

Is There a Latin American Model of the University?

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Universities have existed in what we now call Latin America for almost 470 years. The approximately 25 universities created in Hispanic America by the Catholic Church and the Crown in colonial times were organized after the examples of the Spanish universities of Salamanca and Alcalá (Figueiredo-Cowen 2002).¹ Independence from Spain and Portugal, achieved in most countries between the 1810s and 1820s, gave the new republics the opportunity and the willingness to reshape the institution of the university according to the ideals and aspirations of the time. Universities were created from scratch or revamped from colonial predecessors to spearhead the post-independence effort to create a modern nation-state released from the fetters of Iberian colonial heritage. The new universities, all of them public in the sense that they were created, funded, and governed by the state, were to train the professional, secular elites, especially civil servants, in whose hands the building of the new republics was entrusted. The university was to be the state's educational arm for the promotion of national unity and an enlightened citizenry.² The new design was brought from postrevolutionary France: professorial chairs grouped in loosely articulated faculties, which in turn corresponded to professional fields—typically, law, medicine, and engineering. Prestigious men in the liberal professions and letters were appointed to the chairs. For these reasons of history, mission, and organization, Latin American universities are frequently characterized as Napoleonic.

The emphasis both on public funding and the exclusion of tuition charges as sources of revenue and on professional training as the content of the first university degree come from this era, as does the nation- and state-building calling. Consequently, many of these universities were referred to—some still are—as national universities.

The state's grip on higher education began to loosen with the advent of the Córdoba (Argentina) reform movement of 1918, with its principles of autonomy from governmental control in matters of governance, structure, and mission; democratic governance with participation of faculty, students, and alumni (later, nonacademic staff as well); and commitment to research and social reform. As the ideas of the Córdoba movement spread throughout

¹ No universities were created in Brazil while it was a Portuguese dominion.

² Levy 1986; Schwartzman 1993; Tunnerman 1996; Figueiredo-Cowen 2002.

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the region in the ensuing half century, they became the organizing principle of the region's universities.

However, at the same time the sheer pressure of social change, increased population, and greater secondary education attainment felt in most of the countries in the second half of the twentieth century (Tedesco 1983) was transforming higher education. Expansion was accommodated by swelling numbers of public universities or the multiplication of their enrollments (e.g., Mexico, Argentina, Venezuela, and Honduras), the development of a large private sector (e.g., Chile, Brazil, and Colombia), or a combination of both strategies (e.g., El Salvador and the Dominican Republic). This expansion, together with the emergence of a nonuniversity sector of higher education focusing on technical and vocational training, increased significantly the ideological, functional, and organizational diversity of tertiary education. Catholic universities, for instance, of which some 30 were established in Latin America between the 1920s and the 1960s (Levy 1986), received their marching orders from the local church and the Vatican. Secular private universities, however, which constitute, in Daniel Levy's characterization, the second wave in the rise of private universities, were designed in direct reaction to the perceived ills of their public counterparts: politicization, deterioration of quality, lack of relevance, and chaotic massification (1986). The vocational and technical sector, in turn, often followed either the U.S. community college experience or that of the French *institutes universitaires de technologie* (Castro and García 2003). Thus, a plurality of models has influenced the shape of universities and higher education generally in the second half of the last century.

More recently, Latin America has seen the advent of research activities to meet the call for research that long preceded them and of the full-time research faculty who engage in them. These developments have taken place as the region partakes in contemporary worldwide trends that have affected universities elsewhere: the consequences of the increased economic value of knowledge, the pressures to increase self-funding via tuition charges and sale of services, privatization, the demand on researchers and teachers to work more closely with firms, the multiplication of schemes to provide more accountability, and new modes of academic activity grouped under what critics call "academic capitalism" and advocates refer to as "capitalization of knowledge."

In this new scenario of massification, diversification, and economic change, what, if anything, is left of the Latin American idea of the university? Has a new model emerged? Are there different paradigms for different institutional types or strata? Are there national variations worth considering? In this article I approach these questions through a cross-national, regionwide survey of recent literature on universities in Latin America, with emphasis on the countries whose universities have occupied a regional leading and influential position and for which the literature is most abundant and ac-

cessible: Argentina, Brazil, Chile, and Mexico. The choice of three of these four nations is also guided by the detailed documentation and analysis provided by Levy (1986) on the history and evolution of the higher education systems of Brazil, Chile, and Mexico up to the mid 1980s, which serve as a baseline for exploration of the two ensuing decades. Argentina, not one of Levy's country cases, is nonetheless relevant not only for being the origin of the Córdoba reform but also because of the size of its tertiary education sector (third in numbers of students enrolled after Brazil and Mexico),³ and the significance of its academic accomplishments, which, measured by the numbers of ISI-indexed articles published between 1981 and 2002, is second only to Brazil (closely followed by Mexico).⁴

A word is in order about the use of "model" (or "paradigm," which is used as a synonym) in the following analysis. Borrowing from Clifford Geertz (1973), I use the word in its complementary meanings as "model of" and "model for" the university. A model of the university is a stylized representation of reality. It distills the variety of actual forms of the university in an abstract and general construct, a concept of the university as it exists in the minds of faculty, students, administrators, and other constituencies and is expressed in their discourse about the university. At the same time, a model is a set of instructions for action, a patterned way of doing things. In this case it refers to going about organizing, governing, and operating a university and being an administrator, a professor, or a student.

For our purposes, then, a model of the university can be defined as a culturally embedded idea of the essence, role, and mode of organization of the university and of its relationship to the state and to society at large, which exerts a normative influence over those who are in a position to shape such a role, organization, and relationships. A model may exist even if no university can be found that corresponds neatly to it, as long as the effort continues to be made by "university people" to shape reality into the form defined by the idea of the university and as long as even partial success in this endeavor helps sustain the model of the university in the minds of those who can shape it.⁵ For this reason, in my effort to elucidate the existence of models and

³ As of 2003, Brazil had 3.9 million students at the tertiary level, representing a gross enrollment rate of 18.2 percent. Mexico's figures for the same year were 2.2 million and 21.5 percent, respectively, while Argentina stood at 1.5 million and 56 percent, and Chile's numbers were 570,000 and 37.5 percent (CESOP 2005).

⁴ The source is the Science and Technology Indicators of Chile's National Scientific and Technological Council (CONICYT).

⁵ In this sense, a model is not a Weberian ideal type (Weber 1949). An ideal type is purely heuristic, rests on a priori assumptions (as economic models, for instance, usually posit conditions of perfect competition and rational behavior), and carries no normative weight. It is never a "model for." An ideal type does have a superficial similarity with the notion of "model of," inasmuch as they both emerge as mental constructs synthesized from many varied individual experiences. However, the key difference is that the ideal type is a mental construct in the mind of the researcher, not in her subject's, whereas a model is only such if it resides in the minds of the observed actors and affects their behavior.

their contours, I will move back and forth between proclaimed ideals and observed features of actual universities.⁶

I argue that an overarching model for the postindependence Latin American university existed during the nineteenth and most of the twentieth centuries. The consolidation of private universities in the second half of the last century, which for the most part did not respond to that pattern, restricted the influence of the model to the public sector of higher education. In more recent times, for reasons having to do with the knowledge economy, globalization, financial restrictions, loss of legitimacy, and mission shifts, the grip of the model on public universities has also weakened, and the competing paradigm of the U.S. research university, long the dominant inspiration in the private sector, began to make inroads into public universities as well. The result is that notwithstanding the persistence of elements of the old paradigm in some parts of the public sector, the model of the Latin American university is now to be found chiefly in the idea of the research university, especially as expressed in the most research-intensive universities in the United States.

The Formation of the Latin American Model

What the literature describes as the Latin American model is a cross between elements of what Burton Clark named the Continental model, particularly in its postrevolutionary French incarnation, and the ideas of the Córdoba reform movement, which sought to modernize the universities organized in the former pattern. Postindependence national universities were created by the state to serve its needs, which at the time were mostly related to the Enlightenment's, and later, positivistic notions of material and spiritual progress. With the exceptions of countries in which the postcolonial reaction against the Catholic Church was not too strong (e.g., Chile and Colombia), or conservative forces succeeded in mollifying the trend (e.g., Guatemala), universities were to advance the liberal agenda of governments chiefly through their educational functions, both directly by training civil servants and professionals and indirectly via their supervisory role over lower levels of education. State control was tight, or at least as firm as these generally weak states could manage (Figueiredo-Cowen 2002; Mollis 2006). The basic organizational unit was the Faculty,⁷ with which noted members of the liberal professions were associated. The basic degree was the *licenciatura*, granted exclusively by the university after a course of professional studies (Levy 1986). As the state transferred to the universities the power to qualify graduates for

⁶ It is also important to stress here that by "normative" I refer to the values of the actors of the higher education systems relevant to this article, not to the values of the author. I take no position as to whether the changes I report in the model of the university in Latin America are beneficial or not. My aim is solely to describe them.

⁷ Hereafter, "Faculty" refers to the basic academic unit of university organization and "faculty" to the professoriate. The plural "faculties" indicates a group of those basic academic units.

professional practice, the professional diploma became the most important certificate issued by a university. Empirical research (as opposed to philosophical speculation) did not enter the model until the late nineteenth century. Liberal arts education never did (Schwartzman 1993).

The reform movement set off by students at the University of Córdoba in 1918 was in reaction to a university that they perceived as an oligarchic ivory tower removed from the concerns of the vast majorities, unwilling to open up to modernity and to the rapidly expanding middle class and controlled by politicians and chair holders of little academic accomplishment or vocation (Arocena and Sutz 2005). The movement marked a turning point in the idea of the university predominant in Latin America. The tenets of the reform movement, as they evolved over time from their original formulation in Córdoba into a stylized doctrine—a “model of”—abstracted from the particular conditions from which it emerged in Argentina, can be summarized as follows (Figueiredo-Cowen 2002; Schugurensky and Naidorf 2004):

1. Democratic governance, or cogovernance by students, professors, and alumni, whose representatives were to be elected to Faculty-level and university-wide decision-making councils
2. Orientation of the mission of the university toward the solution of the social, economic, and political problems of the country
3. Institution of an extension function of the university, alongside those of research and teaching, the purpose of which was to bring the university to the working masses
4. Democratization of access through tuition-free education and expansion of enrollments
5. Autonomy from state intervention and academic freedom
6. Selection of faculty through competitive and public contests based on academic merit
7. Original research by full-time professors committed to the university

How much of this program became reality, that is, the extent to which it succeeded as a “model for,” depends on the country and the period. The region’s characteristic political instability carried university regulations in its wake. Autonomy, or free access, was often granted, taken away (most often during authoritarian regimes), and later reinstated (typically with the restoration of political democracy), sometimes in quick succession. The rhetoric of service to the needs of development was incorporated into the universities’ discourse, as was the extension function, which together with teaching and research were proclaimed in mission statements, university bylaws, national laws, and even some national constitutions, to form the inseparable triad of teaching, research, and extension upon which the very nature of the university rested. Yet universities continued to carry out very little research or extension for several decades after the Córdoba reforms (Levy 1986).

Cogovernance was implemented throughout the region, with varying schemes of distribution of power. Typically the vote for electing department heads, deans, and rectors as well as membership in school and university-wide councils would be divided into thirds, but different arrangements, more or less generous for students, were also introduced. In some countries the alumni constituency was replaced with the administrative and clerical staff of the university. Power rested much more with the faculties than with the central administration, and within each Faculty it was vested in a governing council, which typically elected the dean. Free tuition took longer to be established as a norm, but it had become a feature across the board by the late 1960s. Enrollments expanded, although not before the 1960s and 1970s, with the exception of Argentina, where mass higher education arrived in the 1950s. Although competitive contests were legislated as the entry mechanism for faculty, the profile of the professors did not change much until quite recently. Academics continued to be, by and large, part-time teachers, active in the professions or in government, who carried out no research.

In summary, by the late 1960s and 1970s, when the Latin American model had reached the peak of its influence on the region's universities, its main features consisted of autonomy from government control; democratic governance by faculty, students, and alumni or administrative staff who elected deans and rectors and shared in decision making through collective bodies; full funding by the state and free or nominal tuition; and the belief that universities had an irreplaceable role to play in the political objective of transforming society. In spite of the intention to institutionalize research⁸ and full-time commitment among faculty, the teaching of professions by part-time instructors remained the dominant function.⁹

Although this model of the university was meant to define the shape of public institutions, the few private ones that existed prior to the 1960s, most of them Catholic universities, tended to coalesce around a watered-down version of this paradigm (except with regard to autonomy from political intervention, which has been stronger in private higher education). Participation existed, but faculty retained ultimate control, while executive power was not as weak as in the public universities, with rectors typically supported by boards of trustees or by religious authority. There was some state financial support for private institutions in a few countries, but nowhere was it enough, with the exception of Chile, to approach free tuition. Religious missions tended to fade away, especially after the Second Vatican Council (1962–65) “modernized” the Catholic Church. Catholic universities, like their public counterparts, were often inspired by Marxist doctrines and embraced the

⁸ Indeed, the drive toward the institutionalization of the research function in universities was thwarted in Argentina by the creation of public research centers not affiliated with universities.

⁹ Data from Levy (1986, 281) for the mid-1980s put the proportion of professors with exclusive dedication to the university at 9.8 percent in public and 3.5 percent in private universities.

political functions of acting as the critical conscience of society and of educating agents for social transformation (Levy 1986). Universities were perceived to have the right and responsibility to take a public stand on any matter of national concern (Waggoner 1974, 375; Lomnitz 1977). This was not the case with secular private institutions, which retained closer ties to business interests and ideology. Although their enrollments expanded also, selectivity in admissions was generally maintained.

Decline and Fall of the Latin American Model

The erosion of the Latin American model, first in private and later in public universities, began and continued throughout the decades following the peak of its influence, in the 1960s and early 1970s. The principal agents of the model's decline were, first, the expansion of enrollments and the diversification of types of public and private higher education institutions that resulted from it. Second, the cumulative effects on public universities of their massification—unruly growth, deterioration of quality, politicization, and decreased influence over the elites—together with the external shocks caused by the military dictatorships of the 1970s, the economic crisis of the 1980s, and the neoliberal turn of the political economy in the 1990s, provoked a crisis of identity and legitimacy in the public sector of higher education from which it has yet to recover. Third is the knowledge economy, which has redefined some of the goals of research and education, with varied and far-reaching consequences for the ways in which universities' social roles are understood. Coupled with immediate requirements for survival in times of fiscal stringency and generally neoliberal policies propped up by multilateral lending agencies, universities are forced to seek a closer alignment with policies supportive of economic growth and competitiveness and to do away with the dominant discourse of social transformation characteristic of the Latin American model. Finally, the Latin American model has been affected by the worldwide rise of the U.S. idea of a research university, which has gained ascendancy as the top echelon of North American universities continues to increase its lead in scientific productivity and in harnessing the opportunities and challenges of the new economy. Success drives imitation, and notwithstanding criticism about the perils looming in U.S. universities' high exposure to the market, the U.S. research university has become an inspiration for university leaders worldwide.

This explanation of factors involves generalizations, of course. Detailed examination of the present situation and recent evolution of higher education in each country of the region uncovers considerable variation and leads to important qualifications of the trends summarized above. To reveal this variation, I explain the four pressure points introduced above, namely, the expansion and diversification of higher education systems, the loss of legitimacy of their public sectors, the knowledge economy and the political economy

that goes with it, and the worldwide ascendance of the U.S. model of the research university, as they affect the Latin American model in Argentina, Mexico, Brazil, and Chile.

Expansion and Diversification

Latin American higher education, like postsecondary education worldwide, grew enormously in the second half of the last century. From 1950 to 1995 the number of universities grew from 105 to over 700, and if one counts nonuniversity institutions the tally shoots up to more than 2,500. The number of students increased from 1.5 million to 8 million (Mollis 2006, 503) and reached 14 million in 2003 (Rama 2006, 15). Enrollment rates vary considerably from one country to another, but from a 3 percent gross enrollment ratio in 1960 (Levy 1986), the region as a whole stood at 21 percent in 1994 (Castro and Levy 2000) and 28.7 percent in 2003 (IESALC 2006).

Argentina and Mexico accommodated expansion chiefly by enlarging the public sector either by increasing enrollments in the existing public universities, by creating new institutions, or by establishing a public nonuniversity tertiary sector of vocational and technical programs of shorter duration. For this reason, private enrollments reached only 16 percent of total enrollments in Argentina and 32 percent in Mexico in 2005. Chile and Brazil, on the contrary, directed most of their expansion toward the private sector, both university and nonuniversity types, and as a result private matriculation reached 73 percent in Chile and Brazil in 2005.¹⁰ Another expression of these different strategies is the degree of institutional diversification in the public sector. Brazil, for instance, recognizes three types of university-level institutions of higher education and five classes of nonuniversity entities (Arrosa Soares 2002). Argentina has 41 public universities and 772 public nonuniversity institutions (Sabatier 2004), and Mexico boasts approximately 420 public institutions, of which 45 are universities (SEP 2003).

Private universities created in Latin America between 1888 and the 1960s diverged from the public university sector in function, organization, and finance (Levy 1986). Both the Catholic institutions established in the first part of the twentieth century in reaction to growing secularism and the secular privates and newer Catholic institutions, organized since the 1950s by business elites and the church to train the human capital that the massified, politicized, and leftist public universities were failing to produce, emerged as a reaction to public institution practices: they were largely self-financed through tuition fees, admissions were selective, there was no cogovernance by students and other constituencies, their form of authority was more hierarchical, political activism was not welcome or sometimes banned outright, and their missions had more to do with economic development than with revolutionary change.

¹⁰ Data on private share of enrollments are from the Program for Research on Private Higher Education, at <http://www.albany.edu/dept/eaps/prophe/data/international.html>.

The most influential inspiration for these new institutions, especially the secular ones, was the elite U.S. universities, as confirmed by the prevalence of boards of trustees, academic departments, fund-raising campaigns, and selection of students based on academic merit. Professional undergraduate education as the dominant function was maintained, in line with the mission of the new universities. Notwithstanding the Catholic universities' post-Vatican II *aggiornamento*, which—together with their claim to public funds—brought them closer to the public model in the late 1960s and 1970s, privatization has meant, for the most part, a powerful blow to the Latin American model.

The demand-absorbing private sector of nonelite universities, responsible for the phenomenal increase in the number of postsecondary institutions almost everywhere in the region in the 1980s and 1990s, is even more removed from the model. These newest universities teach professional programs, but that is about all they have in common with the paradigm of the Latin American university.

Also relevant is the internal diversification of the public sector. Non-university institutions of higher education, which can be found in large numbers in Mexico and Argentina, have always been outside the sphere of influence of the Latin American model. Second, inasmuch as the channeling of expanding enrollments in the public sector shaped the form of new public universities, as in Mexico, Venezuela, and Colombia in the 1960s and 1970s and in Argentina in the 1970s and 1990s, these new institutions were not just more of the same.¹¹

Like Chile, Brazil only caught wind of the Córdoba reform in the 1960s, but that lasted only until 1964, when a military dictatorship, uncharacteristic for governments of its type in the region, developed an agenda for public universities that reached beyond political containment and repression. The 1968 higher education act, influenced by the U.S. model (Balán 2006), embodied in the University of Brasilia (established 1961), fragmented large faculties into smaller units, created departments and abolished chairs, and introduced the system of course credits, short programs, and general education. It ended lifetime appointments for professors, organized special units for research, created posts for full-time faculty with research capabilities, and gave a boost to graduate programs (Arrosa Soares 2002; Figueiredo-Cowen 2002; Trindade 2004). The values behind the reform were not democracy, access, or social reform but “efficiency, modernization, administrative flexibility and training of high level human resources for the development of the country” (Trindade 2004, 830). This Brazilian reform, the effects of which last to this day, introduced the logic of scientific research and advanced disciplinary training, then absent from most universities in the region, as a

¹¹ Kent 1998; Castro and Levy 2000; Luengo 2003; Garcia de Fanelli 2005.

counterbalance to the dominant logic of the professional schools and of the university as a social force.¹²

The recent histories of higher education in Chile and Argentina are similar in that the sway of the Latin American model peaked in the early 1970s, only to be drastically curtailed by the policies of military rule. The military dictatorship of 1973–90 and the expansion of the private sector in Chile stimulated by the military authorities since the 1980s interrupted an isomorphic trend that, especially since the late 1960s, had closely aligned the then-existing private universities with the public ones, and all of them with the Latin American model. New private universities created since 1980 did not recognize the Latin American model as a benchmark. Moreover, in the public sector the military government banned participation in governance by students and nonacademic staff, restricted that of the faculty, and imposed tuition fees across the board. The return to democracy in 1990 did not turn the clock back on these reforms. Autonomy from government and faculty control of public universities was restored, but cogovernance with students and nonacademic staff was gone for good, as was free tuition and the rhetoric of a new society (Bernasconi and Rojas 2004).

The military dictatorship in Argentina (1976–83) brought massive repression and control over the universities, but unlike the cases of Brazil in the 1960s and Chile in the 1980s, no reform of higher education emerged from the de facto rulers of Argentina. Democratic restoration in 1983 led to a restitution of the situation preceding the coup, in what was called the “normalization” process (Fernández Lamarra 2002, 27). Therefore, in spite of the violence exerted over Argentina’s universities in the 1970s, the Córdoba ideal remained the ideological backbone of Argentinean public universities. More recently, public policy has somewhat altered the social contract between the government and the public universities, as will be explained later.

The crisis of the public universities in the last 2 decades is not exclusive to Latin America nor is it a result only of their lackluster performance. The phenomenon is in part exogenous to higher education and to social change in the region. Rather, it responds to global trends. In what follows, both sets of precipitating factors will be briefly examined. First I will review, following Levy (1986), the causes and consequences of what he has called the “perceived failure” of the public sector. Then I will turn to the worldwide ascendancy of a new economic order and its effect on the region’s universities.

“Perceived Public Failure” and the Crisis of Legitimacy

Improved access to higher education since the 1960s, a result of population growth, economic development, and increased completion of second-

¹² Brazil, originator in 1981 of one-third of Latin America’s mainstream publications and 0.44 percent of the world’s science, produced in 2002 44 percent of the region’s science and 1.54 percent of the world’s (Schwartzman 2004). In 1976 there were 200 doctoral programs in Brazil. This figure exceeded 800 in the year 2000 (Arrosa Soares 2002).

ary education, transformed the public universities' oligarchic student clientele into a middle-class student body (Albornoz 1976). A flight of the elites to the best Catholic and secular private universities ensued, in pursuit of the small class sizes, close access to faculty, network-based job prospects, and high-achieving students that used to characterize public universities. This class-based exit was intensified by frequent strikes in public universities, their politicization, and the supremacy of leftist ideologies on campus at a time when Cuba had shown that a socialist revolution in Latin America was hardly utopia. Universities came to position themselves or be perceived as entities in opposition to their governments and the business sector. Moreover, public universities, characterized by outdated and ideological curricula, rote learning, and little understanding of the job market, were failing to provide the technical human power needed for development (Albornoz 1976; Levy 1986; Jameson 1997). As a result, public universities alienated their countries' elites and lost their support (Albornoz 1976).

This scenario more or less holds for the whole of the region, except for Brazil and Chile. Brazilian public universities did not experience any of the transformations that elsewhere led to elite flight. Rather, they became more elitist over time and were less exposed to anomie as they embraced a scientific mission in place of the short-lived Córdoba banner. Universities in Chile hardly had time to recover from the counterclimactic shock of the 1973 coup before they had to quickly become entrepreneurial with the advent of the reform of 1981. That reform served as a harbinger of, and to some extent a reference point for, the policies that were to prevail in the region in the following decade.

But for most of the region, the loss of legitimacy was pronounced. And every success of the private sector, or even its simple expansion, contributed to the loss of standing of the public sector. By the 1990s, criticism of Latin American higher education, especially its public universities, had become vocal. Critics pointed at their low productivity and efficiency, poor management, bloated bureaucracies, primacy of corporatist interests, and patterns of collective rule that have resulted in paralysis or anarchy.¹³

The contributions of the region's most established universities to nation-building, modernization, democracy, the formation of an educated middle class, and critical thinking (Castro and Levy 2000; Mollis 2006) seem no longer enough to keep supporters from turning a blind eye to their shortcomings, especially when social cohesion seems to not be a high-priority social outcome of universities. In the words of Carlos Torres and Daniel Schugurensky, nowadays "universities are perceived by the political leadership as sources of innovation, especially in scientific and technological areas that feed high-tech productivity" (2002, 432). Yet, adaptation to the new conditions of knowl-

¹³ World Bank 1994; Inter-American Development Bank 1997; Brunner 1998; Castro and Levy 2000.

edge production, transmission, and utilization has been significant despite the aforementioned criticisms. To this matter I turn next.

The Knowledge Economy, Academic Capitalism, and Neoliberal Reforms

The rise of global society and the knowledge economy are well documented, and so are notions of the entrepreneurial university and academic capitalism. What is of interest here is how analysts of Latin American higher education evaluate the significance of those developments for the Latin American model of the university. There is widespread agreement that marketization and knowledge for gain exert pressures to abandon the Latin American university model.¹⁴ For example, a 1996 regional conference on higher education organized by UNESCO, with participation of some 700 Latin American university representatives, came to the conclusion that tertiary education in the region had to improve its relevance for economic development, enhance quality, develop its management capacity, and diversify its funding sources (Yarzabal 1999).

Torres and Schugurensky (2002) argue, in their overview of the new political economy of higher education in Latin America, that the ideological hegemony of neoliberalism, with its policies of decreased subsidization, performance-based funding, diversification of sources of income via tuition fees and partnerships with business, quality assessment, faculty evaluation, and other measures of accountability, have entailed for universities a loss of autonomy with respect to markets and governments—in short, “the shift from the autonomous to the heteronomous university” (447). Examples of these policies can be found, in different degrees and combinations, in the four countries under examination. Chile was the pioneer and sharpest case: Public subsidization was cut by 40 percent in the 1980s, and universities were required to make up the difference through tuition fees. The legal and administrative regimes of universities were deregulated so that faculty could be hired and fired according to the rules each university chose to adopt, increasing portions of public funding were allocated competitively, and accreditation began in 1990 (Bernasconi and Rojas 2004).

Block grant funding for public universities was introduced in Argentina in 1992. A few years later, the government began experimenting with contract and formula funding, while salary policy and work regulation for academic and administrative staff were deregulated. A new higher education act, passed in 1995, strengthened the coordinating mechanisms for higher education, introduced evaluation and accreditation, authorized universities to charge tuition fees and seek other sources of revenues, and provided them with

¹⁴ For varied analyses, see Vessuri 1995; Casas and Luna 1997; Sutz 1997; Lessa 1999; Levy 1999; Schwartzman 1999; Trindade 2000, 2004; Arocena and Sutz 2001, 2005; Leopoldo e Silva 2001; Schugurensky and Naidorf 2004; Miranda de Siqueira 2005; Mollis 2006.

greater freedom to administer those revenues (Fernández Lamarra 2002; García de Fanelli 2005, 2006).

Policy making in Mexico was intense in the 1990s. New technological universities were created, offering short technical and vocational programs tightly linked to local job markets. Performance reviews and salary bonuses were introduced for the most scientifically productive professors (benefiting some 8,000 researchers out of the country's 192,000 academics). Institutional and program evaluations were established. State governments and legislatures forced governance reforms in state universities that aimed to strengthen executive power. The government did away with open admission to public universities and required entrance examinations, and exams for graduates, following the Brazilian example, have also been developed. Cogovernance has been curbed in several universities, diminishing student and administrative staff participation in favor of greater faculty power. Most of the increased funding has been made available to universities not through direct operational subsidies but targeted to research, productivity bonuses for faculty, or specific programs of interest to the government. Universities have been pressured to increase their private sources of funding and, as a result, modest tuition fees have been introduced (Kent 1998; Ibarra Colado 2003).

Policy changes in Brazil have been the least pronounced among our four countries, possibly a reflection of the high social standing public universities enjoy in that country. Institutional evaluation was introduced in 1993 (evaluation of graduate programs has existed for decades). A national examination for graduates of professional programs began to be applied with formative purposes in 1996. While the federal constitution of 1988 confirmed autonomy for universities; the indissolubility of research, teaching, and extension; and free tuition in public educational institutions, a new education act, passed in 1996, set new faculty standards for the licensing of universities: at least one-third of faculty members have to be in possession of a master's or doctoral degree, and the same proportion must have full-time appointments. Some regulations are quite detailed. For instance, faculty in public institutions are required to spend at least 8 hours per week in classroom teaching (Arrosa Soares 2002; Santoro 2003). Excess bureaucracy has been circumvented by the operation in each university of subsidiary foundations in charge of managing business operations for the university. In an effort to increase access, public institutions are required to offer evening programs.

These policies have been in part supported by the reform agenda of the so-called Washington consensus of multilateral funding agencies, both indirectly by their influence in the marketplace of ideas and directly through funding of reform projects.¹⁵ The assessments of the state of higher education of the World Bank and the Inter-American Development Bank, together with

¹⁵ Rodríguez-Gómez and Alcántara 2001; Torres and Schugurensky 2002; McCowan 2004; Olssen and Peters 2005.

the reform agenda built upon them, have been especially influential in the Latin American region. The World Bank (1994) criticized higher education in developing countries for its inefficiency, manifested in administrative bloat, high dropout and repetition rates, graduate unemployment, and inability to procure sources of revenue alternative to public subsidization. The World Bank encouraged institutional differentiation by stimulating the development of private, vocational, technical, and other nonuniversity institutions; the broadening of the universities' revenue base, including charging tuition fees to students; embarking on income-generating services and fund-raising; and linking government funding more closely to demonstrated institutional performance.

The Inter-American Development Bank's position on the state of higher education in Latin American and the Caribbean (1997) points to a lack of accountability; excessive politicization; cultural indifference to science and research; insufficiency of institutional planning, management, and monitoring; and a general indifference to excellence as key explanatory factors for the deficiencies in Latin American higher education. The policy menu embraced by the Inter-American Development Bank is in part similar to the World Bank's. But to the goals of increasing cost recovery in public universities through tuition fees and other sources of income, and diversification of institutional types and missions, it adds a call for reforming what it sees as a pernicious interplay between public funding and governance. The Inter-American Development Bank's proposed means for reform are performance-based public funding, rewards for good performance and disincentives against mediocre results, and evaluation systems aimed at fostering accountability and improving quality.

In an early effort to conceptualize these policy trends, José Joaquín Brunner (1993) put forth the notion of a new contract between higher education and the state in Latin America. According to this notion, production and reproduction of the elites had ceased to be the base of the partnership between the state and the public university and needed to be substituted by a new trade-off: funding in exchange for tighter control over performance, and products that are of interest to the state, in particular, those directly supporting economic growth. Levy, in turn, explains that if the policy reforms of the 1990s in the region have something in common, it is their rejection of the status quo and their sentiment of deep disappointment, especially visible among leading Latin American scholars and analysts of higher education (1999).

The critical consciousness mission of the university, with its attending ideological apparatus, has given way to the "legitimization [of] the specialized participation in knowledge accumulation and in the solution of national problems" (Arocena and Sutz 2001, 1224). A newfound legitimacy for the goals of raising quality, improving efficiency, and making education more

relevant to economic goals through university-industry relations has been slowly finding its way into an academic culture that once opposed them. If universities want to participate in shaping the futures of their nations, it is increasingly accepted that they will be able to do so only by the effect of their functions of knowledge production and dissemination (Kent 1998; Schugursky and Naidorf 2004).

Rise of the Model of the Research University

The idea of the research university is nowadays generally associated with the institutions in the apex of the U.S. higher education system, but it is of course neither native to the United States nor exclusive to it.¹⁶ European origin and European contemporary examples of it notwithstanding, the American idea of the research university that emerged in the early part of the twentieth century, and more forcefully after World War II (Geiger 1986), radiated to the rest of the globe, to the point that it has become institutionalized as the gold standard to which universities throughout the world compare themselves.

According to Philip Altbach (1998), the dimensions of the U.S. model of interest abroad are, among others, the departmental organization, the system of faculty ranking and promotion, a cadre of professional and highly specialized administrators, curriculum flexibility, academic governance by faculty, the organization structure and rewards for research and publication, and the elastic balance between autonomy and accountability. This U.S. model reached Latin America as early as the 1920s (Brazil), by way of U.S.-sponsored technical cooperation projects. These programs multiplied after World War II, helping dozens of universities to develop in the region. Together with USAID, the Ford Foundation and the Inter-American Development Bank were key actors in the modernization of the region's universities up until the 1960s (Rodríguez-Gómez and Alcántara 2001; Figueiredo-Cowen 2002; Levy 2006).

But perhaps still more influential has been the new generation of academics, with graduate degrees often obtained abroad, who know research universities from the inside and press for departmental organization, research labs, equipment, funds, and full-time contracts (Schwartzman 1993). Where these scholars have come to control their academic units, displacing part-time practitioners or full-time professors who only teach, they have brought their units (or their entire universities, when they exist as a critical mass across the faculties) closer to the culture of the research university. Salary

¹⁶ The grafting of a research mission onto the university, as is well known, was the brainchild of German Idealism of the late eighteenth century, embodied in the foundation in 1810 of the University of Berlin under the intellectual leadership of W. von Humboldt. This German model was received in the United States in the second half of the nineteenth century, chiefly through the creation of Cornell (1865) and Johns Hopkins (1876) universities, but it took decades for research to be accepted as a function equal to teaching by the most distinguished colleges. Only after World War II did the top U.S. universities gain the kind of worldwide preeminence in science they enjoy today.

levels for scientifically productive faculty who benefit from research grants and bonus payments in Chile, Mexico, and Brazil have enabled real full-time dedication to academia. Salaries in Argentina lag behind, but this country has nonetheless consolidated full-time university research groups, mostly in the natural sciences. Resources for research and graduate training, in turn, are one of the growing items in public funding in these countries. As a result, Mexico tripled enrollments in graduate programs between 1990 and 2000 (SEP 2003). Doctoral students almost tripled in that period in Brazil (Arrosa Soares 2002) and expanded fivefold in Chile (Bernasconi 2007). In the decade from 1996 to 2005, scientific output (mainstream research articles) doubled in Chile and Mexico and almost tripled in Brazil. Argentina and Venezuela had more modest, but still significant, gains of close to 70 percent.

Still, only a small fraction of the universities of Latin America can be characterized as research-oriented universities (if one looks at their output instead of their rhetoric), and graduate education, especially at the doctorate level, is incipient everywhere except Brazil. Most university research in Argentina, for instance, is carried out by just three universities, or up to seven or eight if a more inclusive indicator is used (García de Fanelli 2005).¹⁷ The situation in Chile is no different (Bernasconi 2007).

Although research-oriented universities are not numerous in Latin America, they usually are the oldest, largest, and most prestigious universities in their countries. As such, they serve as models for the rest of their national systems. Brazil is a clear example, with the University of São Paulo, University of Campinas, and the Federal University of Rio de Janeiro long being the trendsetters for other universities. The University of Chile occupies the same position within its national system. This modeling from a national source is an important isomorphic force for the lesser universities that find themselves hopelessly distant from European or U.S. research universities. Not only do the local research-oriented universities provide the others with a closer-to-home paradigm but also offer it already adapted to the local culture.

The fact that all but a few of the region's universities still have a long way ahead before becoming research universities does not mean that the idea of the research university is not influential. It may be well established as a "model of," in spite of the paucity of its results as a "model for." By the same token, the Napoleonic university, or the Córdoba ideals, were influential in spite of their almost total lack of complete application in any one institution. What matters is that, in the wake of the identity crises of the Latin American university, the U.S. model is there for emulation, facing very little, if any, competition and promising to restore a measure of rationality and sense of purpose to beleaguered academic communities.

¹⁷ As pointed out before, a sizable amount of scientific research in Argentina is carried out not in universities but in public research institutes.

What Remains of the Latin American Model of the University?

I have submitted that the expansion and diversification of higher education opened up the institutional field to private universities that were not part of the Napoleonic heritage and did not recognize in the Córdoba movement a point of reference for their organization and mission. In addition, public universities created since the 1960s were often designed not to acquire the problematic attributes of the national universities. What was up until then a model for all universities increasingly became restricted to the public sector, and even to the largest and oldest universities among the public sector.

Public universities, suffering the consequences of their own failures, and by association, those of the states of which they are a part, have seen massification, politicization, irrelevance to economic development, and bad management eat away at their legitimacy for over 2 decades. As a result, their traditional ideological bases of organization and function have been undermined. The new political economy has only made the shortcomings of the public university more visible and remedies more urgent, prompting governments and development agencies, and some universities themselves, to take corrective action. And in the search for a new model to replace the old one, the U.S. model of the research university offers itself with strong appeal.

Institutional missions no longer consider the university a vanguard of a new society. From its role as leader, universities are acknowledged, albeit reluctantly, to be in a subordinate position to a global economy and a knowledge society they cannot control but need to learn to live with and perhaps take advantage of. Extension, the traditional third function in the ideal model of the Latin American university, does not mean bringing the poor to the university and the university to the poor but, rather, a wide array of money-making endeavors such as continuing education, consulting, and technical transfer to industry.

Open and free public higher education is no longer taken for granted, especially now that it is not invariably taken for granted in Europe. Participation in higher education is increasingly seen as a privilege for the upper and middle classes, and tuition fees have been gaining ground in several nations. In most countries where tuition is free, it is not so for graduate-level programs. However, the deleterious effects of open admission in mass higher education systems with poor-quality secondary education has become too clear to ignore, and universities are moving to merit-based admissions (Castro and Levy 2000), or where open admission still exists, the first year of studies acts as a filter.

So, what is left of the Latin American paradigm? Professional education at the undergraduate level through rigid and long study programs is still what universities do as their main function, but law, medicine, and engineering accounted for less than one-third of enrollments in 1986 (Castro and Levy 2000), and the figure is probably lower now. Curriculum reforms

stressing general education in the liberal arts tradition for the first 1 or 2 years of a professional degree program, taking up space previously devoted to professionalizing courses, are ubiquitous. Moreover, general education is not justified through reference to the Oxbridge tradition of educating cultured persons but on the more practical grounds of the need of the job market for flexible professionals capable of learning new skills. The prevalence of what Claudio de Moura Castro and Daniel Levy (2000) have called general education by default, that is, professional education that fails to train people for specific occupations—either because of the poor quality of the education provided or because of lack of tuning with the labor market—and serves instead as general education for unanticipated jobs, is another telling trend.

Part-time teachers still constitute the majority of the faculty overall, but academics with more dedication to the university are gaining ground. Full-time and half-time appointments represent 48 percent of the faculty in public universities in Mexico (SEP 2003), one-third in Argentina (Fernández Lamma 2002),¹⁸ some 40 percent in Chile (Bernasconi 2005), and 43 percent in Brazil (Arrosa Soares 2002).¹⁹ Graduate degrees among the faculty are the norm only in Brazil, where 33 percent of faculty in federal and state universities have a doctoral degree and another third possess master's degrees (Arrosa Soares 2002). In Chile, the average figure for faculty with PhDs in the five most research-oriented universities is 26 percent (Bernasconi 2007). In Argentina's public universities, some 20 percent of the faculty are registered as research staff (García de Fanelli 2005). These are low proportions, but they represent enormous increases compared to the situation 20 years ago. In Mexico, for instance, research staff increased by 50 percent between 1993 and 1999 (SEP 2003). Brazil's professoriate with graduate degrees doubled between 1990 and 2000 (Arrosa Soares 2002). But most important, given the governance prerogatives of full-time faculty, even though they are in the minority they control their universities.

Faculties remain the basic organization units, but the fields of knowledge they contain are now smaller and, in turn, integrated into departments. The chair system has been eliminated (Chile, Brazil) or has consistently lost ground to the U.S. rank system of full professors, associate professors, and assistant professors. In most large universities faculties remain quasi-autonomous entities with feeble ties to the central administration, but that is not the case for smaller institutions, which make up the vast majority. Moreover, extreme decentralization is almost invariably considered a problem that needs fixing.

With respect to cogovernance, student and administrative staff power are

¹⁸ Includes faculty with "exclusive" and "semiexclusive" dedication.

¹⁹ The numbers for Brazil include private institutions, so the figure for public universities is likely to be much higher.

in retreat, and they have disappeared in Chile. Brazilian universities' governing bodies have some student, and sometimes alumni representatives, but control is in the hands of faculty. Also, in Brazil, the faculty vote weighs 70 percent in the election of the rector (Arrosa Soares 2002). The Argentinean higher education act of 1995 requires that faculty weight in governing bodies shall not be less than 50 percent, although the details are left to each university's bylaws. In practice, students' shares of the top governing bodies in Argentina's public universities range from 14 to 38 percent, and those of alumni or nonacademic personnel range from zero to 20 percent (Fernández Lamarra 2002). Stronger student participation is found in Mexico (SEP 2003). The dominant prescription as to participation, often written into national constitutions, is that some participation by students has to exist, but a distribution of power by halves between faculty and students, like Bolivia's, is by now an anomaly.

The signs of the decline of the Latin American model are numerous but equal in amount or distribution neither across countries nor across universities within a given nation. Brazil and Chile have evolved considerably away from it, but the large national universities in Venezuela, Central America, and Bolivia maintain their loyalty, while Colombia, like Brazil, never did absorb much of its influence. And in Argentina and Mexico, for political and cultural reasons, it has been much easier for the newer or smaller universities, or those not located in the capital city, to leave the model behind than has been the case with the enormously visible Universidad Nacional Autónoma de México or the University of Buenos Aires.

The notion of macrouniversities (Didriksson 2002; Rama 2002) has been advanced to refer to the 20 or so largest public universities in Latin America, where most of each country's research and intellectual capacity is concentrated, where all fields of knowledge are represented, and to which every nation's cultural patrimony is indebted. By either conviction, corporatist interest, or inertia, these are the institutions where the actors most committed to the Latin American model—in doctrine or actual practice—can be found. But at the same time, those universities within this sector, where large groups of researchers exist, are the most susceptible to the influence of the research university paradigm working from within. Thus, these universities constitute the only site in which the tension between the two competing models still plays out. But it is an important site, due to the political, normative, and symbolic influences macrouniversities exert over their environments.

Conclusions

Latin America is by no means alone in redefining what universities should look like. Universal higher education, the economic import of the scientific endeavor and of training for jobs, and the shift to markets as arbiters of worth are global trends challenging universities everywhere. According to

recent institutionalist scholarship (Schofer and Meyer 2005; Frank and Gabler 2006; Kruecken and Meier 2006) we are witnessing a growing convergence of university models, as these entities increasingly find themselves operating in a common global institutional environment and a global economy, striving for resources and legitimacy.

Meanwhile, the United States leads the world in measures of academic vigor, while its economy continues to generate wealth at an unprecedented pace. It does not require much imagination, even to the casual observer, to see a connection between higher education and the might of the U.S. economy. Moreover, some of the most accomplished U.S. centers of higher learning (such as Stanford University and the Massachusetts Institute of Technology) have proved extremely adept at riding the waves of the “mode 2” production of knowledge (Gibbons et al. 1994). Herein lies the appeal of the U.S. higher education system and of its research universities in the imaginations of governments, university leaders, and faculty in Latin America. Paradoxically, this interdependence between U.S. higher education and the American economy is at the same time the object of much academic criticism both internally and abroad.

It is not therefore the academic-capitalism dimension of the U.S. higher education experience that primarily engages the idea of the research university dominant in Latin America. What drives emulation is the preeminence of research in the mission of the top universities in the United States, coupled with their scientific achievements, the education and working conditions of the faculty who make those results possible, and the organization of the research endeavor, from the university department to the graduate programs to the federal funding agencies. Inasmuch as funding diversification, the professionalization of university administrators, merit-based rules for faculty hiring and promotion, and faculty control over academic matters are necessary to advance the scientific vocation of the university, these attributes of the U.S. research university are embraced as well. And once so many features of the system of reference become of interest, others follow, such as the structure of undergraduate education, the community college sector, or the organization of accreditation.

Yet, whether universities should be in the business of turning knowledge into economically valuable products and processes, not just as a strategy for capturing greater resources than the state can provide but as a part of the essential mission of the university, is a contentious issue in Latin America’s academic circles (as it is in the United States). It appears to be conflated with a neoliberal turn in the political economy of higher education that has pressed universities into cooperation with industry more out of necessity than conviction.

Moreover, as Rodrigo Arocena and Judith Sutz (2001) and Sandra Brisolla and her collaborators (1997) have argued, the changes in knowledge pro-

duction and in university-industry relations observed in the North require economic conditions that are rarely found in Latin America, where the patterns of production, as well as the behavior of firms with respect to science, technology, and innovation, find little resemblance with those of the developed economies. Latin America participates in the global economy mostly by exporting low-value-added commodities, while the private contribution to research and development is much lower than the public sector's. In addition, Latin America's universities—with only a few exceptions—have not completed their “first academic revolution”: the transformation from knowledge preservation and transmission to knowledge production. This alone should give pause to the thought of a quick embrace of a “second revolution” (Etzkowitz, Webster, and Healey 1998; Etzkowitz and Leydesdorff 2001) that would throw universities into the business of funneling knowledge into new products and enterprises.

Without dynamic economies growing through continuous gains in productivity due to technology and innovation, and without firms constantly demanding the input of new knowledge, it is unclear to what extent the U.S. research university as a “model of” can produce results in Latin America as a “model for,” even if among just a few universities. A dedication to research such as that of the paradigmatic institutions, and a stronger role of science in support of economic growth, would require public resources not only to match proportionally those of the developed countries but also to compensate for the private sector's meager contributions. It would additionally require a willingness by the region's governments to focus funding on very few institutions, instead of spreading them thin, as has been traditional for reasons of political expedience. None of this seems likely in the foreseeable future.

However, the mores of the Latin American university, present chiefly in the persistent adhesion of macrouniversities to some elements of the Latin American model, such as participatory governance, free tuition, and institutionalized political engagement, are unlikely to vanish without a trace. Furthermore, the long experience of the region's universities with training for the professions at the undergraduate level and the participation in this process of part-time instructors who are not academics are examples of an expertise that has become quite relevant nowadays and may become a contribution of Latin America to a global institutional environment. Also, the traditions of political awareness, social critique, and outreach to the underprivileged seem especially relevant today, in both Latin America and globally, in the face of ideological hegemony and economic inequality. As with other phenomena of cultural diffusion, the idea of the research university is more likely than not to express itself in Latin America in a form that recognizes and integrates in some manner the tradition of the Latin American university.

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