'El central volumen de la fuerza' *

Global hegemony in higher education and research

Simon Marginson & Imanol Ordorika¹ University of Melbourne, Australia & Universidad Nacional Autónoma de México

> s.marginson@unimelb.edu.au ordorika@servidor.unam.mx

es el central volumen de la fuerza, la potencia extendida de las aguas, la inmóvil soledad llena de vidas.

~ Pablo Neruda, El Gran Océano

* 'Power and volume concenter'

translation of El Gran Océano, Open Sea, by Ben Belitt

¹ We express grateful thanks to the anonymous reviewer of this paper. The insightful criticisms and positive suggestions added much value in the development and finalization of the text.

I. Introduction

A small number of nations produce more than one hundred films each year: France, Italy, Iran, China, Japan, India, the Philippines, the United Kingdom and the United States of America. The USA is not the largest producer in terms of numbers of films. But American films are watched everywhere else. The USA exports more film and television to each other country than it imports. In most cases, the balance of trade is overwhelmingly in favour of the USA. All other nations rich and poor are net importers of film and television content and most of what they import is from the USA. For example Mexico, an OECD country whose per capita income in 2005 of \$7310 was just above the world average of \$6987, produced 22 films in 1999. Mexico imported 306 films that year and 203 were from the USA. Australia, a nation with a per capita income in 2005 of \$32,220, in 1999 produced 29 films and imported 255 films, 174 from the USA (UNESCO, 2007; World Bank, 2007).

The lopsided cinematic relationship between the USA and the rest of the world is both economic and cultural. American creative industries in film, TV, music, books and software between them generate more export revenue than any other industrial sector, including agriculture, aircraft and automobiles (Drach & Froese, 2005. They also marinate the world in thoughts and images of Los Angeles, New York and other US centres. Just a tiny proportion of American cinema and TV time is given to content from other nations. Although most people in the USA have zero contact with the visual imaginary of people from elsewhere, the vast majority of people outside the USA are familiar with the icons and language of American popular culture. Many have been soaked in Americana from early in their lives.

Though so ubiquitous as to be taken for granted - US culture has become a generic world culture, the default position in all operating systems – the US domination in film and TV, like the parallel domination of global military capacity and industrial technologies and the staggering levels of private wealth and infrastructure development in American cities, are more than visible. What is less well known is that the USA enjoys an equivalent domination in higher education and research. Along with US economic and military power and geo-strategic mobility, that capacity to intervene freely in other national sites while maintaining territorial control of the homeland, the US hegemony in education and research underpins US global domination in all of the other spheres. The planet is soaked not just in the United States' visual imaginary and iconic products but US language and knowledge, and in the intellectual preoccupations, assumptions and methods of American scholars and researchers. The leaps of imagination that take place in US universities, not to mention the biases and lacunae typical of mainstream US academic thinking, ultimately underpin products, shape the Internet and business practice and permeate popular culture and daily life everywhere else. Through the education of foreign students in universities in the United States the norms and ideas of the US set the horizon of vision of non-American elites in government, business and intellectual life.

In this paper we analyse higher education as world-wide field of power in which researchintensive universities in the United States exercise a global hegemony. This hegemony has been powerfully advanced by the uneven process of economic and cultural convergence AKA 'globalization'. Here we want to emphasize from the outset that it is not inevitable that worldwide communications, time-space compression and expanding people flows and knowledge flows in higher education *should* be so soaked in American content as to subordinate everything and everyone else. Globalization in higher education could cater for a broad range of interests and carry many cultural contents in a more plural environment. While global unevenness is inevitable a global monoculture is not. However that is not the way it has worked so far. In this era globalization has fed into the domination of the USA in higher education and research, and also vice versa. Our underlying preoccupation in the paper is with the consequences of this and with the obvious possibility that things could be different.

Following this introduction, the second part of the paper discusses Bourdieu's theorisation of 'field of power' and Gramsci's theorisation of 'hegemony', which can assist in understanding higher education as a worldwide relational field and the place of US power within it. The third part maps American global hegemony using selected data markers. The fourth part touches on the 'how' of global hegemony: the reinvention of higher education in other nations in terms of American norms of policy and institutional practice, and the impact of university rankings in shaping higher education as an imagined global market. Hegemony in worldwide higher education has secured not only the part-commodification of erstwhile national public goods in many countries, it is shaping the character of global public goods as well, particularly through worldwide flows of knowledge and research. The final part returns to theorisations of the global higher education setting and considers the potential of human and institutional agents. It finds that despite hegemony worldwide higher education is not as closed as it appears.

II. Theorising Global Hegemony

Worldwide higher education is a relational space that includes national systems and individual institutions, global agencies such as the World Bank and OECD with a policy interest in education and research, and global disciplinary and professional communities. It is crisscrossed by a thickening array of networks and connected at many points with centres of power in the economy, government and other institutions grounded in localities, cities and crossborder operations. Although the worldwide higher education environment is complex it is open to observation and analysis; and in the last two decades global convergence and integration triggered by communications technologies (Castells, 2000) and accelerated crossborder activity have rendered institutions and national systems more connected and more visible to each other. This does not mean that higher education and research have become a single global system. There is a global network of research universities but they continue to function also in national systems and as local agents. Many other institutions, perhaps most, are scarcely active globally. The higher education environment and its connections to other sites are simultaneously global, national and local. Articulations between the three dimensions vary country by country, university by university and over time (Marginson & Rhodes, 2002; Valimaa, 2004; Marginson, 2006a; Marginson & van der Wende, forthcoming).

Globalization

In an era of accelerated globalization (Held et al., 1999) all of this is in motion. Globalization is a symbiosis of economic changes and cultural changes. It rests on one hand on the formation of world-wide markets, operating in real time via automated processes and underpinned by the first world-wide system of financial exchange; and growth rates of foreign direct investment that far exceed capitalist growth as a whole. With instantaneous transmission

of financial information the turnover time of economic capital tends towards zero (Mandel 1975; Harvey 1989, 2006); the world economy moves faster and becomes more transformative of the localized parts as Marx (1970) predicted 150 years ago in the *Grundrisse*. On the other hand, globalization rests on new worldwide systems of communications, information, culture and knowledge. These cultural systems, which are partly subsidized by governments as public goods (for example universities, especially in basic research) are mobilized by nation states and global agencies so as to support the extension of global markets that produce private goods and generate profits. In turn global these economic forces drive further cultural integration and the world tends towards a single cultural community (McLuhan, 1964). What kind of diversity this will ultimately sustain is unclear, but the pace of change is astonishing, for example the roll-out of global English and the global evolution of research and knowledge.

Research universities are enmeshed in all aspects of globalization, especially communications, culture and knowledge. Higher education is among the most globalized of sectors. 'Although many universities still seem to perceive themselves rather as objects of processes of globalization, they are at the same time also key agents' (Enders & de Weert 2004, p. 27). But national systems and institutions do not participate in the global higher education environment on the basis of equality. The length of time that more than 90 per cent of the population is enrolled in education varies from 15 years in Belgium to one year in India. The USA spends more than \$300 billion per year on tertiary education; some nations spend less than \$10 million per year. The distribution of the competences needed to operate *proactively* as a self-determining global agent (Marginson, forthcoming A) – journal access, scientific equipment, trained people, English, communications infrastructure, modernized administration, executive steering, competitive faculty salaries and the payment of student support- is highly uneven. Global processes tend to magnify these starting inequalities. Globalization draws nations into common systems while at the same time excluding most of them from global power.

Any theorization of the global higher education environment must account for two aspects. The first is the *flows* across national borders via networked relationships: flows of people (students, faculty and administrators); flows of messages and other communications; flows of information and knowledge, including published and posted research and data; flows of technologies; flows of norms, ideas and policies; and flows of financial capital and other economic resources (Appadurai, 1996; Marginson & Sawir, 2005). In the Rise of the Network Society (2000, pp. 71, 442-445, 500-501 and The Internet Galaxy (2001), Manuel Castells provides a sociology of networks and flows. 'Society is constructed around flows', states Castells, 'the expression of processes dominating our economic, political and symbolic life'. The economics of networks sustains an inbuilt expansionary dynamic (Castells 2000, p. 71).² Global flows constitute lines of communication and also lines of influence and affect, and are highly visible. But equally important is the second aspect. That is the worldwide map of *difference* in the sector: both horizontal diversity, such as the variety of languages, pedagogies, approaches to scholarship and organizational systems and cultures; and vertical diversity: relations of power and boundary-making between national systems and institutions: differentiation and hierarchy, inclusion and exclusion; the unequal distribution of resources and capabilities (Sen, 2000) that channel and limit global flows in higher education. Global

² 'When networks diffuse, their growth becomes exponential, as the benefits of being in the network grow exponentially, because of the greater number of connections, and the cost grows in linear patter. Besides, the penalty for being outside the network increases with the network's growth because of the declining number of opportunities in reaching other elements outside the network'. Technically, the value of a network increases as the square of the number of nodes in the network (Castells 2000, p. 71).

higher education is a relational field of power shaped by inequality and hierarchy – it is not a level playing field - and a field with relationships/networks both cooperative and competitive.

Bourdieu and higher education as a 'field of power'

For theorisation of relational fields in higher education we look to Pierre Bourdieu (1984, 1988, 1993, 1996), the only major social theorist since 1960 who has devotedLyotard substantial attention to universities,³ though the work is nation-bound not global. Bourdieu conceives a field of power as 'a space, that is, an ensemble of positions in a relationship of mutual exclusion' (Bourdieu, 1996, p. 232), with 'a small number of distinctive features which, functioning as a system of differences', allow social differences to be expressed (Bourdieu, 1984 p. 226).⁴ In his analysis of *The Field of Cultural Production* (1993, pp. 38-39) that field is structured by a polar opposition between at one end the sub-field of restricted production, at the other end the sub-field of mass tending to commercial production. Each sub-field has a distinct principle of hierarchization. In the mass or 'popular' institutions it involves economic capital and market demand, and is heteronomous; though from time to time mass institutions, which shape the high value products, the principle of hierarchization is cultural status, autonomous and specific to the field. Between lie a range of intermediate institutions which combine the two opposing principles in varying degrees.

We can readily see this polarity in national higher education systems (Naidoo, 2004) and now at the level of global field. Figure 1 provides a two dimensional description of the global field. One the horizontal left to right axis the description moves from predominantly autonomous institutions in the sub-field of restricted production, to heteronomous institutions in the sub-field of mass tending to commercial production. On the vertical access the description moves from institutions active in the global dimension (above) to institutions predominantly bound to the national and local dimensions (below). Some autonomous elite universities (category 1) exercise more world-wide sway than others more nationally bound in activity (category 2a). Some commercial institutions (categories 3 and 6a) are significant players in global markets while others (categories 8 and 9) are in local markets.

The numbers 1-9 are an attempt to rank the overall *global* power and prestige of institutions by category, though this must be considered approximate. Here there is some overlap between categories. The overlap is considerable in the categories ranked 2a and 2b, and 4a and 4b. Note that in this vertical ranking the overall principle of hierarchization at work is derived from the elite sub-field and reflects cultural rather than economic status. As in the national dimension so in the global dimension: the field of universities – and in the most prestigious fields of knowledge which as will be discussed, vector the field of universities - are mapped in terms of the aristocratic sensibility. Non-profits always tend to be ranked above for-profits, except in the case of outlier such as the Indian IITs where their commercial position in part derives from their extreme scarcity of student places in a very large domestic market.

³ Others such as Ortega Y Gasset and Talcott Parsons focused on universities in earlier periods. Among more contemporary theorists Habermas, Lyotard (1984) and Derrida (2004) have produced works that bear directly or indirectly on questions of universities and knowledge. Arguably, the topic of higher education is not as centrally important in their work as it is for Bourdieu.

⁴ We can note here in passing, though the issue deserves more attention, that in the global setting boundaries and membership of the field of higher education are not only contestable but characteristically unstable, taking on new permutations given the permeability of boundaries and multiplicity of identities.

Figure 1. The polar field of global higher education, after Bourdieu

(horizontal axis maps autonomy/heteronomy; vertical axis maps degree of global engagement, numbers signify order of status in *global* field)

AUTONOMOUS SUB-FIELD of elite research* universities, prestige- not profit-driven. <i>Notes</i> 1. autonomy relative to <i>global</i> field 2. elite teaching- only liberal arts colleges are feeders for elite US research universities	1 The 'Global Super- league': Much of American doctoral sector and high prestige universities in UK. Prestige from stellar research reputation and global power of degrees. Autonomy from not just national system position but global power [e.g. Harvard U, Cambridge etc.]	2b Elite non U.S. national research universities with strong cross-border role: Prestige-driven non profit research universities at national level. Global presence in research; cross-border students; some offer for-profit foreign degrees [e.g. U Sydney, U of Warwick, Leiden U. LSE UK on border between categories 1 & 2]	4b Teaching-focused export universities : Lesser status non-profit universities, operating commercially in the global market, providing lower cost/ lower quality foreign education at scale. Often have minor research role [e.g. Oxford Brookes, U Central Queensland]	3 Elite and globally focused for-profits: Fully for-profit institutions operating on global basis, global prestige, largely teaching focused with some research. National exclusivity and global power enables greater autonomy than in for- profits in category 6 [very small category, e.g. Indian IITs, IMs]	6 Lesser prestige teaching only global for-profits: Fully commercial operators actively building export markets, low cost mass production, no research [U Phoenix, DeVry, various global e-Us]	HETERONOMOUS SUB-FIELD of institutions providing commercial vocational cross- border education: teaching-focused exporters (includes for-profits & revenue-driven units of non-profits)
	2a Less globally engaged American doctoral universities Retain global prestige and some research role though marginal interest in cross-border students and foreign engagement [e.g. some U.S. state universities]	4a Nationally-bound elite research universities: Prestige providers in a single nation, research intensive. Nationally competitive with segment 2, not 1. Varying global presence in research, [e.g. U Buenos Aires, many in Europe and Japan]	5 Teaching-focused national universities Largely teaching focused institutions, marginal global in research and/or cross-border teaching [e.g. most Malaysian public universities, some Canadian community colleges]		8 For-profits with minor global functions: Commercial operators focused on local market with some cross-border students. [e.g. some private industry training in Australia]	
		L	7 Non-profits without global agendas: teaching-focused, local demand orientation. No cross-border role. [largest group, especially in importing nations]		9 For-profits without global agendas: local degree mills, no cross-border students. [large category in some nations, e.g. Philippines]	

A field description based on the sensibilities of global business, not Harvard, would order the hierarchy differently. But such sensibilities do not determine national and global university prestige, though the Times Higher ranking now attempts to account for them (see Part IV).

At the elite end of the global field in category 1 is the 'Global Super-league' (The Economist 2005) where knowledge power is concentrated: Harvard, Stanford, MIT, Yale, Princeton, Caltech, Chicago, Pennsylvania, Berkeley and other leading lights of the University of California system, the large mid-west universities and others in the United States, plus a handful in the UK led by Cambridge and Oxford (category 1 in Figure 1). In the context of a world in which every research university is visible to every other and ranked against each other on a global scale, knowledge flows freely across borders and a growing number of students and faculty follow, there universities have become the elite sub-field of the global sector. Their brands are recognized around the world, universal objects of desire, and they draw talent from everywhere. Though the extent of global engagement varies, and some enhance their global position by being particularly active across borders, these universities derive their ultimate global importance from their presence in the sub-field of elite universities in their own nations. Thus maintaining the vertical distinction between themselves and other nationally and locally based institutions is crucial to their global role. Some carry out very strenuous boundary work, in the manner that Bourdieu (1984) identifies, to sustain prestige. This work is particularly important for Oxford, Cambridge, Imperial and London in the UK. While all American doctoral universities obtain a significant global status regardless of the extent of their global engagement simply by virtue of national identity, this is much less the case for universities in the UK. Minor British universities do not enjoy high global status. In the USA institutions are not in this bind. They can play the national/local and global games almost as one and the same. As will be discussed, this is a key characteristic of hegemony.

At the opposite end of the field are institutions focused on revenues, cost management and expansion like commercial companies (Breneman et al., 2007 discuss USA-based for-profits). This group includes not only the University of Phoenix and global e-learning enterprises, but also non-profit universities where they provide international education on a revenue-raising commercial basis. In the intermediate zone between the two sub-fields many research universities have become more heteronomous. Their status logics are often over-determined by corporatisation and commodification.⁵ They vary in the extent to which they practise global research and the status-building mission.

One example of these intermediate institutions is those British and Australian universities (category 2b) that compete in the global research stakes while also building high volume concentrations of full fee-paying international students to plug the hole left by reductions in the government funding of teaching and basic research. Beneath that group in status terms are ostensibly teaching-research universities for whom the research mission is decisively subordinated to chasing cross-border revenues (category 4b). Other leading national research universities (category 4a) operate as elite universities but fall below the Super-league in research and have no presence in the global market for students. Their assiduous boundary

⁵ Has the whole field has been pulled towards the field of economic and political power so that in general the autonomy of higher education is reduced? There are advocates of that position (e.g. Slaughter and Leslie, 1997), but perhaps it is not so simple. Though the heteronomy of the mass and middling universities has increased, and commercial science has found its way inside the Ivy League, the Super-League seems to have more independent agency than before. Perhaps as in economic and political life the field of higher education is becoming more steeply hierarchical with the Bourdieuian elite becoming more concentrated on the global scale.

formation at home cannot deliver standing in the global market, where they might be subordinated by institutions that have a lesser historical status at home but are more active across borders. Outside global operations altogether are institutions that are solely national and local I mission (categories 7 and 9). These are outside global operations but not outside the global field. Whether they like it or not, regardless of the strength of their relations with local constituencies, such institutions are being devalued by global transformation.

The polar nature of the field of global higher education powerfully reinforces the global hegemony of the doctoral universities in the United States which are predominantly located in the global sub-field of elite university education and research. The Bourdieuian theorisation of the field also helps explain why the American universities sustain a dominant global position without having to aggressively building their global operations as others do; why the institutions in the other English-speaking countries seem so much more strenuous, even frenetic, in the pursuit of global strategic ambitions. Nevertheless, in global higher education the polarity between the two principles of hierarchization works somewhat differently to the market in art described by Bourdieu (1993). The elite end of the university field is more robust than elite cultural producers, more closely integrated with the centres of economic and political power. Super-league universities, particularly the US Ivy League, are economically stronger than mass producers of higher education. This tension between Bourdieu's two principles is absorbed not just between the different types of university in the field but inside elite universities, especially their research which is alternately fundamental and commercial, for example bioscience (Bok, 2003). Nevertheless Bourdieu is right to argue that the more autonomous that universities become, the less they are commercial in temper. The ultimate rationale of the Super-league is not revenue but prestige. The driving forces of university prestige are knowledge production and the production of social position.

Bourdieu also discusses the strategic behaviour of agents within the field of power. Agents within the field are competing with each other for resources, status or other objects of interest. In the field, 'every position-taking is defined in relation to the *space of possibles* which is objectively realized as a *problematic* in the form of the actual or potential position-takings corresponding to the different positions' (Bourdieu, 1993, p. 30). Bourdieu refers to position-taking as the 'space of creative works' (p. 39) but only some position-takings and 'trajectories' (the succession of positions occupied by an agent over time) are possible. These are identified by the agents as they respond strategically to changes in the settings and the moves in the game. Agents do not simply respond as autonoma to structured signals in the environment. 'Although position helps to shape dispositions, the latter, in so far as they are the product of independent conditions, have an existence and efficacy of their own and can help shape positions' (Bourdieu, 1993, pp. 61-62). Bourdieu find that the room for self-determination, 'the scope allowed for dispositions', is variable, shaped by the autonomy of the field in relation to other fields, by the position of the agent in the field, and by the extent to which the position is a novel and emerging one, or path-dependency has been established (p. 72).

Bourdieu's notion of interplay between 'position' and position-taking', between the structured starting position within the global field and the scope for autonomous action, is helpful. But there are questions about how much room Bourdieu leaves for self-determining agency and about the assumption of universal competition. Bourdieu also fails to distinguish between hierarchy and overwhelming power of the kind exercised by American film or American higher education. That brings us to Gramsci and his notion of *egemonia* (hegemony).

Gramsci and hegemony

Antonio Gramsci contrasts and also couples two different regimes of power. First, there is domination or coercion by the open state machine, the 'State-as-force' (Gramsci, 1971, p. 56). Second there is the exercise of hegemony, which is secured primarily through civil society, including educational institutions (Gramsci, 1971, p. 12). Hegemony is 'the "spontaneous" consent given by the great masses of the population to the general direction imposed on social life by the dominant fundamental group' which derives its prestige from 'its position and function in the world of production' (Gramsci 1971, p. 12). Hegemony is a social construction in the realm of intellectual reason, ideas and also popular culture. It is 'an order in which a certain way of life and thought is dominant, in which one concept of reality is diffused throughout society in all its institutional and private manifestations' (Williams, 1960, p. 587). The construction of hegemony is an active, complex process, a coherent integration of separate and at times contradictory belief systems, meanings and practices into a single regime. The formal institutions of civil society such as universities are analytically distinct from the state (political society) but intertwined with it. 'One might say that state = political society + civil society, on other words hegemony protected by the armour of coercion' (Gramsci, 1971, p. 10). Rule by consent is underpinned by rule by force.

Hegemony is reproduced in and through *institutions* with their own autonomy and techniques. It is motored also by identifiable *social formations* or interests: 'effective movements and tendencies, in intellectual and artistic life, which have significant and sometimes decisive influence on the active development of culture and which have a variable and often oblique relation to formal institutions' and provide 'the link between culture and society' (Williams, 1977, p. 117 & p. 120). *Tradition* is also an active, shaping force in hegemony. Raymond Williams (1977) notes that in a culture certain meanings and practices are selected while others are neglected or excluded. The hegemonic institutions sustain a 'deliberately selective and connective process which offers a historical and cultural ratification of a contemporary order' (p. 116). The selection becomes the common 'tradition' (1977). But hegemony is more than the sum of top-down institutions, social formations and traditions. It rests also on self-forming subjects (Rose, 1999) who identify voluntarily with it as its instruments. Here language and education are central in the formation of an active constituency for hegemony.

Gramsci's notion of hegemony originated in linguistics and language plays a special role in his argument. Under conditions of cultural hegemony a given population adopts linguistic forms and even an entire language from another group of people. Adoption is not triggered by coercion but relates to cultural prestige, and economic, political, social and at times military power (Ives, 2004, pp. 82 & 47). His theorisation also places the university in a pivotal role in civil society and in hegemony as the institution that standardises and inculcates the dominant language and authoritative knowledge, a site of cultural activity in its own right, and the place where the next generation of social leaders is formed. In universities people learn to make themselves in the terms of hegemony, both questioning and remaking tradition. They are attached to the university not simply because of the intrinsic lure of science or culture - that is enough for some but not for most - but because leading families use the university. In the university powerful social groups are reproduced, their career paths are defined and the initial momentum of their upward trajectories is secured. The lure of the leading universities, which draws the great volume of student applications, is the promise of social position. The lure of the leading global universities is the promise of mobile success that can be taken everywhere. Nevertheless, as David Forgacs puts it 'this does not mean that everything that takes place in

universities and the rest of civil society 'is subservient to the state or reflects ruling class interests'. By distinguishing between state and civil society 'Gramsci avoids on one hand a liberal reductionism, which sees civil society as the realm of free individuality entirely apart from the state, and on the other a statist and functional reductionism, which sees everything in society as belonging to the state and serving its interests' (Gramsci, 2000, p. 224).

In higher education nation-building is carried out not just instrumentally but reflexively. From time to time the state itself is criticised and thereby renewed, much as in Habermas's (1989) notion of the 'public sphere' (Calhoun, 1992; Marginson, 2006b; Pusser 2006). In fact universities are able to conduct scientific research and secure consent for the nation-state only because they are autonomous of machinery of government. University autonomy is always relative but can be substantial and generative under specific historical conditions (Ordorika, 2003). In inclusive Latin American public institutions such as the Universidad Nacional Autonoma de Mexico (UNAM), from time to time the university becomes a site in which political society itself is placed in continual question, the state machine can be directly challenged and alternative hegemonic political projects and leadership can emerge. But always there are difficulties in the relationship between universities and government. This is 'the weakest link of the public university, because the scientific and pedagogical autonomy of the university is based on its financial dependency on the state' (Santos, 2006, p. 62).

Did Gramsci see hegemony, with its grounding in city states and nations, as operational at the global level beyond the nation-state? Yes, he did, making the prescient statement that

Every relationship of 'hegemony' is necessarily an educational relationship and occurs not only within a nation, between the various forces of which a nation is composed, but in the international and worldwide field, between the complexes of national and continental civilizations' (Gramsci, 1971, p. 350).

In one respect Gramsci's theorisation has dated. He argues that the potential for American hegemony is retarded by the later historical development of the USA vis a vis Europe. The US 'has not yet created a conception of the world or a group of great intellectuals to lead the people within the ambit of civil society' (1971, p. 272). This has changed. The United States has created a distinctive conception of the world and it is there not Europe that the strongest universities lead global civil society and exercise hegemony in and through education and research.⁶ Like Gramscian institutions of hegemony in each nation the Super-league embody social formations and a tradition both national and global. They shape worldwide knowledge formation and the idea of the university. However much university personnel might criticize particular imperial projects such as the war in Iraq the leading universities are animated by and reproductive of US knowledge power worldwide. Given that education is central to all hegemonic projects, in the building of global hegemony in higher education much is at stake.

As suggested also by Steven Lukes (2005), hegemonic relations of power in higher education are shaped in three interrelated 'Gramscian' domains. The first is the domain of institutional centrality, strength and prestige. At the instrumental level some institutions and national higher education systems exercise power over others through the accumulation of financial

⁶ Perhaps a case can be made for an Anglo-American hegemony in higher education, given the global leadership exercised alongside the Ivy League by the major British institutions – though lesser British institutions have less global clout than their American counterparts – and given the centrality of English language to global hegemony, especially in research. But if there is an Anglo-American hegemony (Marginson, 2006c) then the UK is a relatively subordinated partner despite the global authority of Oxford and Cambridge.

resources, the strength of faculty and student bodies, the potency of infrastructures, the global centrality and position of their base country as well as their closeness to financial and political centres of decision-making, national and global. One manifestation of instrumental power within the global field is the participation of Super-league university personnel in the elaboration of higher education policies at agencies like the World Bank, OECD, Inter-American Development Bank and UNESCO. The second domain is that of shaping and controlling higher education agendas. In decision-making, institutions and systems exercise power through process rather than structural conditions and position. Power is expressed through the control of agendas as well in policy debates and policy design. At this level power relationships are shaped by direct instrumental power, coercion (threat of negative sanctions or use of positive incentives) and invocation of biases (norms, precedents, rules or procedures). One example of agenda control in education is the world-wide spread of evaluation, standardization and accreditation policies. The third domain in which hegemony is exercised is that of framing the field and constructing dominant views of higher education, including accepted notions and discourses. Institutions in the strongest countries exercise power by shaping widespread understandings of the nature and role of higher education, acceptable outcomes and processes and the prevailing standards and norms. They frame the field itself, determining the conditions of interaction and the terms of competition.

Gramsci also remarks that hegemony can vary in the degree of integration it facilitates. Hegemony normally presupposes that account is taken of the interests and tendencies of the groups over which the hegemony is exercised. But there is also the hegemony of the Italian *Risorgimento*, which does not feel the need to secure concordance between its interests and the dominated groups or engage with their specificities such as languages and ways of life 'They wished to "dominate" and not to "lead" (Gramsci, 1971, pp. 104-105). As we shall see the hegemony of the *Risorgimento* suggests the character of US domination in higher education, inflected as it is with American exceptionalism and the periodic American isolationism.

Part III. Mapping Global Hegemony

There is no fully satisfactory empirical inquiry into global hegemony in higher education. There is a plurality of observational tools and data sets. The most important sources are the global agencies, particularly OECD (2006) and the World Bank (2007). Few data and analyses are constructed with hegemony in mind and there are significant lacunae in empirical coverage. On the whole the existing data sets more readily allow us to compare worldwide higher education as a relational hierarchy using static markers of difference (for example expenditures on institutions and research) than to trace global flows of people, capital, communications, knowledge and ideas in higher education. It is not yet possible to build the kind of data sets that would allow us to comprehensively investigate flows on the location of initiative and drive, intensity, direction and reciprocity (Marginson & Sawir, 2005). Castells (2001) has data on the intensity of Internet traffic by nation and city, the location of English with some plurality at the edges; it would be helpful to have an equivalent set of data in relation to universities. Data are available concerning cross-border student flows, faculty flows, publication and citation patterns and language of use. Some nations collect data on

foreign students while others collect data on students crossing borders and these do not always coincide (Kelo et al., 2005; OECD, 2006, p. 303). Many nations collect data on short-term outgoing academic visits and some including the USA track incoming short-term visits. Data on incoming academic personnel are more complete than the data on outgoing personnel and on return rates. Few data are available on cross-border postdoctoral appointments. Only some nations provide data on the proportion of academic staff that are foreign born. Fortunately for the study of global hegemony, the USA provides a more comprehensive set of data on people flows in higher education and research than other nations (e.g. NSB, 2006; IIE, 2006).

Even so, a more complete set of empirical data would still require interpretation and synthesis. In this paper the investigation of hegemony is not data driven, it is theory driven. Bourdieu's theorization of fields of power, Gramsci on hegemony and Lukes' domains of power relations enable us to begin to imagine (to 'map') the complex global higher education environment. Drawing those theorizations into conjunction with the data allows us to (1) critically review the theorized mapping of that environment, and (2) test data sets for coverage and clarity, in a continuous and reciprocal process. For example, the data provide some insight into Bourdieu's polarity between elite and mass/ commercial institutions on the global scale. They enable tracking of publications outputs (NSB, 2006), institutional research performance (SJTIHE, 2007) and the locations of commercial institutional education. This exercise also demonstrates that data on the tuition market are not standardized and there is a lack of comparative data on student selectivity and on research in languages other than English. It also shows that in the global university sector, unlike the field of artistic production theorized by Bourdieu, status leadership coincides with the principal concentrations of economic resources.

Instrumental conditions

Lukes (2005) identifies institutional centrality, strength and prestige as the first domain of power relations. The instrumental or 'structural' conditions of hegemony include the size and weight of national economies and university budgets, and the geo-spatial distribution of the leading research universities. We want to emphasize three aspects of global stratification:

First, there is a worldwide hierarchy in terms of national wealth as measured by GDP/GNI per head. GDP/GNI per head is loosely correlated to tertiary education participation rates but more closely shadows research capacity. 'Developed' nations dominate the list of the world's top 500 research universities in terms of research outputs as measured by Shanghai Jiao Ting Institute of Higher Education (SJTIHE, 2007). In total 465 of the top 500 research universities are in nations with a per capita GDP of more than \$20,000 per year, and 193 of the top 200 research universities. In the middle group of nations there is much variation in infrastructure development and rates of student participation, with some nations approaching Western European levels, but just a handful of research universities in the global top 500 (Table 5 has details). China is in a special position. Per capita income is still relatively low but GDP, higher education and research are growing fast. Nations like Indonesia have both low rates of tertiary participation and relatively little science-based research. Some do not have universities at all.

	population 2005 millions	GDP PPP 2005 billion \$USD	GDP per head of population PPP 2005 \$USD	total spending on tertiary education PPP 2003/2005 billion \$USD	universities in SJTU top 200 2006	universities in SJTU top 500 2006
United States	296.5	12,409.5	41,854	359.9	84	167
Netherlands	16.3	537.7	32,929	7.0	7	12
United Kingdom	60.2	1926.8	32,007	21.2	23	43
Australia	20.3	643.0	31,642	9.6	6	16
Japan	128.0	3943.8	30,811	51.1	9	32
Singapore	4.4	116.8	26,844	n.a.	1	2
Mexico	103.1	1052.4	10,209	13.7	1	1
China *	1311.4	8787.2	6701	n.a.	2	14
Indonesia	220.6	847.4	3842	5.1	0	0

Table 1. Instrumental conditions of hegemony: United States' GDP, GDP per head, spending on tertiary education and number of top research universities compared to seven other nations

PPP = Purchasing Power Parity SJTU = Shanghai Jiao Tong University data (SJTUIHE, 2007) spending on tertiary education is an approximation, using 2005 GDP data and the 2003 proportion of GDP allocated to tertiary education * includes Hong Kong, excludes five universities from Taiwan n.a. = data not available

sources: World Bank (2007) for columns 2-4 and part of column 5, OECD (2006) for part of column 5, SJTUIHE, 2007

Second, as the example of China suggests, national system size matters. All else being equal, larger nations have the capacity to sustain both greater autonomy and initiative within the global field. Larger nations have a larger resource bases and greater resource flexibility, they have more scope for a mission-based internal division of labour, they have greater potential to self-reproduce research infrastructure and are less vulnerable to the outflow of skilled personnel. For example, in Germany and France academic labour markets are more selfsufficient than elsewhere in Europe (Musselin, 2005). Yet a paradox of large system size is that it can postpone the necessity for global engagement. Higher education is now globally referenced and knowledge flows and people flows pour across the national border regardless. Ultimately national systems and research universities failing to pursue a global strategy will be left with less agency freedom at home and abroad. Smaller nations face a different set of strategic imperatives. They can scarcely afford to abstain from global engagement but struggle to maintain identity and autonomy viz a viz the larger players. This does not mean that smaller size signifies absolute global weakness or the absence of strategic options. Some small nations such as Singapore, Switzerland and the enclave of Hong Kong in China (Postoglione 2005) specialize in knowledge-intensive industries and cross-border services. They have positioned themselves as managers and brokers of global flows of finance, knowledge and people.

Third, the instrumental strength of the United States in higher education is massive, compared to all other nations whether 'developed' or 'under-developed'. The strength of the USA begins from its scale as a nation, resources as measured by the level of per capita income, and the size of the national investment in higher education and research. The United States has the third largest population in the world; its GDP is much the largest and GDP per head exceeds \$40,000. The next competitor Japan has less than half the population, one third of the GDP and a per capita income of just over \$30,000. The USA also spends a higher proportion of its GDP on tertiary education than any other nation, 2.9 per cent. This amounted to approximately

\$360 billion in 2005 in PPP terms. The next largest spender Japan is at \$51 billion. *The United States invests seven times as much on tertiary education as the next nation*. This is almost on par with the American global supremacy in military weapons and the cinema industry. It is not surprising that the USA is overwhelmingly dominant in the Shanghai Jiao Tong University (SJTU) research university rankings based on publications, citations and prizes for research performance. The United States has 84 of the top 200 research universities.

The SJTU data also point to the secondary leadership role of the UK, and hint that global power is not solely a function of resources. UK GDP per head is about \$32,000 and the UK spent \$21 billion on tertiary education in 2005, 6 per cent of the USA. Yet the UK has 23 research universities in the top 200, 27 per cent of the US level. How? One reason is language.

Hegemony in and through language

The second and third domains of power identified by Lukes (2005) are shaping and controlling higher education agendas, and framing the field and constructing the dominant views of higher education. In higher education an identifiable 'way of life and thought', a 'dominant tradition', operates globally. The global tradition is not all pervasive; national traditions and localized practices persist, especially in teaching and professional preparation; but it sets the agendas of research in research intensive universities. This global tradition is created above all via the English language and the worldwide flows of research knowledge, especially in the sciences. It is also institutionalized in asymmetrical flows of students and faculty between countries.

English is one of two languages spoken by a billion people. The other is the national tongue of China, Putonghua ('Mandarin'). Two pairings of related and mutually intelligible languages are spoken by over half a billion people: Hindi/ Urdu and Spanish/ Portuguese. Three languages are spoken over 200 million: Russian, Bengali and Arabic. Four more have over 100 million (Linguasphere Observatory, 2006). Regardless of this plurality and the diversity of traditions of scholarship and inquiry 'it is English that stands at the very centre of the global knowledge system. It has become the lingua franca par excellence and continues to entrench that dominance in a self-reinforcing process' (Held et al. 1999, p. 346; Crystal, 2003).

English is spreading as a medium of instruction in non English-speaking nations, particularly in programs designed to attract foreign students. It is widely used in India and the Philippines. In Malaysia, it has been reintroduced in the school sector and is dominant in the private tertiary colleges. In Europe English is especially used in Masters level programs targeting foreign students and in doctoral education. Nations where English is widely used include the Netherlands, Finland, Sweden and Denmark. Another 13 countries provide some programs in English, including Korea and Japan (OECD, 2006, p. 291). As a second language English is much more widely used throughout the academic world. A survey of 1998-1999 ERASMUS teachers and coordinators in Europe found that almost 90 per cent of those from non Englishspeaking countries spoke English. The next language, French, was spoken by less than half the respondents (Enders & Teichler, 2005, p. 101). In research global Latin, French, German and Russian are declining. French retains importance in the Francophone countries; Arabic is a common medium of academic discussion in many nations; and Spanish is the regional language throughout Central and South America. Nevertheless, in many if not most nations faculty receive financial or career incentives to publish in English. Linguistic diversity in higher education is often now expressed not in bilingual or multilingual practices but in

variation between different 'Englishes', especially in Asia and Africa, whereby English becomes inflected with elements from local or national language.

Even so these trends do not quite capture the special status accorded to English. This extends not just to the preferred use of English as a medium for the common intellectual conversation and the incidental neglect of conversations in other languages but to a greater *direct and intrinsic* value placed on knowledge originating in English as compared to other languages. Knowledge has somehow become more 'true' if it begins in English. This is indicated by the worldwide patterns of book translation. Books originating in English are much more likely to be translated into other languages than the other way round, as Table 2 shows. The USA and the UK publish less translated books than other large countries. Much work in languages other than English, some of exceptional quality, never enters the one recognized global intellectual conversation. Work produced in English is much more likely to be used everywhere else. The articulation of power via linguistic origin is not confined wholly to native speakers. Professors from India or Singapore, teachers from Pakistan, gain a referred global power and vocational mobility from the fluency in English that is endemic also to their education systems.

	total book translationsproportion of books translated from					
		English	French	German	Spanish	other
		%	%	%	%	%
Spain	7711	50.1	20.0	10.6	0	19.3
Germany	6676	60.7	11.9	3.4	1.9	22.1
Netherlands	4286	56.8	18.0	15.1	1.1	9.0
France	3979	65.0	3.3	10.0	2.6	19.1
Japan	2696	78.3	7.9	7.5	0.7	5.6
Sweden	1937	65.5	5.5	6.5	1.3	21.2
UK	1139	4.0	23.2	25.7	3.1	44.0
USA	606	0.3	21.8	23.8	6.1	48.0

Table 2. Unequal linguistic flows: patterns of translation 1983-1985

source: adapted from Held et al., 1999, p. 346

English has been taken up throughout the global field of higher education not because of coercion exercised by Anglo-American universities and still less because of the intrinsic intellectual utility of their language but because of the imperial economic, political, military and cultural weight of the UK and then the USA in the last 250 years. Language translates Anglo-American domination in education where the fashioning of thought and communication feeds into every other sphere. And so we have a worldwide academic monoculture in which the universities from all English language systems are complicit. For them it is so easy to set global agendas. How often is this challenged? Most principal academic journals are led from the USA. Few of their editors feel obliged to take contributions outside English into account. This asymmetrical and largely one-way exchange of knowledge is a taken-for-granted reality of academic life, a non-reflexive foundation against which academic reflexivities find their limit and are played out. In their non-coercive fashion, and seemingly (at least on the surface)

with the consent of all the participants, the civilities of academic life truncate human potential as surely as do poverty and war.

Knowledge concentrations and knowledge flows

The English-speaking nations constitute an extraordinary 71 per cent of the Jiao Tong University top 100 research universities on the basis of measured research performance. The measure is biased in favour of research in English but the point is that this is the global mainstream. The UK has 11 of these universities, Canada four, Australia two and the United States has 54. A further 22 of the top 100 are located in Western Europe, six in Japan, and one in each of Israel and Russia. The main Western European nations are Germany (five) France and Sweden (four each), Switzerland (three) and Netherlands (two). Only one of the top 100 is in southern Europe and there are none in the Spanish-speaking countries, China or India. India has t three in the JTU top 500, China excluding Taiwan has 14 (SJTUIHE, 2007. See Table 5).

The Jiao Tong ranking is configured in terms of globally comparable disciplines, which in practice means the science-based fields, with a minor role played by the more 'scientistic' of the social sciences, economics/business and psychology and its derivatives. Humanities are more nationally structured and correspondingly more centrally implicated in the formation of distinctive national, and sometimes more localized, identities. Until recently, in many nations, the humanities were often the medium for the formation of a significant sector of the national leadership; for example classics and history in the training of the British and Indian civil servants. But everywhere now the nation-bound nation-building project has been translated into the global competition state. There is a continuing demand for nationally-grounded knowledge in many nations, for example the role of neo-Confucianism in China in the construction of identities which are taken out into the world. But such national traditions cannot yield international rankings. It is in the sciences and the associated technologies that nations readily compete, in both research and economy; and can more readily measure their competitive standing in relation to each other. Thus the dominance of research university as science university is entrenched. It is not merely an Anglo-American model. It is equally the model of Western European higher education. But for Western Europeans universities, it is not enough to be in the historical vanguard of the science university; for in the construction of the global hierarchy the globalization of science is over-determined by the hegemony of language.

The leading universities concentrate to themselves prestige, financial resources, human talent, research infrastructure and knowledge production and each form of concentration produces the others. A principal criterion used in the Jiao Tong research rankings is the number of 'Hi Ci' researchers, those in the top 250-300 scholars in their field as measured by citations. Of these HiCi researchers, no less than 3835 are located in the USA, more than *eight* times the number in any other country (Table 3). Among the US universities Harvard has 160 HiCi researchers, more than all the French universities together, Stanford 135, UC Berkeley 82, MIT 74 and Chicago 41. There are 44 at the University of Cambridge in the UK. The Jiao Tong rankings also measure the number of Nobel Prize winners associated with each university. Of the 736 Nobel Prizes awarded up till January 2003, 670 (91.0 per cent) went to people from high-income countries, the majority to the USA, with 3.8 per cent from Russia/Soviet Union/

their best prospect of winning a Nobel Prize in Literature (10.1 per cent) or Peace (19.8 per cent). These areas are excluded from the SJTU index of research performance (Bloom, 2005).⁷

United States	3835			
United Kingdom	443			
Japan	246			
Germany	242			
Canada	174			
France	157			
Australia	105			
Switzerland	102			
Netherlands	92			
Sweden	58			
China	20			
Spain	18			
India	11			
Singapore	4			
Mexico	3			
Indonesia	0			
Source: Thomson/ISI 2007				

Table 3.	Concentrated knowledge power:	
'HiCi' r	esearchers, selected countries, 2007	

Source: Thomson/ISI 2007

Where research capacity is concentrated, there the knowledge flows are generated and pushed outwards to the rest of the world. In 2001 scientists and social scientists in the USA published 200,870 papers in major journals. The volume of papers from Japan was 57,420, the UK 47,660, Germany 43,623 and France 31,317. In China there were 20,978 papers in 2001, Australia 12,602, India 11,076. Mexico produced 3209 papers, an increase of 263 per cent since 1988. Indonesia despite its size created just 207 papers in 2001 (NSB, 2006). Not much knowledge is flowing back from Indonesia to the USA. In a group of rising Asian science powers, between 1988 and 2001 the number of scientific papers produced per year increased sharply in Korea (1332 per cent), Singapore (535 per cent), Taiwan (472 per cent) and China (354 per cent). Mainstream research is more plural in terms of national origin than in terms of linguistic medium and the national plurality is increasing. However the long lead of US research universities and their continued domination of the material means of production – research infrastructure and personnel, electronic publishing and journal production – and their capacity to co-opt talent from other nations via hirings and collaboration, ensures that US universities will continue to dominate global knowledge flows for the foreseeable future.

⁷ Of the nine scientists who originated from emerging or developing countries and who won Nobel Prizes in Chemistry, Physics, Physiology or Medicine, four were working in universities in the USA and two in the UK and Europe (Bloom, 2005).

The unevenness in the flows, the asymmetries in direction, can be traced more precisely when we move from paper output to citation patterns. The USA produced less than a third of the world's scientific articles in 2001 but 'accounted for 44 per cent of citations in the world scientific literature' (Vincent-Lancrin, 2006, p. 16). On average, knowledge produced in the USA enjoys greater authority than knowledge from elsewhere, even good work by scholars from other nations working in English. This hierarchy in value, the special importance placed on knowledge from the USA shows itself as strongly or more strongly within the USA than it does outside it. For some American faculty there is *nothing* produced outside the USA. The external referencing of US phenomena is impossible. The local is equated with the universal. The Carnegie survey found that while over 90 per cent of scholars from other nations believed it necessary to read foreign books and journals only 62 per cent of American scholars agreed, much the smallest level among the developed nations (Altbach, 2005, pp. 148-149). Table 2 shows that only 606 books translated from foreign languages were published in the United States in 1983-1985, including 37 translated from Spanish to English. This compared to 7711 translated books published in Spain, a country of one seventh the population of the United States, including 3863 translated from English to Spanish. American scholars and students also travel across borders less often than their counterparts. Philip Altbach remarks that though US scholars are 'at the centre of the world academic system', 'the American research system is remarkably insular, especially when compared to scientific communities in other countries... The American system accepts scholars and scientists from abroad, but only if they conform to American academic and scientific norms' (Altbach, 2005, pp. 149-150). Academic faculty all over the world inhabit global fields in which they pursue the twin satisfactions of cultural production and social prestige. Outside the USA many faculty have correspondingly ambivalent relations to their national and local contexts. Inside the USA, when faculty move between local world to academic world they are less conflicted: they do not leave America.

In US universities there are many exceptions to these generalizations, many instances of a more cosmopolitan outlook. Here we identify the main lines of practice not the only lines. Yet there is the same asymmetry even in the construction of American cosmopolitanism. Though many US faculty reject the Huntington (1996) thesis about the 'clash of civilizations' global exceptionalism and its seductive sense of superiority leaves its mark. Across borders a confident American liberalism becomes manifested as a kind of missionary virtue: crossborder work too readily becomes a matter of what 'we' can teach 'them', not what we can learn, or what we all can share. Ease of communication and global pedagogy are all too compatible with hegemony. Cosmopolitan on the surface, monolingual and culturally and technically superior at heart. To put it bluntly, no matter how much US faculty might embrace tolerance and openness as virtues, the binary inside/outside logic of global academic monoculture is at bottom not all that different to Huntington. Correspondingly, in the English language countries 'diversity' has a more limited meaning than in Western Europe, Latin America and East Asia. It is understood in social rather than cultural terms, or as a limited multiculturalism within the monoculture, for example the access of non dominant groups to higher education. 'This model values diversity as a function of competition and not the other way round' (Drache & Froese, 2005, pp. 26-27). In this framework a global cultural diversity based on equality of respect between sovereign identities, the classic virtue of multilateralism, ceases to be seen as essential in itself either as a human right or as a mutual benefit.

There is much that academic eyes in the United States cannot see. Still less can universities in the USA see themselves as others see them. But this partial blindness is functional enough. Researchers and scholars in fortress USA draw global authority from the binary inside/outside

distinction and deploy it so as to perpetually remake the field in their own image. US higher education draws the main benefit from the gift economy called academia in which there is an unequal capacity to give. This is the essence of client relations. Notwithstanding the focus on commercial research in policy, the main bulk of academic knowledge in the United States as elsewhere is produced as freely reproducible public goods not privatized commodities (Stiglitz, 1999). In that sense it is part of a collective knowledge system offering benefits to all. But the coin of the benefactor has another side. These are also culturally loaded public goods. To the extent that they exclude knowledge produced in other nations and traditions, they constitute 'public bads' in those locations. And the commons is also diminished. To the extent that it reduces the overall diversity of knowledge the hegemonic global system of knowledge constitutes a collective public bad (Marginson, 2007a). This subtracts from the ultimate potentials of knowledge, for US faculty and English speakers as for everyone else.

The inclusion/ exclusion binary in the global knowledge system decisively over-determines the free flow of knowledge goods imagined in global utopias. The universal circulation of all human knowledge is technically possible but does not happen. Some knowledge goods flow freely. Others do not. Once a system of truth attains critical mass it reproduces itself as true in circular fashion, relegating to the outer darkness, outside the circle, any viewpoint from which the system *qua* system could be objectified. To participate in the global knowledge system as self-determining agents people outside the USA must accept these terms. Positioned within a global field framed by universal English and US domination, they position-take on grounds only partly empathetic and familiar. They find themselves constantly oscillating between strategy and identity, knowing that by position-taking on these terms they are complicit in the very mechanisms that place them at a permanent disadvantage. No system of control is as effective as that which is embraced voluntarily with a sense the inevitable has come.

Unequal people flows

In worldwide higher education short-term movement tends to be more two-way (reciprocal) than long-term movement; though some short- or medium-term movement does lead to permanent migration. Between 2000 and 2004 the number of mobile cross-border students rose by 41 per cent (OECD, 2006, p. 286) and in 2004 2.7 million students were enrolled outside their country of citizenship. About half were students moving from China, India and other Asian nations to English-speaking nations; another almost one third was movement within Europe. In terms of country of destination the largest group of students, 22 per cent, entered the USA followed by UK 11 per cent, Germany 10 per cent, France 9 per cent and Australia 6 per cent (p. 288). The surface appearance is one of multiple flows in all directions but there is a primary global flow within the flows. Research on student choice identifies a strong overall preference for the elite universities in the USA, especially among Asian families (e.g. Mazzarol et al., 2001). For their part US doctoral universities, unlike most universities in the UK, Australia and New Zealand, do not set out to maximize the number of foreign students and the revenues they bring. US doctoral universities want the best foreign students not the most foreign students. One third of their foreign intake is recruited at doctoral level. In 2003 the UK enrolled 23,871 foreign doctoral students, Spain 11,765, Australia 8855, Switzerland 6028 and Sweden 3205 (OECD, 2005). The role of these nations was dwarfed by that of the USA where there were 102,084 foreign doctoral students in 2004-2005. Most of the foreign doctoral students enrolled in the USA receive scholarships or other subsidies from their American universities (IIE, 2006). The USA has made itself the global graduate school.

Between 1977 and 1997 the foreign born proportion of all American PhDs rose from 13.5 to 28.3 per cent, and in engineering from 32.1 to 45.8 per cent (Guellec & Cervantes, 2002, pp. 77-78). As graduate assistants foreign students are an important part of US national research effort, many are later recruited into post-doctoral programs and some build long-term careers. The find the US labour market more flexible and open than the academic labour markets of most nations. Stay rates vary by country of origin. Potential migration is particularly high for students from China, Israel, Argentina, Peru, Eastern Europe and Iran; and some developed countries including the UK, Canada, New Zealand and Germany. In 2001 the stay rate for Chinese graduates in science and engineering was 96 per cent, and for Indian graduates 86 per cent (Vincent-Lancrin, 2004, p. 32). In 2003 three quarters of EU citizens who obtained a US doctorate said they had no plans to return to Europe (Tremblay, 2005, p. 208). On the other hand stay rates are very low for Korea, Japan and Indonesia and relatively low for Mexico (Guellec and Cervantes, 2002, p. 92). Even so, the graduates that return to their country of origin or migrate elsewhere broadcast the norms of US higher education throughout the world.

Though conclusive data are lacking it appears that the size of cross-border faculty recruitment is growing relative to national labour markets at all career stages. But it has not subsumed national faculty labour markets into one worldwide set of regulations, salaries and conditions (Musselin, 2004; 2005). Not does the globally mobile element constitute a single global labour market (Marginson, forthcoming B). Nevertheless, the scale of foreign doctoral education and the recruitment of foreign faculty into the USA has transformative implications for labour markets in other nations. For example, as well as Germany losing many doctoral graduates in the USA and UK its own long standing as an attractor of foreign faculty labour is the market in highly mobile researcher/scholars working at the top end of citation performance. This market is dominated by the Super-league universities (Table 3) so that global salaries and conditions are an outgrowth of the American domestic system. For universities in other nations to compete effectively for high value scientists they must offer American salaries and something approaching American research infrastructure as Singapore has done (Lee, 2002).

Arguments that there is no such thing as 'brain drain' and instead we should talk about 'brain circulation' are right in that mobility is frequently temporary and locations often unstable; and that the research diasporas of Korea, China and India show an increasing tendency to move back from the USA if not back and forth several times; but wrong in that they obscure the continuing asymmetries in people flows and hide the fact of US hegemony. Few US national doctoral graduates 'brain drain' to the emerging and under-developed nations and relatively few to Western Europe. The striking fact remains that just as every other nation has a balance of trade deficit with the USA in film and television, every other nation has a net brain drain of faculty labour in relation to the United States. The 'brain circulation' concept provides cold comfort to those developing nations and university systems where the movement of talented scholars and researchers continues to be almost all one way and permanent in character.

The pattern of global people flows in higher education clarifies the shape of global hegemony in higher education. A binary hierarchical model which imagines the world in terms of developed/ underdeveloped is not sufficiently dynamic and creates the false impression that every nation is on the same developmental ladder. Rather, the structural logic of the global field is that of core/periphery with the USA at the global core. Systems and universities are arranged at increasing distances, from the relatively advanced national systems in the global semi-periphery (for example Australia or Finland) to emerging systems in the global periphery 21

(for example Mexico or South Africa) to nations without research capacity at the global margins. The core exerts a magnetic effect on periphery and margins, continually drawing talented people and resources into itself. Some it holds permanently, others later move back to the periphery and the margins as its agents. In alliance as it is with hegemonic English, the attribute that all globally successful faculty share in full measure, the core/periphery dynamic more deeply entrenches the insider/outsider binary. But the beauty of the core/periphery model, its functional democratic ambiguity, is that it is never quite clear where the line between insider and outsider falls. Herein lies the deception at the heart of American global engagement. Who can quarrel with the provision of opportunities for upward mobility for the deserving poor? And talented people from all over the world *do* have significant personal opportunities in US research universities, if they can reach those universities in the first place and if they are prepared to abandon their outsider identities once they get there. As they walk in the gate for the first time and begin the long and rocky journey to tenure the Super-league is at its most cosmopolitan moment. Thus these selectively generous universities open themselves to the world, on one-way terms designed to accumulate their own human capital.

Unequal capital flows

We do not have global data on the cross-border flows of technological capital in the form of inventions and patents and research know how. Be do know that the characteristically Anglo-American insistence on intellectual property rights is played out in asymmetrical capital flows, in which the dominant powers absorb a range of know-how, discoveries and ideas from other nations and return these embodied in the form of commodities for which full prices are charged. The only saving graces are the public good character of research knowledge and the technical and juridical impossibility of preventing the cost-price replication of cultural commodities, which undermines the imperial property regime (Drache & Froese, 2005). We do have better data on the capital flows associated with the cross-border student markets. In 2001 the USA took in \$11.5 billion from foreign students while Australia took in \$2.1 billion. Comparatively few domestic students from either country went abroad (another sign of the indifference of the English language universities to plural encounters); outward mobility cost the USA \$2.4 billion and Australia \$0.4 billion. In net terms the cross-border capital flows in favour of those nations were \$9.1 billion in the USA and \$1.6 billion in Australia (OECD, 2004, p. 32).⁸ Since 2001 Australian education exports have grown sharply and the estimated revenues from student fees and expenditures is now \$7.0 billion (ABS, 2006).⁹

Table 4 might suggest that capital accumulation is the driver of global educational activity in these two nations. While this is true of at least some Australian universities operating within the sub-field of commercial cross-border education it is not true of the US doctoral sector.

In the USA both foreign policy goals and the needs of research dictate a focus on subsidizing and recruiting talent not on commercial revenues. Both when it retains foreign students and when it sends them back US international education is one pillar of the imperial economic and politico-military relationship between the USA and the world. Since Woodrow Wilson the American foreign policy establishment has supported international education and generations of benefactors have donated scholarships to as to incubate and Americanize foreign elites.

⁸ Relative to the revenue flow in their favour these two nations spent little on foreign aid for post-secondary education: USA \$111 million, Australia \$13 million (OECD, 2004, p. 286).

⁹ This makes education one of Australia's four most valuable exports along with coal, iron ore and tourism.

Global hegemony is a much bigger prize than capital accumulation in higher education alone, and still bigger than the fiscal savings which have driven the Australian commercialization. Global hegemony opens the way to the maximum possible capital accumulation, political power and cultural shaping across the full range of social and economic sectors.

	revenues from foreign students 2001	cost of national students abroad 2001	net capital flows 2001
	\$ million USD	\$ million USD	\$ million USD
United States	11,490	2380	9110
Australia	2145	529	1616
Canada	727	529	198
Mexico	31	81	- 50
Greece	124	205	- 81

<i>Table 4.</i> Unequal global capital flows in higher education:
selected nations and selected capital flows *, 2001

* e.g. does not include revenues from patents and research, publishing and consulting activities, or the governmental flows of foreign aid for tertiary education

Source: OECD, 2004, p. 32

The principal material constituent of global hegemony in higher education is not financial capital, but the capacity to produce research and knowledge where the USA dominates the field. We emphasize again that this research is subsidized rather than commercial market-based and much of it is pure basic research. Correspondingly the prime objective of the Asian science powers, those challengers of hegemony on the grounds of hegemony, is not export capacity but research capacity. That Australia and New Zealand leverage the positional advantage of an English-language system to chase down revenues not research capacity is a Bourdieuian sign that their position-taking strategies are being played out not at the heart of the hegemony but in the semi-periphery (Marginson, 2007b). That the USA despite its outlay on foreign talent has so engineered it so that other nations provide \$9 billion to fund the hegemonic project in higher education is yet another sign of remarkable global domination.

Summarizing hegemony

The global currencies are English language research knowledge and positional advantage. The former signifies the latter, while also providing the medium in which the leading universities shape and control agendas, frame the field and construct the norms of the sector. Though the logic is a core/periphery model and an inclusion/ exclusion dynamic, the normalizing effects of hegemony are felt everywhere. Meanwhile the great American universities engineer the consent of elites from other nations who finish their education in the USA. Here we find the Gramscian sequence between the two regimes of power. Global consent engineered in civil society in the peaceful realms of the lecture hall and the research laboratory becomes an active condition of American global rule by financial weight and military force. The flows of people, knowledge, ideas and resources in higher education, and their many fecund potentials, become harnessed for nationally specific global objectives. That is, for the fulfilment of imperial ends.

To world-wide American power in higher education is joined the secondary global role of the UK in the spheres of culture and language, research and elite university education, and in the technologies of governmental neo-liberalism. In the UK it is near-hegemony and this brings with it an oscillation between a sense of helplessness in the face of brash American power, and the practical confidence and sense of cultural superiority which born of Empire are still deeply ingrained. To many in higher education outside the English-speaking world the difference does not matter. To them globalization appears simply as a single Anglo-American process. Yet 'Americanization' is so remarkably flexible, more various and innovative than British rule and far less planned and driven by the state, the province of autonomous institutions and faculty, the sum of a multitude of spiels and deals. It rarely involves the US government directly. Still, the nation supports its universities abroad, despite the polemical snipings of faculty and episodic problems in securing visas for scholars and students from countries under suspicion; and the cross-border dealings of US universities together reflect a surprising degree of cultural coherence in their interface with the rest of the world. In the last analysis none forget they are American and that they have this in common with Washington. It is the kind of mutually supportive relationship between civil society and state that Gramsci imagined. Universities do not always relate to states this way, but they do so in the context of hegemony.

But this is the most remarkable thing: the effects of US universities on the higher education world are profound and continuous, sustained by many communications and engagements, yet they protect themselves completely from contamination by foreign influences in a sector where multiple loyalties and hybrid identities are part of the stock in trade. Globalization in higher education is what the USA does to the rest of the world, not what the world does to US universities. Hegemony in higher education is framed by American exceptionalism and the episodic American isolationism. Of course it depends which agent is in play. Americanization at the World Bank is a missionary ideology for remaking the higher education world on quasi-American lines. But the Americanization of the Ivy League deals selectively and in its own mind occasionally across borders. It always retains the option of indifference. This is another sign of the university as aristocracy as Bourdieu (1988) identifies. When elite US research universities consider foreign universities, when they look up briefly from their fascination with all things local (which being also imperial would normally be expected to subsume offshore matters), they do not waste time in loose fishing expeditions. They use the open global setting instrumentally, sending good American knowledge in one direction and drawing talented foreigners from the other. Otherwise foreign universities are largely ignored. American universities take what they want from the rest of the world and junk the rest. They are not very interested in engaging so closely with non-American institutions as to learn their languages of use, as in the classical British imperial strategy described in Orientalism (Said, 1979). Nor are they much interested in converting foreign universities, or especially interested in making money from them. Still less are they interested in taking continuing responsibility for capability building in emerging national systems. Foreign universities are left benignly to evolve towards US templates according to their own capacity and 'merit'. This is a top down globalization which marginalizes the cultural 'other' rather than absorbing it and building hybrid fusions as for example the Asian science powers are doing. It is the classical hegemony of the nineteenth century Italian Risorgimento. It dominates but it does not lead.

Arjun Appadurai's (1996) suggests that this kind of hegemonic relationship can be subverted from below in the hybrid cultural forms constructed by diasporic communities. Perhaps we can identify such forms in the academic spaces created by American exceptionalism and isolationism. Within global university hegemony there is more potential for hybridity in some

domains than others. Organizational models are nested in historical conditions and culture and this opens them to local self-determination and variation. In teaching there is a plurality of languages of use including heterogeneous 'Englishes'. Despite the fluidity of intellectual discourse research and knowledge formation are less open to hybridity on hegemonic ground. They constitute a tight binary global logic of inclusion/ exclusion that assigns worldwide academic labour to one of two categories: (1) part of the global research circuit, which means using the dominant language and publishing in the recognised outlets; or (2) not global, bearer of knowledge that is obsolete or meaningless and doomed to irrelevance. Global flows might have facilitated diverse cultural encounters but in the more global era post 1990, knowledge building outside the English language has become less rather than more visible. To establish a genuine cultural plurality in research it is necessary to move outside the terms of hegemony.

IV. Tracing the institutionalization of global hegemony

We turn now to the 'how' of the framing of the field, the construction of the dominant views of global higher education and the shaping of higher education agendas. The paper identifies two components of the hegemonic model (1) the tradition of the American university, or rather, a particular reading of that tradition, and (2) the new public management in higher education, including reforms designed to simulate a commodity market in the sector; and discusses the way global university rankings inculcate both. First, however, the paper notes the actually existing diversity of structure, mission and activity within the worldwide field; the diversity that is confronted and reified in the processes of global norming and ranking.

Diverse traditions and models

There is no one single 'Idea of a University' (Newman 1899/1996) but many different missions, structures and organizational cultures, associated with distinctive traditions and models. All are nested in national contexts, historical identities and conditions of possibility. In the USA there are the traditions of the Ivy league private research university and the liberal arts college, the flagship state university and the community college, and newer models such as for-profits trading on the equity market In the 'Westminster' countries (UK, Australia, New Zealand) systems combine university autonomy with explicit state steering. There are the Nordic/ Scandinavian university with high participation, research culture and strong state investment (Valimaa, 2004; 2005); the German-style university with elite participation, research culture and state administration; the Latin American public university with high participation, scholarly culture and a special social and political centrality; the emerging science university systems of East and Southeast Asia, including China, Taiwan, Korea and Singapore, fostered by state investment, Singapore's uniquely global orientation; the technology and business-focused institutions of India. Beyond the research university, there are highly regarded vocational sectors in Germany (the Fachhochschulen) and Finland and many other vocational and community-based programs, including for-profit models and online institutions. There are also many examples of specialized institutions in teaching and research.

Some tendencies to global standardization are inevitable and desirable, for example protocols for recognition and accreditation, and forums for publication. When global systems slip from facilitating and communicating diverse national and regional identities into the suppression of diversity through the installation of hegemonic norms, something is lost. There is a cultural imbalance in the emerging global systems. Most of the non-American traditions face crises of legitimacy and material possibility, particularly those dependent on high state investment. But the choice is *not* between a standardizing one-world hegemony and the old national diversity. The choice is between Americanized systems across the world attuned to the conditions and needs of one nation, in which most universities look like weak imitations of the real thing; and a more plural environment with space for national and regional self-determination in which several regionally-based norms of higher education could flourish. Traditions with potentially broad appeal already exist in embryo. One possibility is a European university grounded in a distinctive mix of public and private goods and freedoms and sustained mostly by state investment, as exemplified by the successful Nordic university systems. Another possibility is the 'State-building university' (Ordorika & Pusser, in press), a model of higher education linked to the development projects of postcolonial societies and the developmental State. Arguably, state-building universities are already prominent in Latin America and something similar can be discerned in parts of Asia and Africa as well.

Hegemonic norms

How is it that the non Anglo-American traditions under assault? They are being problematized and subordinated by the New Public Management (NPM), by the normalization of reified NPM models of US higher education and by global ranking on the terms of the hegemony.

The NPM first emerged in the UK in the 1980s. Though it pre-dates the communicative globalization of the 1990s that medium has accelerated its policy diffusion.¹⁰ For the most part NPM perspectives on higher education have been adopted by the worldwide financial sectors, which closely influences government, and global policy agencies outside the United Nations especially the IMF and World Bank. NPM reforms includes government-steered competition between institutions, executive-steered competition between academic units; modernized management and entrepreneurship, marketing of institutions; systems with a mixture of public and private institutions and institutions with a mixture of public and private funding, higher tuition, rhetorical emphasis on customer focus; research links with industry; performance measures and output-based funding; and relations with funding agencies based on contracts, accountability and audit. NPM reforms are driven by desires for fiscal efficiency and global competitiveness, and entail the reworking of control systems. In its full form the NPM models national systems as economic markets and imagines universities as firms driven by economic revenues and market share, not teaching, research and service. In the last two decades the NPM has been the main policy conversation. Numerous studies, supportive and critical, attest to its impact (for example Clark, 1998; Marginson & Considine, 2000; Nowotny et al., 2001; Musselin, 2005; Henkel 2005, 2007; Rhoads & Torres, 2006). Bensimon & Ordorika (2006) note how in Mexico performance management and individualizing faculty incentives redirect effort from the broader social mission of the public university to globally reputable 'outputs'. This is not to say that NPM reforms are uniform or uniformly applied, or inevitable. Except

¹⁰ It is not surprising that some analysts see the NPM, globalization and an imperial Americanization or Anglo-Americanization simply as one process (Currie, 2005).

where conditions are set by World Bank loans the implementation of NPM is essentially shaped by national politics, governmental culture and local stakeholders, not global agents.

Although the NPM began life as the child of British neo-liberalism, its ideal models of higher education are taken from the United States. It is inevitable that given the worldwide dominance of US higher education the American traditions would be closely watched. Nevertheless, imitation does not always make good policy; and nor is isomorphism always possible. Though it seems that policy makers everywhere believe that if their universities imitate US universities they will succeed like them, the NPM cannot deliver US outcomes without the national/global conditions that sustain the US brand of 'academic capitalism' (Slaughter & Leslie, 1997; Slaughter & Rhoades, 2004). Policies of imitation with insufficient regard for local context are likely only to confirm the dominance of the prototype American parent, thereby illuminating the vertical distinctions in the sharpest possible relief. Nevertheless, there is more than one possible 'American model', not just the Ivy League. Most US enrolments are in the public sector, which includes the University of California system and land grant and other public flagship universities in different states. The diversity of the US system is seen as one of its characteristic virtues and is spotlighted by the NPM for imitation elsewhere. Yet the hegemonic norms are based on a particular selection from and reification of US practices. This has produced two global models, not so much blueprints as social imaginaries diffused across nations, institutions and social agents; often in vague forms and imprecise notions; combining structures, technologies, behaviours and values:

- The hegemonic norm of research university, the 'entrepreneurial model' (Clark, 1998: centrally focused on knowledge production, emphasizing research and graduate studies, excellence and prestige, tied to business and the knowledge economy, competitive for students and funds, productive and efficient, internationally oriented, and achieving greater autonomy via financial diversity, including tuition and philanthropy. This model, which has one set of roots prior to the twentieth century in Europe, especially Germany, and the UK; and the other set of roots in the most specifically American evolution of massive educational and research empires after world war two, the 'multi-versity' (Kerr, 1963); is exemplified most closely in contemporary practices by the Ivy League private universities in the USA, such as Harvard and Stanford. These universities are not as market responsive as the norm promises. But they impart to the model tremendous prestige;
- The hegemonic norm of for-profit vocational university: centrally focused on vocational training for business, computing, perhaps mass professions such as health, accountable for immediate vocational relevance, marketing-driven in their business planning and organizational culture, expansionary in student numbers, sites and market share, spare and efficient with few 'frills' such as research, libraries or academic freedoms, using teaching from the vocational field and curriculum packages, 'customer'-focused using performance management of staff and quality assurance. This form has a mixed record around the world but in the US it is embodied in corporations that raise significant equity funds (Ortmann, 2002), including the Apollo Group, parent company of the University of Phoenix. Phoenix is the largest and fastest growing private university in the USA and has spread to a dozen other countries.

By pushing institutions towards one or another norm the NPM reform process draws them into two homogenous systems, in which all are readily compared to each other across borders and all appear as inferior to institutions in the global core in the USA. Yet here there is a double irony, two different slippages between the idealized models and the world of practice.

First, the Ivy League model does not travel across borders. No other nation has a sector akin to this, at one time able to amass both public and private resources and to concentrate public and private prestige. The difference in other nations is that national research investments in the sciences are largely concentrated in the public or national university sector; even in Japan, where the private universities enrol the majority of students and the most prestigious private institutions sometimes educate the majority of national cabinet, within the university field itself the national imperial group led by the University of Tokyo tower over Keio and Waseda. This does not diminish the power of the Ivy League to compel the helpless admiration of the rest of the world. No doubt a paradise unobtainable can secure an even more powerful hold on the imagination than one which is readily emulated; and no doubt also, the model unobtainable constitutes a firmer vertical barrier and hence a steeper, more powerful kind of global control.

Second, both of these models depart from actual American practice in significant ways. US higher education is much more politicized than the NPM imagines: consider the complex interest group politics played out around the accreditation agencies, which sit somewhere between state, civil society, business and community; and the long role of congressional committees in shaping the national evolution of the higher education sector (Slaughter & Leslie, 1997). In addition US private institutions are less the agents of market economy than the NPM imagines. They are heavily dependent on state support via student loans, and in the case of the Ivy League public funding of research. Public funding is essential to the global strength of all US institutions. Thus by encouraging other nations to withdraw from state support comparative American global competitiveness is *directly* improved. The US maintains its level of public subsidy of higher education while that same subsidization is reduced elsewhere. Further encouraging other nations to reduce the role of government in higher education, for example via WTO/GATS (2005), opens their national policy systems to American profit-making by Phoenix and others in the newly opened market-place in those nations. Finally, neither model fits the comprehensive public research university and the fouryear and two-year colleges. This the NPM exploits, however. Measured against these two norms the actual existing public institutions look flawed. Compared to high status private universities, public research universities look overly democratic if they expand access rather than intensifying selectivity. Compared to the commercial sector, public research universities look inefficient, under-focused, and indifferent to the 'customer'. The commercial sector claims democratic credentials somehow separated from governance, transparency and accountability. In an ongoing process of 'self-hegemonisation' the American public sector is subject to the some of the normalising pressures reshaping systems and institutions elsewhere.

Rank-ordering the field

The two norms of the entrepreneurial research university and for-profit vocational university, embody in an NPM form the sub-fields identified by Bourdieu: that of the autonomous and elite research university focused on knowledge and prestige, and that of the heteronomous mass training institution focused on economic volumes and revenues. The NPM has earmarked each sub-field for organization as a specific global market. We see that global

hegemony extends not just to normalisation of a single ideal type but to the continuing reconstitution of the global field as a whole. In this process non-elite institutions are subject to a reinforced heteronomy and the terms of all position-taking are altered. Universities and all other higher education institutions are positioned as quasi-firms, competitive pressures become more determining and economic imperatives bite more deeply, though again the last change shows itself mostly at the heteronomous end of the field. Higher education is moved closer to the positional war of all against all, the universal market imagined by Bourdieu.

Global university ranking makes a competitive field of global higher education more explicit and orders the two sub-fields (especially the elite research universities) along hegemonic lines. The Shanghai Jiao Tong University Institute of Higher Education (SJTUIHE) began research university ranking in 2003, and the *Times Higher Education Supplement* commenced its 'World's best universities' ranking in 2004. The two ranking systems differ in their framing of the field (Figure 2). The SJTUIHE maps the sub-field research-intensive universities, focusing solely on research rather than status data. The *Times Higher* attempts to draw both sub-fields into a single league table, incorporating research, status and international marketing. Neither ranking system fully encompasses the global field but both contribute to its formation.

The SJTUIHE notes that only research, meaning published research in English in the sciences, is sufficiently standardized to enable comparison on a quantitative basis across the world. 20 per cent of the SJTUIHE index is constituted by citation in leading journals; 20 per cent by articles in Science and Nature; and 20 per cent by the number of ISI-Thomson (2006) 'HiCi' researchers in the institution in mostly science-based fields. Another 30 per cent derives from the distribution of the winners of Nobel Prizes and Fields Medals in mathematics according to university of training (10 per cent) and current employment (20 per cent). The remaining 10 per cent is determined by taking the total from the above data and dividing by the number of staff. The SJTUIHE ranking favours large research intensive universities with comprehensive research performance in a range of fields, universities and nations that invest in scientific infrastructure at scale, and English language nations. Americans enjoy an additional advantage because of circular citation patterns: Americans tend to cite Americans (Altbach, 2006). This league table creates a coherent mapping of the field consistent with prior assumptions about elite universities. It precisely orders the hierarchy of research universities while tightly coupling status to measured research outcomes and installing research capacity firmly as the principle of division between centre/ periphery/ margins; the fulcrum where global power and differentiation are turned. Being grounded in standardized research data the rankings reinforce the authority of those data and of global standardization itself. In the process the SJTUIHE not only confirm the dominance of American and English-language universities and the prestige of the leading institutions, it confirms their idea of the university. Coherence is secured by ignoring the economic logic of the other sub-field, that of commercial education. Institutions strong in the commercial market are not acknowledged for that. Only their research outputs if any are measured. In the SJTUIHE rankings the field is re-represented as a single league table in which only one principle of hierarchization is in operation rather than both.

AUTONOMO SUB-FIELD elite research universities	league	2b National elite non U.S. research universities with strong cross- border role significant second order presence in JTU top 200/500, after category 1; higher up in TH, driven by reputational survey, some in top 50 mixed with category 1	4b Teaching- focused export universities no presence in JTU top 500; reputation and student internationalizat ion indicators push some Australians into TH top 200	3 Elite and globally-focused for profits Indian IITs appear in TH ranking at 57 but not in JTU ranking	6a Lesser prestige teaching-only global for profits no presence in either ranking	HETERONOMOUS SUB-FIELD commercial vocational cross- border education
	2a Less globally engaged American doctoral universities Significant proportion of JTU top 500 due to research outputs, little role in TH	4a Nationally- bound elite research universities some have enough research to appear in JTU top 200, many in top 500; in TH the survey ensures an erratic list of national leaders with weaker global connectivity in top 100 and 200	5 Teaching- focused national universities no presence in either ranking		8 For-profits with minor global functions no presence in either ranking	
	L	1	7 Non-profits without global agendas no presence in either ranking		9 Fro-profits without global agendas no presence in either ranking	

Figure 2. Coverage of the field of global higher education in the university rankings by Shanghai Jiao Tong University (top 200/500) and the *Times Higher* (top 200)

The *Times Higher* ranking is designed to secure a more plural definition of higher education. It credits both research-strong universities and universities strong in the market for international students. 40 per cent of the Times index is comprised by an opinion survey of worldwide faculty ('peers') and another 10 per cent by a survey of 'global employers'. There are two 'internationalization' indicators: the proportion of students that are international (5 per cent) and staff (5 per cent). Another 20 per cent is determined by the student-staff ratio, a proxy for teaching 'quality', and the remaining 20 per cent is comprised by research citations per staff member. Research standing is captured by the citation data and more partially, the surveys of 'peers'. Economic clout in the global market for cross-border education is captured by the internationalization of students indicator, which rewards volume building in the mass market for cross-border education, and more doubtfully and partially by the surveys of peers and employers and the internationalization of faculty. The outcomes is a less coherent mapping of the field. Two sub-fields and two principles of hierachization do not fit into one league table. The Times index credits elite research university status twice, once directly and one via the indicators of global reputation, while crediting economic status once. This produces a composite league table in which the research leaders are again dominant and the US Ivy

League heads the pack, modified by universities strong in the market for international students, some universities with a vocational flavour (the *Times* includes the Indian IITs and promotes the Dutch technical universities), and leading universities in countries such as China that have been buoyed by the reputational surveys. British and Australian universities have the major presence in the commercial market for international students and both nations do much better in the *Times* ranking than the Jiao Tong ranking. Australia has seven universities in the *Times* top 100 with six in the top 50 and appears as the third strongest system in the world, ahead of Japan, Canada and all nations of Western Europe. But Australia has none of the Jiao Tong top 50 and only two of the top 100. While the USA has 54 research universities in the Jiao Tong top 100 the *Times* manages to reduce American world leadership to just 33.

The *Times* exercise can be understood as an attempt by a British publisher to assert an Anglo-American hegemony as distinct from American hegemony in higher education. However the credibility of the *Times* data are impaired by methodological weaknesses in the survey, by the fact that the survey data can be altered or interpreted to secure one or another outcome,¹¹ and by dramatic oscillations year by year in the ranking of some universities (Marginson, 2007c).

Nevertheless like the SJTUIHE ranking the *Times Higher* ranking reinforces the global hegemony overall. 'The fact is that essentially all of the measures used to assess quality and construct rankings enhance the stature of the large universities in the major English-speaking centres of science and scholarship and especially the United States and the United Kingdom' (Altbach, 2006). Especially, the rankings elevate on the global scale the universities in the Super-league, which now loom larger over each national hierarchy. The rising Asian science powers, which for the first time able to chart their own course in higher education, are told in no uncertain terms by the rankings that to succeed at the global level they must confine themselves to the terms of an American domination that at this time seems unchallengeable. Whether they subordinate themselves to the hegemony is yet to be determined.

The potency of specifically global referencing and its norms is almost universal. Except in the USA, every university and its public know where that university stands in the Jiao Tong and/or Times Higher list, especially whether the university is inside or out. It matters. The criteria for success are clear and so rankings channel position-taking into a small number of moves enabling movement up the table. Innovations in curriculum, pedagogy, delivery and organizational design that are distinctive to particular institutions, localities or cultures are inhibited by the long lead time necessary before they come to fruition. The tyranny of rankings is the tyranny of equity prices. It enforces a short-term mindset that cuts off the potential for investment in bold new strategies especially outside the dominant norms. Further, by narrowing the possible trajectories rankings marginalize the heterogeneous traditions and models. Here the higher education *status quo* is protected by default. In the exceptional case of the USA the global rankings do not matter much. Instead, in that nation the tyranny of the national ranking by the *US News and World Report* is almost complete. For American university presidents and publics it might serve to compose a de facto global ranking; for the parochial horizon is sufficient to reach across more than half of the world leaders.

¹¹ At a conference in Brisbane, Australia on 12 February, a representative of QS Marketing, the marketing firm that conducts the two surveys for the *Times Higher*, stated that the return rate for the 2006 survey of academic 'peers' was only 1 per cent and the response group was loaded in favour of returns from the UK and Australia. The responses were not tested for representivity and/or weighted to correct for bias.

Shanghai Jia	no Tong University IHE ranking
1 - 100.0	Harvard, USA
2 - 72.6	Cambridge, UK
3 - 72.5	Stanford, USA
4 - 72.1	U California Berkeley, USA
5 - 69.7	Massachusetts IT (MIT), USA
6 - 66.0	California IT ('Caltech'), USA
7 - 61.8	Columbia, USA
8 - 58.6	Princeton, USA
8 - 58.6	Chicago, USA
10 - 57.6	Oxford, UK
top 100	USA 54, UK 11, Japan 6, Germany 5, Canada, France & Sweden 4 each
top 200	USA 87, UK 22, Germany 15, Japan 9, Canada 8, Netherlands 7, France, Switzerland, Australia, Italy 6 each
top 500	USA 167, UK 43, Germany 40, Japan 32, Italy 23, Canada 22, France 21, China 19 (14) **, Australia 16
iniversities from less affluent countries*	7 (3.5%) of the top 200 - China 3, Russia, Mexico, Argentina, Brazil 1 each. Some of these are very large. 35 (7.0%) of the top 500 - China 14, Brazil, South Africa 4 each, Russia, Hungary, Poland, India 2 each, Argentina, Mexico, Czech Republic, Chile, Egypt 1 each
vocational universities	in general vocationally focused research universities do much less well than basic research focused universities, pure vocational sectors (e.g. Germany) do not appear

Table 5. Outcomes of the Shanghai Jiao Tong University and Times Higher EducationSupplement university rankings

Times HigherEducation Supplement ranking				
1 - 100.0	Harvard, USA			
2 - 96.8	Cambridge, UK			
3 - 92.7	Oxford, UK			
4 - 89.2	Massachusetts IT (MIT), USA			
4 - 89.2	Yale, USA			
6 - 85.4	Stanford, USA			
7 - 83.8	California IT ('Caltech'), USA			
8 - 80.4	U California Berkeley, USA			
9 - 78.6	Imperial College, London, UK			
10 - 74.2	Princeton, USA			
top 100	USA 33, UK 15, Australia, Netherlands 7 each, France, Switzerland 5 each,			
top 200	USA 55, UK 29, Australia 13, Netherlands, Japan 11 each, Germany 9, Canada 6, China 6, Belgium 5			
top 500	[not listed]			
universities from less affluent countries*	15 (7.5%) of the top 200 including China 6, India 3, Russia, Malaysia 2 each, Mexico, Thailand 1 each. Reputational survey picks up some leading national institutions in emerging countries that would not otherwise appear			
vocational universities	vocationally focused institutions in Netherlands and India rank ahead of basic research universities, some vocationally-focused universities from Australia included in second 100			

* universities from countries with per capita incomes of less than \$20,000 per year ** includes five from Taiwan source: SJTUIHE, 2007; Times Higher, 2007

Global referencing of the rankings kind creates greater heteronomy across the sector except in the Super-league universities whose freedoms are enhanced. This heteronomy is different to the assertion of government controls at the national level. As we have seen, when operating in the national field universities exercise a reflexive autonomy *viz a viz* the nation-state. This is a two-sided never resolved process in which institutions are continually under pressure from the state to weaken autonomy, while from time to time the state itself is criticised and sometimes

renewed. This nation-state reflexivity is disrupted by the pull towards global rankings, fragmenting the old role of universities in nation-building. But global rankings do not establish an equivalent reflexivity in the global dimension. There is no global state, and though global hegemony is everywhere it is also out of reach. The universities in the Super-league have an ongoing relationship with global centres of power yet for the most part they practice this as a US-focused reflexivity which rarely acknowledges the global dimension except by default. Other universities lose their reflexive role once they look to the global level, as the rankings say they must. How can they interpolate themselves into a world-making project on terrain blocked out by the Super-league? Thus the university as an institution is diminished.

V. Beyond global hegemony

Global educational hegemony is a fact but no closure is ever complete, the imaginative possibilities are always open, and in the longer term there is potential for plural centres of power. The Internet, air travel and research are not confined to English-speaking nations and we can envisage a more diverse cultural environment with European, Spanish-speaking, Chinese, Islamic and other globalizations. Drache and Froese (2005) note the film industry is exhibiting signs of pluralization that 'nobody could have foreseen a few decades ago'. In dollar terms Hollywood is still supreme, generating \$6.4 billion in international sales each year compared to foreign earnings of \$100 million in India (Drache & Froese 2005, pp. 7-8 & 24), but Bollywood produces over 800 films in 25 different Indian languages each year from many regional centres. Selected Bollywood and 'cross-over' products are breaking into mainstream global cinema markets. Other creative powers include animation in Japan, film in China and Iran, and television production in Mexico, Venezuela and Brazil. Where and how could the remarkable global hegemony in higher education and research begin to fragment? What conditions and factors shape individuals' and institutions' potential within the global field? How ontologically open is the global field and the possible trajectories?

Global agency and ontology

Bourdieu's notion of the inter-dependency between position and position-taking strategy helps to explain the actions of institutions and individuals within the field of power, for example the decisions of university executives and the trajectories they envisage (Marginson & Considine, 2000). The theorization is particularly apt in studying orthodox, often mimetic and predictable decisions premised on the essential of maintaining relative position. It is less explanatory of the practices of university and disciplinary leaders when they re-imagine their options: for example by conceiving a change in field boundaries, or a change in the products of higher education, or a break with competition as the norm of relations in the field. From time to time there are off-the-wall innovations that cannot be adequately explained by positions and conditions. Such innovations are especially apparent in the global dimension, for example the early initiatives in locating branches of foreign universities in importing nations. Here Bourdieu is open to question. First, he universalises competition in the field of power. It seems there can be no respite from the relentless Hobbesian war of all against all which continually eats into our conditions of possibility. Second, he argues that freedom; that is, the potential for

self-determination; should be understood merely as freedom from material necessity. In *Distinction* (1984) Bourdieu talks about the opposition between the tastes of luxury (or freedom) and the tastes of necessity' (p. 177). The scope for action is confined by prior class relations and resource levels so locking up the potential of self-determination itself. But while self-determination is conditioned by material resources and historical relations of power and it is essential to understand those conditions, they do not close the list of possibilities.

History suggests that freedom is also conditioned by agency itself, by the imagination and the capacity of agents to work on the limits. Gramsci with his emphasis on the will and individual initiative understood this (Williams, 1960). For Bourdieu 'strategy' is not based on conscious imagining and deciding so much as learned dispositions, the habitus. We move instinctively in response to a structured set of possibilities as they shift and change. The range of possible position-taking strategies, and the limits of that range, appropriate to the position of each agent and to the state of the struggle, is burned into the agent's unconscious mind and conditions their every action. 'Because position-takings arise quasi-mechanically – that is, almost independently of the agents' consciousnesses and wills – from the relationship between positions, they take relatively invariant forms' (Bourdieu, 1993, p. 59). Arguably, with his attenuated vision of the scope for reflexive self-determination, Bourdieu has left insufficient space for the play of the conscious creative imagination in strategy making.

Amartya Sen (1985) finds that freedom as self-determination has two principal components. He calls these 'agency freedom', and 'freedom as power'. Or in later work (Sen, 1992) 'effective freedom'. Agency freedom is where identity is located, the imagination is gathered and the will is formed. Freedom as power is, roughly speaking, positive freedom, including the resource capacity to realize one's goals. Sen distinguishes both of these forms of freedom from negative freedom, freedom from coercion which is foundational to Hayek (1960) and neo-liberalism (Marginson, 1997). Sen notes that negative freedom is one condition of selfdetermination but it is less important than freedom as power, and it is presupposed by freedom as power. Positive freedom entails negative freedom but the reverse is not the case. Sen argues that the range of choices available to us is an important element of freedom, again in contrast to Hayek for whom the range of choice is not important and what matters is the absence of coercion, that is, who is doing the choosing (Sen, 1992, p. 63). He also emphasizes that the extent of freedom should be distinguished from resources and other means to freedom. Two agents with the same resources and same negative freedom may have a different *freedom to* achieve. When resources are held constant the primary source of variations in freedom is agency freedom. Here the range of choices can be expanded, in the first instance by thought. Thus to the long list of elements that might differentiate freedom to achieve in global higher education, including national GDP, investment in higher education, research capacity, language of use, the volume and intensity of cross-border engagements, and so on, we can add another quality crucial in establishing the boundaries of the possible in the global higher education environment. That quality is an aspect of agency freedom. It is the *imagination*: the possibilities that are imagined by universities, groups and individuals.

But if we entertain a notion of agency that leaves more space than does Bourdieu for conscious positivity and acts of will, this has implications for the notion of relational field. In his description of the global space, Arjun Appadurai (1996) foregrounds agency and is centrally interested in global imaginings; while at the same time he describes the structure of the field in terms of ontological openness, a world vectored by different cultural flows, the heterogenous and disjunctive 'scapes' with their uneven shapes and articulations. Appadurai's

'scapes' are structures – this is not simply a description of the imagination floating free of the constraints of power, cultural catregories and economic materiality – but he emphasizes the changeability, volatility and contingency of all categories and structures. The implication is that in the global setting, more so than the national setting, even the structures are of hegemony in higher education are provisional, partial, contested: relativised by the other parts of the field, and in continuous transformation. One element at continuous play within the field (and one of the principal sources of its ontological openness) is the imagination and will of agents. In the global setting agents have more and more varied spaces in which to innovate, than in the national field. The global environment is in continuous formation, the map of positions is continually being reworked and novel positions are emerging.

Why is there greater ontological openness in the global setting? One factor is the growth, extension, openness, reciprocity and dynamism of the global flows of people, knowledge, ideas, technologies and capital in higher education and other sectors. As the fluid ever-moving metaphor of 'flows' suggests cross-border flows continually generate change and themselves undergo change. This tends to 'loosen' the relations of power in world-wide higher education to some extent; imparting a certain dynamism, instability, openness and unpredictability; more so than national systems. Other factors are the exponential tendency in the expansion of networks described by Castells (2000); more permeable national borders and the flaky nature of both global networks and the borders of the global field; the volatility and vitality of the space for position-taking; the lacunae in formal governmental regulation of the cross-border of systems and institutions and the space for spontaneous association this creates (Marginson & van der Wende, forthcoming). And above all there are the expanded potentials for agency freedom created by the global transformations in space and time: more multiple locations; faster passage between them; instantaneous, expanded, intensified and multi-associating communications; more multiple *identities*; multiple and variously articulated spheres of action.

The complication for analysis of relations of power in higher education – and for all those who theorise the mutual exclusivity of the modern and post-modern, and the national and the global - is that in the global setting we can all too readily detect both Bourdieu-ian relations and Appadurai-ian relations at work. On the field of the global with its unevenness, alterity and disjuncture, we nevertheless detect the Bourdieuian binary between elite and mass, between the principle of culture and the principal of autonomy, together with vigorous boundarymaking and hierarchy forming activities, such as university rankings, that are sustained by the principal beneficiaries. In essence that is what the hegemonic project is: the imposition of form on flux, the bold attempt to stop time and centre power in particular places, and the necessary blindness of reflexivity that this entails. How could any such project ever be anything but provisional? How can it not fail 'in the long run'? But that does not mean that it is ephemeral, unable to secure potent effects, or incapable of immediate domination: only that the project must be continually made and remade as Gramsci saw until the capacity for renewal is undermined, fragmented or exhausted. Meanwhile, one of the continuous and immediate effects of hegemony in higher education is precisely to articulate and differentiate agency freedoms themselves in the interest of the hegemonic project. The expanded and more open global ontology is experienced differentially. Some have greater freedoms of action than others. The Bourdieuian point is that autonomy and capacity are located at the high status academic sub-field of the field and above all in the Super-league universities. There the hypothetical scope for strategy is maximised (though it tends to be confined to strategies that reproduce hegemony or are at least consistent with it). Other institutions and agents in higher education can imagine more radical alternatives but have less means of implementation. Some

are so overshadowed by hegemony as to have less not more options in the global environment. Here the differentiation of freedom as power – some systems conduct basic research and others not, some institutions are more globally connected than others – constrains the potential of agency freedom. It does not eliminate the desire for self-determination or the possible imaginings. But it does suggest the need for new approaches to identity and self-organization.

For national systems and institutions outside the USA and outside the Anglo-American dyad which is the half integrated extension of the American global project in higher education and research, one strategic way forward lies in regional (meta-national) organization, to accumulate critical mass and perhaps to consolidate cultural identity. In the face of American global hegemony larger units are required. In Europe regionalization through the Bologna and Lisbon accords is fostering structural commonality, intensive people movement and advanced research cooperation. In Latin America, where some higher education systems are benefiting from a prolonged period of democratic rule, the growth of civil institutions and governments with a social agenda that extends beyond the Washington consensus, there is potential for more advanced cooperation. This is already happening in the nations of the 'southern cone' via MERCUSOR.

A second way forward is intensified capacity building on the national scale to provide the basis for a more potent global intervention. Here capacity building has two aspects: material resources, and projects grounded in proactive national identity. China doubled its real per capita income the last decade, and according to some projections will overtake US PPP GDP by 2025. Higher education in China is undergoing a major state-driven development in extraordinarily rapid time. Between 1990-1991 and 2002-2003 the gross enrolment ratio rose from 3 to 13 per cent (World Bank, 2007). From 1998 and 2004, a period of only six years, the total number of undergraduate admissions in China multiplied by four times (Liu, 2006). China now accounts for half the R&D expenditure of the non-OECD nations (Vincent-Lancrin, 2006, p. 16) and is the second largest R&D investor in the world. This transformation has incalculable long term consequences for world-wide provision, for the map of research and flows of knowledge and people, and the pattern of alliances and networks. But equally important and the necessary corollary of this process of material stock-piling and people building is the sense of national/global mission in Chinese higher education. As Zhang Xiaoming and Xu Haitao (2000) put it: 'many non-western societies are trying to evaluate themselves with western standards and then develop what they lack. The time seems ripe for change with regard to such an unwise approach' (p. 103). Internationalization should emphasize 'not the elimination of cultural differences but international exchange on an equal footing' (p. 104). Differences in national power inevitably results in inequalities; but 'no route to development, autonomy and power can be separated from international systems' (p. 110). Openness to and open participation in the global dimension is essential. At the same time maintaining a strong sense of both national tradition and national strategic project is equally essetial. In the face of cross-border flows the national project should be not be one of adaptation to global normalization and standardization, but rather on of 'indigenization', whereby foreign culture is 'grafted onto the tree of indigenous culture' (p. 104).

Taiwan China, Singapore and Korea are on a similar path to China in higher education; Singapore has developed a particularly sophisticated capacity for global strategy that reflects a coherent national project, in which it seems that the gap between global identity and national/local identity, the duality that attends university work in most nations outside the USA, has largely been closed by a deliberate act of national will. Multiple identities create strategic flexibility, enabling a freer movement between different spheres of operation, while a successful global strategy also requires that multiple identities can cohere. Much hangs on how this is managed in non hegemonic nations, whether they can sustain both multiplicity and coherence. How China manages biculturalism in higher education, and the extent Putonghua (Manadarin Chinese) becomes a language of global communication and of research, will be a principal factor determining the extent of cultural plurality of knowledge. There are prospects of a greater global role also for Spanish, given the demographic and cultural weight of Latin America, and the growing importance of Spanish within the USA, and perhaps for Arabic.

Strategising the global

The global field of higher education contains global markets but is more heterogeneous than the single 'global market' coined by the NPM and university rankings. It is standardized not by the laws of motion of capital accumulation but by Anglo-American hegemony and the dominance of the autonomous sub-field of research universities from the USA (primarily) and the UK. The instruments of domination are language and monoculture, research and publishing systems, knowledge flows and the people flows that follow; though global uniformity is incomplete and practiced at the expense of much diversity. It is often assumed that global market forces are enforcing the American hegemony and standardization in higher education - that cultural diversity is being suppressed by the world-wide accumulation of capital, in this industry sector as in others. But universities are not banks, mining companies or computer manufacturers. Their social logic is different. In higher education, hegemonic language and knowledge are the prior and essential conditions for the evolution of global markets, not vice versa. The techniques of university ranking became possible only on the basis of the previous universalization of English language research in the sciences. Likewise it is often assumed that higher education is being commodified at the behest of the state, but the global elite universities are not becoming knowledge commodity factories. There is commodification at their edges but their primary concern is to extract support from state and civil society for basic research in the classical form of a public good. (It is below the level of the hegemonic institutions that heteronomy and commodity forms are more determining). Like the Catholic Church and other organized religions that also pre-date finance capital, the Superleague university is essentially its own creature. Ironically, perhaps, the pre-modern origins of the elite university enable it to play a primary role in constructing global relations in this era.

The hegemonic higher education sector serves business and the imperial nation-state but does so from a condition of autonomous reflexivity. The Super-league is not an artifact of state or economy, despite the 'knowledge economy' discourse. Civil society in the form of the Super-league research universities has moved beyond the Gramscian horizon of the national class structure and the sphere of the nation-state, into a global space where it is accountable primarily to the one national power that spans the full planetary terrain (albeit accountable to it in national not planetary guise) and secondarily to the globally mobile social elites which are now among its primary users. In this global space the defining features of the leading universities remain specific to them: the production of knowledge and of the social status or positional goods (Hirsch, 1976) attached to authoritative knowledge. Research capacity, not economic capital, is the primary material constituent of global hegemony in higher education.

Global relations of power in higher education are determined by the positioning and selfpositioning of countries, universities and individual agents by and towards the hegemonic project. Some agents in the global setting are central to that project and benefit from it, some agents are absorbed into it, others marginalized or excluded from it. The Bourdieuian binary logic of the global sector, divided between elite research universities and mass/commercial education, is the divide between knowledge-power and the commodity economy in higher education, and the ultimate divide between inclusion and exclusion. From where then can the challenge come? Given the weight of hegemony - while given also the more jagged and fluid Appadurai-ian world on top of which the hegemony sits, a world held in place by the weight of categorical power but one that is always threatening to break the binds - how might we move to create space for local, national and regional autonomy, while preparing more democratic and pluralistic global relations in higher education?

The resource support of national governments is essential to global competence and autonomy but national investment alone is not enough to secure the necessary space for strategy beyond hegemony. If the options are limited to enhancing national competitiveness, this reproduces not just hegemony but subordination to it. Local and national revolts against the NPM and commodification can establish space for more generous social projects but are unlikely to be decisive viz a viz hegemony as long as the monoculture in language and research remains intact. Otherwise the monocultural hegemony will continue to shape the desired outcomes and forms of higher education, and the Super-league will retain full authority, which is a function of global civil society rather than national policy or World Bank conditionalities. Policy will continue to be conducted in these terms and sooner or later recalcitrant local institutions and national systems will be pulled back (or will pull themselves back), becoming re-normalized in the terms of hegemony. Regional and other cross-border alliances are essential because they provide more room for alternative approaches and for cultural identity building. Here the strategic problem is to break free of hegemonic global standards and standardization without losing the global. What are needed are local and national projects that are 'conceived in a nonnationalist way' (Santos, 2006, p. 80) and building new forms of global civil society:

From the perspective of the peripheral and semi-peripheral countries the new global context demands a total reinvention of the national project without which there can be no reinvention of the university. There is nothing nationalistic about this demand. There is only the need to invent a critical cosmopolitanism in a context of aggressive and exclusive globalization (Santos, 2006, p. 78).

From time to time, subject to the factors that condition agency including the active imagination of local leaders, parts of the higher education world can constitute an alternative globalism to that of the US-dominated communications and entertainment sectors, the finance sector and the Super-league universities. In doing so individual universities may need to utilize the freedoms flowing from their old autonomy and the new global agency and ontology so as to strike out ahead of their national governments. Such an alternative globalism would have two principal elements. First, diversity. Part III concluded that to establish a genuine cultural plurality in research it is necessary to move beyond the terms of present hegemony. Correspondingly, to move beyond the present hegemony it is essential to establish genuine cultural plurality in research and knowledge. One vital condition for this process of pluralization is to sustain linguistic diversity in the global higher education sector; not as a substitute for global communication, which is inevitable and necessary, but alongside it and as part of it. A hopeful sign here is the potential for cultural plurality in the 'belly of the beast' in the United States itself. Demographic and cultural hispanization could provide favourable conditions for broadening US ways of seeing in the larger global setting. This might even lead

to greater engagement with non Anglo-American models of higher education.¹² Second, the social agenda. Individually and collaboratively, universities everywhere can bring their resources to bear on the diagnosis and solution of the many urgent problems that humanity faces. Global warning and climate change head the list, followed by poverty and illiteracy, civil and foreign warfare, human trafficking and epidemic disease. Here the scope for cross-border cooperation beyond the terms of hegemony is limitless. 'The goal is to re-insert the public university in the collective solution of social problems, which are now insoluble unless considered globally' (Santos, 2006, p. 79).

Finally, culture, language and alternative approaches to research and knowledge are right at the centre of the problem of strategy in higher education. It is here, in the domain of research and knowledge, that the global hegemony in higher education is primarily sustained. Higher education is not permanently subordinated to the formation of global markets and inevitably complicit in its own normalization in the terms of hegemony. As long as they retain a role in knowledge formation, institutions have the potential for autonomous power at the global level. When higher education is reduced merely to the functions of producing and allocating positional goods, like a labour bureau, its historical potential is decisively limited. It becomes still more Bourdieu-ian, more category bound, than it is at present. It is when its role in knowledge formation is at the fore that the potential opens up for the fuller play of the imagination, the larger promise that an Appadurian global order/disorder offers us.

¹² A plurality of models would enable greater diversity in global comparisons between institutions. At worse this means university rankings based on several league tables rather than one. At best it can lead to a move altogether away from whole of institution comparison, towards assessments based on disaggregated disciplines and services, as developed by the Centre for Higher education Development (CHE) in Germany. Lest this be considered utopian, the CHE system is already established as the principal mode of inter-institutional comparison in Germany, Austria, Netherlands and Flanders and will further spread in Europe (Marginson, 2007c). This development also underlines the salience of regional modes of organization in higher education and research in the face of the global hegemony.

References

- Altbach, P. (2005) Academic challenges: the American professoriate in comparative perspective, A. Welch (ed.) *The Professoriate: Portrait of a profession.*, Springer, Dordrecht, pp. 147-165.
- Altbach, P., (2006) The dilemmas of ranking, International Higher Education, 42.
- Appadurai, A. (1996) *Modernity at Large: cultural dimensions of globalization*, University of Minnesota Press, Minneapolis.
- Australian Bureau of Statistics, ABS (2006) *Balance of Payments and International Investment Position*, Australia, December, Catalogue Number 5302.0, ABS, Canberra
- Bensimon, E. and Ordorika, I. (2006) Mexico's Estimulos: Faculty compensation based on piecework, in R. Rhoads and C. Torres (eds.) *The University, State and Market: The political economy of globalization,* Stanford University Press, Stanford, pp. 250-274
- Berning, E. (2004) Petrified structures and still little autonomy and flexibility: Country report Germany, in J. Enders and E. de Weert (eds.) (2004) *The International Attractiveness of the Academic Workplace in Europe*. Herausgeber und Bestelladresse, Frankfurt, pp. 160-182.
- Bloom, D. (2005) Raising the pressure: globalization and the need for higher education reform, in G. Jones, P. McCarney and M. Skolnik (eds.) *Creating Knowledge: Strengthening Nations: The changing role of higher education*. University of Toronto Press, Toronto, pp. 21-41.
- Bok, D. (2003) *Universities in the Marketplace: The commercialisation of higher education*, Princeton UP, Princeton
- Bourdieu P. (1984) *Distinction: A social critique of the judgment of taste*, R. Nice (transl.), Routledge & Kegan Paul, London
- Bourdieu, P. (1988) Homo Academicus, Polity, Cambridge
- Bourdieu, P. (1993) *The Field of Cultural Production*. R. Johnson (ed.), Columbia University Press, New York
- Bourdieu, P. (1996) The State Nobility L. Clough (transl.), Polity Press, Cambridge
- Breneman, D., Pusser, B. & Turner, S. (2007) *Earnings from Learning: The rise of for-profit universities*, SUNY Press, New York
- Calhoun, C. (1992) 'Introduction: Habermas and the Public Sphere', In C. Calhoun (ed.) *Habermas and the Public Sphere*, 1–48. The MIT Press: Cambridge.
- Castells, M. (2000) *The Rise of the Network Society*, 2nd Edition, Volume I of *The Information Age: Economy, Society and Culture.* Blackwell, Oxford.
- Castells, M. (2001) *The Internet Galaxy: Reflections on the Internet, business and society.* Oxford University Press, Oxford.
- Clark, B. (1998) Creating Entrepreneurial Universities : Organizational pathways of transformation, Pergamon Press, Oxford
- Crystal, D. (2003) *English as a Global Language*, 2nd Edition. Cambridge University Press, Cambridge.
- Currie, J. (2005) Globalisation's impact on the professoriate in Anglo-Amercian universities, in A. Welch (ed.) *The Professoriate: Portrait of a profession*, Springer, Dordrecht, pp. 21-34.
- Derrida, J. (2004) *Eyes of the University: Right to philosophy* 2, J. Plug (transl.). Stanford, Stanford University Press.

- Drache, D. and Froese, M. (2005). *Globalization and the Cultural Commons: Identity, citizenship and pluralism after Cancun.* Research paper. Department of Political Science, York University, Canada.
- The Economist (2005) The brains business, 8 September
- Enders, J. and De Weert, E. (eds.) (2004) The international attractivness of the academic workplace in Europe – synopsis report, in J. Enders and E. de Weert (eds.) (2004) *The International Attractiveness of the Academic Workplace in Europe*. Herausgeber und Bestelladresse, Frankfurt, pp. 11-31.
- Enders, J. and Teichler, U. (2005) Academics' view of teaching staff mobility: The ERASMUS experience revisited, in A. Welch (ed.) *The Professoriate: Portrait of a profession.*, Springer, Dordrecht, pp. 97-112.
- Gramsci, A. (2000) *The Antonio Gramsci Reader*, D. Forgacs (ed. and transl.), New York University Press, New York.
- Gramsci, A. (1971) Selections from the Prison Notebooks, Q. Hoare & G. Nowell Smith (transl.), International Publishers, New York
- Guellec, D. and Cervantes, M. (2002) International mobility of highly skilled workers: From statistical analysis to policy formulation, in OECD, *International Mobility of the Highly Skilled*. OECD, Paris, pp. 71-98.
- Habermas, J. (1989) *The Structural Transformation of the Public Sphere: An Inquiry into a Category of Bourgeois Society,* trans. by T. Burger with the assistance of F. Lawrence. The MIT Pres: Cambridge. First published in Germany in 1962
- Harvey, D. (1990) The condition of postmodernity : an enquiry into the origins of cultural change. Blackwell, Oxford.
- Harvey, D. (2006) Spaces of Global Capitalism: Towards a theory of uneven geographical development, Verso, London.
- Hayek, F. (1960) The Constitution of Liberty Routledge & Kegan Paul, London
- Held, D. McGrew, A. Goldblatt, D. & Perraton, J. (1999). *Global Transformations: Politics, economics and culture*. Stanford University Press, Stanford.
- Henkel, M. (2005) Academic identity and autonomy in a changing policy environment, *Higher Education*, 49, pp. 155-176
- Henkel, M. (2007) Can academic autonomy survive in the knowledge society? A perspective from Britain, *Higher Education Research and Development*, 26 (1), pp. 87-99
- Hirsch, F. (1976) Social Limits to Growth, Harvard University Press, Cambridge
- Huntington, S. (1996) *The Clash of Civilizations and the Remaking of World Order*, Simon and Schuster, New York.
- Institute for International Education, IIE (2006). Data on US international education. Accessed 1 February 2006 at http://www.iie.org/
- Institute for Scientific Information, Thomson-ISI (2006) Data on highly cited researchers, ISIHighlyCited.com. Accessed 10 April 2006 at: http://isihighlycited.com/
- Ives, P. (2004) Language and Hegemony in Gramsci, Pluto Press, London
- Johnson, R. (1993) Introduction to Pierre Bourdieu, The Field of Cultural Production, pp. 1-25
- Kelo, M., Teichler, U. and Wachter (eds.) (2006) *Eurodata: Student mobility in European higher* education. Lemmens Verlags- & Mediengesellschaft, Bonn.
- Kerr, C. (1963) The Uses of the University. Harvard University Press, Cambridge.

- Lee, M. (2002) The academic profession in Malaysia and Singapore: Between bureaucratic and corporate cultures, in P. Altbach (ed.) *The Decline of the Guru: The academic profession in developing and middle-income countries.* Boston College, Chestnut Hill, pp. 141-172.
- Linguasphere Observatory (2006) *Linguasphere Table of the World's Major Spoken LKanguages* 1999-2000. Accessed on 2 April 2006 at http://www.linguasphere.org/language.html
- Liu, N. (2006) The differentiation and classification of Chinese universities and the building of worldclass universities in China. Presentation at the seminar at Leiden University, 16 February, 2006. http://www.leidenslatest.leidenuniv.nl/content_docs/presentation_prof._liu.ppt#364,4,Dream of Chinese for WCU
- Lyotard, J.-F. (1984) *The Postmodern Condition: A report on knowledge*, G. Bennington & B. Massumi (transl.). University of Minnesotas Press, Minneapolis.
- Lukes, S. (2005) Power: A radical view, 2nd edition. Palgrave Macmillan, Houndmills.
- Mandel, E. (1975) Late Capitalism, J, de Bres (transl.), Verso, London
- Marginson, S. (1997) Markets in education, Allen & Unwin, Sydney
- Marginson, S. (2006a) Dynamics of national and global competition in higher education, *Higher Education*, 52, pp. 1-39
- Marginson, S. (2006b) Putting 'public' back into the public university, Thesis Eleven, 84, pp. 44-59
- Marginson, S. (2006c) The Anglo-American university at its global high tide, review essay, *Minerva*, 44, 65-87
- Marginson, S. (2007a) The public/private division in higher education: a global revision, *Higher Education*, 53, pp. 307-333
- Marginson, S. (2007b) Global position and position-taking: the case of Australia, *Studies in International Education*, 11 (1), pp. 5-32
- Marginson, S. (2007c) Global university rankings: where to from here? Paper delivered to the Asia-Pacific Association for International Education conference, National University of Singapore, 7-9 March 2007
- Marginson, S. (forthcoming A) Hayekian neo-liberalism and academic self-determination, submitted to *Educational Theory*
- Marginson, S. (forthcoming B) The academic professions in the global era, in J. Enders and E. de Weert (eds.), *The Academic Profession and the Modernization of Higher Education: Analytical and comparative perspectives*, Springer, Dordrecht [accepted, in production]
- Marginson, S. and Considine, M. (2000). *The Enterprise University: Power, governance and reinvention in Australia*. Cambridge University Press, Cambridge
- Marginson, S. and Rhoades, G. (2002) Beyond national states, markets, and systems of higher education: A glonacal agency heuristic. *Higher Education*, 43, pp. 281-309.
- Marginson, S. and Sawir, E. (2005) Interrogating global flows in higher education. *Globalization*, *Societies and Education*, 3 (3), pp. 281-310.
- Marginson, S. & van der Wende, M. (forthcoming), Globalization and Higher Education, OECD, Paris
- Marx, K. (1970) Grundrisse, translated by M. Nicolaus. Penguin, Harmondsworth.
- Mazzarol, T., Soutar, G., Smart, D. and Choo, S. (2001) *Perceptions, Information and Choice: Understanding how Chinese students select a country for overseas study*, Australian Education International, Commonwealth of Australia, Canberra. www.dest.gov.au
- McLuhan, M. (1964) Understanding Media. Abacus, London.
- Musselin, C. (2004) Towards a European academic labour market? Some lessons drawn from empirical studies on academic mobility, *Higher Education*, 48, pp. 55-78.

- Musselin, C. (2005) European academic labour markets in transition, *Higher Education*, 49, pp. 135-154.
- Naidoo, R. (2004) Fields and institutional strategy: Bourdieu on the relationship between higher education, inequality and society, *British Journal of Sociology of Education*, 25 (4), pp. 446-472
- National Science Board, NSB (2006) *Science and Engineering Indicators 2004*. Accessed on 9 April 2006 at: http://www.nsf.gov/statistics/seind04/
- Newman, J. (1996/1899) The Idea of a University, F. Turner (ed.), New Haven, Yale University Press.
- Nowotny, H., Scott, P. & Gibbons, M. (2001) *Rethinking science: knowledge and the public in an age of uncertaint,* Polity, Cambridge
- Ordorika, I. (2003) *Power and Politics in University Governance: Organization and change at the Universidad Nacional Autonoma de Mexico*, RoutledgeFalmer, New York.
- Ordorika, I. & Pusser, B. (in press) La máxima casa de estudios: The Universidad Nacional Autónoma de México as a state-building university, in P. Altbach & J. Balan (eds.) Empires of Knowledge and Development: The roles of research universities in developing countries. Johns Hopkins University Press, Baltimore.
- Organization for Economic Cooperation and Development, OECD (2004a). *Internationalization and Trade in Higher Education: Opportunities and challenges.* OECD, Paris.
- Organization for Economic Cooperation and Development, OECD (2005). *Education at a Glance*. OECD, Paris.
- Organization for Economic Cooperation and Development, OECD (2006). *Education at a Glance*. OECD, Paris
- Ortmann, A. (2002) Capital romance: why Wall Street fell in love with higher education. The For-Profit Higher Education Research Project at the Curry School of Education, University of Virginia. Accessed on 11 April 2006 at: http://curry.edschool.virginia.edu/forprofit/workingpapers.htm
 - http://curry.eusenooi.virginia.euu/forpront/workingpapers.htm
- Postiglione, G. (2005) China's global bridging: The transformation of university mobility between Hong Kong and the United States, *Journal of Studies in International Education*, 9 (1), pp. 5-25.
- Pusser, B. (2006) Reconsidering higher education and the public good: the role of public spheres (2006) in W. Tierney (ed.) *Governance and the Public Good*, SUNY Press, Albany, 11-28
- Rhoads, R. & Torres, C. (2006) *The University, State, and Market: The political economy of globalization in the Americas,* Stanford University Press, Stanford
- Rose, N. (1999) *Powers of Freedom: reframing political thought* Cambridge University Press, Cambridge
- Said, E. (1979) Orientalism, Vintage Books, New York
- Santos, B. de Sousa (2006) The university in the 21st century: towards a democratic and emancipatory university reform, in R. Rhoads and C. Torres, *The University, State, and Market: The political economy of globalization in the Americas,* Stanford University Press, Stanford, pp. 60-100.
- Sen, A. (1985) Well-being, agency and freedom: the Dewey lectures 1984, *The Journal of Philosophy*, 82 (4), pp. 169-221
- Sen, A. (1992) Inequality Reexamined, Harvard University Press, Cambridge
- Sen, A. (2000) Development as Freedom, Anchor Books, New York.
- Shanghai Jiao Tong University Institute of Higher Education, SJTUIHE (2007). Academic ranking of world universities. Accessed 15 March 2007 at http://ed.sjtu.edu.cn/ranking.htm
- Slaughter, S. and Leslie, L. (1997) Academic Capitalism. Baltimore: Johns Hopkins University Press.

- Slaughter, S. and Rhoades, G. (2004) Academic Capitalism and the New Economy: Markets, state and higher education, The Johns Hopkins University Press, Baltimore
- Stiglitz, J. (1999). Knowledge as a global public good, in I. Kaul, I. Grunberg & M. Stern (eds.), *Global Public Goods: International cooperation in the 21st century*. Oxford University Press, New York, pp. 308-325.
- *Times Higher* (2007) World University Rankings, *The Times Higher Education Supplement*. Accessed on 15 March 2007 at: www.thes.co.uk
- Tremblay, K. (2005) Academic mobility and immigration, *Journal of Studies in International Education*, 9 (3), pp. 196-228.
- UNESCO Institute for Statistics (2007), data on culture and communications. Accessed 26 February 2007. http://www.uis.unesco.org/ev.php?URL_ID=5208&URL_DO=DO_TOPIC&URL_SECTION=2
- Valimaa, J. (2004) Nationalisation, localization and globalization in Finnish higher education, *Higher Education*, 48, pp. 27-54.
- Valimaa, J. (2005) Globalization in the concept of Nordic Higher Education, in Akira Arimoto, Futao Huang, and Keiko Yokoyama (eds.) *Globalization and Higher Education*, International Publications Series 9, Research Institute for Higher Education, Hiroshima University. Accessed 10 February 2006 at http://en.rihe.hiroshima-u.ac.jp/pl_default_2.php?bid=63653
- Vincent-Lancrin, S. (2004) Building capacity through cross-border tertiary education, paper prepared for the UNESCO/OECD Australia Forum on Trade in Educational Services, 11-12 October 2004. Accessed on 10 February 2006 at http://www.oecd.org/dataoecd/43/25/33784331.pdf
- Vincent-Lancrin, S. (2006) What is changing in academic research? Trends and futures scenarios. Draft paper. OECD-CERI, Paris.
- Williams, G. (1960) The concept of 'egemonia' in the thought of Antonio Gramsci: some notes on interpretation, *Journal of the History of Ideas*, 21 (4), pp. 586-599
- Williams, R. (1977) Marxism and Literature, Oxford University Press, Oxford.

01

- World Bank (2007) World Bank Data and Statistics, Accessed 28 February 2007. http://www.worldbank.org/data
- WTO/GATS (2005) World Trade Organization website on negotiations on the General Agreement on Trade in Services (GATS) in relation to educational services. Accessed 11 September 2005. http://www.wto.org/english/tratop_e/serv_e/education_e/education_e.htm
- Zhang Xiaoming & Xu Haitao (2000), Internationalization: A challenge for China's higher education, in OECD, *Current Issues in Chinese Higher Education*, OECD, Paris, pp. 101-115.