

THE PUBLIC MISSION OF THE RESEARCH UNIVERSITY

EDITED BY

DIANA RHOTEN AND CRAIG CALHOUN

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Preface

Universities around the world are charged with public missions and often financed with public resources. The missions are many and often in tension with one another; they connect universities to different constituencies and different conceptions of the public good. The balance between public and private goals, and public funding and private property approaches to achieving goals has shifted in recent years.

At the same time, neither the universities nor their funders have clearly articulated their conceptions of the universities' public mission, particularly not how those universities should combine their mission of research with teaching and service. Rankings and assessment schemes have proliferated and greater accountability is widely sought. But this depends on a greater clarity of purpose and greater clarity about the ways in which different institutional configurations shape (or reflect) the pursuit of different goals. Debates over specific questions, like affirmative action or the imposition or increase of student fees, are seldom informed by attention to how universities should balance their private and public missions.

This book brings together contributors from Europe, Australia, Asia, Africa, Latin America, and North America. They focus on the debates in research

universities—those charged with creating new knowledge—over their public mission, the implications of different decisions and policies for their organization, and different approaches to assessment and evaluation. For examples, the contributors look at individual cases, comparisons, and global patterns.

Modern research universities are central social institutions. They have grown dramatically during the last sixty years. They have become more internally complex with the rise of graduate and professional education, large-scale scientific research, the operation of subsidiary units like hospitals or TV stations, and the proliferation of "off-campus" programs, as well as engagement in local, regional, and national economic development.

Although most research universities receive substantial public funding, their public mission is not always clear. Is their "core mission" the provision of undergraduate education, and if so, what principles govern access? Is the primary goal selection on the basis of individual excellence, even if this reinforces class inequalities? Or is the goal ensuring opportunities for social mobility? Is it the job of universities to find cures for diseases, provide consultants for businesses, develop software and systems like the Internet, preserve knowledge in libraries, and distribute knowledge through extension programs? How should these different purposes be balanced? And how should the universities' success in meeting such goals be assessed?

These questions come to the fore today along with changes in funding for universities, not only curtailment in many public budgets, but also new levels of private funding. Some long-established private universities, mainly in the United States, have achieved remarkable wealth (though they also continue to receive public funds). New private and often for-profit universities are becoming prominent around the world. They come to the fore as universities compete for rankings in both domestic and increasingly global hierarchies, often with little understood and relatively arbitrary metrics. They come to the fore as governments mandate new assessment schemes, as parents question fees charged for their children, and as it becomes easier for potential students to shop for universities beyond their countries and easier for researchers and teachers to seek employment abroad. National configurations are distinct, but all these issues appear around the world.

To help answer these questions, we have brought together global perspectives on how the public mission of higher education has been conceived and debates on how it should be conceived. These perspectives are brought to bear on recent changes in university organization, funding, and assessment; in academic careers; in the marketplace for research-based knowledge; in the role of

universities in promoting economic development and other public goals; and in the recent hegemony of a U.S. model and the English language.

Running throughout the chapters is a concern for the shifting relationship between public and private goods and public and private purposes for universities. Is student access an individual reward for achievement or a public good anticipating future social contributions? Is scientific research better organized as a source for private intellectual property or for open-access knowledge? Is the pursuit of knowledge for its own sake a public good or a private privilege? Should serving the economic interests of private corporations be part of the universities' mission? If so, how much should the private beneficiaries pay? These questions are addressed here not simply as binary choices about what is good or bad but through attention to the empirical implications of different approaches, the ways in which different choices are worked out in practice, and the changes-often unanticipated—that they have produced.

In the first chapter, Craig Calhoun offers a perspective on the connection between the immediate crisis-or, at least, anxieties-and longer-term structural transformations. To understand either requires situating accounts of particular universities in an understanding of the larger research university system as well as asking about its competing missions. In chapter 2, Gustavo Fischman, Sarah Igo, and Diana Rhoten delve deeper into the idea of a "crisis" specifically in public research universities. They raise questions about a previous alleged golden age and ask us to watch out for crisis-thinking informed more by nostalgia than research.

In chapter 3, Simon Marginson and Imanol Odarika explore global hegemony, higher education, and research. Using Gramsci's and Bourdieu's ideas, they analyze a field of power marked by strategic competition and the shifting structures of capital and norms across the globe. Marginson and Odarika ask whether any room will be left for transformative public roles in institutions that are so heavily shaped by structures of power and competition. In chapter 4, Mark Johnson and Andrey Kotrunov expand on this question, looking at the transformations of universities before and after the Soviet Union was dissolved. They find some new projects to be of potentially pivotal importance, although all are locked in a struggle for resources that only a few are likely to receive.

Investments in research universities are driven significantly by economic agendas. The question of how much universities actually contribute to economic development is pursued through an in-depth analysis of Latin America in chapter 5. Juan Carlos Moreno-Brid and Pablo Ruiz-Nápoles not only analyze individual cases but also situate them in relation to emerging global patterns, which

include the competitive rankings regime and the effort to secure venture capital, patents, and marketable products. In chapter 6, Ka Ho Mok asks similar questions about Asia and explores the ways in which Asian policymakers integrate market fundamentalism with national development agendas.

Yusef Waghid takes up related issues in chapter 7, but in the context of African universities confronting different financial conditions and the pressures of globalization. He draws on the concept of *ubuntu* to describe distinctive orientations to collective intellectual engagement, as well as the tension between individualism and the affirmation of one's humanity in relation to others. In chapter 8, N'Drie Assié-Lumumba and Tukumbi Lumumba-Kasongo explore ways in which the university has figured as a central institution for national development projects in Africa and how its fate has been tied to theirs.

In chapter 9, Stefan Lange and Georg Krücken analyze how German universities and academics confront broader transnational structures and shifting demands in a new "knowledge ecology." They show university organization and work structures changing as German universities adapt to global competition while trying to preserve long-standing commitments such as that to professorial autonomy. John Willinsky discusses another dimension of changing knowledge ecology in chapter 10: the shifts in scholarly publication and communication. He asks both whether existing structures of libraries, presses, and journals meet the university's mission of serving the public as well as they could and how they are changing.

Questions about intellectual property rights have recently become central to debates about research universities. A shifting combination of legal, normative, and economic regimes shape the ways in which universities try to control their intellectual products and assets and often profit commercially from them. In chapter 11, Diana Rhoten and Walter Powell consider the various ways in which American public research universities have supported economic growth. They situate today's efforts to derive income from patentable technology in a longer history of applied research as academic service to the larger community. In chapter 12, Voldemar Tomusk recounts an informative debate about new intellectual property rights (IPR) policies for Cambridge University and what they can tell us about underlying issues and anxieties.

This research is, of course, committed not only to producing new knowledge and educating students but also to doing each of these things (and others) well. Quality assessment has become more and more prominent in higher education, partly because of increasingly complex regulatory systems and partly in order to manage relations among governments, markets, and the "workers" and "managers" in the universities themselves. In chapter 13, John Brennan and

Mala Singh use South African and British cases to address both what quality assessment offers and how it reflects power relations. Closely related questions concern the structure of academic work and the assessment of performance. In chapter 14, Christine Musselin takes up issues from employment patterns and gender disparities to productivity and the relationship between teaching and research. Based especially on European and American research, she assesses both what we know and what we do not but wish we did.

Finally, in chapter 15, Michael Kennedy turns his attention to a detailed local study of the tensions around globalization and diversity at the University of Michigan. These mobilize both directly academic values and values of public service, including university-state relations, and Kennedy reminds us that the ways the issues play out is always embedded in a local culture.

The authors of these varied studies do not agree with one another on everything. Moreover, even though they may discuss the same issues regarding the public mission of the research university in the face of globalization, they point to very different local conditions and contexts that influence these issues. The contributors have met to explore the insights from a comparison of the cases with which they are familiar. We are grateful to the Ford Foundation for its financial support and to the foundation's program officer, Jorge Balan, for attending and contributing to our discussions.

Collectively, the discussions point first to the importance of research universities, especially public research universities, and the range of different products, from personal mobility to national development. Research universities are important throughout the world, and some of the issues they confront are familiar everywhere. At the same time, the contributors to this book call attention to the dangers of false generalizations. While shifting economic conditions and ideologies affect universities around the world, they have different relationships with the dominant economic trends. An easy example is that universities are growing, and sometimes being created anew, in Asia in a way that they are not in Europe or America. In the latter cases, universities with strongly established ways of working are struggling to adapt to new conditions. Even as basic an issue as reconciling research expectations and teaching demands looks different in a national field that is densely populated with institutions and one in which demand is outrunning supply. Or put more simply, in some settings the research universities seem to be in crisis, and in others they seem centrally positioned in national development plans.

In all these different cases, however, there is a common struggle to articulate more clearly the ways in which knowledge matters. No one really doubts that it

does, either inside universities or among their funders, regulators, and critics. But knowledge can matter in different ways. At the moment, many opinion leaders are concentrating on private interests in knowledge and the ways in which university education and research can be appropriated as a private good. But the ideal of a research university puts greater emphasis on the public: not just public support but a public mission that includes citizenship and advances in civil society as well as economic development and a public way of conducting inquiry and debate that has been crucial to modern science.

How well research universities will fare in coming years and in different contexts is up for debate. But it seems clear that clashing conceptions of their missions, both public and private, will be important.

Diana Rhoten and Craig Calhoun

KNOWLEDGE MATTERS

"El central volumen de la fuerza"

THREE

Global Hegemony in Higher Education and Research

SIMON MARGINSON AND IMANOL ORDORIKA

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

—Pablo Neruda, *El gran océano*

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. Although the United States is not the largest producer of films, American films are watched everywhere, and the United States exports more film and television than it imports. In most cases, the balance of trade is overwhelmingly in favor of the United States. All other nations, both rich and poor, are net importers of film and television content, and most of what they import is from the United States. For example, Mexico, an OECD (Organization for Economic Cooperation and Development) country whose per capita income in 2005 of \$7,310 was just above the world average of \$6,987, produced 22 films in 1999, but it imported 306 films that year, 203 of which were from the United States. Australia, a nation with a per capita income in 2005 of \$32,220, produced 29 films in 1999 and imported 255 films, 174 from the United States (UNESCO Institute for Statistics 2007; World Bank 2007).

This lopsided cinematic relationship between the United States and the rest of the world is both economic and cultural. American creative industries in film, TV, music, books, and software generate more export revenue than any other

industrial sector, including agriculture, aircraft, and automobiles (Drache and Froese 2005). They also fill the world with thoughts and images of Los Angeles, New York, and other U.S. cities. Just a tiny proportion of American cinema and TV time is spent on content from other nations. Although most people in the United States have no contact with the visual imaginary of people from elsewhere, the vast majority of people outside the United States are familiar with the icons and language of American popular culture.

U.S. culture has become a generic world culture, the default position in all operating systems, like the U.S. domination of film and TV, global military capacity, industrial technologies, private wealth, and infrastructure design in urban spaces. What is less well known is that the United States enjoys an equivalent domination in higher education and research. Along with U.S. economic and military power and geostrategic mobility (the capacity to intervene freely in other national sites while maintaining territorial control of the homeland), the U.S. hegemony in education and research underpins the U.S. domination of all other spheres. The planet is permeated by not just the United States' visual imaginary and iconic products but also U.S. language and knowledge and American scholars' and researchers' intellectual pursuits, assumptions, and methods. The creativity of U.S. universities, not to mention the biases and lacunae typical of mainstream U.S. academic thinking, ultimately underpin products, shape the Internet and business practices, and permeate popular culture and daily life everywhere else. Through the education of foreign students in universities in the United States, U.S. norms and ideas determine the vision of non-American elites in government, business, and intellectual life.

THE GLOBAL SPACE FOR HIGHER EDUCATION

Worldwide higher education is a relational space that includes national systems and individual institutions, global agencies such as the World Bank and the Organization for Economic Cooperation and Development (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 centers of power in the economy, government, and other institutions grounded in localities, cities and cross-border operations. Although the worldwide higher education environment is complex, it is open to observation and analysis. In the last two decades, global convergence and integration triggered by communications technologies (Castells 2000) and accelerated crossborder activity have made institutions and national systems more connected and more visible to one another. This does not mean that higher education and research have become a single global system that supersedes their national and local histories and identities. There is a global network of research universities, but they continue to function also in national systems and as local agents. Many other higher education institutions, perhaps most, are scarcely active globally. The higher education environment and its connections to other sites are simultaneously global, national, and local. The three dimensions communicate differently with one another country by country, university by university, and over time (Marginson 2006b; Marginson and Rhodes 2002; Marginson and van der Wende 2009; Valimaa 2004).

When mapping the relations of power in global higher education, a fuller picture would do justice to the variations and inequalities within nations. Here we focus mainly on the global dimension while also acknowledging the national and local distinctions, which are analytically separable. No doubt the focus on the global interpolates a globalist bias into the argument. Like economic capital, knowledge moves freely across borders, but locality-bound institutions do not have the same freedoms or reach. Indeed, national systems comprise universities, colleges, and institutes with varying fluency and resources in cross-border mobility. In the hegemonic United States, as in Indochina or sub-Saharan Africa, the most locally bound people experience the global as external and other-determining rather than internal and enabling. National powers matter also when they are configured on the scale of empire itself. Not every kind of subordination within national systems is equivalent, just as the elite research universities of some countries have more authority than those in others. One sign of the global hegemony of higher education in the United States is that U.S. community colleges and four-year institutions, while subordinated at home, are nonetheless special on the global scale, capable of attracting significant numbers of foreign students if they make the effort to recruit abroad. The Ivy League rises higher still, yet it also retains an "American" identity. Remarkably, the local and national institutions in the United States have exceptional global importance without having to look beyond the place-based mental horizons they have inherited.

Globalization

In an era of accelerated globalization (Held et al. 1999), globalization is a symbiosis of economic changes and cultural changes. On one hand, it rests on the formation of worldwide markets, operating in real time via automated processes and

underpinned by the first worldwide system of financial exchange; and growth rates of foreign direct investment that far exceed capitalist growth as a whole. With the instantaneous transmission of financial information, the turnover time of economic capital tends toward zero (Harvey 1989, 2006; Mandel 1975); and the world economy moves faster and becomes more transformative of the localized parts, as Marx (1970) predicted 150 years ago in his 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 (e.g., 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, these global economic forces drive further cultural integration, and the world leans toward 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 rollout 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 and de Weert 2004, 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 percent of the population is enrolled in education varies from fifteen years in Belgium to one year in India. The United States 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 2008b)—journal access, scientific equipment, trained people, English language, 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, drawing 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 and Sawir 2005). In the *Rise of the Network Society* (2000, 71, 442–445, 500–501) and *The Internet Galaxy* (2001), Manuel Castells provides a sociology of networks and flows. "Society is constructed around flows, the expression of processes dominating our economic, political and symbolic life" (Castells 2000, 71). The economics of networks sustains an inbuilt expansionary dynamic. Global flows constitute highly visible lines of communication, lines of influence and effect.

Equally important is the second aspect, 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; and the unequal distribution of resources and capabilities (Sen 2000) that channel and limit global flows in higher education. Global 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.

Global Higher Education as a "Field of Power"

Pierre Bourdieu² conceives a field of power as "a space, that is, an ensemble of positions in a relationship of mutual exclusion" (Bourdieu 1996, 232), with "a small number of distinctive features that, functioning as a system of differences," allow social differences to be expressed (Bourdieu 1984, 226).3 Without buying into all of Bourdieu's argument concerning agency or "habitus," and his problematic claim about the interchangeability of the different Bourdieuian "capitals" (Marginson 2008a), we, like others, find that the notion of a bounded social field and its internal dynamics has wide application. In his analysis of The Field of Cultural Production (1993, 38-39), Bourdieu found that the cultural field is structured by a polar opposition between, at one end, the subfield of restricted production and, at the other end, the subfield of mass tending to commercial production. Each subfield has a distinct principle of hierarchization. In the mass or "popular" sites of cultural production, this principle involves economic capital and market demand and is heteronomous, although mass producers periodically renew themselves by adapting ideas from the elite sector. In the aristocratic or elite sites of cultural production, which shape the high-value products, the principle of hierarchization is cultural status, autonomous and specific to the

field. Between them lie a range of intermediate institutions that combine the two opposing principles in varying degrees.

We can readily see this kind of polarity in national higher education systems as well (Naidoo 2004), and the same kind of polarity is present in the global field as in the national field. Table 3.1 provides a two-dimensional description of the global field. On the horizontal left-to-right axis, the description moves from predominantly autonomous institutions in the subfield of restricted production, to heteronomous institutions in the subfield of mass tending to commercial production. On the vertical axis, 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 worldwide influence than do others more nationally bound in activity (category 2a). Some commercial institutions (categories 3 and 6a) are significant players in global markets, and others (categories 8 and 9) are in local markets.

The numbers 1 through 9 are a ranking of the overall global power and prestige of institutions by category, although this must be considered approximate, as 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 is derived from the elite subfield and reflects cultural rather than economic status. As in the national dimension so in the global dimension: the field of universities and the most prestigious fields of knowledge are mapped according to the aristocratic sensibility. Nonprofits always tend to be ranked above for-profits, except in the case of outliers, such as the Indian IITs whose commercial position derives in part from their extreme scarcity of student places in a very large domestic market.

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, even though the Times Higher's ranking now attempts to account for them.

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 midwestern universities and others in the United States, plus a handful in the United Kingdom led by Cambridge and Oxford (category 1 in table 3.2). In a world in which every research university is visible to every other and ranked against one another on a global scale, knowledge flows freely across borders, and a growing number

of students and faculty follow. Here Super-league universities have become the elite subfield of the global sector. Their brands are recognized around the world, are universal objects of desire, and draw talent from everywhere. Although 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 subfield 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 to Oxford, Cambridge, Imperial, and London in the United Kingdom. While all American doctoral universities obtain a significant global status, simply by virtue of national identity, regardless of the extent of their global engagement, this is less true for universities in the United Kingdom. Minor British universities do not have a high global status. In the United States, however, institutions do not have this problem. They can play the national/local and global games almost as one and the same. As we will discuss, this is a key characteristic of hegemony.

At the opposite end of the field are institutions like commercial companies, focused on revenues, cost management, and expansion (Breneman et al. 2007 discuss U.S.-based for-profits). This group includes the University of Phoenix and global e-learning enterprises, as well nonprofit universities that provide international education on a revenue-raising commercial basis. In the intermediate zone between the two subfields, many research universities have become more heteronomous, their status logics often overdetermined by corporatization and commodification. Their global research and status-building mission vary.

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-time fee-paying international students to plug the hole left by reductions in the government funding of teaching and basic research. Below that group in status are ostensibly teaching-research universities for which 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 Superleague in research and have no presence in the global market for students. Their assiduous boundary formation at home cannot deliver standing in the global market, in which 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 with a local mission

Table 3.1 The Polar Field of Global Higher Education, After Bourdieu

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

3 Elite and globally 4b Teaching-2b Elite non-U.S. 1 The Global Super-

Subfield of institu-

teaching only global

education: teaching-

focused exporters

cost mass produc-

tional cross-border

commercial vocations providing

> tors actively building export markets, low-

global basis, global

status nonprofit uni-

universities: lesser-

focused export

national research

universities with

doctoral-sector and

research universities, prestige-, not

Subfield of elite Autonomous

league: many U.S.

commercial opera-

for-profits: Fully

fully for-profit institutions operating on

focused for-profits:

(includes for-profits and revenue-driven units of nonprofits).

various global e-Us).

enable greater auton

omy than in for-

research role (e.g.,

Oxford Brookes,

degrees (e.g., Sydney,

Warwick, Leiden.

between categories LSE UK on border

colleges are feeders

for elite U.S. re-

search universities.

and global power

lower-quality foreign

presence in research;

Autonomy from not ust national system position but global

Notes

power of degrees.

cross-border stu-

dents; some offer for-profit foreign

power (e.g., Harvard,

Cambridge, etc.)

tive to global field. 1. Autonomy rela-

2. Elite teaching-

only liberal arts

tional level. Global

education at scale. Often have minor Central Queensland). (very small category,

e.g., Indian IITs,

profits in category 6

(Phoenix, DeVry,

tion, no research

with some research. National exclusivity

teaching focused,

prestige, largely

commercially in the versities, operating

role: prestige-driven,

universities. Prestige from stellar research

profit-driven.

U.K. high-prestige

nonprofit research

reputation and global universities at na-

strong cross-border

global market, providing lower-cost /

Heteronomous

6 Lesser prestige

2a Less globally	4a Nationally bound 5 Teaching-focused	5 Teaching-focused	8 For-profits with
engaged U.S. doctoral elite research uni-	elite research uni-	national universities:	minor global func-
niversities. Retain	versities: prestige	largely teaching-	tions: commercial
global prestige and	providers in a single focused institution	focused institutions,	operators focused
	nation, research in-	marginally global	on local market with
though marginal	tensive. Nationally	in research and/or	some cross-border
nterest in cross-	competitive with seg-	competitive with seg- cross-border teaching	students (e.g., some

cross-border students

out global agendas:

teaching-focused, local demand ori-

7 Nonprofits with-

(large category in some nations, e.g.,

Philippines).

group, especially in

entation. No crossborder role (largest importing nations).

local degree mills, no

9 For-profits without global agendas:

training in Australia).

private industry

(e.g., most Malaysian

ment 2, not 1. Vary-

border students and foreign engagement

ing global presence in research, (e.g., U

(e.g., some U.S. state

universities).

public universities, some Canadian com-

munity colleges).

in Europe and Japan).

Buenos Aires, many

Heteronomous Subfield: commercial vocational cross-		
6a Lesser-prestige teaching-only global for profits; no presence in either ranking.		
3 Elite and globally focused for profits; Indian IITs appear in TH ranking at 57 but not in JTU	ranking.	
4b Teaching-focused 3 Elite and globally 6a Lesser-prestige export universities, focused for profits, teaching-only glob no presence in JTU Indian IITs appear for profits, no top 500; reputa- in TH ranking at 57 presence in either tion and student but not in JTU ranking.	internationalization indicators push some Australians into TH top 200.	
2b National elite non-U.S. research universities with strong cross-border role; significant	second-order pres- ence in JTU top 200/ 500, after category 1; higher up in TH, driven by reputational	
ne ı	categories 2 and 4a.	significant proportion of JTU top 500 due to research outputs,

4a Nationally bound	5 Teaching-focused	8 For-profits with mi-
elite research univer-	national universities;	nor global functions;
sities; some have	no presence in either	no presence in either
enough research to	ranking.	ranking.
appear in JTU top		
200, many in top 500;		
in TH the survey en-		
sures an erratic list of		
national leaders with		
weaker global con-		
nectivity in top 100		
and 200.		

(categories 7 and 9). Although these are outside global operations, they are not outside the global field. Whether or not they like it, regardless of the strength of their relations with local constituencies, such institutions are being devalued by global transformation.

The polar nature of global higher education reinforces the global hegemony of the doctoral universities in the United States that are predominantly located in the global subfield of elite university education and research. The Bourdieuian theorization of the field also helps explain why the American universities sustain a dominant global position without having to build their global operations as aggressively as others do, and why the institutions in the other English-speaking countries seem so much more frenetic in their pursuit of global strategic ambitions. Nevertheless, in global higher education, the polarity between the two principles of hierarchization works somewhat differently for the market, an art described by Bourdieu (1993). The elite end of the university field is more robust than elite cultural producers, more closely integrated with the centers of economic and political power. Super-league universities, particularly the U.S. 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 also 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 will be commercial in temper. The ultimate rationale of the Super-league is not revenue but prestige. The driving forces of university prestige are the production of knowledge and of social position.

Bourdieu also discusses the strategic behavior of agents within the field of power. Agents within the field compete with one another 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, 30, italics in original). Bourdieu refers to position-taking as the "space of creative works" (39), but only some position-takings and "trajectories" (the succession of positions occupied by an agent over time) are possible. Agents identify such positions as they respond strategically to changes in the settings and the moves in the game. Agents do not simply respond as automata 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, 61-62). Bourdieu finds 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 (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 he leaves for self-determining agency and about the assumption of universal competition. Bourdieu also fails to distinguish between hierarchy and the overwhelming power of the kind exercised by American film or American higher education. This brings us to Gramsci and his notion of *egemonia* (hegemony).

HEGEMONY IN HIGHER EDUCATION

The current discussion of hegemony in social organization starts with the work of Antonio Gramsci, who contrasts and also combines two different regimes of power. First is domination or coercion by the open state machine, the "State-asforce" (Gramsci 1971, 56). Second is the exercise of hegemony, which is secured primarily through civil society, including educational institutions (Gramsci 1971, 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, 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, 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." "In other words," stated Gramsci, the state is "hegemony protected by the armour of coercion" (Gramsci 1971, 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 driven 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, 117, 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" (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), people who identify voluntarily with it as its instruments. Here language and education are central to 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, 82, 47). Gramsci's theorization also places the university in a pivotal role in civil society and in hegemony as the institution that standardizes 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 construct 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 in The Antonio Gramsci Reader, 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, 224).

In higher education, nation-building is carried out both instrumentally and reflexively. From time to time, the state itself is criticized and thereby renewed, much as in Habermas's (1989) notion of the "public sphere" (Calhoun 1992; Marginson 2006c; Pusser 2006). In fact, universities are able to conduct scientific research and secure consent for the nation-state only because they are independent of the 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 autónoma de México (UNAM), the university from time to time 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 there always are difficulties in the relationship between the universities and the 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, 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, 350).

In one respect, Gramsci's theorization seems dated. He argues that the potential for American hegemony is retarded by the later historical development of the United States vis-à-vis Europe. The United States "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, 272). The United States "lacks great historical and cultural traditions" (285). "Americanism," Gramsci states, is merely "an organic extension and intensification of European civilisation" (318). If Gramsci's observations were correct in the 1920s, the situation has now changed. Arguably the United States has created its own 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.⁵ Like the Gramscian institutions of hegemony in each nation, the Super-league embodies social formations and a tradition both national and global. It shapes 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 U.S. knowledge power worldwide. Given that education is central to all hegemonic projects, much is at stake in the building of global hegemony in higher education.

As Steven Lukes (2005) suggests, hegemonic relations of power in higher education are formed 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 resources, the strength of faculty and student bodies, the potency of infrastructures, the global centrality and position of their base country, and their closeness to financial and political centers of national and global decision making. One manifestation of instrumental power within the global field is the participation of Super-league university personnel in elaborating higher education policies at agencies like the World Bank, OECD, Inter-American Development Bank, and UNESCO (United Nations Economic, Scientific, and Cultural Organization). 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 determined 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 worldwide 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 forming 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. At the same time, the fact that Lukes provides a general theory of power rather than a theory of power in higher education should caution us against too readily applying these categories to the higher education sector without testing them empirically. Relations of power in higher education are situated in a larger space, articulated at many points through formal and cultural politics, government, sovereignty, and economic relations. It would be an illusion to suppose that these patterns of authority and hegemony could be undone and remade solely from within (Ordorika 2003).6

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 to engage with their specificities such as languages and ways of life. "They wished to "dominate" and not to "lead" (Gramsci 1971, 104–5). As we shall see, the hegemony of the Risorgimento suggests the character of U.S. domination in higher education, inflected as it is with American exceptionalism and periodic American isolationism.

Mapping Global Hegemony

No empirical inquiry into global hegemony in higher education is completely satisfactory, owing to the multiple and heterogeneous nature of the observational tools and data sets. The most important sources are the global agencies, particularly the OECD (2006) and the World Bank (2007). Few data and analyses are constructed with hegemony in mind, and empirical coverage shows significant lacunae. On the whole, the existing data sets allow us to more readily compare worldwide higher education as a relational hierarchy using static markers of difference (e.g., 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 kinds of data sets that would allow us to comprehensively investigate flows on the bases of location of initiative and drive, intensity, direction, and reciprocity (Marginson and Sawir 2005). Castells (2001) has data on the intensity of Internet traffic by nation and city, the location of web page creation, and the languages in use in the Internet, data that point to the domination of English with some plurality at the edges. An equivalent set of data in relation to universities would be helpful. Information is available concerning cross-border student flows, faculty flows, publication and citation patterns, and language of use. Some nations collect data on foreign students, and others collect data on students crossing borders, and these do not always coincide (Kelo, Teichler, and Wachter 2005; OECD 2006, p. 303). Many nations collect information about outgoing short-term academic visits, and some, including the United States, track incoming short-term visits. Data on incoming academic personnel are more complete than the data on outgoing personnel and on return rates. Little information is available on cross-border postdoctoral appointments. Only some nations provide data on the proportion of foreign-born academic staff. Fortunately for the study of global hegemony, the United States provides more comprehensive information about people flows in higher education and research than do other nations (e.g., IIE 2006; NSB 2006).

Even so, more complete empirical data would still require interpretation and synthesis. Here, our investigation of hegemony is not data driven but theory driven. Bourdieu's theorization of fields of power, Gramsci on hegemony, and Lukes's 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 the 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 a global scale. They enable tracking publications' outputs (NSB 2006), institutional research performance (SJTUIHE 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 leading research universities' geospatial distribution. We emphasize three aspects of global stratification:

First is the worldwide hierarchy of national wealth as measured by (gross domestic product / gross national income) GDP/GNI per head. GDP/GNI per head is loosely correlated with tertiary education participation rates but more closely shadows research capacity. "Developed" nations dominate the list of the world's top 500 research universities in research outputs as measured by the Shanghai Jiao Ting Institute of Higher Education (SJTUIHE 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, the infrastructure development and rates of student participation vary widely, with some nations approaching western European levels but with just a handful of research universities in the global top 500 (see table 3.3). 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 countries do not have any universities at all.

Table 3.3 Instrumental Conditions of Hegemony: U.S. GDP, per Capita GDP, Spending on Tertiary Education, and Number of Top Research Universities Compared with Eight Other Nations

	Population, 2005	GDP PPP, 2005	GDP per Head of Total Spending on Population PPR, 2005 Tertiary Education, PPP 2003/2005	Total Spending on Tertiary Education, PPP 2003/2005	Universities in SJTU Top 200, 2006	Universities in SJTU Top 500, 2006
	millions	sUS billions	s usp	sUS billions		
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	1,926.8	32,007	21.2	23	43
Australia	20.3	643.0	31,642	9.6	9	16
Japan	128.0	3,943.8	30,811	51.1	6	32
Singapore	4-4	116.8	26,844	n.a.	₩	ผ
Mexico	103.1	1,052.4	10,209	13.7	1	I
China	1,311.4	8,787.2	6,701	n.a.	2	14
Indonesia	220.6	847.4	3,842	5.1	0	o
Notes: PPP = Purchas the 2003 proportion c	Notes: PPP = Purchasing Power Parity; STTU = Shanghai Jiac the 2003 proportion of GDP allocated to tertiary education.	Shanghai Jiao Tong Ur ry education.	niversity data (SJTUIHE 200	07); spending on tertiary e	ducation is an approximati	Notes: PPP = Purchasing Power Parity; STTU = Shanghai Jiao Tong University data (STTUIHE 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	* Includes Hong Kong but excludes five universities from Taiwan; n.a. = data not available.	sities from Taiwan; n.a.	= data not available.			0.
Correcte Authors, alaboration based on		Anton Woold Book and	ashows date. Would Book some sale a road mast 60. OFO and a set of all a citating accounted to	DOD sand seed on a	TTITLE ACCESSOR &	

Sources: Authors' elaboration based on authors' data; World Bank 2007: cols. 2-4 and part of 5; OECD 2006: part of col. 5; SJTUIHE 2007: cols. 6-7.

Second, as the example of China implies, 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 larger resource bases and greater resource flexibility, have more scope for a mission-based internal division of labor, have greater potential to self-reproduce a research infrastructure, and are less vulnerable to the outflow of skilled personnel. For example, in Germany and France, academic labor markets are more self-sufficient 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, those 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 vis-à-vis 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 (Postiglione 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 United States' instrumental strength in higher education is massive compared with all other nations, whether "developed" or "underdeveloped." The strength of the United States begins with its scale as a nation, resources as measured by the level of per capita income, and the size of its 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 its 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 above \$30,000. The United States also spends a higher proportion of its GDP (2.9 percent) on tertiary education than does any other nation. This amounted to approximately \$360 billion in 2005 in PPP terms. The next largest, Japan, spent \$51 billion. The United States invests seven times as much on tertiary education as does Japan, 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 United States 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 houses eighty-four of the top 200 research universities.

The SJTU data also point to the secondary leadership role of the United Kingdom and hint that global power is not solely a function of resources. The United Kingdom's GDP per capita is about \$32,000, and it spent \$21 billion on tertiary education in 2005, 6 percent of the outlay of the United States. Yet the United Kingdom has twenty-three research universities in the top 200, 27 percent of the U.S. level. 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 global tradition 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 also is institutionalized in asymmetrical flows of students and faculty between countries.

English is one of two languages spoken by a billion people. The other is Pudonghua (Mandarin), or the standard dialect of China. In addition, two pairings of related and mutually intelligible languages are spoken by more than half a billion people: Hindi and Urdu, and Spanish and Portuguese. Three languages are spoken by more than 200 million people: Russian, Bengali, and Arabic, and four more are spoken by more than 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, 346; Crystal 2003).

English is spreading as a medium of instruction in non-English-speaking nations, particularly in programs designed to attract foreign students. English is widely used in India and the Philippines. In Malaysia, it has been reintroduced into the schools and is dominant in the private tertiary colleges. In Europe, English is used especially in master's-level programs targeting foreign students and in doctoral education. Nations in which English is widely used include the Netherlands, Finland, Sweden, and Denmark. Another thirteen countries, including South Korea and Japan, provide some programs in English (OECD 2006, 291). As a second language, English is much more widely used throughout the academic

world. A survey between 1998 and 1999 of European Region Action Scheme for the Mobility of University Students (ERASMUS) teachers and coordinators in Europe found that almost 90 percent of those from non-English-speaking countries spoke English. The next language, French, was spoken by fewer than half the respondents (Enders and Teichler 2005, 101). In global research, the use of Latin, French, German, and Russian are declining. French still is important 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 the variation among different "Englishes," especially in Asia and Africa, in which English becomes inflected with elements from local or national language.

Even so, these trends do not quite capture the special status accorded to English, 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 compared with other languages. Knowledge has somehow become more "true" if it begins in English, as 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. The United States and the United Kingdom publish fewer translated books than do other large countries. For example, between 1983 and 1985, Spain had 7,711 book translations; Germany, 6,676; France, 3,979; and Japan, 2,696—in each case, more than half were from English to the national language—but just 1,139 in the United Kingdom and 606 in the United States (Held et al. 1999, 346). 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, however. Professors from India or Singapore and teachers from Pakistan gain a referred global power and vocational mobility from the fluency in English that is endemic also to their education systems.

English has been taken up throughout the global field of higher education, not because of coercion exercised by Anglo-American universities, still less because of the intrinsic intellectual utility of their language, but because of the imperial economic, political, military, and cultural weight of the United Kingdom and then the United States in the last 250 years. Language translates Anglo-American domination in education into the fashioning of thought and communication in

every other sphere of economic and social life. And so we have a worldwide academic monoculture in which the universities from all English language systems are complicit. For them, it is easy to set global agendas. How often are they challenged? Most principal academic journals are based in the United States, and few of their editors feel obliged to take into account any contributions not written in English. This asymmetrical and largely one-way exchange of knowledge is a takenfor-granted reality of academic life, a nonreflexive foundation against which academic reflexivities find their limit and are played out. In their noncoercive fashion, and seemingly (at least on the surface) with all the participants' consent, the civilities of academic life truncate human potential as surely as do poverty and war.

KNOWLEDGE CONCENTRATIONS AND FLOWS

The English-speaking nations constitute an extraordinary 71 percent of the Shanghai Jiao Tong University's top 100 research universities on the basis of measured research performance. Although the measure is biased in favor of research in English, the point is that this is the global mainstream. The United Kingdom has eleven of these universities, Canada four, Australia two, and the United States fifty-four. Another twenty-two of the top 100 are located in western Europe, six in Japan, and one each in 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 none is in the Spanish-speaking countries, China, or India. India has three in the Shanghai Jiao Tong University's top 500, and China, excluding Taiwan, has fourteen (SJTUIHE 2007).

The Shanghai Jiao Tong ranking is configured in regard to 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 forming a significant sector of the national leadership, for example, classics and history in the training of the British and Indian civil servants. But now everywhere, 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 Chinese identity in the world. But such national traditions cannot yield international

rankings. Instead, 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 one another. Thus the dominance of the research university as science university is entrenched. Besides an Anglo-American model, it is equally the model of western European higher education. But for western European 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 overdetermined by the hegemony of language.

The leading universities keep for themselves prestige, financial resources, human talent, research infrastructure, and knowledge production, each of which produces the others. The principal criterion used in the Jiao Tong research rankings is the number of "Hi Ci" researchers, those in the top 250 to 300 scholars in their field as measured by citations (see table 3.4). Of these Hi Ci research-

Table 3.4 Concentrated Knowledge Power: "Hi Ci" Researchers, Selected Countries, 2007

	United States	3,835	
51	United Kingdom	443	
2-	Japan	246	
	Germany	242	
	Canada	174	
5	France	157	
W.	Australia	105	
en.	Switzerland	102	
i ll	Netherlands	92	
	Sweden	58	
	China	20	:
91	Spain	18	
-	India	11	
(4)	Singapore	4	
	Mexico	3	
	Indonesia	o	
Alian-			

Source: Authors' elaboration based on data from ISI-Thomson 2007.

ers, no fewer than 3,835 are located in the United States, more than eight times the number in any other country. Among the U.S. universities, Harvard has 160 Hi Ci researchers, more than all the French universities together; Stanford 135; UC Berkeley 82; MIT 74; and Chicago 41. The University of Cambridge in the United Kingdom has forty-four. The Shanghai Jiao Tong rankings also measure the number of Nobel Prize winners associated with each university. Of the 736 Nobel Prizes awarded up to January 2003, 670 (91.0 percent) went to people from high-income countries, the majority to the United States, with 3.8 percent from Russia/Soviet Union/ eastern Europe and 5.2 percent from emerging and developing nations. The latter have by far their best prospect of winning a Nobel Prize in literature (10.1 percent) or peace (19.8 percent). These areas are excluded from the SJTU index of research performance (Bloom 2005).7

Where research capacity is concentrated, knowledge flows are generated and pushed outward to the rest of the world. In 2001, scientists and social scientists in the United States published 200,870 papers in major journals. The volume of papers from Japan was 57,420, the United Kingdom 47,660, Germany 43,623, and France 31,317. China had 20,978 papers in 2001, Australia 12,602, and India 11,076. Mexico produced 3,209 papers, an increase of 263 percent since 1988. Despite its size, Indonesia created just 207 papers in 2001 (NSB 2006). Not much knowledge is flowing from Indonesia to the United States. In the group of rising Asian science powers, between 1988 and 2001 the number of scientific papers produced per year increased sharply in South Korea (1,332 percent), Singapore (535 percent), Taiwan (472 percent), and China (354 percent). Mainstream research is more diverse in national origin than in linguistic medium, and the national diversity is increasing. The long lead of U.S. 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 U.S. universities will continue to dominate global knowledge flows for the foreseeable future.

The unevenness in the flows and the asymmetries in direction can be traced more precisely when moving from paper output to citation patterns. The United States 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, 16). On average, knowledge produced in the United States 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 United States, shows itself as or more strongly within the United States than it does outside it. To some American faculty, nothing is produced outside the United States. The external referencing of

U.S. phenomena becomes impossible, as the local is equated with the universal. The Carnegie survey found that while more than 90 percent of scholars from other nations believed it necessary to read foreign books and journals, only 62 percent of American scholars agreed, much the smallest number among the developed nations (Altbach 2005, 148-49). Philip Altbach stated that although U.S. 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, 149-50). Academic faculty all over the world inhabit global fields in which they pursue the twin satisfactions of cultural production and social prestige. Outside the United States, many faculty have correspondingly ambivalent relations to their national and local contexts. Inside the United States, when faculty move between their local context to the larger academic world, they seem to be less conflicted. Many do not need to leave America.

Many exceptions to these generalizations can be found in U.S. universities, many instances of faculty with a cultural imagination, and some that evidence a profound determination to surmount insularity, which is the price that an imperial hegemony imposes on itself. In some respects, these faculty are the hope of the world, yet the generalizations hold. While the critics of hegemony struggle against its institutional logic, a more modest cosmopolitanism is compatible enough. Many U.S. faculty reject the raw edge of Huntington's (1996) thesis about the "clash of civilizations," but global exceptionalism, with its seductive sense of superiority, is hard to escape. Across borders, a confident American liberalism is manifested as a kind of missionary virtue: cross-border 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, which is cosmopolitan on the surface, but monolingual and culturally and technically superior at heart. To put it bluntly, no matter how much U.S. faculty might embrace tolerance and openness as virtues, the binary inside/outside logic of the global academic monoculture is not all that different from Huntington. Likewise, in the English-language countries, "diversity" has a more limited meaning than in western Europe or Latin America. It is understood in social rather than cultural terms or as a limited multiculturalism within the monoculture, for example, the access of nondominant groups to higher education. "This model values diversity as a function of competition and not the other way round" (Drache and Froese 2005, 26-27). In this framework, a global cultural diversity based on sovereign identities' equality of respect, which

is the classic virtue of multilateralism, ceases to be seen as essential in itself as either a human right or a mutual benefit.

American public universities and faculty are being remade according to organizational blueprints that use business models grounded in the imagining of higher education as a market competition among firms. These models draw on performative protocols and systems of knowledge management that are not all that different from the organizational systems being imposed on universities outside the United States. In other words, U.S. public institutions, too, are victims of the reified models laid down by the New Public Management (NPM) and based on idealized versions of the Ivy League and the for-profit university. But the common fact of transformation does not eliminate the real cross-border differences in resources and power between American research universities and research universities in other countries. Even recognition of the common presence of the new public management is not enough to create in the eyes of American faculty, even most of those who are notable for liberal convictions, the kind of real solidarity that would flatten the global status hierarchy in their eyes. Beliefs in the intrinsic superiority of American higher education institutions over higher education in other nations are hard to shake. However problematized it might be within its own domain, beyond American shores the American public research university still shares with the Ivy League private university that all-pervasive sense of "American exceptionalism" that brings to each American research university a potent confidence in itself as bearer of a special global mission, albeit a mission that always seems to be less pressing than the all-important domestic U.S. agenda.

There is much that too many academic eyes in the United States cannot see. Still less do universities in the United States see themselves as others see them. But this partial blindness performs a useful function. Researchers and scholars inside the United States draw global authority from the binary inside/outside distinction and use it to perpetually remake the field in their own image. U.S. 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 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, as these benefits also are culturally loaded public goods. To the extent that they exclude knowledge produced in other nations and traditions, they constitute "public bads" in those locations (for

more discussion of "public bads," which are the opposite of "public goods," see, among others, Kaul, Grunberg, and Stern 1999). The commons is diminished as well. To the extent that it reduces the overall diversity of knowledge, the hegemonic global system of knowledge constitutes a collective public bad (Marginson 2007c). This subtracts from the ultimate potentials of knowledge and thus from the potential goods accessible to U.S. faculty and English speakers as well as everyone else.

The inclusion/exclusion binary in the global knowledge system decisively overdetermines 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 United States must accept these terms. Positioned within a global field framed by universal English and U.S. 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 a system that is embraced voluntarily with a sense the inevitable has come.

Unequal People Flows

In worldwide higher education, short-term movement tends to be more a twoway (reciprocal) than a long-term movement, although some short- or mediumterm movement does lead to permanent migration. Between 2000 and 2004, the number of mobile cross-border students rose by 41 percent (OECD 2006, 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 regard to country of destination, the largest group of students, 22 percent, entered the United States, followed by United Kingdom, 11 percent; Germany, 10 percent; France, 9 percent; and Australia, 6 percent (OECD 2006, 288). The surface appearance is one of multiple flows in all directions but a primary global flow within these flows. Research on student choice identifies a strong overall preference for the elite universities in the United States, especially

among Asian families (e.g., Mazzarol et al. 2001). For their part, U.S. doctoral universities, unlike most universities in the United Kingdom, Australia, and New Zealand, do not set out to maximize the number of foreign students and the revenues they bring. Instead, U.S. 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 United Kingdom enrolled 23,871 foreign doctoral students, Spain 11,765, Australia 8,855, Switzerland 6,028 and Sweden 3,205 (OECD 2005). The role of these nations was dwarfed by that of the United States, which hosted 102,084 foreign doctoral students in 2004/2005. In addition, most of the foreign doctoral students enrolled in the United States receive scholarships or other subsidies from their American universities (IIE 2006). The United States 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 percent and, in engineering, from 32.1 to 45.8 percent (Guellec and Cervantes 2002, 77-78). As graduate assistants, foreign students are an important part of the U.S. national research effort, as many are later recruited into postdoctoral programs, and some build long-term careers. They find the U.S. labor market more flexible and open than the academic labor markets of most other nations. "Stay" rates vary by country of origin. Potential migration is high for students from China, Israel, Argentina, Peru, eastern Europe, and Iran; and some developed countries, including the United Kingdom, Canada, New Zealand, and Germany. In 2001, the stay rate for Chinese graduates in science and engineering was 96 percent, and for Indian graduates, 86 percent (Vincent-Lancrin 2004, 32). In 2003, three-quarters of EU citizens who obtained a U.S. doctorate said they had no plans to return to Europe (Tremblay 2005, 208). Conversely, stay rates are very low for South Korea, Japan, and Indonesia and relatively low for Mexico (Guellec and Cervantes 2002, 92). Even so, those graduates who do return to their country of origin or migrate elsewhere broadcast the norms of U.S. higher education throughout the world.

Although conclusive data are lacking, cross-border faculty recruitment seems to be growing relative to national labor markets at all career stages. But it has not subsumed national faculty labor markets into one worldwide set of regulations, salaries, and conditions (Musselin 2004, 2005). Nor does the globally mobile element constitute a single global labor market (Marginson 2009). Nevertheless, the scale of foreign doctoral education and the recruitment of foreign faculty into the United States have transformative implications for labor markets in other nations. For example, besides Germany's losing many doctoral graduates to the United States and United Kingdom, its own long standing as an

attractor of foreign faculty and doctoral students has been diminished (Berning 2004). The most global element of faculty labor is the market for highly mobile researcher-scholars working at the top end of citation performance. This market is dominated by the Super-league universities (table 3.1), 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 that we instead should talk about "brain circulation" are right in that mobility is frequently temporary and locations often unstable and that the research diasporas of South Korea, China, and India show an increasing tendency to move back from the United States, if not back and forth several times. But they are wrong in that they obscure the continuing asymmetries in people flows and hide the fact of U.S. hegemony. Few U.S. national doctoral graduates "brain drain" to the emerging and underdeveloped nations, and relatively few go to western Europe. The striking fact remains that just as every other nation has a balance-of-trade deficit with the United States in film and television, every other nation has a net brain drain of faculty labor 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 that 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 United States at the global core. Systems and universities are arranged at increasing distances from the relatively advanced national systems in the global semiperiphery (e.g., Australia or Finland) to emerging systems in the global periphery (e.g., 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 of these it holds permanently; others later move back to the periphery and the margins as its agents. In its alliance 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 U.S. 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 through 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. We 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 as 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 and Froese 2005). We do have better data on the capital flows associated with the cross-border student markets. In 2001, the United States took in \$11.5 billion from foreign students, and Australia took in \$2.1 billion (see table 3.5). Comparatively few domestic students from either country went abroad (another sign of the English-language universities' indifference to plural encounters); outward mobility cost the United States \$2.4 billion and Australia \$0.4 billion. In net terms, the cross-border capital flows in favor of those nations were \$9.1 billion in the United States and \$1.6 billion in Australia (OECD 2004, 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; Marginson 2007a).9

Table 3.5 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 subfield of commercial cross-border education, it is not true of the U.S. doctoral sector. In the United States, 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

	Revenues from Foreign Students, 2001	Cost of National Students Abroad, 2001	Net Capital Flows, 2001
5	\$US million	\$ US million	\$US million
United States	11,490	2,380	9,110
Australia	2,145	529	1,616
Canada	727	529	198
Mexico	31	81	-50
Greece	124	205	-81

Table 3.5 Unequal Global Capital Flows in Higher Education: Selected Nations and Selected Capital Flows, 2001

Note: Does not include revenues from patents and research, publishing and consulting activities, or the governmental flows of foreign aid for tertiary education.

Source: Authors' elaboration based on data from OECD 2004, 32.

and when it sends them back, U.S. international education becomes one pillar of the imperial economic and political-military relationship between the United States and the world. Since Woodrow Wilson was president, the American foreign policy establishment has supported international education, and generations of benefactors have donated scholarships to incubate and Americanize foreign elites. Global hegemony is a much bigger prize than capital accumulation in higher education alone, and still bigger than the fiscal savings that 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.

The principal material constituent of global hegemony in higher education is not financial capital but the capacity to produce research and knowledge, in which the United States dominates the field. We emphasize again that this research is subsidized rather than based on the commercial market and that much of it is pure basic research. Likewise, 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 in the semiperiphery, not at the heart of the hegemony (Marginson 2007a). That despite its outlay on foreign talent, the United States 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. Although 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 United States. 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 fulfillment of the ends of empire.

To worldwide American power in higher education is joined the secondary global role of the United Kingdom in the spheres of culture and language, research, and elite university education and in the technologies of governmental neoliberalism. In the United Kingdom, it is nearly 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 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, and the sum of a multitude of spiels and deals. It rarely involves the U.S. government directly. Still, the nation supports its universities abroad despite the polemical sniping of faculty and the episodic problems in securing visas for scholars and students from countries under suspicion. The cross-border dealings of U.S. universities together reflect a surprising degree of cultural coherence in their interface with the rest of the world. In the last analysis, none can forget that they are American, and 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 in this way, but they do so in the context of hegemony.

The most remarkable thing is that the effects of U.S. universities on the higher education world are profound and continuous, sustained by many communications and engagements, yet U.S. universities largely protect themselves 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 United States brings to the rest of the world, not what the world brings to U.S. 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) notes. When elite U.S. research universities consider foreign universities, when they look up briefly from their fascination with all things local (which also being 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, they largely ignore foreign universities. American universities take what they want from the rest of the world and junk the rest. They are not interested enough in engaging so closely with non-American institutions as to necessitate learning their languages of use, as in the classic British imperial strategy described in Orientalism (Said 1979). Nor are they much interested in converting foreign universities or 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 to benignly evolve toward U.S. templates according to their own capacity and "merit." This is a top-down globalization that marginalizes the cultural "other" rather than absorbing it and building hybrid fusions as, for example, the Asian science powers are doing. It is the classic hegemony of the nineteenth-century Italian Risorgimento. It does not lead, but it dominates.

Arjun Appadurai (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. The global university he-

gemony has 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. Teaching has a plurality of languages of use, including the heterogeneous "Englishes." Despite the fluidity of intellectual discourse, research and knowledge formation are less open to hybridity on hegemonic grounds. They constitute a tight binary global logic of inclusion/exclusion that assigns worldwide academic labor to one of two categories: (1) part of the global research circuit, which means using the dominant language and publishing in the recognized outlets; or (2) not part of the global research circuit, the 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 since 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.

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. We identify 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.

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. The United States has 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. The systems of the "Westminster" countries (United Kingdom, Australia, New Zealand) combine university autonomy with explicit state steering. The Nordic/Scandinavian university is characterized by high participation, research culture, and strong state investment (Valimaa 2004, 2005); the Germanstyle 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, South Korea, and Singapore, this last fostered by its state investment, Singapore's uniquely global orientation; and the technology- and business-focused institutions of India. Beyond the research university are the highly regarded vocational sectors in Germany (the Fachhochschulen) and Finland, as well as many other vocational and community-based programs, including for-profit models and online institutions, as well as many examples of specialized institutions in teaching and research.

Some tendencies toward 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. Instead, 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 and 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 are under assault? They are being problematized and subordinated by the New Public Management (NPM), by the normalization of reified NPM models of U.S. higher education, and by global ranking on the terms of the hegemony.

The NPM first emerged in the United Kingdom in the 1980s. Although it predates 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 influence government, and global policy agencies outside the United Nations, especially the International Monetary Fund (IMF) and World Bank. NPM reforms includes government-steered competition among institutions, executive-steered competition among 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 their 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 (e.g., Clark 1998; Henkel 2005, 2007; Marginson and Considine 2000; Musselin 2005; Nowotny, Scott, and Gibbons 2001; Rhoads and Torres 2006). Bensimon and Ordorika (2006) note that in Mexico, performance management and individualizing faculty incentives have redirected the 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 when 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 neoliberalism, its ideal models of higher education were borrowed from the United States. It is inevitable that given the worldwide dominance of U.S. higher education, the American traditions would be closely watched. Nevertheless, imitation sometimes makes poor policy and poorer identity. Nor is isomorphism always possible. Even though policymakers everywhere seem to believe that if their universities imitate U.S. universities, they will succeed like them, the NPM cannot deliver U.S. outcomes without the national/global conditions that sustain the U.S. brand of "academic capitalism" (Slaughter and Leslie 1997; Slaughter and 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. There is more than one possible "American model" besides the Ivy League, however. Most U.S. 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 U.S. system is seen as one of its characteristic virtues and is spotlighted by the NPM for imitation elsewhere. This points to the fact that the hegemonic norms are based on a particular reification of U.S. 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, behaviors, and values:

- The hegemonic norm of research university, the "entrepreneurial model" (Clark 1998), is 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. One set of this model's roots date before the twentieth century in Europe, especially in Germany and the United Kingdom. Its other set of roots, in the most specifically American evolution of massive educational and research empires after World War II, the "multi-versity" (Kerr 1963), is exemplified most closely in contemporary practices by the Ivy League private universities in the United States, such as Harvard and Stanford. These universities are not as responsive to markets as the norm promises, but they impart tremendous prestige to the model.
- The hegemonic norm of for-profit vocational university is centrally focused on vocational training for business; computing; perhaps mass professions such as health; accountable for immediate vocational relevance; business-like in organizational culture; expansionary in student numbers, sites, and market share; spare and efficient with few "frills" such as research, libraries, or academic freedoms; with teaching borrowed from the vocational field and curriculum packages; and "customer" focused, using performance management of staff and quality assurance. This form has a mixed record around the world but in the United States, 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 United States and has spread to a dozen other countries.

By pushing institutions toward one of these norms, the NPM reform process draws them into two homogenous systems, in which all are readily com-

pared with one other across borders and all appear as inferior to institutions in the global core in the United States. 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 like the Ivy League, 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 public or national universities. Even in Japan, where private universities enroll the majority of students, and the most prestigious private institutions sometimes educate the majority of national cabinet members, within the university field itself the national imperial group led by Tokyo University tower over Keio University and Waseda University because of the accumulated state investments in research. This does not diminish the power of the U.S. Ivy League to compel the helpless admiration of the rest of the world. No doubt, a distant and unobtainable paradise secures an even more powerful hold on the imagination than one that can readily be seen and emulated; and no doubt also, the unobtainable model 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. U.S. 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 and Leslie 1997). In addition, U.S. private institutions are less the agents of market economy than the NPM imagines. They are heavily dependant 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 U.S. institutions. Thus by encouraging other nations to withdraw from state support, comparative American global competitiveness is directly improved. The United States 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 marketplace in those nations. Finally, neither model fits the comprehensive public research university and the four-year and two-year colleges. This the NPM exploits, however. Measured against these two norms, the actual existing public institutions look flawed. Here the American public sector is subject to the many of the same normalizing pressures reshaping systems and institutions elsewhere. Compared with high-status private universities, public research universities are made to look overly democratic if they expand access rather than intensifying selectivity. Yet compared with the commercial sector, public research universities look inefficient, underfocused, and indifferent to the "customer"; and the commercial sector manages to claim democratic credentials somehow separated from governance, transparency, and accountability.

Rank Ordering the Field

The two norms of the entrepreneurial research university and the for-profit vocational university embody in an NPM form the subfields 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 subfield for organization as a specific global market. We see that global hegemony extends not just to normalization 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 subfields (especially the elite research universities) along hegemonic lines. The Shanghai Jiao Tong University Institute of Higher Education (SJTUIHE) began ranking research universities in 2003, and the *Times Higher Education Supplement* began ranking its "world's best universities" in 2004. The two ranking systems differ in their framing of the field (see table 3.6). The SJTUIHE maps the subfield of research-intensive universities, focusing solely on research rather than status data. The *Times* attempts to draw both subfields 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 rankings were welcomed by the Chinese government as a means of comparing Chinese universities to the top research performers world-

Table 3.6 Shanghai Jiao Tong University and *Times Higher Education Supplement*—QS World University Rankings

Shanghai Jiao Tong University IHE Ranking, 2006	Times Higher Education Suppelement Ranking, 2006	
1–100.0	1-100.0	
Harvard, USA	Harvard, USA	
2–72.6	2-96.8	
Cambridge, UK	Cambridge, UK	
3-72-5	3–92.7	
Stanford, USA	Oxford, UK	
4-72.1	4-89.2	
UC Berkeley, USA	MIT, USA	
5-69.7	4–89.2	
MIT, USA	Yale, USA	
6-66.0	6-85.4	
Caltech, USA	Stanford, USA	
7–61.8	7–83.8	
Columbia, USA	Caltech, USA	
8-58.6	8–80.4	
Princeton, USA	UC Berkeley, USA	
8–58.6	9–78.6	
Chicago, USA	Imperial College, London, UK	
10–57.6	10-74.2	
Oxford, UK	Princeton, USA	
Top 100	Top 100	
USA 54; UK 11; Japan 6; Germany 5; Canada,	USA 33; UK 15; Australia and Netherlands, 7	
France, and Sweden, 4 each.	each; France and Switzerland, 5 each.	
Top 200	Top 200	
USA 87; UK 22; Germany 15; Japan 9; Canada	USA 55; UK 29; Australia 13; Netherlands and	
8; Netherlands 7; France, Switzerland, Austra-	Japan, 11 each; Germany 9; Canada 6; China	
lia, and Italy, 6 each.	6; Belgium 5.	
Top 500 USA 167; UK 43; Germany 40; Japan 32; Italy 23; Canada 22; France 21; China 19 (14); Australia 16.	Top 500 (not listed)	
Universities from less affluent countries ⁶	Universities from less affluent countries ^b	
Seven (3.5%) of the top 200: China 3; Russia,	Fifteen (7.5%) of the top 200, including China	
Mexico, Argentina, and Brazil, 1 each. Some	6; India 3; Russia and Malaysia 2 each; Mexico	
of these are very large.	and Thailand 1 each. Reputational survey picks	

South Africa 4 each; Russia, Hungary, Poland, ing countries that would not otherwise appear. and India 2 each; Argentina, Mexico, Czech Republic, Chile, and Egypt 1 each.

35 (7.0%) of the top 500: China 14; Brazil and up some leading national institutions in emerg-

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.

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.

Notes: Includes 5 from Taiwan.

Source: SJTUIHE 2006; Times Higher 2006.

wide. The objective in establishing the competitive position of China's universities is to underpin the government's policies designed to catch up. The exercise requires realism, measurable outputs, and sound data. The SJTUIHE states that only research, meaning published research in English in the sciences, is sufficiently standardized to enable comparison on a quantitative basis across the world. Twenty percent of the SJTUIHE index is constituted by citation in leading journals, 20 percent by articles in Science and Nature, and 20 percent by the number of ISI-Thomson (2006) "HiCi" researchers in the institution are in mostly science-based fields. Another 30 percent derives from the distribution of the winners of Nobel Prizes and fields medals in mathematics according to university of training (10 percent) and current employment (20 percent). The remaining 10 percent is determined by taking the total from the preceding data and dividing by the number of staff.

The SJTUIHE rankings favor 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 with measured research outcomes and installing research capacity firmly as the principle of division between center/periphery/

^b Universities from countries with per capita incomes of less than \$20,000 per year.

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 rankings not only confirm the dominance of American and English-language universities and the prestige of the leading institutions, but they also confirm their idea of the university. Coherence is secured by ignoring the economic logic of the other subfield, 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, rather than both, is in operation.

The Times ranking was developed by Rupert Murdoch's Times in 2004 (Times Higher 2007). It is designed to secure a more plural definition of higher education than that used by SJTUIHE, and it tends to favor both high-status research-intensive universities and universities that are particularly strong in the market for international students. Forty percent of the Times index is an opinion survey of worldwide faculty ("peers"), and another 10 percent is a survey of "global employers." There are two "internationalization" indicators: the proportion of international students (5 percent) and staff (5 percent). Another 20 percent is determined by the student-staff ratio, a proxy for teaching "quality," and the remaining 20 percent is the number of 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 shown 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 outcome is a less coherent mapping of the field. Two subfields and two principles of hierarchization 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 U.S. Ivy League heads the pack, modified by universities strong in the market for international students, with some universities with a vocational flavor (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 greatest presence in the commercial market for international students, and both nations

do much better in the *Times* ranking than in the Shanghai Jiao Tong ranking. Australia has seven universities in the *Times* top 100, with six in the top 50, and is ranked as the third-strongest system in the world, ahead of Japan, Canada, and all the nations of western Europe. But Australia has none of the Shanghai Jiao Tong top 50 and only two of the top 100. Whereas the United States has fifty-four research universities in the Shanghai Jiao Tong top 100, the *Times* manages to reduce American world leadership to just thirty-three. 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. The credibility of the *Times* data, however, 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, II and by dramatic oscillations each year in the ranking of some universities (Marginson 2007b).

Like the SJTUIHE ranking, the *Times* ranking reinforces the presumed 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 centers of science and scholarship and especially the United States and the United Kingdom" (Altbach 2006, 1). The rankings elevate on the global scale especially the universities in the Super-league, which now loom larger over each national hierarchy. The rising Asian science powers, which for the first time are 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 United States, every university and its public know where that university stands in the Shanghai Jiao Tong and/or *Times* list, especially whether the university is inside or outside. It matters. The criteria for success are clear, and so rankings channel position-taking into a small number of steps 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 mind-set that cuts off the potential for investment in bold new strategies, especially outside the dominant norms. Furthermore, 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 United States, the global rankings do not matter much. Instead, in that nation the tyranny of the national ranking by U.S. News & World Report is almost complete. For American university presidents and publics, the national ranking might serve to compose a de facto global ranking, for the parochial horizon is sufficient to reach across more than half the world leaders.

Global referencing of the rankings creates greater heteronomy across the sector, except in the Super-league universities, whose freedoms are enhanced. This heteronomy is different from the assertion of government controls at the national level. As we have seen, when operating in the national field, universities exercise a reflexive autonomy vis-à-vis the nation-state. This is a two-sided, never-resolved process in which institutions are continually under pressure from the state to weaken their autonomy while from time to time the state itself is criticized and sometimes renewed. This nation-state reflexivity is disrupted by the pull toward global rankings, fragmenting the old role of universities in nationbuilding. But global rankings do not establish an equivalent reflexivity in the global dimension. There is no global state, and even though global hegemony is everywhere, it is also out of reach. The universities in the Super-league have an ongoing relationship with the global centers of power, but they usually use this as a U.S.-focused reflexivity that 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.

BEYOND GLOBAL HEGEMONY

Global educational hegemony is a fact. But no closure is ever complete; the imaginative possibilities are always open; and the longer term has potential for plural centers 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) noted that the film industry was 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 with foreign earnings of \$100 million in India (Drache and Froese 2005, 7-8, 24), but Bollywood produces more than eight hundred films in twenty-five different Indian languages each year from many regional centers. 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. That is film. 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 interdependency of position and position-taking strategy helps 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 and Considine 2000). The theorization is particularly relevant to studying orthodox, often mimetic, and predictable decisions premised on maintaining relative position. It is less relevant to the practices of university and disciplinary leaders when they reimagine 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, off-the-wall innovations appear 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 universalizes competition in the field of power. No respite from the relentless Hobbesian war of all against all that continually eats into our conditions of possibility seems likely. Second, Bourdieu argues that freedomthat is, the potential for self-determination—should be understood merely as freedom from material necessity. In Distinction (1984), Bourdieu talks about an opposition between "the tastes of luxury (or freedom) and the tastes of necessity" (177). The scope for action is confined by prior class relations and resource levels locking up the potential of self-determination itself. But while it is true that self-determination is conditioned by material resources and historical relations of power and that it is essential to understand those conditions, they do not foreclose all possibilities.

History suggests that freedom also is conditioned by agency itself, by the imagination and the capacity of agents to work on the limits. With his emphasis on the will and individual initiative, Gramsci understood this (Williams 1960).

Bourdieu did not see "strategy" as based on conscious imagining and deciding as much as on 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, are burned into the agent's unconscious mind and conditions his or her every action. "Because positiontakings 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, 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 a 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 these forms of freedom from negative freedom, freedom from coercion, which is foundational to Hayek (1960), and neoliberalism (Marginson 1997). Sen explains that negative freedom is one condition of self-determination but 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, to 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, 63). Sen 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 to establishing the boundaries of the possible in the global higher education environment. This quality is an aspect of agency freedom. It is the imagination: the possibilities 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, it will have 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 as ontological openness, a world vectored by different cultural flows, the heterogeneous 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 categories, 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 in the national setting, even the structures of hegemony in higher education are provisional, partial, and contested. They are relativized by the other parts of the field and in continuous transformation. One element continuously at 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 they do 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 metaphor of "flows" implies, cross-border flows continually generate change and themselves undergo change. This tends to "loosen" the relations of power in worldwide higher education to some extent, thereby imparting a certain dynamism, instability, openness, and unpredictability, and more so than in 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 and van der Wende 2009). Above all 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 multiassociating communications; more multiple identities; and multiple and variously articulated spheres of action.

The complication for analyzing relations of power in higher education—and for all those who theorize the mutual exclusivity of the modern and postmodern, and the national and the global—is that in the global setting, we can all too

readily detect both Bourdieuian relations and Appaduraian 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 autonomous culture and the principle of heteronomy, together with vigorous boundary-making and hierarchy-forming activities, such as university rankings that are sustained by the principal beneficiaries. In essence, this is what the hegemonic project is: the imposition of form on flux, the bold attempt to stop time and center 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. It means 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 the 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. Bourdieu's point is that autonomy and capacity are located at the field's high-status academic subfield and, above all, in the Super-league universities. There the hypothetical scope for strategy is maximized (although 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 fewer means of implementation. Some are so overshadowed by hegemony as to have fewer, 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 United States 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 (metanational) 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, the intensive movement of people, and advanced research cooperation. Bologna walks a tightrope between fragmentation and homogenization. The latter poses dangers especially

in the vulnerable post-Soviet nations, but the gains have been impressive. Latin America has potential for more advanced cooperation, as some higher education systems are benefiting from a prolonged period of democratic rule and the growth of civil institutions and governments with a social agenda beyond the Washington consensus. This is already happening in the nations of the "Southern Cone" via MERCUSOR.

A second way forward is intensified capacity building on a 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 the United States' 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 enrollment ratio rose from 3 to 13 percent (World Bank 2007). From 1998 to 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, 16) and is the second largest R&D investor in the world. This transformation has incalculable long-term consequences for worldwide provision, for the map of research and flows of knowledge and people, and for 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" (103). Internationalization should emphasize "not the elimination of cultural differences but international exchange on an equal footing" (104). Differences in national power inevitably results in inequalities, but "no route to development, autonomy and power can be separated from international systems" (110). Openness to and open participation in the global dimension are essential. At the same time, maintaining a strong sense of both national tradition and national strategic project is equally important. In the face of crossborder flows, the national project should be not be one of adaptation to global normalization and standardization but one of "indigenization," in which foreign culture is "grafted onto the tree of indigenous culture" (104).

Taiwan, Singapore, and South 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 United States, has largely been closed by a deliberate act of national will. Multiple identities create strategic flexibility, enabling freer movement among different spheres of operation, while a successful global strategy also requires that multiple identities cohere. Much hangs on how this is managed in nonhegemonic nations, whether they can sustain both multiplicity and coherence. How China manages biculturalism in higher education, and the extent to which Pudonghua (Mandarin) becomes a language of global communication and of research, will be a principal factor determining the extent of cultural plurality of knowledge. The Spanish language might also gain a greater global role, given the weight of Latin America and the growing importance of Spanish in the United States. Arabic, as well, has some prospects of consolidating a global role.

STRATEGIZING 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 subfield of research universities from the United States (primarily) and the United Kingdom. The instruments of domination are language and monoculture, research and publishing systems, knowledge flows, and the people flows that follow; even though global uniformity is incomplete and practiced at the expense of much diversity. Global market forces often are assumed to be enforcing the American hegemony and standardization in higher education, suppressing cultural diversity by the worldwide 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 because of the previous universalization of English-language research in the sciences. Likewise, higher education is often assumed to be commodified at the behest of the state, but the global elite universities are not becoming knowledge commodity factories. Despite the commodification at their edges, their primary concern is to extract support from state and civil society for basic research in the classical form of a public good. (Below the level of the hegemonic

institutions, heteronomy and commodity forms are more determining.) Like the Catholic Church and other organized religions that also predate finance capital, the Super-league university is essentially its own creature. Ironically, perhaps, the premodern 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 the state or the 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 first to the one national power that spans the full planetary terrain (albeit accountable to it in national, not planetary, guise) and second to the globally mobile social elites that 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 self-positioning of countries, universities, and individual agents by and toward the hegemonic project. Some agents in the global setting are central to that project and benefit from it; some agents are absorbed into it; and 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—and given also the more jagged and fluid Appadurain world on top of which the hegemony sits, a world held in place by the weight of categorical power but one 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. National investment continues to be crucial. At the same time, by itself it is not enough to secure the space for strategy beyond hegemony; and if the options are limited to enhancing national competitiveness, this will reproduce both hegemony and subordination to it. When global strategy is secured by dumbing down local contents, identity is negated. Here local and

national revolts against the NPM and commodification can establish space for more generous social projects but are unlikely to be decisive vis-à-vis 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 conditions. 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 renormalized in the terms of hegemony. Regional and other cross-border alliances are necessary because they provide more room for alternative approaches and cultural identity building. Here the strategic problem is to break free of hegemonic global standards and standardization without losing the global. Local and national projects are needed that are "conceived in a non-nationalist way" (Santos 2006, 80) and that build forms of local and national autonomy that are part of a new kind 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, 78).

The essence of global civil society—analogous to the modern national societies built before it—is that agency, fluid within the common space, is irreducibly global and local/national at the same time. Building on these local and national initiatives while remaining subject to the factors that condition agency (including the imaginations of local leaders), parts of the higher education world can constitute an alternative globalism apart from that of the U.S.-dominated communications and entertainment sectors, the finance sector, and the Super-league universities. In doing so, individual universities may need to use the freedoms flowing from both their old autonomy and the new global agency and ontology, so as to strike out ahead of their national governments. Such an alternative globalization would have two principal elements. These are partly independent, partly dependent, and each is necessary to the other.

First, diversity. To establish a genuine cultural plurality in research, it is necessary to move beyond the current hegemony. Likewise, to move beyond the current hegemony, it is essential to establish genuine cultural plurality in research and knowledge. One condition for this process of pluralization is sustaining 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 favorable conditions for broadening U.S. perspectives in the larger global setting and 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 warming 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 vast. "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, 79). At the same time, even though critical cosmopolitanism in the global dimension is necessary, it is not by itself sufficient. If the common global character of problems and solutions is configured so as to empty out the local and national specificities of those problems, the move to diversity will be ineffective, and a shallow difference will be all that is left. Cosmopolitanism will be played out as a set of predictable signifiers within a single game. The global starts to peel away from place and is vulnerable to capture by the agents of market power. Universities become divided between global players and those confined to what they can see. The social agenda's many points of purchase on egalitarian politics will be lost.

Finally, culture, language and alternative approaches to research and knowledge are right at the center 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 on the global level. When higher education is reduced merely to producing and allocating positional goods, like a labor bureau, its historical potential is decisively limited. It becomes more Bourdieuian, more category bound, than it is at present. If knowledge formation is quintessentially global, it also constitutes an endless possibility for diverse identities, for local praxis and language maintenance and the reentry of local ideas into the common conversation. For universities, research groups, and faculty within the United States, the essence of counterhegemony is to aid in building the capacity for knowledge formation in other places. It is when the role of the university in knowledge formation is at the fore that the fuller play of the imagination becomes possible, the larger promise that an Appadurian global order/disorder offers us.

NOTES

We express our grateful thanks to the anonymous reviewer of this chapter, whose insightful criticisms and positive suggestions added much value to the development and finalization of the text. We thank all the reviewers for their stimulating feedback while noting that several of them were uncomfortable with the portrayal of American power in the worldwide high education sector. No one actually disputed the facts of global hegemony as we have described them here. But some reviewers wanted us to be less clear and direct about the matter or to emphasize ways in which American universities and American faculty were similar to those in other nations, rather than to focus on ways in which the global roles of American universities and faculty differed from those of other nations

- 1. Technically, the value of a network increases as the square of the number of nodes in the network:
 - 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. (Castells 2000, 71)
- 2. Arguably, Pierre Bourdieu (1984, 1988, 1993, 1996) is the only major social theorist, and certainly the only one since 1960, who has devoted much of his total output to analyzing education and universities. His work, however, is bound to only one nation—he universalizes on the basis of the French case—and is not global in scope. In earlier periods, others such as Ortega y Gasset and Talcott Parsons focused on universities to some extent. Among the more contemporary theorists, Habermas, Lyotard (1984), and Derrida (2004) have produced works that bear directly or indirectly on universities and knowledge. While some of these works, such as Lyotard's famous essay on the postmodern condition and knowledge, are undoubtedly important, only Bourdieu made higher education a central feature of his life's work.

- 3. Although this issue deserves more attention, in the global setting, boundaries and membership in the field of higher education are not only contestable but also unstable, acquiring new permutations given the permeability of boundaries and multiplicity of identities.
- 4. Has the whole field has been pulled toward economic and political power so that the autonomy of higher education has generally been reduced? Some people advocate that position (e.g., Slaughter and Leslie 1997), but perhaps it is not so simple. Although the heteronomy of the mass and middling universities has increased, and commercial science has found its way into 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 a global scale.
- 5. 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—although lesser British institutions have less global clout than their American counterparts—and given the centrality of the English language to global hegemony, especially in research. But if there is an Anglo-American hegemony (Marginson 2006a), then the United Kingdom is a relatively subordinated partner, despite the global authority of Oxford and Cambridge.
- 6. The transformation of the university in the context of social relations is too large a topic to be explored in this chapter, which thus finds itself carrying a de facto "internalist" bias. But among others, see Ordorika 2003 and Santos 2006.
- Of the nine scientists who came from emerging or developing countries and won Nobel Prizes in chemistry, physics, physiology, or medicine, four were working in universities in the United States and two in the United Kingdom and Europe (Bloom 2005).
- 8. Relative to the revenue flow in their favor, these two nations spent little on foreign aid for postsecondary education: United States US\$111 million and Australia US\$13 million (OECD 2004, 286).
- This makes education one of Australia's four most valuable exports, along with coal, iron ore, and tourism.
- It is not surprising that some analysts see the NPM, globalization, and an imperial Americanization or Anglo-Americanization as simply one process (Currie 2005).
- 11. At a conference in Brisbane, Australia, on February 12, 2008, a representative of QS Marketing, the marketing firm that conducted the two surveys for the *Times Higher*, stated that the return rate for the 2006 survey of academic "peers" was only 1 percent and the response group was loaded in favor of returns from the United Kingdom and Australia. The responses were not tested for representivity and/or weighted to correct for bias.

12. A plurality of models would enable greater diversity in global comparisons of institutions. At worst, this means university rankings based on several league tables rather than one. At best, it can lead to a move away altogether from the whole institution comparison toward 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 already is established as the principal mode of inter-institutional comparison in Germany, Austria, Netherlands, and Flanders and will spread further in Europe (Marginson 2007b). This development also underlines the salience of regional modes of organization in higher education and research in the face of the global hegemony.

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