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GLOBALIZATION AND THE UNIVERSITY:

MYTHS AND REALITIES IN AN UNEQUAL WORLD

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<u>Abstract</u>

Much has been said about the impact of globalization on higher education. Some have argued that globalization, the Internet, and the scientific community will level the playing field in the new age of knowledge interdependence. Others claim that globalization means both worldwide inequality and the McDonaldization of the university. It is argued that all of the contemporary pressures on higher education, from the pressures of massification to the growth of the private sector are the results of globalization. There is a grain of truth in all of these hypotheses—and a good deal of misinterpretation as well. The purpose of this essay is to "unpack" the realities of globalization and internationalization in higher education and to highlight some of the ways in which globalization affects the university. Of special interest here is how globalization is affecting higher education in developing countries—the nations that will experience the bulk of higher education expansion in the coming decades.

Much has been said about the impact of globalization on higher education. Some have argued that globalization, the Internet, and the scientific community will level the playing field in the new age of knowledge interdependence. Others claim that globalization means both worldwide inequality and the McDonaldization of the university. It is argued that all of the contemporary pressures on higher education, from the pressures of massification to the growth of the private sector are the results of globalization. There is a grain of truth in all of these hypotheses—and a good deal of misinterpretation as well. The purpose of this essay is to "unpack" the realities of globalization and internationalization in higher education and to highlight some of the ways in which globalization affects the university. Academe around the world is affected differently by global trends. The countries of the European Union, for example, must adjust to new degree structures and other kinds of harmonization that are part of the Bologna and related initiatives. Countries that use English benefit from the increasingly widespread use of that language for science and scholarship. Of special interest here is how globalization is affecting higher education in developing countries—the nations that will experience the bulk of higher education expansion in the coming decades (Task Force on Higher Education and Development, 2000).

Universities have always figured in the global environment and thus been affected by circumstances beyond the campus and across national borders. This reality is all too often forgotten in analyses of 21st century globalization. A long-term perspective is useful when considering the university because of the deep historical roots and their ongoing impact on both the ethos and governance of universities. As Clark Kerr has noted, of the institutions that had been established in the Western world by 1520, 85 still exist—the Roman Catholic church, the British Parliament, several Swiss cantons, and some 70 universities. Of these, perhaps the universities have experienced the least change (Kerr, 2001, p. 115). From the beginning, universities represented global institutions—in that they functioned in a common language, Latin, and served an international clientele of students. Professors, too, came from many countries, and the knowledge imparted reflected scholarly learning in the Western world at the time.

It is also the case that all of the universities in the world today, with the exception of the Al-Azhar in Cairo, stem from the same historical roots—the medieval European university and, especially, the faculty-dominated University of Paris. Much of the non-Western world had European university models imposed on them by colonial masters. Even those countries not colonized by Western powers—such as Japan, Thailand, Ethiopia, and a few others—adopted the Western academic model (Altbach and Selvaratnam, 1989). This is the case even where, as in China, well-established indigenous academic traditions already existed. The basic structure of the institution and the orientation to teaching, for example, characterize universities internationally and are derived from the medieval European tradition.

The structure of the American university itself, so influential worldwide, constitutes an amalgam of international influences. The original colonial model, imported from England was combined with the German research university idea of the 19th century and the American concept of service to society to produce the modern American university. Foreign models were adapted to domestic realities in creative ways. As the European Union moves toward the harmonization of national higher education systems in the "common European space," foreign influences again emerge—degree structures, the course-credit system, and other elements in modified form combined to produce evolving academic patterns. Just as Japan adapted German academic models and some American ideas as it built its modern university system after 1868, the European Union looks to "best practices" worldwide.

Today's globalization, at least for higher education, does not lack precedents. From the beginning, universities have incorporated tensions between national realities and international trends. While English now dominates as the language of research and scholarship, at one time German held sway as did Latin in an earlier era. Students have always traveled abroad to study, and scholars have always worked outside their home countries. Globalization in the 21st century is truly worldwide in reach—few places can elude contemporary trends, and innovations and practices seem to spread ever faster due to modern technology. But, again, similar trends have occurred in other periods as well.

Because of the centrality of the knowledge economy to 21st-century development, higher education has assumed unprecedented importance both within countries and internationally because of its roles in educating people for the new economy and in creating new knowledge (Altbach, 1998a). As evidence, the World Trade Organization is now focusing on higher education. The current debate concerning the General Agreement on Trade in Services (GATS)—an effort by multinational corporations and some government agencies in the rich countries to integrate higher education into the legal structures of world trade through the WTO—indicates how important universities and knowledge have become in the contemporary world (Larsen, Martin, and Morris, 2002; Knight, 2002; Altbach, 2002).

Definitions

It will be useful to define some of the terms in the current debate about globalization. For some, globalization means everything. For others, it includes only the negative side of contemporary society. This essay concentrates on the specific international context of higher education and the effect of globalization. Thus, the focus is not on the broader issues of the management of academic institutions—such as how universities have dealt with mass enrollments or privatization, for example.

In this analysis, globalization is defined as the broad economic, technological, and scientific trends that directly affect higher education and are largely inevitable. Politics and culture are also part of the new global realities. Academic systems and institutions may accommodate these developments in different ways, but they cannot ignore them. These phenomena include information technology in its various manifestations, the use of a common language for scientific communication, and the imperatives of both mass demand for higher education (massification) and societal needs for highly educated personnel. Academe is affected by, for example, patterns in the ownership of multinational publishing and internet companies, the expenditure of R & D funds worldwide, and international patterns of cultural diffusion. All of these elements, and many more, are parts of a global environment that impacts higher education in different ways.

Internationalization includes specific policies and programs undertaken by governments, academic systems and institutions, and even individual departments or institutions to cope with or exploit globalization. Internationalization describes the voluntary and perhaps creative ways of coping. With much room for initiative, institutions and governments, can choose the ways in which they deal with the new environment. While the forces of globalization cannot be held completely at bay, it is not inevitable that countries or institutions will necessarily be overwhelmed by them or that the terms of the encounter must be dictated from afar. Internationalization accommodates a significant degree of autonomy and initiative (Knight, 1997; Scott, 1998; De Wit, 2002).

This analysis also focuses on a new higher education trend multinationalization, which is defined as academic programs or institutions from one country offered in other countries. Often, the programs are sponsored in collaboration, but this is not always the case. Joint-degree offerings among institutions in two or more countries, often called "twinning," is an example of a multinational academic enterprise. Setting up offshore institutions constitutes a variation on the trend—this may be carried out through franchising (sometimes referred to as "McDonaldization") or simply by opening a branch institution (Hayes and Wynyard, 2002). Increasingly, the Internet is used in the delivery of multinational academic programs.

Globalization cannot be completely avoided. History shows that when universities shut themselves off from economic and societal trends they become moribund and irrelevant. European universities, for example, ignored both the Renaissance and the Industrial Revolution and ceased to be relevant. Indeed, the French Revolution swept away the universities entirely, while von Humboldt had to reinvent the German university model in 1809 in order to save the institutions (Ben-David and Zloczower, 1962). At the same time, institutions and systems do possess great latitude in how they deal with globalization. Thus, those who argue that there is just one model for higher education in the 21st century are clearly wrong.

Centers and Peripheries in an Unequal Environment

The world of globalized higher education is highly unequal.

Concentrating on developing countries and on smaller academic systems immediately raises the specter of inequality. While the Internet and other manifestations of globalization are heralded as bringing knowledge equality to the world, the evidence is mixed. In some ways, globalization opens access and makes it easier for students and scholars to study and work anywhere. But in many respects, existing inequalities are only reinforced and new barriers erected. The debate in higher education mirrors analyses of globalization generally. Economists Joseph Stiglitz and Dani Rodrik, among others, have argued that in some respects globalization works against the interests of developing countries in some ways reinforcing international inequalities (Stiglitz, 2002; Rodrik, 1997; Rodrik, 1999). Neither is opposed to globalization—and both in any case see it as inevitable—but their critiques reveal problems that must be addressed and that tend to be overlooked in the dominant perspectives on the topic.

The powerful universities have always dominated the production and distribution of knowledge, while weaker institutions and systems with fewer resources and lower academic standards have tended to follow in their wake. Academic centers provide leadership in all aspects of science and scholarship such as research and teaching, the organizational patterns and directions of universities, and knowledge dissemination. The centers tend to be located in larger and wealthier countries and benefit from the full array of resources—including funding and infrastructures such as libraries and laboratories for research, academic staff with appropriate qualifications, traditions and legislation in support of academic freedom, and an orientation toward high achievement levels on the part of individual professors and students and by the institutions themselves. Typically, these top institutions use one of the major international languages for teaching and research, and they enjoy appropriate support from the state for their work.

The world of centers and peripheries grows ever more complex (Altbach, 1998c). The major international academic centers—namely the leading researchoriented universities in the North, especially those that use one of the key world languages (particularly English)—occupy the top tier. World-class universities do exist elsewhere—for example, in Japan and several smaller European countries. A number of universities in China, Singapore, and South Korea are approaching the status of world-class research institutions. Even within countries at the center of the world academic system in the early 21st century—the United States, Britain, Germany, France, and to some extent Australia and Canada—there are many peripheral institutions. For example, perhaps 100 of America's 3,200 postsecondary institutions can be considered research universities. These institutions receive more than 80 percent of government research funds and dominate most aspects of American higher education. Much of the rest of the American higher education system lies on the periphery of the research centers—these segments, including the comprehensive universities, community colleges, and others play important roles in both the academic system and in society. Other countries exhibit similarly stratified academic systems. There are also universities that play complex roles as regional centers, providing a conduit of knowledge and links to the top institutions. For example, the major universities in Egypt provide academic leadership for the Arabic-speaking world and conduits to the major centers, while contributing relatively little themselves. China's key universities are significant producers of research, mainly for internal consumption, while at the same time serving as links to the wider world of higher education.

In many ways, it is now more difficult to become a major player in international higher education—to achieve "center" status (Altbach, 1998b). The price of entry has risen. Top-tier research universities require vast resources, and in many fields scientific research involves a large investment in laboratory facilities and equipment. Enabling institutions to remain fully networked for the Internet and information technology is also costly, as are library acquisitions— including access to relevant databases. Universities in countries without deep financial resources will find it virtually impossible to join the ranks of the top academic institutions. Indeed, any new institution, regardless of location, will face similar challenges.

In some ways, academic institutions at the periphery and indeed the entire academic systems of developing or in some cases small industrialized countries depend on the centers for research, the communication of knowledge, and advanced training. The major journals and databases are headquartered at the major universities—especially in the United States and the United Kingdom—since international scholarly and research journals are largely published in English. Most of the world's universities are mainly teaching institutions—in developing countries virtually all are in this category—that must look elsewhere to obtain new knowledge and analysis. Many smaller developing countries, for example, lack the facilities for research, do not provide degrees beyond the bachelor's, and are unable to keep

up with current journals and databases due to the expense. Structural dependency is endemic in much of the world's academic institutions.

Any discussion of globalization cannot avoid the deep inequalities that are part of the world system of higher education. Globalization has added a new dimension to existing disparities in higher education. This essay will return to this context as it moves on to a discussion of some of the specific aspects of the global reality of higher education.

A New Neocolonialism?

The era of the Cold War was characterized by the efforts of the major powers to dominate the "hearts and minds" of the peoples of the world. The Soviet Union, the United States, and others spent lavishly on student exchanges, textbook subsidies, book translations, institution building, and other activities to influence the world's academic leaders, intellectuals, and policymakers. The goals were political and economic, and higher education was a key battlefield. The rationale was sometimes couched in the ideological jargon of the Cold War but was often obscured by rhetoric about cooperation.

The programs included many that offered considerable benefit to the recipients—including scholarships to study abroad, high-quality textbooks to be used in universities, scientific equipment, and other resources. Participation in programs took place on an entirely voluntary basis, but in a context of scarcity assistance becomes difficult to decline. Acceptance meant increased ties to the donor countries and institutions and long-term dependence on the countries providing the aid. Installation of laboratory equipment or computers, for example, meant continuing reliance on the supplier for spare parts, training, and the like.

We are now in a new era of power and influence. Politics and ideology have taken a subordinate role to profits and market-driven policies. Now, multinational corporations, media conglomerates, and even a few leading universities can be seen as the new neocolonists—seeking to dominate not for ideological or political reasons but rather for commercial gain. Governments are not entirely out of the picture—they seek to assist companies in their countries and have a residual interest in maintaining influence as well. As in the Cold War era, countries and universities are not compelled to yield to the terms of those offering aid, fostering exchanges, or offering Internet products, but the pressures in favor of participation tend to prevail. Involvement in the larger world of science and scholarship and obtaining perceived benefits not otherwise available present considerable inducements. The result is the same—the loss of intellectual and cultural autonomy by those who are less powerful.

The Role of English

English is the Latin of the 21st century. In the current period, the use of English is central for communicating knowledge worldwide, for instruction even in countries where English is not the language of higher education, and for cross-border degree arrangements and other programs. The dominance of English is not surprising, and it is a factor in globalization that deserves analysis if only because higher education worldwide must grapple with the role of English (Crystal, 1997).

The most widely studied foreign language in the world, English is also the most widely used second language. In many countries, it is the required second language, and it is the second language of choice almost without exception. English is the medium of almost all of the internationally circulated scientific journals, and it also dominates other academic fields as well. Universities in many countries stress the importance of their professors' publishing in internationally circulated scientific journals, almost by definition in English, placing a further premium on the language. Internet websites devoted to science and scholarship function predominantly in English. Indeed, English serves as the language of Internet transactions involving science and scholarship. The largest number of international students go to universities in English-speaking countries.

English is the main medium of instruction in many of the most prominent academic systems—including those of the United States, the United Kingdom, Australia, Canada, and New Zealand—all of which enroll large numbers of overseas students. Singapore, Ethiopia, and much of Anglophone Africa use English as the primary language of instruction as well. English often functions as a medium of instruction in India, Pakistan, Bangladesh, and Sri Lanka. Other countries are increasingly offering academic programs in English—to attract international students unwilling to learn the local language and to improve the English-language skills of domestic students and thus enable them to work in an international arena. English-medium universities exist in many countries—from Azerbaijan and Bulgaria to Krgyzistan and Malaysia. In many countries—such as Japan, the Netherlands, Germany, Mexico, and others—universities offer English-medium degree programs and courses at local universities. Many European Union nations offer study in English as a way of attracting students from elsewhere in the EU. English is clearly a ubiquitous language in higher education worldwide.

What does this mean for globalization? The role of English affects higher education policy and the work of individual students and scholars. In many ways, the place of English at the pinnacle of scientific communication gives a significant advantage to the United States and the United Kingdom and to the other wealthy English-speaking countries. As the country with the world's largest academic system and most important user of English, the United States has a double advantage. For example, not surprisingly, many scientific journals are edited in the United States. This gives an advantage to American authors—not only are they writing in their mother tongue but the peer review system is dominated by people accustomed to both the language and methodology of U.S. scholars. Others must communicate in a foreign language and conform to unfamiliar academic norms. As mentioned earlier, in many places academics are pressured to publish in internationally circulated journals—the sense being that publication in the "best" scientific journals is a necessary validation of academic work. Increasingly, international and regional scientific meetings are exclusively in English, again placing a premium on fluency in the language.

English-language products of all kinds dominate the international academic marketplace. This is especially true for journals and books. For example, textbooks written from a U.S. or U.K. perspective are sold worldwide, influencing students and academics in many countries and providing profits for publishers who function in English. The English-language databases in the various disciplines are the most widely used internationally. Universities must pay for these resources, which are priced to sell to American or European buyers and are thus extraordinarily expensive to users in developing or middle-income countries. Nevertheless, English-language programs, testing materials, and all the other products find a ready market in these countries.

Countries that use "small languages" may be tempted to change the medium of instruction at their universities entirely to English. A debate took place in the Netherlands on this topic, and it was decided to keep Dutch as the main language of instruction largely out of concern for the long-term survival of the Dutch language—although degree programs in English are flourishing in the Netherlands. Where collaborative degree programs are offered, such as in Malaysia, the language of instruction is almost always English and not the language of the country in which the joint degree is being offered.

English is supplanting such languages as French, German, and Spanish as the international medium of scholarship. These languages are in no danger of disappearing in higher education, but their world role has shrunk. The use of English tends to orient those using it to the main English-speaking academic systems, and this further increases the influence of these countries. Regardless of the consequences, however, English is the predominant academic language of the current period.

The Global Marketplace for Students and Scholars

Not since the medieval period has such a large proportion of the world's students been studying outside their home countries—more than 1.5 million students at any one time. Large numbers of scholars and scientists travel abroad temporarily for research or teaching. There is a substantial migration abroad for academic work as well. Globalization encourages these flows and will ensure that growth continues. As academic systems become more similar and academic degrees more widely accepted internationally, as immigration rules are tailored to people with high skill levels, and as universities themselves are more open to hiring the best talent worldwide, the global marketplace will expand.

The flow of academic talent at all levels is directed largely from South to North—from the developing countries to the large metropolitan academic systems. Perhaps 80 percent of the world's international students come from developing countries, and virtually all of them study in the North. Most of these students pursue master's, doctoral, and professional degrees. Many do not return to their countries of origin. Some 80 percent of students from China and India, two of the largest sending countries to the United States, do not return after obtaining their degrees and take jobs in the United States. Since the collapse of the Soviet system, there has also been a flow of scientists from Russia to Western Europe and North America. Students from industrialized countries who study abroad typically do not earn a degree but rather spend a year or two in the country to broaden their horizons, learn a language, or gain knowledge that they could not acquire at home.

Most international students pay for their own studies, producing significant income for the host countries—and a drain on the economy of the developing world. According to estimates, the money spent abroad by students from some developing countries more than equals incoming foreign aid. These students not only acquire training in their fields but also absorb the norms and values of the academic systems in which they studied. They return home with a desire to transform their universities in ways that often prove to be both unrealistic and unattainable. Foreign students serve as carriers of an international academic culture—a culture that reflects the norms and values of the major metropolitan universities. In many ways this culture lacks relevance to the developing world.

An increasingly robust international migration of academic talent exists, predominantly from South to North; large numbers of the most talented academics from developing countries work in the North. Numerous visiting scholars travel across international borders to take up temporary teaching positions or to undertake research. In 2000, universities in the United States hosted almost 80,000 visiting scholars. Although the statistics do not exist, it is estimated that visiting scholars number 200,000 worldwide. The predominant South-North flow notwithstanding, there is a significant movement of academics among the industrialized countries and to some extent within other regions, such as Latin America. Most visiting scholars return home after their sojourns abroad, although a certain number use their assignments as springboards to permanent emigration.

A much larger number of academics migrate in order to take jobs in other countries. Again, the flow is predominantly from South to North. As noted, significant numbers of international students do not return home, taking jobs in the countries in which they have obtained their degrees. Others compete for positions abroad from home. Although accurate international statistics are unavailable, the impact on many developing countries is quite substantial. For example, more Ethiopian holders of doctoral degrees work outside of Ethiopia than at home, and 30 percent of all highly educated Ghanaians and Sierra Leoneans live and work abroad (Outward Bound, 2002, p. 24). This phenomenon is common for many African countries. South Africa is losing many of its most talented academics to the North, while at the same time it is recruiting from elsewhere in Africa. This migration has seriously weakened the academic institutions of many developing countries.

Migration is not limited to developing countries. Academics will take jobs in countries with more attractive opportunities, salaries, and working conditions. At present, a small but significant exodus continues from the United Kingdom to the United States and Canada because of the low salaries and deteriorating working conditions at home. To combat this trend, U.K. authorities have provided funds to entice their best professors to remain at home. Scholars from small but well-endowed academic systems, such as in Denmark or Finland, are sometimes lured to the metropoles by the prospect of being at the center of research activity and having access to the latest scientific equipment. In some fields, such as engineering specialties and computer science, the percentage of professors from other countries working in U.S. universities is very high—reflecting the fact that almost half the doctoral enrollments in these fields are foreign. Academic migration takes place at all levels of the academic system, especially in the sciences, engineering, information technology, and some management areas. Such migration may occur more at the top of the system, with some world-famous scholars being attracted abroad by high salaries at top universities, and at the bottom, where modest salaries are able to lure foreigners but are unappealing to local applicants.

Academic migration follows complex routes. Many Egyptian, Jordanian, and Palestinian academics work at Arabian Gulf universities, attracted by higher salaries and better working conditions than are available at home. Indians and Pakistanis are similarly drawn to the Gulf as well as to Southeast Asia. Singapore and Hong Kong attract academics worldwide. Mexico and Brazil employ scholars from elsewhere in Latin America. South Africa, Namibia, and Botswana currently recruit Africans from elsewhere on the continent. Some of the best scholars and scientists from Russia and a number of Central European countries have taken positions in Western Europe and North America. The existing traffic among European Union member states will likely grow significantly as EU policies to harmonize academic systems are implemented.

The most significant "pull" factors include better salaries and working conditions and the opportunity to be at the centers of world science and scholarship (Altbach, forthcomiong). The discrepancies in salaries and conditions between North and South mean that in most developing countries academics cannot aspire to live in a middle-class lifestyle or expect to have access to the necessary tools of research and scholarship—including the ability to obtain the most current knowledge and to connect with the international community of scholars. Among the many "push" factors, the limited extent of academic freedom in many developing countries means that academics are sometimes subject to restrictions and even arrest if they stray from officially approved themes. Favoritism or even corruption in academic appointments, promotions, and other areas further erode the environment of the university. In some places, job security or stability are unattainable. In some ways, conditions at Third World universities stem inevitably from the scarcity of resources and the pressure of increased student numbers on overburdened academic institutions and systems. The "pull" factors at the centers cannot be altered much, but the "push" factors can be moderated. Overall, however, the migration of academic talent will continue in the current globalized environment.

At one time, the migration of talent was perceived as a brain drain because those who left were considered to be permanently lost, retaining negligible or zero academic links with their home countries. The situation in this respect has undergone change (Choi, 1995). Many academics who have migrated keep in close contact with their countries of origin, often maintaining scientific and academic relationships with colleagues and institutions at home. Some have even returned after establishing careers abroad as academic conditions at home have improved—some academics from South Korea and Taiwan, for example, returned from the United States or other countries to accept senior academic appointments in their home countries once academic working conditions, salaries and respect for academic freedom had improved. More commonly, academics return home for lectures or consulting, collaborate on research with colleagues in their country of origin, or accept visiting professorships. Facilitated by the Internet, these links are increasingly accepted as appropriate and useful. Such trends are especially strong in countries with welldeveloped academic systems, such as China, India, and South Africa, among others.

The migration of academic talent is in many ways promoted by the industrialized countries, which have much to gain. Immigration policies are in some cases designed to encourage talented personnel to migrate and establish residency. In many countries, academic institutions make it easy for foreigners to fit into the career structure. Countries that place barriers to foreign participation in academe, such as Japan, suffer as a result. In general, however, the industrialized countries benefit from a large pool of well-educated scientists and scholars—people educated by developing countries—who choose to take their talents and skills to the highest bidder. In this way, the developing world has helped the North to maintain its already overwhelming lead in science and scholarship. The renewal of links between academics who migrate and their countries of origin mitigates this situation somewhat, but the fact remains that developing countries find themselves at a disadvantage in the the global academic labor market. The same applies as well to smaller and more peripheral nations worldwide.

The Internationalization of the Curriculum

The field of business and management studies illustrates the global dominance of ideas from the major English-speaking academic systems. In most countries, business administration is a new field, established over the past several decades to prepare professionals for work in multinational corporations or in firms engaged in international commerce. The dominant pattern of professional studies is the M.B.A. degree—the American-style master's of business administration. This degree originated as the way to prepare American students for work in U.S. business, based on American curricular ideas and American business practices. A key part of many M.B.A. programs is the case study, again developed in the U.S. context. The M.B.A. model has been widely copied in other countries, in most cases by local institutions but also by American academic institutions working with local partners or setting up their own campuses overseas. While the programs sometimes are modified in keeping with the local context, the basic degree structure and curriculum remain American.

A number of countries are contemplating including some general education in the first-degree curriculum. Part of the U.S. undergraduate curriculum for centuries, general education provides a broad background in the disciplines along with skills in critical thinking. *Higher Education in Developing Countries: Peril and Promise*, an influential report sponsored by the World Bank and UNESCO, recommends general education, and it is being considered as an alternative to the existing largely specialized curriculum in higher education (Task Force on Higher Education, 2000). As stated earlier, instructional materials go into international circulation. There is an increasing use of common textbooks, course materials, and syllabi worldwide, stimulated by the expanding influence of multinational publishers, the Internet, and databases, as well as the growing cadre of professors who return home after their studies abroad with ideas concerning curriculum and instructional materials in their fields. These materials originate mainly in the large academic systems of the North—especially the United States, the United Kingdom, and France. An examination of the textbooks used, the patterns of translations from one language to another, and the databases used reveals a similar pattern.

Disciplines and fields vary in terms of how globally homogenous they have become. Such fields as business studies, information technology, and biotechnology are almost entirely dominated by the major academic centers. Other fields—such as history, language studies, and many areas in the humanities—are largely nationally based, although foreign influences are felt in methodology and approaches to research and interpretation. The internationalization of the curriculum, like other aspects of globalization, proceeds largely from North to South.

The Multinationalization of Higher Education

The emergence of a global education marketplace exhibits itself in the form of a variety of multinational higher education initiatives—ranging from "twinning" programs linking academic institutions or programs in one country with counterparts in another to universities in one country setting up branch campuses in another. The different kinds of cross-border higher education ventures include many that use the Internet and other distance education means to deliver their programs. Many for-profit companies and institutions have invested in multinational educational initiatives, as have a range of traditional higher education institutions.

The multinationalization of higher education has historical roots. During the colonial period, universities in the metropole frequently set up branch institutions or sponsored new schools in the colonies. The main examples include the British in Africa and Asia, Dutch institutions in what is now Indonesia, and French initiatives in Africa and Asia. Roman Catholic universities set up new institutions in Latin America and the Philippines; religious orders such as the Jesuits undertook what might now be referred to as multinational higher education initiatives. In the 19th century, American Protestant missionaries set up universities based on the U.S. model in Lebanon, Egypt, and Turkey, among other places. This is the historical background, for example, of the American University of Beirut. Some new institutions were established using foreign models, often with direct links to universities in the metropole (Ashby, 1964).

History shows that the export of educational institutions and the linking of institutions from different countries generally represented a union of unequals. In almost all cases, the institution from the outside dominated the local institution, or the new institution was based on foreign ideas and nonindigenous values. The same is true in the 21st century. When institutions or initiatives are exported from one country to another, academic models, curricula, and programs from the more

powerful academic system prevail. Thus, linkages between Australian and Malaysian institutions aimed at setting up new academic institutions in Malaysia are always designed by Australian institutions. Rarely, if ever, do academic innovations emanate from the periphery to the center.

Multiple models of multinational initiatives exist in higher education. The export of academic institutions from one country to another is a growing but not entirely new phenomenon. Of course, both traditional colonialism and the government-sponsored foreign assistance programs of the Cold War era exported institutional models, practices, and curriculum from the metropole to developing countries. In the past decade, institutional exports based on non-governmental initiatives have risen, usually on the initiative of the exporting country. In the 1980s, for example, American colleges and universities were quite interested in Japan, seeing a market there. Several hundred U.S. institutions explored the Japanese "market," and more than a dozen established campuses there—usually in cooperation with a Japanese institution or company (Chambers and Cummings, 1990). A small number of Japanese institutions looked into the feasibility of a U.S. connection, and a few even set up branch campuses. However, most Japanese programs were aimed at bringing Japanese students to the United States for study, while U.S. programs focused on educating Japanese students in Japan. With few exceptions, the institutions engaging in export activities were not the most prestigious schools on either side. By 2000, very few of the branches were still operating. In Japan, the difficulty of obtaining Ministry of Education certification for U.S. programs proved overwhelming, and the initiatives on both sides were affected by the protracted economic slowdown in Japan. The U.S.-Japan initiatives were unusual in that both sides were industrialized countries.

Some of the export initiatives taking place today are indicative of global trends. A small number of prestigious American universities are establishing campuses worldwide, usually in popular professional fields such as business administration. The University of Chicago's business school now has a campus in Spain. The program offers Chicago degrees to students from Spain and other European countries, using the standard Chicago curriculum—taught mostly by Chicago faculty members—with an international focus. It includes a period of study at the home campus as well. Some other U.S. universities have developed similar programs. An unusual but interesting model of multinationalization is being undertaken by Singapore, which is inviting a number of prestigious foreign universities, such as the University of Pennsylvania's Wharton School, to start programs in Singapore. The institutions, which are carefully selected by the Singapore government, are given incentives to come to Singapore. In a related trend, a number of U.S.-sponsored universities have been established in Kyrgyzstan, Qatar, and Bulgaria, among other places. These schools typically originate through local initiative, with strong links to American universities, and are generally supervised by the U.S. partners and accredited in the United States. The language of instruction is English and the curriculum U.S. based.

In keeping with the more standard export model, a university in an industrialized country will set up a program abroad, often but not always in a

developing country, at the invitation of a host institution. The host may be a corporation without any link to education, an educational institution, or some combination of the two. Malaysia provides many examples of such arrangements, set up to satisfy unmet demand by local students. Universities from Australia and the United Kingdom are most active in Malaysia, and the new programs have generated complaints of low quality, poor supervision, or inadequate communication between the providers and the hosts. In Israel, a number of small American colleges and universities (some of lesser quality) began to offer academic degrees when the market was opened up by the Israeli government. After considerable criticism, restrictions were later placed on the programs—many of which have ceased to exist.

Sometimes foreign academic degree programs are simply "franchised" by local institutions. The foreign university lends its name and curriculum, providing some (often quite limited) supervision and quality control to a local academic institution or perhaps business firm. The new institution is given the right to grant a degree of the foreign institution to local students. These franchising arrangements have led to many abuses and much criticism. Many highly critical articles have appeared in the British press charging that U.K. institutions, mostly the less prestigious ones, involved in overseas programs are damaging the "good name" of British higher education. Meanwhile, "buyers"—fee-paying students—overseas think that they are getting a standard British degree, when in reality they are receiving the degree but not the level of education provided in the United Kingdom.

There are a large number of "twinning" programs worldwide. This concept links an academic institution in one country with a partner school in another country. Typically, the links are between North and South, with the university in the North providing the basic curriculum and orientation. In such arrangements, academic degrees are often jointly awarded. Twinning has the advantage of aiding institutions in the South in developing new curricular offerings, with the stamp of approval of a foreign university.

As can be seen in this brief discussion, there are many facets to the new multinationalization of higher education. However, some common perspectives and motivations can be identified. With few exceptions, a central goal for all of the stakeholders, especially those in the North, is to earn a profit. Institutions in the South that are attracted to multinational initiatives may also be interested in making money and they are also concerned with meeting growing demand for access to higher education and providing new degree programs that may not be available in local schools. As with other aspects of globalization in higher education, multinational arrangements between institutions are marked by inequality.

Information Technology and Globalization

The information age carries the potential of introducing significantly change in higher education, although it is unlikely that the basic functions of traditional academic institutions will be transformed. The elements of the revolution in information technology (IT) with the power to transform higher education include the communication, storage, and retrieval of knowledge (Castells, 2000).. Libraries,

once the repositories of books and journals, are now equally involved in providing access to databases, websites, and a range of IT-based products (Hawkins and Battin, 1998). Scholars are increasingly dependent on the Internet both to undertake research and analysis and to disseminate their own work. Academic institutions are beginning to use IT to deliver degree programs and other curricula to students outside the campus. Distance education is rapidly growing both within countries and internationally. IT is beginning to shape teaching and learning and is affecting the management of academic institutions.

IT and globalization go hand in hand. Indeed, the Internet serves as the primary vehicle for the globalization of knowledge and communications. As with the other aspects of globalization, significant inequalities exist. Inevitably, the information and knowledge base available through the Internet reflects the realities of the knowledge system worldwide. The databases and retrieval mechanisms probably make it easier to access well-archived and electronically sophisticated scientific systems of the advanced industrialized countries than the less networked academic communities of the developing countries.

The Internet simplifies the obtaining of information for scholars and scientists at universities and other institutions that lack good libraries. This change has had a democratizing effect on scientific communication and access to information. At the same time, however, many people in developing countries have only limited access to the Internet (Teferra, forthcoming). Africa, for example, has only recently achieved full connectivity to the Internet.

The Internet and the databases on it are dominated by the major universities in the North. The Internet functions largely in English, and much of the material carried on it is in English. These realities also affect access and usage of information. Multinational knowledge corporations have become key players, the owners of many of the databases, journals, and other sources of information. Academic institutions and countries unable to pay for access to these information sources find it difficult to participate fully in the networks. Tightening copyright and other ownership restrictions through international treaties and regulations will further consolidate ownership and limit access (Correa, 2000).

Distance education comprises another element of higher education profoundly affected by IT. Distance education is not, however, a new phenomenon the University of South Africa, for example, has been offering academic degrees through correspondence for many decades. The Open University in the United Kingdom has effectively used a combination of distance methods to deliver its highly regarded programs. IT has greatly expanded the reach and methodological sophistication of distance education, in the process contributing to the growth of distance education institutions. Of the 10 largest distance education institutions in the world, 7 are located in developing countries, and all use IT for at least part of their programs. Universities and other providers in the industrialized nations are beginning to employ IT to offer academic programs worldwide, a significant portion of which are aimed at developing countries. Entire degree programs in fields such as business administration can be found on the Internet, and most providers see the international market as critical for the success of their programs. These providers include corporations—such as some of the major multinational publishers—forprofit educational providers like Sylvan Learning Systems, and others. Some universities now offer degree and certificate programs through the Internet to international audiences. Firms such as Microsoft, Motorola, and others are offering competency certificates and other training programs in fields relating to their areas of expertise.

As with the other aspects of globalization discussed in this analysis—the leading providers of IT consist of multinational corporations, academic institutions, and other organizations in the industrialized nations. The Internet today combines a public service—e-mail and the range of websites to which access is free—with a commercial enterprise. Many databases, electronic journals, e-books, and related knowledge products are owned by profit-making companies who market them, often at prices that preclude access by those in developing countries.

Nevertheless, at the same time, developing countries have been able to take advantage of IT. For example, the largest universities using distance education are mostly located in developing countries. The African Virtual University is an innovative effort by a number of African nations to harness the Internet and other distance techniques to meet their needs. E-mail is widely used to improve communication among scientists and scholars and to create networks in the developing world. While the information revolution with neither transform higher education generally, nor will it provide a panacea for developing countries, it is of great importance and one of the central elements of globalization in higher education.

International Agreements and Frameworks

In many ways, we are moving into a new era of globalization in higher education, characterized by the new international agreements and arrangements drawn up to manage global interactions. The arrangements between countries range from bilateral agreements relating to student and faculty exchanges to the mutual recognition of degrees—for example, the many binational commissions governing the American Fulbright scholarship and exchange programs. Of the current set of international agreements in higher education, perhaps the most comprehensive are the European Union's: the comprehensive Bologna framework designed to introduce changes to harmonize the higher education systems of all EU member states, to specific exchange and scholarship programs such as ERASMUS and SOCRATES. NAFTA, the North American Free Trade Agreement, in contrast, has few implications for higher education.

An indication of the potential impact of globalization is the debate over the inclusion of higher education in particular and knowledge industries within the framework of the WTO through the GATS proposal. While GATS has not yet been fully formulated and is not part of the WTO framework, it is relevant not only because of its influence but also for what it reveals about the reality of globalization. GATS seeks to establish "open markets" for knowledge products of all kinds—including higher education. The idea behind GATS and, for that matter, the concept of globalization is that knowledge is a commodity like any other and should be

freely traded around the world. The proponents argue that free trade will benefit everyone by permitting competition in the marketplace of ideas and knowledge products.

GATS and related arrangements also seek to provide a legally binding framework for the circulation of educational services and for the protection of intellectual property. Thus, GATS and the WTO are very much related to TRIPS (Trade Related Intellectual Property) arrangements and copyright regulations. The motivating force behind all of these regulatory frameworks is to rationalize the global trade in knowledge and to ensure open markets and protections for the owners of knowledge products. The WTO and its related agreements, as well as international copyright, have the force of law—they are international treaties supported by a legal enforcement regime. These arrangements were created to protect the sellers and the providers, not the buyers and users, and as a result they have negative implications for developing countries (Raikhy, 2002). For example, copyright laws have been further strengthened to protect the owners of knowledge, while failing to open access through "fair use" provisions or meaningful special arrangements for developing countries.

Those favoring GATS and the regulatory framework in general are the sellers and owners-multinational knowledge companies, governments focusing on exports, and others (OECD, 2002). Testing companies such as the U.S.-based Educational Testing Service, multinational publishers, information technology and computer firms, for-profit educational providers such as Sylvan Learning Systems, and others are examples of businesses involved in global education that see GATS as benefiting their interests. In many countries, government agencies most focused on GATS include not the ministries of education but rather departments concerned with trade and export promotion. In the United States, it is the Department of Commerce that has taken the lead and not the Department of Education. In the United Kingdom, the Department of Trade and Industry has been in the forefront. Education groups in the United States, Canada, and a number of other countries have been skeptical or opposed to the GATS proposal. The American Council on Education, which represents most university presidents in the United States, for example, has spoken out against GATS. Developing countries have generally not yet taken a position on the concept of free trade in education and knowledge products.

While the complicated details of a GATS treaty have not been worked out, the basic issues are straightforward. Should education in all of its manifestations be considered as a commodity to be traded in the marketplace, regulated in the same fashion as are automobiles or bananas? As Lawrence Summers, the former U.S. treasury secretary and current president of Harvard University put it in a recent interview, "I'm skeptical as to whether bringing educational issues under the auspices of trade negotiations would be helpful.... To start with, many educational institutions are nonprofit, their motivations are different from the motivations of commercial firms that we think of in a trade context.

There may be some egregious practices that should be addressed, but I would be skeptical about treating education in a way that had any parallels with financial

services, with insurance, or with foreign investments" (The World According to Larry, 2002, p. 38).

While GATS would bring developing countries into a global framework of commerce and exchange in higher education, it would remove aspects of autonomy from decision making concerning education. Extending the principle of free trade to education would open national markets in countries that sign on to GATS to testing companies, providers of distance education, and many others. Regulation or control of these entities would prove difficult if not impossible to achieve. Institutions or companies could, in principle, count on having access to foreign education markets. Since developing countries typically import rather than export their educational products or institutions, it is unlikely that GATS would promote their exports. Developing countries represent the markets that sellers from the industrialized world are eager to target. Most developing countries, having few educational "products" to export, would be at the mercy of the multinational providers.

Current arrangements—in which all countries retain authority over educational imports and exports, subject to some regulatory arrangement such as international copyright, patent treaties, and the like—nonetheless permit a great deal of international higher education exchange, as this essay illustrates. It can be argued that additional regulations are not needed. Cross-border educational transactions of all kinds are being actively pursued worldwide. At present, the developing countries are the main importers of products and services from the abroad.

Conclusion

Globalization in higher education and science is inevitable. Historically, academe has always been international in scope, and it has always been characterized by inequalities. Modern technology, the Internet, the increasing ease of communication, and the flow of students and highly educated personnel across borders enhances globalization. No academic system can exist by itself in the world of the 21st century.

The challenge is to recognize the complexities and nuances of the modern context and then seek to create a global academic environment that recognizes the need to ensure that academic relationships are as equal as possible. Recognizing inequality is the first step. The second is to create a world that ameliorates these inequalities. These tasks, in the context of marketization and the pressures of mass higher education, are not easy ones. Yet, it is important to ensure that globalization does not turn into the neocolonialism of the 21st century.

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