regulation normally plays a minor role. But as global space making, the effects of partnerships are modest unless, as in Singapore, the partnerships shape activity in the longer term; that is, they move from the normal conditions of weak ties and open ended voluntary consent to a deeper level of agreement and dependency. The potential for such convergence depends not only on normative commitment but on the contents of agreements, and perhaps the range of areas of cooperation. Thus joint degrees are more likely to change curricula than a student or faculty exchange. Most cross-border partnerships in higher education are not transformative. Even those that are active often have little effect because it is difficult to so configure the joint activity that all parties to the agreement parties gain substantial benefits on an ongoing basis. This will only occur if the partnership adds something additional and unique to the portfolio of activities of each, without substantial opportunity costs. In practice these are difficult conditions to fulfil. When they are fulfilled, for example when a consortium becomes active enough to affect global relations in each member organizations, the global space forming potential of partnerships is apparent.

### **Internet-based delivery**

The first envisioning of the global space created by the Internet triggered a second strategic response, the use of the Internet for the delivery of educational programs. This global imagining was more spectacular than partnerships. Universities and corporations could imagine the world as a single classroom. At first glance, the Internet promised to abolish all the barriers to delivery of programs: distance, cost, lack of qualified teachers. Global e-U's could replace face to face delivery. Potentially, the Internet placed venerable and powerful university brands within everyone's reach. Providing the communications hardware was rolled out and barriers of language and culture were overcome, the Internet could bring programs from technology-rich English speaking and European nations to students anywhere. In the second half of the 1990s it seemed that a major new zone for direct value creation had opened up. State regulators became involved in some e-U development but the main money was raised by universities themselves, and the commercial education sector. In any case, Internet contents were beyond the control systems of state regulators. Public agencies could develop programs but they could not secure a monopoly. The e-U ventures coincided with the dot-com equity boom in the USA. Major investments were made by NYU On-line, the consortium-based Cardean University (\$100 million USD), Universitas 21, the British e-U (55 million sterling) and others. The dot.com market suffered partial collapsed at the of the decade. The e-U's also failed. It was not simply that they were caught in the selling frenzy over tech shares. They never came close to the order of magnitude of their projected markets. Student numbers were dismal.

No organizational strategy in education has been attended by higher hopes or poorer returns on capital investment than Internet-based commercial programs that deploy their courseware as intellectual property (IP). There are several reasons. High quality interactive models of online pedagogy that explore the fuller potentials of the medium have yet to emerge (OECD, 2005, 14). Early prototypes rested on unit cost savings, with uniform courseware and low intensity communication in place of face-to-

face teaching, and producers from English-speaking nations failed to design learning materials and methods sensitive to cultural and linguistic variations (OECD, 2005, 66). More fundamentally, courseware is a public good. Credentials are a potential private good, but the value of Internet degrees is low. Online programmes were handicapped by perceptions that the degree had less status than a face-to-face programme, even when offered by leading brands such as New York University. Teaching is a potential private good but only if it is sufficiently intense and interactive. Thus high cost e-learning such as the programs of the University of Phoenix have proven commercially viable while the first generation low cost ventures were not.

The more important development than commercial delivery has been non-proprietary open source models and systems (OECD, 2005, 134-135). These methods release the interactive potentials of online education more effectively than commercial learning systems and are more potent in their transformative effects. MIT placed its courseware on the Internet on an open source basis. This enhanced MIT's global sway without diminishing the value of its onsite degrees. It also demonstrated the distinction between knowledge as a public good and Ivy League credentials as private goods. The parallel action of the Faculty of Arts and Science at Harvard, which posted its academic output on an open source basis, also underlines the public good character of knowledge and the limited business potential of Internet delivery.

### **Cross-border mobility of institutions**

The cross-border mobility of institutions, whereby they establish branch campuses in other countries, brings a foreign provider education into the student's home nation. This mode of cross-border education, in which the institution is 'foreign' to the nation in which provision takes place, rather than the student being foreign, has spread relatively quickly (Verbik & Merkley, 2006; Ziguas & McBurnie, 2007). For the providers it can be expensive but it is more sustainable than global e-U's and (one suspects) global hubs. The main exporters of institutions are the USA, UK and Australia. Offshore initiatives by Australia boomed early, in the 1990s, when they were favoured by a weak Australian dollar. The USA entered the field more recently. For receiving countries, cross-border institutions offer a low cost opportunity to expand local higher education capacity. They are also deployed as a modernizing force by some national regulators such as those of Malaysia and Korea. Some European institutions run study centres and other nodes of activity abroad. As noted, Singapore has made the inward mobility of foreign providers a core element of global strategy. India has now become a key zone for foreign providers of both university and vocational qualifications, even though private and foreign institutions are formally prohibited in much of the country. Cross-border institutions are not confined to the middle level and emerging economies. There are a number of American providers operating in Western Europe, mostly in business education. Carnegie Mellon has an Australian business school supported by the South Australian government. Charles Sturt University has a teacher training campus in Ontario, Canada.

Strategies of institutional mobility rest on export institutions rather than export nation governments; though government in the importing nation normally regulates it. There are two main modes of cross-border institution. One is the stand-alone campus owned and built by the foreign provider. This involves often complex negotiations with local authorities, and is expensive and must be financed from home, but enables full

quality control over the education and engagement in the local system. The more common model is franchising with a local partner as provider. This is cheaper to provide and may generate surplus. However, franchised campuses are prone to lack of control from home base, weak levels of equivalence with the home country degree, and business collapse. There is less integration of the curricula and assessment standards of the partner with those of the parent provider, compared to twinning. Franchising generates ongoing teaching problems of quality and reputation.

Table 3 from Verbik and Merkley (2006) is a list of stand-alone branch campuses by provider nation. This excludes franchising. Despite the efforts of the researchers, the list is not fully comprehensive; for example no institutions are listed for India.

**Table 3. Transnational branch campuses, by provider nation, 2006**

provider nation	international branch campuses	locations
USA	44	Qatar (5), China (4), Canada (3), Emirates (3), Jordan (2), Mexico (2), Netherlands (2), Singapore (2), UK (2), Czech Republic, Ecuador, France, Germany, Greece, Hungary, Israel, Italy, Jamaica, Japan, Panama, Poland, Puerto Rico, Switzerland, Thailand
Australia	10	Malaysia (3), Singapore (2), Canada, Emirates, Fiji, South Africa, Vietnam
India	5	Emirates (4), Singapore
UK	4	Emirates (2), China, Malaysia
Canada	3	Emirates (2), Qatar
Ireland	2	Malaysia, Pakistan
Netherlands	2	Qatar, South Africa
Pakistan	2	Emirates, Kenya
Philippines	2	Vietnam, Indonesia
Belgium	1	Emirates
Chile	1	Ecuador
France	1	Singapore
Italy	1	Argentina
Korea	1	Vietnam
Sweden	1	Russia

Source: Berbik & Merkley, 2006, 25-30

The institutions involved in branch campus activity range from fully commercial providers such as the University of Phoenix, to second sector public institutions, to the one third that are established research universities. In addition to the Australian providers (Charles Sturt, Central Queensland, Curtin, Monash, Swinburne, James Cook, Monash, New South Wales, RMIT and Wollongong) they include the University of Bologna (Argentina), Seoul National (Vietnam), the University of Nottingham (China and Malaysia), Johns Hopkins (China and Italy), Columbia (Jordan), Harvard Medical (Emirates) and the Chicago School of Business (UK). There are 14 institutions in the Emirates, seven in Qatar, six in Singapore and five in China.

The cross-border movement of institutions is one of the most novel and potent of all the global strategies considered here. Potentially, it is transformative at both ends of the relationship. It makes a new global space in which the nexus between national identity and provider identity is partly broken. Local students obtain a broader set of options; while for their part the providers must localize as well as globalize, and also lodge themselves in the regulatory requirements of the nation of education. For example there may stipulations as to the educational program. Foreign institutions in Malaysia must provide core subjects in Islamic Studies and Malay. Inevitably foreign providers are partly changed in course of this glonacal process. Unlike education provided to foreign students within the export nation, the cross-border mobility of institutions encourages hybrid approaches that combine the educational traditions of exporting and importing nations. Unlike Internet-based degrees, which can be accessed almost anywhere regardless of particular national policies (the global dimension supplants the national dimension), offshore campuses depend on the cooperation of the host country and are subject to local registration, accreditation and quality assurance protocols. Transnational programs supplement rather than replacing educational provision where they are provided. (Ziguras & McBurnie, 2007).

### **Framing and closing the global space (1): WTO/GATS**

The space forming strategies described so far have rested on nation-states, national systems or individual institutions and generated their global effects largely as a spillover from localized activities. However, there are two strategies whose explicit purpose has been to construct a whole global framework. Both have generated very considerable energy, but only one has proven to be profoundly shaping of the global

The first such whole global framing was by the World Trade Organizations General Agreement on Trade in Services (WTO/GATS). This set out to shape world higher education as a unitary economic market. It also constituted an environment for negotiation in which national governments would open up their education systems to foreign competition. The GATS provisions are well known and will not be repeated here. It is the outcome that is important for this paper. Although it was widely believed that the GATS process would trigger the creation of a single global market space and thus facilitate the wholesale commodification of higher education neither proved to be the case. The barriers were the part public good character of teaching, which retards its commercial potential; and the desire of most governments to maintain political and cultural control over their higher education systems, especially control over the entry of new providers and the contents of programs and degree structures. While the GATS process provided ideological comfort for the evolution of the commercial market in international degrees it did not trigger the commercialization of domestic systems; and while some developing nations opened their doors to foreign for-profits; for the most part international education stayed under national government control even in the nations with a strong policy commitment to free trade. Thus the exporting nations of the USA and Australia advocated the opening up of all other systems but continued to largely protect their own systems from foreign involvement. This is an open statement of the paradox that often underlies national and institutional strategies in global space making. Agents depend on the openness of the global setting to

facilitate their strategic forays. But these same forays often constitute forms of closure, or at least the modification of global spatiality, to their own advantage.

### **Framing and closing the space (2): Global research rankings**

The second framing of the global dimension in higher education also took the form of a worldwide competition, but a competition for position and status rather than an economic market. The global networking of higher education institutions and systems, the enhanced cross-border engagement made possible by cheaper air travel, global academic mobility, the global character of the sciences, and the growing converges in national policy sets: all of these developments feed into imaginings of worldwide higher education as a single system; notwithstanding the heterogeneity of traditions and practices in education and research; the continuing national, cultural and linguistic differences and the partial barriers to mobility; and the gross unevenness in capacity and the level of global engagement on the world scale. This imagining of a single global system in turn has created favourable conditions for the rise and rise of global institutional rankings and other forms of global referencing and comparison.

The first global rankings of higher education institutions, by the Shanghai Jiao Tong University in China (SJTU, 2008) in 2003 and the Times Higher Education Supplement in 2004 (Times Higher, 2008), quickly secured a wide impact, except in the United States where the sector stayed with national rankings by the *US News and World Report*. Since then further rankings have appeared, mostly in relation to research performance. The potential importance of comparative measures of learning outcomes, now emerging in the OECD Assessment of Higher Education Learning Outcomes (AHELO) project, can hardly be overstated. All of these developments have strengthened the potency of the global dimension in higher education. They have also secured much influence in the evolution of institutions and systems.

Hazelkorn (2008) for OECD demonstrates that the new body of comparative information, especially institutional rankings and research output metrics, has been quickly installed in the perspectives, performance measurement systems and objectives of both national governments and higher education institutions; and is entering into the funding decisions of corporations, philanthropists and donors. Hazelkorn surveyed and interviewed institutional leaders in 41 countries on their response to university rankings and league tables. Almost universally, respondents testified that 'rankings are a critical factor underpinning and informing institutional reputation', affecting applications, especially from international students; university partnerships; government funding; and the employer valuation of graduates (Hazelkorn, 2008, 197-198). Most university leaders had set in place strategies and systems to lift rankings, especially the Jiao Tong position. Only eight per cent of respondents stated they had taken no action in response to rankings (199). Many institutions had stepped up data collection on research, and monitored the performance of comparator institutions. Some universities had 'taken a more aggressive approach, using rankings as a tool to influence not just organizational change but influence institutional priorities' (199-201). Strategic attention has become focused on the constituent elements that constitute the Jiao Tong ranking, for example by recruiting Nobel Prize Winners and HiCi researchers, and awarding incentive funding for the publication of articles in the most prestigious journals.

In national policy, research rankings appear to generate tendencies to augment national investment in research and also to favour policies of concentration through selective research funding or institutional merger. In the first Jiao Tong ranking in 2003, the University of Manchester in the UK was placed at 89 and the University of Manchester institute of Science and Technology was at 201-250. Following a merger of the two institutions and their research, the University of Manchester climbed to position number 40 in the Jiao Tong table by 2008, which positions Manchester at the base level of the genuine world leaders. The lesson has not been lost on everyone else. Rankings may trigger an unfortunate tendency to size for its own sake even without the potential of scale economies (a potential which is often disappointed in mergers, as the 1987-1993 merger wave in Australia demonstrates). If so this foregrounds questions of institutional design. Unless systems of comparison develop that foster small specialist institutions - and it is hard to envisage such a development at this stage - the global setting will tend to favour large loosely coupled institutions in which individual research units have considerable freedom to move while the institution qua institution supplies the brand, organizational coherence and ranking cachet. Some leading US universities already fulfill this description.

Governments use rankings data to drive performance management regimes and draw regulatory benefits from the rankings-led differentiation of national systems. They have played a secondary role in developing rankings systems, for example in China and Taiwan. But for the most part university rankings have originated from outside regulation, from media organizations and from universities themselves. Unlike WTO/GATS, rankings have never been the subject of multi-lateral negotiations by governments to order the global dimension of higher education. They rest more on traditional positional competition and status than on states. Yet they have been far more potent in the global imagining and ordering of the sector than the WTO. This can be seen from their potency in other global space making strategies such as competitive national investments, research concentrations, regionalization – the new European Institute of Technology is directly motivated by rankings goals - knowledge cities and partnerships. Then there are their effects in academic mobility. Strong academic staff tend to gravitate in high ranked institutions. Prestige is an end in itself, strong institutions pay better and all else being equal provide better colleagues and research infrastructure. By the same token, institutions pay more for such staff to lift their rankings position. Rankings are shaping the evolution of global labour markets.

University rankings have an unquestionable capacity to regulate the sector from outside government. At the same time, they constitute a form of closure of the global and its broad potentials in higher education that is as dramatic as the neo-liberal commodification agenda. The closure is more complete because traditional elites in higher education are very difficult to displace: economic merit in global markets is more open to challenge. (High status and leading economic power tend to coincide at the top end of the universities, but as Bourdieu notes the correlation is incomplete).

Rankings lock many institutions into inferior imitations of the leading universities, eschewing innovation. Many other institutions are simply excluded. Rankings so far have largely focused on research-heavy universities because research performance is more readily measured and ranked than other aspects, and is traditionally associated with prestige. Yet global research rankings are largely irrelevant for the majority of institutions with lesser prestige or capacity and a primarily local or national mission; and they directly and emphatically subordinate the leading research

institutions in developing countries that have no prospect of accumulating the necessary weight of globally competitive research staff, publications in English and citations. The existing rankings also tend to disadvantage or eliminate specialist vocational institutions; large institutions with multiple social tasks that are disadvantaged by measures focused on average staff research or student selectivity; and non-English speaking institutions. Such ranking systems militate against system diversity within national systems, and diversity on the global scale, while reinforcing the position of strong institutions and nations. They tend to bifurcate higher education between those placed-based but globally engaged, and those who are merely place-bound (the same hierarchy is found in academic labour markets). A partial way out of rankings-created constraints on diversity is to establish classifications that enable separate rankings for different kinds of institution, like the Carnegie classification underpinning the *US News and World Report* ranking in the USA. A European typology of institutions is under development (Bartlese & van Vught, 2007).

## Conclusions

The global space making moves in higher education discussed in this paper can be observed as acts of the imagination, acts of production and acts of regulation. The different strategies vary in the degree to which they constitute an imaginative break with past practices, and in their implications for each of production and regulation. Like most innovations the global space making strategies build largely on what they have inherited, but there are also radical breaks here. It should not be forgotten that the global imagining itself, taking higher education beyond the incubator of the nation-state, is itself a fundamental innovation that except in the intellectual disciplines and the world religions was scarcely possible prior to communicative globalization.

Nevertheless, some of the moves extend strategies already coined prior to the advent of communicative globalization in the 1990s, for example competitive investments in national capacity in education and research, research concentrations, and partnerships. Two other strategies imagine the global higher education space as a business environment: the development of education as a commercial export, and the organizing of the global as a world trading system through WTO/GATS. Internet-based delivery is grounded in the global communications architecture itself; and while it is a bold departure from higher education practice (one reason why it fails) it was not difficult to conceive. Knowledge hubs and the cross-border mobility of institutions both constitute original imaginings, though the second strategy is more viable in practice than the first. Regionalization in Europe works off the larger EU project but is highly innovative in the creation of regional convergences and common projects in higher education. A distinctive feature is the extent to which the Bologna process combines inter-state negotiations with collaboration at the level of sub-systems, individual institutions, particular regulatory agencies such as bodies responsible for quality assurance and professional training; and the spontaneous outcomes of staff and student mixing across borders. Global university rankings extend the process of national ranking, with a long history in the USA, to organizing the sector on a world scale. Rankings constitute a potent form of regulation from outside government, which can nevertheless be annexed to state projects. Of the other strategies, national

investments, research concentrations, education exports and knowledge hubs are all essentially state-driven projects; while Internet delivery, cross-border institutional mobility, networks and consortia are institution-driven. But nearly all the global space making strategies build institutional capacity. For some, this is the end they seek.

The global space making strategies most likely to be the most successful are those that are working in or affecting all three glonacal dimesions, acknowledge the historical context of the sector, and respect the logic of resource configurations. Of all the space making strategies, it is research concentrations, the cross-border mobility of institutions, Europeanization and rankings lthat ook the most transformative in effect. Like the e-Us before them, the global hubs absorb much capital but outside Singapore do not appear viable. Others may emerge in more favourable locations.

These space making strategies are suggestive in relation to not just higher education, but the larger family of global convergences and creations. A notable features of much higher education development is a tendency to *synchrony* in the manner in which cross-border relations are formed and sustained. Kant notes there are three modes of time: duration, succession and simultaneity. The last 'expresses the relationship of that which is present to time as a summation of everything present' (Heidegger, 2002, 107). Perhaps synchrony is a fourth mode of time. Global synchrony is at one and the same time the driver and product of space-time compression and convergence. Mimetic behaviour is always present in competitive settings, for example in the export market and the effects of university rankings; but what appears as a profound desire for synchrony show itself also in Europeanization (especially the ready convergence of degree structures, personnel mobility and the Tuning agenda in course description); in the world-wide pattern of partnerships and consortia, and in policies of research concentration. It is as if communicative technologies, which facilitate universal templates and synchronous conversations, have also released a new capacity for agreement and the building of common culture which is expressed in the chain-like spread of similarities of form and rhetoric.

Agents in higher education seem to revel in their greater freedom of movement, but there are always risks entailed in their journeys into the unknown. Synchrony means safe havens. Mimetic behaviour gives them a footing in the new global time/ space at least risk to themselves; except for the risks constituted by opportunity cost.

'Temporality is at bottom individualization', as Heidegger remarks (2002, 90). All global agents have their own time. Much of the global strategy making is about managing time and controlling time. Through synchrony global space making entails creating global time, as well as creating forms of global space. And here the many individual coincidences of time, formed in synchronous relations between the myriad of decentralized agents in higher education, accumulate as the global space/time of the knowledge sector. This is only partly driven by governments and less by the economic markets in higher education, which in contrast with the power of markets in finance find themselves adapting to the temporal rhythms rather than creating them.

At the same time global space making entails (like all global processes) profound implications for the changing of agents themselves, a process that is partly self-controlled, the subject of continuous reflexivities. Globalization in higher education offers universities an unprecedented experience of negative freedom, the breaking of bonds: a sense of growing up, maturing, discovering the capacity to lead oneself. Likewise it is marked by inability of single nation-states to surmount the whole of global space. These are important changes in the regulatory environment, whose

potentials are not yet fully apparent; but on present indications it is likely that the greater freedoms will be largely confined to the leading research universities. One of the effects of global university rankings is to dramatically narrow the potential size of this group. This suggests the politics of rankings will become more contested.

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