

The Mission of the University: Medieval to Postmodern Transformations

The concept of institutional mission and its redefinition are questions of current debate and discourse. Nevertheless, little direct historical analysis of the topic has appeared. Abraham Flexner (1930/1994) is perhaps first in deploring the alleged lack of “unity of purpose” (p. 179) or clear, overall mission. Flexner sees “not organisms: they are merely administrative aggregations” (p. 179); even so, modern American universities are increasingly models to the rest of the world. A modern term applied to universities, “mission” is the broadest word used to describe a university’s basic purpose (Allen, 1988, p. 7). With the dawn of the new millennium and its projected societal transformations now appearing on the horizon, all parties concerned, especially institutions, employers, policy-makers, and legislators, can benefit from a deeper understanding of how and why the university mission has evolved.

High technology and rapid globalization are altering work, leisure time, and formal schooling structures. At the heart of this new information society, academic institutions are pivotal organizations. Yet, they must remain flexible enough to respond to emerging social demands, technological change, and economic realignments. Many colleges and universities currently articulate formal, written statements of mission, aim, or goals. Ultimately, the life force of any enterprise is its mission,

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either stated or assumed. Hence, virtually all of today's policies and issues in higher education—from admissions to weapons technology—derive from institutional mission.

To distinguish *mission* from *mission statement*, the latter is just a written product of the former. In the past, college and university statutes often laid out institutional aims. Beginning in the 1930s, American universities were the first to publish mission statements in their catalogues. In recent decades, British, Canadian, and other universities have followed suit by publishing mission statements in order to prove themselves accountable to the public. Today's mission statements are often based on the triad (20th-century) mission of the university: teaching, research, and public service. Particular institutions will add to these fundamental goals their own educational, social, political, or spiritual aims. The best statements of mission go to the core of the organizations' purposes while avoiding the use of trendy language.

Fenske gives this definition of *mission* as a management concept: "*mission* is often used to express the aspirations, often unstated, that society has for institutions of higher education. These aspirations are consensual and represent the most general level of hopes and expectations people in general hold for colleges and universities" (1980, pp. 178–179). Possible disadvantages with mission statement establishment, notes Peeke (1994, pp. 8–12, 32), relate to its cursory nature, one lacking involvement by the majority of the organization's members and having little impact upon the actual management of the institution. He also cites advantages, such as developing a clear sense of purpose, facilitating decision-making, enhancing communication between and among internal and external stakeholder groups, aiding institutional evaluation and measurement, and clarifying marketing strategy. Thus, the mission establishment process—moving from abstract mission to institutional goals to concrete objectives—can promote organizational improvement.¹ The big challenge today, according to Berg, Csikszentmihalyi, & Nakamura (2003, pp. 40, 45–46), is to remain productive and valuable in a time of nonstop change. Therefore, university missions must be crafted and refined to meet the challenge: institutional strengths identified, mission-attentive hiring and leadership initiated, and academic tradition balanced with societal change.

Philosophy is another source of ideas about what the mission of the university should be. General and educational philosophy, with its less cohesive specialty, the philosophy of higher education, goes back centuries (Allen, 1988, pp. 13–14). Arising within the medieval European universities was the dominant philosophy of Scholasticism. Under Scholastic method, human reason was subordinate to biblical truth, and

it laid the foundations for modern empirical science. During early modern times, humanism took root in the universities of Europe and Latin America. Humanists emphasized the individual, free will, and values. Later, in following the doctrine of Wilhelm von Humboldt, the neo-humanist German university of the 19th century promoted original inquiry or research.

Still within the Western, humanistic context, late modernity's John Henry Newman, Abraham Flexner, José Ortega y Gasset, and Clark Kerr, among others,² reflect upon institutional mission. In brief, Newman's *The Idea of a University* (1873) is a defense of teaching the liberal arts as against organized research. In *Universities: American, English, German* (1930/1994), Flexner champions pure research and graduate teaching over undergraduate teaching and public service. In *Mission of the University* (1944), Ortega y Gasset wants to exclude research, focusing instead on liberal and professional education. Finally, Kerr's *The Uses of the University* (1963) is a proposal that a single institution, the "multiversity,"³ can perform multiple missions to benefit society.

Conceptual Framework

A new construct, one that relates the university to the pre-nation-state, nation-state, and globalization (body of nation-states) stages of Western and world history, is advanced in this essay. Six basic missions or *transformations* in university mission result from this historical analysis.

One must first recognize the *multiplicity of missions*—extending across time; types of higher education institutions, systems, multicampuses, and even single universities. In reality, the macrolevel missions identified in this study are often coexisting, interlocking, or contradictory in nature. Missions are also multilayered: Examples are the basic and applied research missions or the undergraduate liberal education and vocational instruction missions (historically, conflicting models), as well as graduate education within the teaching mission. University missions are dynamic and fluid; they reflect the ever-changing philosophical ideals, educational policies, and cultures of particular societies or learned institutions.

Finally, a major theme runs through all six of the missions under review. From medieval to postmodern times, *service* is the keynote. All universities were and are social organizations designed to provide higher educational services such as teaching, research, and a host of other academic services to the church, governments, individuals, public, and in the future, perhaps, the world.

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Pre-Nation-State Stage

The two core missions of universities worldwide, teaching and research both emerged in pre-nation-state circumstances.

Teaching Mission

Teaching services were first provided during the later Middle Ages at the Universities of Bologna and Paris. Scholastic method was state-of-the-art in Europe for both teaching and research; thus, these missions or ideals fused. For example, Roger Bacon taught classes as well as performed scientific experiments. The medieval university teaching mission embodied the undergraduate liberal education and graduate (professional) education missions.

Research Mission

As a regularly funded mission, research first emerged in the preindustrial German states (1800s), before national unification. Starting at the University of Berlin, original inquiry was the primary goal. In the German (Hunboldtian) universities, research was regularly integrated with classroom teaching—mission interplay. Beyond basic research, the applied research mission also emerged.

Nation-State Stage

Under modern, independent nation-state circumstances, three distinct missions of universities emerged. The nationalization, democratization, and public service missions developed to serve the needs of nation-states. Ultimately, the missions of teaching and research were superimposed upon each of these missions.

Nationalization Mission

Nationalization, or service to the government of the nation-state, first arose as a mission during early modern times (c. 1500) in western European universities. The absolute monarchies of England, Spain, and France nationalized their universities to serve the government more efficiently. Today, most universities around the globe are national institutions. In sharp contrast, the United States has never nationalized its colleges or universities.

Democratization Mission

Democratization, or service to the individual of the nation-state, was first promoted as a mission in the formative U.S. colleges (1800s), such as Jefferson's University of Virginia. Algo Henderson (1970) affirms

that “the function of higher education in a democracy rests on certain premises concerning the fulfillment of individual and societal needs” (p. 4).

Public Service Mission

Public service, or service to the public of the nation-state, first arose as a regular mission of American higher education through the Morrill Acts of 1862 and 1890. Henceforth, the “Wisconsin Idea” (1904), influenced many universities to elevate public service as a core mission equal to teaching and research. Today’s “urban university mission” is just one expression of the public service mission.

Globalization Stage

The 21st century is rapidly heading toward a globalization stage. As the body of nation-states becomes increasingly interdependent, another university mission is arising: internationalization.

Internationalization Mission

Internationalization, or service to the body of nation-states, involves the existing multiple missions of the university. Thus, the postmodern university will likely internationalize its missions of teaching, research, and public service in the global “information age.” Many treaties and organizations—such as the EU, ASEAN, and NAFTA—also promote the internationalization of higher education.

Causation

What causes these transformations in the university mission across the centuries? The answer is found in the drive of Western and world civilization. University history, over 850 years, reflects those seismic events that periodically rock humanity.

Here are the six major missions of the university with their probable causes, listed in chronological order. First to develop was the European medieval university, characterized by its *teaching* mission and Scholasticism; the later Middle Ages society evolved rapidly, and higher education was required for administration in the church, secular states, and municipalities, as well as for the traditional “professions.” Thereafter, the early modern university of Europe and Latin America accepted *nationalization* (service to the government of the nation-state) and humanism; the early modern period saw the rise of independent nation-states. Next, the formative U.S. college of the 19th century advanced the *democratization* (service to the individual of the nation-state) of higher

learning; America is the world's first democratic nation-state and it extends Jeffersonian and Jacksonian liberalism to education. Simultaneously, the 19th-century German (Humboldtian) university promoted the *research* mission and academic freedom; the state of Prussia consolidated its intellectual power by founding the University of Berlin in 1809–1810, following the Enlightenment and total defeat by Napoleon. Throughout the 20th century, the modern American university elevated the mission of *public service* (service to the public of the nation-state); during “America’s century,” the U.S. was the world’s leading democratic, economic, and military power. Today, the nations of this rapidly globalizing world approach the postmodern or postindustrial age; thus, the concept of *internationalization* (service to the body of nation-states) is likely to become a vital mission of the university. Prominent “internationalist” forerunners, attracting foreign students and professors, are universities of the Middle Ages, German (Humboldtian) era, and Victorian Britain.

Medieval University: Emphasis on Teaching

Universities first arose in Europe during the later Middle Ages (c. 1150–1500). The *universitas* was a corporation or guild of masters (professors) and scholars (students). Western civilization was developing rapidly at the time. The birth of this new and uniquely Western institution resulted from a combination of powerful societal trends. Briefly, these trends were the revival of mercantilism, growth of cities and the urban middle class, and bureaucratization, along with the 12th-century intellectual renaissance. As European society became more complex, the universal Roman church, secular governments, and municipalities required educated priests, administrators, lawyers, physicians, and clerks for business. Fulfilling this social demand were the universities, which were clearly oriented toward teaching and the learned professions (Cobban, 1992, pp. 227–228, 231–232). Northern universities generally patterned themselves after the University of Paris, which had a system of faculty governance. Southern universities, on the other hand, usually were patterned after the University of Bologna, which was student-controlled. In the south, students were older and more financially secure than their northern counterparts were. Nonetheless, by 1500, the student-controlled type of university structure lost popularity. Since that time, Europe has been dominated by the masters’ type of university.

Mission interplay between teaching, research, and service prevailed among prominent Scholastic doctors. The major philosophical goal of the medieval university, states Chaplin (1977), was “the pursuit of

[divine] truth and learning” (p. 3208), although research was not a formal mission. Neither was public service a formal mission, but professors (and chancellors) served the universal church and their kingdoms at the highest levels. University men from all over Europe, particularly theologians and jurists, were in demand for their learned opinions during the semiseular Great Schism and Conciliar Movement (1378–1449), which shook the foundations of Western civilization. Similarly, monarchs often relied upon university doctors to serve as judges in the secular court systems, while in foreign affairs such doctors acted as mediators and diplomats (Scott, 1992, pp. 113–118, 133, 137–138, 192).

Yet, the teaching mission—at the undergraduate and graduate levels—was foremost in the university. Students came from all social classes. They were mainly bright, older boys and men, but there were a few female students and professors in southern Europe. Undergraduates generally studied the liberal arts or sometimes the notarial arts in the south to become secretaries, notaries, and chancery officials. Graduate students pursued the higher disciplines of theology, medicine, and law. Most alumni served the church, state, or municipality in various capacities. Like today, a few hoped to become university masters themselves; others became masters in the lower schools. By the end of the Middle Ages there were at least 80 universities operating throughout most of Europe, except in Russia (Thompson, 1960, p. 232)—attesting to their importance within society.

Organizationally, the medieval university is quite recognizable to moderns. It was a legal corporation with the power to grant the bachelor’s, master’s, and doctor’s degrees; the master of arts was universally recognized as a teaching license. Other important features were curriculum, examinations, commencement, and faculties (Haskins, 1927, p. 369), as well as the endowed collegiate system within universities, originating at Paris (e.g., the Sorbonne), later to dominate student and faculty life at the Universities of Oxford and Cambridge. Most medieval universities were legally chartered by the Roman church, and many also received royal charters. These semi-autonomous institutions were subject to the authority of popes, monarchs, local bishops, dukes, or municipalities, depending upon the country and century. In northern Europe, teachers and students generally had clerical status because the university was part of the church. Legal protections might include exemption of university members from military service and property taxes, university control in determining its own curriculum, power of the university over trial and punishment of misbehaving students, and the right of the university to strike (Burrige, 1970, p. 50).

Teaching in the universities everywhere followed a similar pattern. Medieval Latin was the universal language of learning, and it was to be acquired by the student before entering the university. The printing press was not yet invented in Europe (China already had movable type); manuscripts were rare and still copied by scribes. Therefore, the master lectured on his subject by reading the textbook and explaining its contents. Each text included commentaries or glosses upon it. Glosses often had grown so extensive as to overshadow the original works, with explanatory notes, cross references, summaries, and objections to the authors' statements. As he read, the teacher might add a personal commentary. Lecturing was a slow process in order to allow the student to memorize or take notes on the main points. Another method of teaching, oral debate or formal disputation, was a more vigorous activity, where one student, or a group of students, opposed one another in intellectual argument. Debaters cited the major authorities, such as Aristotle, but might add their own arguments (Graves, 1920, pp. 90–92; see also Schwinges, 1992; Van Engen, 2000). In the northern European universities, faculties of arts and the higher disciplines were allowed considerable freedom, even when they challenged the church or state in their teaching and scholarship. "The right of a professor to follow an argument withersoever it may lead . . . is a claim at least as ancient as Plato" (Brubacher & Rudy, 1976, p. 308). This ongoing, controversial issue today is termed academic freedom.

In general, undergraduate students were taught to systematically organize and harmonize the established tradition of biblical truth through Scholastic method (Kagan, Ozment, & Turner, 1979, p. 269). Currently, undergraduate teaching in the liberal arts continues to stress ethical principles. This is especially true in Christian institutions, where character or moral education can take on mission status, such as at Boston College (Catholic) and Valparaiso University (Lutheran).

Directly stimulating the creation of the universities and bringing a fresh, Aristotelian worldview to medieval culture was the aforementioned 12th-century intellectual renaissance (see Haskins, 1927). It rivaled the future Italian Renaissance. A virtual flood of Medieval Latin translations of classical and Islamic literature flowed northward into the Christian West, mainly from Toledo in Moorish Spain (McNeill, 1963, pp. 549–550). Recovered were many of the philosophical and scientific works of Aristotle and Plato, the writings of Euclid and Ptolemy, the Greek works on medicine, Arab mathematical treatises (with Arabic figures), and the major Roman law texts (Kagan, Ozment, & Turner, 1979, p. 266). The new universities developed Scholastic philosophy by applying Aristotelian logic (philosophy) and dialectic (debate) to Christian

doctrine. Soon, the church formally adopted Scholasticism, because Christianity was the worldview that permeated medieval society and university life.

Scholasticism provided not only a state-of-the-art teaching method but also a rational method of inquiry or research into the whole range of knowledge, including the flood of new information from the Islamic world. Consequently, after the 12th century, logic came to dominate the traditional medieval curriculum known as the seven liberal arts. That curriculum consisted of the *trivium* (grammar, rhetoric, and logic) and the *quadrivium* (arithmetic, music, geometry, and astronomy) (Kagan, Ozment, & Turner, 1979, p. 269). In reality, university faculties of arts mainly taught logic—how to frame tight arguments—followed by grammar and rhetoric, through lectures and disputations (Broudy & Palmer, 1965, pp. 59–70; Simon, 1970, pp. 94, 97), as described above. Scholasticism also triumphed in the higher or graduate-level faculties of theology, medicine, and law, both civil (secular) and canon (church) (Kagan, Ozment, & Turner, 1979, p. 269); the Scholastic techniques of classification, analysis, and evidencing were thus applied across the disciplines. Furthermore, “interdisciplinary research,” as it is called today, was commonplace before modern specialization. For example, Henry of Hesse, a famed astronomer at the University of Vienna, was a theology professor (Kren, 1983, p. 15). Similarly, Roger Bacon, who taught theology at Paris, pioneered the science of optics, because the Creator produces light.

As Charles Homer Haskins (1957) points out, “the medieval university was the school of the modern spirit” (p. 25). Truly, with its Scholastic method, near monopoly of higher knowledge, advanced training role, new intellectual class, encouragement of upward social mobility, and political influence upon the church and secular governments, the institution ushered in modern civilization around 1500 (Scott, 1992, pp. 1–5). The University of Paris was the intellectual and theological center of Western Christendom. Here the moderate Scholastic St. Thomas Aquinas (c. 1225–1274) reconciled human *reason* and Christian *faith*, a profoundly “modern” development. Roger Bacon (1220–1292), who has been called the first “modern scientist,” taught at Oxford and Paris, but he was ultimately imprisoned for his experimentation. Indeed, the 13th-century Scholastics—first at Oxford, then at Paris and other Continental universities—established the foundations of modern empirical science (Heer, 1962, pp. 235, 245, 261, 294–296, 302).

In today’s universities, the basic teaching mission and many features of the medieval model from Europe remain intact. This pattern exists worldwide in the Americas, Asia, Africa, and Australia. Major organiza-

tional features are the power to confer degrees, curriculum, examinations, commencements, as well as colleges. Chickering and Jackson (1999, pp. 109–120) now call for revitalizing the “collegiate ideal” of traditional residential institutions: student development, active learning pedagogies, and integration of academic and experiential learning. Other developments, particularly in the U.S., are academic departments and a lay-appointed president, rather than a rector elected by the faculty.

Early Modern University: Dawn of Nationalization

Early modern Europe (1500–1800) saw the rise of the independent nation-state: a sovereign state with defined boundaries and composed of people sharing a feeling of common nationality. Indeed, the absolute monarchies of Western Europe consolidated their power with the decline of both papal political influence and feudalism. Further, modern civilization was characterized by global exploration, nationalism, and humanistic emphases on the individual, vernacular languages (replacing Medieval Latin, the language of learning), and the printing press.

Not surprisingly, the relative autonomy of the first universities was systematically eroded by the emerging nation-states of England, Spain, and France, as well as the Italian city-states. In German territories, universities were originally founded by secular rulers and would later help to unify Germany as a nation-state in 1871. According to Rashdall (1936), “universities throughout Europe in the course of the fifteenth century tended in the same direction—towards the nationalization of Paris as of all other universities.” Rashdall describes the result at the University of Paris: “Within those limits, the theological faculty [was] . . . henceforth completely subservient to the Crown. . . . The university itself, indeed, the great scholastic democracy of the Middle Ages could not live under the France of Henry IV or Louis XIV [the ‘Sun King’]” (p. 581).

After 1500, the mission of nationalization or service to the government of the nation-state embraced the traditional teaching mission (undergraduate and graduate). Faculty research and external service activities, too, were critically important.

Today, most of Europe’s and, hence, the world’s universities are national institutions that retain the early modern mission of *service to the state* whether that state is free or totalitarian (Scott, 1998, pp. 110–111, 127). Examples of the former type are common with democratic reforms currently sweeping the globe, but examples of the latter are also clear: universities of the Nazi and Soviet regimes. Twentieth-century totalitarian governments “of both the left and the right” used higher education

“to attempt a rapid change in the social structure of society, to increase the growth of industrial-technological proficiency, and to control scholarship for propagandistic purposes” (Domonkos, 1977, p. 2037).

Since universities were controlled by the new nation-states, principalities, or municipalities during this period, the training role for the expanding governing elite was greatly intensified (Rüegg, 1996, p. 8). Kings therefore emphasized the acquisition of advanced, secular knowledge and technical skills by students—future public servants—in order to build up efficient state bureaucracies (Hammerstein, 1996, pp. 114–116). Simultaneously, growing numbers of young aristocrats, especially the gentry in England, entered universities in preparation for high offices. Paul F. Grendler (2002) has described the importance of graduate teaching in jurisprudence: “In Italy, for example, it is likely that key advisors to princes and republics (counsellors and secretaries) and those who held elective and appointive offices were more often men with legal training” (p. 473).

Overall, faculty research and external service, especially in legal, diplomatic, parliamentary, and administrative matters, begun by the medieval universities, were instrumental in streamlining early modern governments. (Ironically, universities were themselves soon nationalized.) In statecraft, during the early 1500s Henry VIII consulted the Universities of Oxford, Paris, and Salamanca regarding his controversial divorce case (Scott, 1992, p. 111).

Historians no longer view the early modern university as a decaying institution, in contrast to the intellectually dynamic, cosmopolitan, and semi-autonomous medieval university. That poor image has largely been corrected through recent research synthesized in the volume *A History of the University in Europe: Universities in Early Modern Europe (1500–1800)*, edited by Ridder-Symoens (1996). The authors conclude that the early modern university was far more socially responsive than the medieval university because of humanist professors’ emphasis on ethical values for themselves and their students. Early modern universities continued to expand as a movement while making solid scientific and scholarly contributions. The newly consolidated state began to increase visitations, intervention, regulation (curriculum, subjects taught, and publications allowed), and appointment of chancellors. Despite state control and guidance, university faculties did not necessarily lose their authority over teaching appointments, nor did academic quality always suffer. Indeed, the early modern state never achieved exclusive jurisdiction over the universities, nor was the church ever completely ousted from the universities by the state. Universities retained a measure of independence because the state was only loosely centralized; additionally,

the traditional academic rights and privileges inherited from the Middle Ages could not easily be discarded. By abandoning some of their medieval characteristics, the institutions moved strongly in the direction of modern professionalization.

Readings (1996, pp. 45–46) sees the interplay of nation-state and the university project as centered on the training of monarchical subjects and, later on, republican citizens. This “sociopolitical mission” (p. 4) takes place within the university as “an ideological arm of the state” (p. 11). In other words, “The state protects the action of the University; the University safeguards the thought of the state” (p. 69). With current globalization, however, the future of higher education might not be linked to the nation-state.

The university network in Europe, now including Russia, continued its incredible expansion throughout early modern times. Between 1500 and 1800, around 190 universities existed at different times. Especially during the Reformation of the 16th century, many new universities were founded by various rulers in Protestant lands for theological and political reasons in the struggle against Catholicism. In response, Roman Catholic universities staunchly defended their faith.

Early modern civilization was characterized by global exploration and New World colonization. Throughout Latin America, from the 16th century until the post-independence era, the Spanish planted their state-controlled colonial universities in urban areas. The first foundation in the Western hemisphere was the University of St. Thomas Aquinas in Santo Domingo (founded in 1538). The Royal Council of the Indies supervised the new Spanish institutions of higher education. Universities prepared missionaries and jurists for the settlement of the New World (LaFaye, 1984, pp. 675–676, 683). Most prominent were the Universities of Mexico City and Lima (Roberts, Cruz, & Herbst, 1996, p. 263). In contrast, Portugal never allowed a regular university to be founded in its colony of Brazil. Only after forming an independent republic, in 1889, did Brazil achieve that goal with the founding of the University of Rio de Janeiro in 1920. During the 19th century, the newly independent nations of Latin America founded many universities—24 total, all secular and under direct state supervision (Domonkos, 1977, p. 2036). Maier & Weatherhead (1979) affirm that the postcolonial goals of Latin American higher education were “to forge a national identity and to create a national culture” (p. 7). True to its European heritage, the modern Latin American university lives on today as a national institution, working to achieve national purposes.⁴ Frequently, the university has clashed with authoritarian governments.

In North America, the U. S. and Canada have never nationalized their higher education institutions. Interestingly, President George Washington and many other founders did favor establishing a national university in Washington, DC. The university was discussed but not created (Madsen, 1966). Why not? American colonial colleges were local initiatives, and there was no tradition of support from England or religious ties to Rome (Roberts, Cruz, & Herbst, 1996, pp. 260–261).

Philosophically, humanism and humanistic disciplines gradually replaced medieval Scholasticism in universities on the Continent and in England (Domonkos, 1977, pp. 2029–2030). Originating as part of the Italian Renaissance, the movement began outside the universities and emphasized literary and cultural activities. From the 15th century onward, humanists exploited the printing press. They also favored modern vernacular languages, which began to displace Medieval Latin on a large scale (Kagan, Ozment, & Turner, 1979, p. 341). Humanists studied the works of the ancient, pagan Greeks and Romans with a new vigor. Overall, there was a much greater emphasis on the individual, free will, and human values. The humanists' goal for liberal education was well-rounded development of the student. Naturally, the first universities to firmly establish humanistic studies were in Italy, which did so by the middle of the 15th century. Students in these Italian universities studied literature, ancient languages, Neo-Platonism, modern vernacular languages, medical science, and related subjects. Beyond the Alps, the spreading humanistic movement had a more religious tone and helped to usher in the Protestant Reformation of the 16th century. In the northern European universities, humanistic studies were permanently instituted only after 1500.

Recently, Grendler (2002, pp. 242–246, 510–511) proves that the Italian Renaissance university, which flourished between 1475 and 1600, was the prototype for the German (Humboldtian) and contemporary universities with a formalized research mission. Star professors presented the results of their original research in lecture courses, and some adopted a problem-oriented approach to teaching. Thus began modern academic specialization and the intersection between the teaching and research missions.⁵

A tide of humanism would take many forms and become more secular, and it thrives yet today. It produced the Scientific Revolution of the 17th century as well as the Enlightenment of the 18th. John Henry Newman and Matthew Arnold sought to reconstruct the liberal arts in light of modern bodies of knowledge during the 19th century (Blackham, 1976, pp. 116–128; Radest, 1990, pp. 1–2). In his standard text on

the humanist worldview, Lamont (1990) states that, in the 20th century, “humanism already is the functioning philosophy of millions upon millions of human beings throughout the globe” (p. 29).

Consequently, in the Western university of today, humanist ontology still dominates the teaching, research, and service missions. This is particularly true regarding the modern liberal arts curriculum, because it is directly descended from Renaissance humanism. Liberal education continues to emphasize values and cultural appreciation over vocational skills training (Chaplin, 1977, p. 3209). It survived early-20th-century attacks by some U.S. educators who considered the liberal arts “impractical” for industrial pursuits. Currently, however, there is curricular debate between traditionalists and multicultural reformers.

In summary, the major universities around the globe are currently national—and secular—institutions in the European tradition. Even in the United States, since World War II, universities (public and private) have grown dependent on the federal government for research funding to advance the national purposes of military superiority and economic development (Scott, 1998, pp. 110–111, 127). Correspondingly, observes Schwartzman (1992, p. 973), most non-Western “developing” states, the former colonies of France, Spain, and Britain, have retained the tradition of direct governmental control and supervision over higher education. Universities, therefore, have been employed for nation building.

Formative U.S. College: Growth of Democratization

The United States of America was founded in 1776, with 13 original colonies that became states, as the first democratic nation-state in world history. Individual rights were protected under the Constitution. Led by Thomas Jefferson, the founders were deeply influenced by the European Enlightenment. What they desired was an educated and self-governing citizenry (Pangle & Pangle, 1993, pp. 4–5). Equally vital was keeping the fragile republic intact. Thus, writes Hellenbrand (1990), “many of Jefferson’s contemporaries fervently believed that only education and a general reformation of manners could ensure America’s political separation from Britain” (p. 11). Through education, the republican values of liberty and self-government were to be reinforced in young people. Jefferson’s generation therefore founded many colleges in addition to schools. A potent example is the South, where before the Revolutionary War, there was just the College of William and Mary; by 1800, no less than 10 colleges operated in the region. Furthermore, the founders were worried about American youth, as the future civic leaders, being drawn

to the great European (foreign) universities. Colonial colleges had been few, elitist, and poorly equipped (Pangle & Pangle, 1993, pp. 146–147).

Democratization, or service to the individual of the nation-state, was the inherent mission of American higher education throughout the 19th century. This mission was later to be embodied in the formal public service mission of the 20th and 21st centuries. Today, specific terms describing that same goal are “open access,” “equal educational opportunity,” or “diversity.”

At least 10 of the nation’s founders were also founders of academic institutions: George Washington of Virginia, Thomas Jefferson of Virginia, Benjamin Franklin of Pennsylvania, James Madison of Virginia, George Wythe of Virginia, Benjamin Rush of Pennsylvania, William S. Johnson of South Carolina, William R. Davie of North Carolina, Abraham Baldwin of Georgia, and Manasseh Cutler of Massachusetts. In fact, President Jefferson’s University of Virginia, founded in 1819 and opened in 1825, was the most influential of the early state “universities.” Jefferson (1961) planned a nondenominational place of higher learning: “We wish to establish in the upper & healthier country, & more centrally for the state an University on a plan so broad & liberal & *modern*, as to be worth patronizing with the public support” (p. 175).

Rev. Manasseh Cutler, an author of the Northwest Ordinance of 1787, successfully negotiated with Congress for the Ohio Company land purchase and the setting aside of two square miles for a public university. In this way, Ohio University in Athens (founded in 1804) became the first state university west of the Appalachian mountains. As stated above, President Washington along with other prominent founders favored the creation of a national university; however, a system of many state-supported institutions emerged instead (Johnson, 1987, pp. 129, 147; Roseboom & Weisenburger, 1996, pp. 47, 53). Indeed, the federal land grant in Ohio set a strong precedent. Thereafter, every new state entering the Union west of the Appalachians also received public land for the endowment of a university (Brubacher & Rudy, 1976, p. 154). By the time the Morrill Act of 1862 was passed, extending land grant (state) colleges and universities to the Pacific Ocean, 20 states already had state universities (Johnson, 1987, p. 127).

Through the 1800s, the teaching mission at the undergraduate level was the primary means of fulfilling the democratization goal for individuals. Yet, after the Civil War, American universities also offered research opportunities to the graduate student population connected to the formal research mission imported from Germany. Furthermore, the roots of the U.S. public service mission, notes Ward (2003, pp. 20–24), can be

traced prior to the Civil War, when Christian denominational colleges helped in developing frontier communities through traditional and vocational instruction. Democratization of the teaching mission created more diverse student enrollments.

Early republican colleges offered a liberal arts curriculum in the European tradition. A liberal education was believed to be well-rounded preparation for the individual student in a democracy (Readings's "sociopolitical mission" [p. 4]). Most alumni took up the established professions of the clergy, law, and medicine. Today, in the age of mass (democratic) higher education, the undergraduate civic or democratic education mission remains a traditional strand inside of the teaching mission. More radical calls for a critical citizenship education to resist global and commercial pressures upon academe would make the entire campus a *site* for keeping alive democratic and multicultural values through the teaching, research, and service missions (Giroux, 2001, pp. 1–11).

In the 19th century, however, there came a second emphasis: technical education in the agricultural and industrial sciences. Such training would prove useful for developing or—in the view of the original inhabitants—exploiting the vast continent. The pacesetters were Rensselaer Polytechnic Institute (founded in 1824), along with Harvard College's Lawrence Scientific School and Yale College's Sheffield Scientific School (both founded in 1847). The climax came with the Morrill Acts of 1862 and 1890, which provided land grants and federal funding and thus stimulated state legislatures to establish agricultural and mechanical (A & M) colleges and universities. Later influenced by the German research-oriented university, a small number of these colleges would develop into leading institutions (Brubacher & Rudy, 1976, pp. 61–64, 288). Today, these are often dubbed "public ivies." Examples are the University of California at Berkeley, Pennsylvania State University, and the Georgia Institute of Technology.

According to Arthur M. Schlesinger, Jr. (1946), the Jeffersonian and Jacksonian tradition of democracy "defined the basic meaning of American liberalism" (p. 505), even though President Jefferson was a slaveholder and President Jackson promoted the Indian Removal Act of 1830. Regarding the democratization of higher education, the Jeffersonian concept of a "natural aristocracy of talent" kept college enrollments relatively small until the mid-19th century. Thereafter and up to the current day, the Jacksonian emphasis on equality for the "common man" (individual) has led to ever-increasing student numbers but also to an apparent lowering of average academic quality (Brubacher & Rudy, 1976, p. 300).

Women and Blacks made impressive gains through the Morrill Acts of 1862 and 1890. The 1862 legislation resulted in equal admissions for women, especially in the Midwest and West, as the new state institutions almost immediately became coeducational. The second Morrill Act of 1890 went beyond land endowments by also furnishing annual federal funding, like the earlier Hatch Act of 1887.⁶ Both new and existing state colleges and universities received federal funds. This legislative activity encouraged the states to provide similar financial support, which continues today. The 1890 act also authorized public support for Black land grant colleges and universities. States that denied admission to their land grant institutions based on race were *required* to establish parallel institutions for their Black residents (Brubacher & Rudy, 1976, pp. 67, 159, 229). Representative of this type of institution are Tuskegee University, Florida A & M University, and Tennessee State University. Currently, a paradoxical situation exists, where certain groups are arguing in the courts that such historically Black institutions now perpetuate racial segregation.

Veysey (1965, pp. 62–66) documents the growing use of the term “democracy” in relation to higher education by academic reformers between 1869 and the Progressive Era of the early 20th century. He identifies six distinct meanings for democracy: (a) equal status among fields of study, whereby the new sciences were to be fully accepted, as at the founding of Cornell University in 1865; (b) equal treatment of students, such as not publicly printing the academic standing of classmates in relation to one another or abolishing letter grades completely; (c) equal access, through the elimination of tuition, lowering of admission standards, or acceptance of the poor, women, and ethnic students; (d) the university was touted as a place for young people to acquire valuable skills and training before struggling for success in the (nonacademic) American society; (e) the university was described as a communicator of knowledge to society in general, from agricultural skills to good citizenship indoctrination to artistic values; and (f) the university by the 1890s was viewed by reformers more radically as a servant to the will of the common people.

Historians Brubacher and Rudy (1976, pp. 59, 64, 399) identify “democracy” as the most unique feature of higher learning in the United States. This trait, growing out of the American political milieu, has distinguished the American institution from the European university tradition until quite recently. Throughout the 19th century, the formative American college multiplied in number, diversified in form, and transmitted knowledge to the general population. The most powerful forces of democratization were the early state university and land grant college

movements, in addition to the municipal college movement, technical institutes, normal schools, women's colleges, church-related liberal arts colleges, Black institutions, Native American schools, and many other types of higher education institutions in the pluralistic society.

The last quarter of the 19th century saw the Chautauqua movement further democratize higher learning through its innovative adult education programs, which included women, working adults, and senior citizens. Chautauqua cofounder John H. Vincent probably articulated the first modern theory of adult education in the U.S., emphasizing lifelong learning. Chautauqua University (1883–1892) pioneered summer sessions, correspondence courses, extension services, and the university press. In turn, Chautauqua influenced William Rainey Harper's University of Chicago master plan (1892) and the "Wisconsin Idea" (1904) (see Scott, 1999).

In analyzing total student enrollment estimates for higher education in England, Germany, Russia, and the United States between 1860 and 1930, Jarausch (1983, pp. 13–16) found that student numbers expanded dramatically in all four industrializing nations. Yet the U.S. far exceeded the other nations for both university/college and non-university higher education enrollments. What reasons explain the American lead in democratization? "With the most open and varied structure, the United States was clearly ahead of all other developed nations with 11.25% of a 5-year age cohort going to college, graduate or professional school" (Jarausch, 1983, p. 14). Enrollments also were higher because American students were younger and subject to less rigorous academic standards. Regarding non-university enrollments, in the U.S. and Europe there was an "explosion of higher technical education" and an "expansion of teacher training" (Jarausch, 1983, p. 14) and normal schools. Today, confirms Eggins (1999), the democratization mission continues with "practices across Europe intended to widen participation in higher education" (p 565).

During this period, at least one important critic, Flexner (1930/1994), urged opposition to the democratization and public service missions at the university level: To prevent the dilution of pure research, mass undergraduate teaching belongs outside of the university, along with remedial programs. Currently, some U.S. states are actually *redirecting* their remedial education mission away from 4-year institutions into community colleges.

Let us realize that however open admissions are today, the saga of the democratization of U.S. colleges and universities is smeared. In the beginning, the Constitution protected the rights of white male citizens exclusively. Only after decades of grassroots activity by underrepresented groups—namely, the civil rights movement of the 1950s and 1960s—were full legal privileges won. Important victories of this movement were equal housing, employment, and educational opportunities, includ-

ing higher learning. White middle-class women made impressive gains during the 20th century. According to Solomon (1985, p. 63), by 1950, females already comprised 40.2% of the total postsecondary enrollment.

Throughout the 20th century, the democratization of American higher education was much accelerated. Underrepresented and lower-income groups were increasingly enrolled through such efforts as the adult education and junior (community) college movements, the G.I. Bill, President Johnson's Great Society programs, and most recently, President Clinton's Hope scholarship or tax credit for the first two years of college. U.S. success in this area—over 20% of *all* adults 25 years of age and older currently possess a baccalaureate or higher degree ("The Nation," 2002, p. 14)—is highest in the world.

Now, after many decades of successful agricultural extension services and adult and continuing education, colleges and universities are now delivering coursework via "distance learning" (a European term) technologies: Internet, CD ROM, interactive television, and telecommunity offerings. All of these formats democratize higher education. Yet, Kirk (2000, p. 18) points out that in the "knowledge society" a new debate has begun over a U.S. meritocracy, based heavily upon quantitative measurements, such as the SAT.

Since World War II but especially since the 1970s, European and other nations have been closing the gap with America in graduation rates, by changing from elite to mass, and even to universal, higher education (Domonkos, 1977, p. 2036; Dill & Sporn, 1995, pp. 2–3). It is most difficult, though, to measure quantitatively the influence of U.S. ideas and institutions. For example, how much of Europe's democratization mission is owed to the American model and how much to local social demand? Nevertheless, the size, power, and economic success of the United States guarantees that its colleges and universities are highly influential. Important aspects of the American university model have been widely exported. Furthermore, that quintessential democratic institution, the American state university, is reproduced, in whole or part, in such regions as Canada, Africa—Nigeria is a case-in-point—and Micronesia (Jones, 1992, pp. 960, 964–965). Today, privatization of higher education is a major worldwide trend to widen participation, and frequently U.S. institutions are models.

German (Humboldtian) University: Dominance of Research

Most influential in shaping the research mission, worldwide, was the 19th and early 20th century German model, especially Prussia's new University of Berlin, founded in 1809–1810 (Domonkos, 1977,

p. 2034). Prussia had emerged as the most dominant of the many small German territories during the 1700s. Its state-run universities professionalized graduate-level teaching in administrative science, law, and medicine. By building a strong military as well as a university-trained civil service (the mission of nationalization), Prussia would lead the unification of Germany as a nation-state during the later 1800s.

There were two motivations for the Berlin foundation. First, Prussian intellectuals and aristocrats of the Enlightenment put forth the idea of a vibrant, new university in reaction to the perceived academic stagnation at existing German universities. The other reason was Napoleon's defeat of the Prussian army and his subsequent closure of the Universities of Jena and Halle (Fallon, 1980, pp. 5–9). After the nation's loss to France, Germany's already flourishing letters became a major source of national pride. Indeed, the government supported the University of Berlin because it represented this nationalistic philosophical, historical, and literary culture (Ben-David, 1971, pp. 116–117).

Wilhelm von Humboldt led the creation of the neo-humanistic University of Berlin (Fallon, 1980, pp. 10–11, 14, 19, 28). Serving for a mere 16 months as the Prussian education minister from 1809 to 1810, he succeeded in enacting deep and lasting reforms for higher and secondary education. While setting up the new university, Humboldt established one basic doctrine: “to appoint the best intellects available, and to give them the freedom to carry on their research wherever it leads” (Fallon, 1980, p. 19). Three principles that flowed out of Humboldt's doctrine became paramount at Berlin and later at most of the German-speaking universities. Ultimately, these principles also became famous around the globe. First, the principle of the unity of the research and teaching missions confirmed the importance of original scholarship. Second, the principle of academic freedom developed. Consisting of *Lernfreiheit* (the concept of “freedom to learn”), which allowed students to pursue any course of study, and *Lehrfreiheit* (the concept of “freedom to teach”), which allowed professors free inquiry regarding their lines of research and teaching, this principle was protected by the state. Third, the principle of the centrality of the arts and sciences, comprising “astronomy, biology, botany, chemistry, classics, geology, history, mathematics, philology, philosophy, physics, and political science,” raised the academic status of the traditional (humanistic) liberal arts faculty to the same level as the theology, law, and medicine faculties—thereby elevating pure research (Fallon, 1980, pp. 28–30, 34).

Each full professor at the University of Berlin directed an “institute” or “seminar” (curricular specialization) built around himself and including a pyramid of junior professors, lecturers, and students. Full profes-

sors also negotiated directly with the appropriate government ministries, not the university, for the funding of their institutes (Fallon, 1980, pp. 32–45). Highlighting the synergy in today's models of collaborative research, Smith (2001) remarks that “the creativity essential to new knowledge production is frequently the outcome of this collectivity; the sum is greater than the individual parts” (p. 135).

Mission interplay between research and teaching developed inside of Germany's state-run universities. As mentioned above, the mission of nationalization (service to the government of the nation-state) was important in the larger German society. There was an intimate relationship between the nation-state and the university, mainly due to the latter's monopoly over the training of the former's civil servants for a vast array of government bureaucracies (see McClelland, 1980). Unfortunately, there is a danger with academic freedom maintained by a nonrepresentative government. Non-converted Jews were never appointed to the professorial staffs of any of the universities before 1918 (Fallon, 1980, pp. 48–50). Tragically, starting in 1933, the totalitarian and racist Nazi regime forced the dismissal of all civil servants of Jewish ancestry, including university professors (Hartshorne, 1937, pp. 175–177).

The 19th-century German system of more than 20 universities engaged itself in “all fields of academic teaching and research” (Ben-David, 1977, p. 3585). Toward the close of the century, the empire commissioned the publication of *The German Universities, Their Character and Historical Development* (1895), by Friedrich Paulsen. Addressing the research mission, he wrote, “the German university professor no longer regards it as his business to hand down a definite sum of generally accepted truth, but rather to impart the results of his own researches” (p. 79). Paulsen also outlined the main advances in German scholarship from about 1800. Research was centered on the liberal arts. In the beginning, philosophy was predominant; Hegel, for instance, taught at the University of Jena. The discipline of philology was most strongly represented by F. A. Wolf at Berlin. Philological research then developed new branches: Germanic studies was established by the brothers Grimm, who eventually taught at Berlin; romance philology was founded at the University of Bonn; and, both comparative philology and Egyptology were developed at Berlin. History, as a discipline, was a most powerful influence not only on scholarship but also on the political struggle to unify the German nation; Leopold Ranke pioneered historical methods at the University of Berlin. The discipline of chemistry was advanced through Justis von Liebig's laboratory at the University of Giessen. Similarly, the discipline of physiology was developed at Berlin. Following these avant-garde efforts, the second half of the

century was marked by lateral growth or “constantly increasing specialization and subdivision of the fields of research” (Paulsen, 1895, p. 72).⁷

Since the German research ideal at the start of the 1800s emphasized the humanities, which are nonexperimental, the natural sciences took more time to develop. Unfortunately, in the end, problems arose with the personal institutes of professors. The rigid hierarchies of the institutes inhibited scientific cooperation; also, certain institutes (such as biochemistry, statistics, bacteriology, physical chemistry, and most of the new social sciences) had weak ties to the undergraduate curriculum and thus suffered institutional discrimination; finally, research fields like physics often called for large and expensive facilities. Scientific research essentially outgrew the personal institutes and became *big science* by the end of the 19th century (Ben-David, 1977, pp. 3586–3588). Even today, the “cost of research has spiralled” in the United Kingdom, threatening to upset the balance between the teaching and research missions nationwide as more selective funding favors the top universities (Smith, 2001, pp. 138–140).

Writing in 1930, Abraham Flexner (1930/1994) noted post-World War I difficulties: “Personal, political, and racial considerations thus mar the German scheme” (p. 323). He deplored the trend toward democratization and public service—particularly applied research for industry—by the German universities. Swelling enrollments lower standards regarding the teaching mission, and direct service to society detracts from the research mission.

By 1900, the German university model and research mission had influenced, to varying degrees, higher education throughout the world. These concepts were carried abroad during the 19th century by foreign students, visitors, and professors who were observing or working in the institutes and laboratories. German scholarship was internationally recognized and admired, especially in the fields of history, philology, and chemistry (Jones, 1992, pp. 963–964). Nakayama (1984, p. 137) affirms that Germany was the global leader in scientific and laboratory research. England, for example, adopted some elements of the German system, including organized laboratory research. Japan’s borrowing was selective, too, beginning with the founding of Tokyo University, in 1877, as a national institution. Japan viewed higher education as essential in the nation-building process (in the face of Western military and economic might). There was an intimate relationship between government service and the university, as in Germany (Jones, 1992, pp. 961–964). During the 1880s, graduate-level instruction and the research mission arose at Tokyo (Bartholomew, 1989, pp. 91–98). In America, the emerging world

power, institutions such as Johns Hopkins adopted both the research ideal and graduate education, but not the German professor's rank as a national civil servant. The research mission dominated U.S. universities by 1910, Veysey notes (1965, p. 177). With the triumph of the research ideal in America there began a decline of the teaching mission during the 20th century (much publicized in recent decades).

In summary, the German university left many substantial legacies: (a) regular integration of the teaching and research missions (Ben-David, 1977, p. 3585); (b) academic freedom for professors and students regarding teaching, learning, and research; (c) seminar method; (d) specialist's lecture; (e) laboratory instruction; (f) monographic study (Brubacher & Rudy, 1976, pp. 174–175); (g) immensely expanded curriculum and fields of study (Domonkos, 1977, p. 2034); and, (h) applied research.

The current “knowledge society” presents complex research mission issues. Perennial problems are balancing the overall teaching and research missions, as well as basic versus applied research, which is linked to the public service mission. Newer issues include intellectual property rights; technology transfer; spin-off companies; competition (and coordination) within and among nation-states regarding university, corporate, and government research; and, fetal tissue. Further, Smith (2001) asserts that new collaborative arrangements in the natural and social sciences raise policy challenges, including institutional autonomy.

Ultimately, research is a proven, dynamic mate to the teaching mission of the university, simultaneously meshing with the nationalization or public service missions. The research mission is valuable for the improvement of societies around the globe—creating a skilled workforce, enabling economic growth, improving health care, and encouraging knowledge production.

Modern American University: Formalization of Public Service

The public service mission of the modern university is a natural outgrowth of the democratization initiated by the formative American college during the 19th century. Above all, Congress had passed the Morrill Acts of 1862 and 1890 to expand teaching and service activities in agricultural science and the mechanical arts through land grant (state) colleges and universities. This notion of service to society is fundamentally American. Broadly defined, the public service mission of the university is that of making available to the citizenry useful knowledge and academic research (Brubacher & Rudy, 1976, pp. 62–64, 317, 404). The term “public service” is often confused with “internal service” (faculty

advising of student clubs, serving on university committees, etc.) and “professional service” (attending professional meetings, publishing in professional journals, etc.). Occasionally, definitions of public service will embrace the undergraduate civic or democratic education mission and multicultural education mission.

In *The Emergence of the American University* (1965), Laurence Veysey documents the academic conflicts surrounding the missions of a new and modern type of graduate institution around 1900. Unique to the world, it combines the ideals of teaching, research, and public service.⁸ He concludes that service was a permanent borrowing of Progressive Era good will, as well as a justification for the German-style, research mission in the exceedingly practical culture of the United States (p. 444). Most Americans believed that building great research universities would advance basic knowledge and provide the technical expertise required by a modern industrial society (Brubacher & Rudy, 1976, pp. 177).

Public service, or service to the public of the nation-state, is a mission that interlocks with the teaching and research missions. Consequently, universities as corporations, but mainly individual faculty and staff members and now students, transmit higher knowledge to the public through external service activities: applied research, off-campus courses, a wide array of consulting and analysis for rural and urban communities, and service learning.⁹

Early 20th century critics, like the economist Thorstein Veblen, argued that the public service mission was, in reality, submission to business power or the industrial status quo. Faculty were discontent over business leaders involving themselves in higher education as well as over universities patterning themselves after bureaucratic structures (the business model of education). Marxist theorists of today conclude, as Veblen did, that public service is an expectation put upon universities by their capitalist masters (Barrow, 1990, pp. 7, 10). It is a classic problem in the history of academe: what is the correct balance between freedom (autonomy) and the forces of control—whether they are business, government, or university administration (see Perkin, 1984). This problem, notes Hawkins (1970, p. xi), resurfaced during the 1960s as students and some professors first rebelled against the impersonal, bureaucratic structure of American (and other nations’) universities and then against the larger “Establishment” and its Vietnam conflict. Today’s criticisms revolve around global and commercial pressures upon the Western university’s teaching and research missions, which threaten institutional autonomy (Axelrod, 2002, pp. 3–7; Giroux, 2001, pp. 3–5).

Public service, according to Veysey (1965, pp. 15, 60–65), was advocated by academic reformers from about 1865 up to the Progressive Era of the early 20th century—when the middle class desired to reach out and help less advantaged members of the new industrial society. Important support was enlisted from both administrative leaders and faculty members across the land. Eastern private institutions championed the service idea nearly as much as did the Midwestern and Western state universities. Presidents David Starr Jordan of Stanford, Charles W. Eliot of Harvard, Andrew S. Draper of Illinois, Charles Kendall Adams of Wisconsin (prior to the “Wisconsin Idea”), and others spoke of college instruction and useful knowledge as part of “real life” or a “democracy,” or in terms of “practicality,” “usefulness,” or “service.” Presidents of state universities moved toward the goal of public service because of relations with their respective state legislatures and outside pressure groups. These groups included agricultural societies (e.g., the Grange), political factions, and organized religions.

Faculties in the new applied sciences, emerging social sciences, and even an important minority in the humanities believed strongly in the social utility of their disciplines. Professors in the social sciences were often committed to public service.¹⁰ To this end, schools of political science were established at Columbia, Michigan, and Wisconsin during the 1880s and 1890s. At the same time, within departments of economics and sociology, there were devotees of social utility. Psychology, which was then a part of philosophy, also developed a faction devoted to utility (pragmatism). Social scientists served their society in the capacity of experts, which also involved research. By 1900, the “useful” university was establishing such untraditional fields of study as business administration, physical education, sanitary science, and engineering (Veysey, 1965, pp. 15, 59, 61, 72, 76, 113, 124).

Today’s “urban (or metropolitan) university mission” of both public and private institutions, which focuses teaching, research, and public service on urban needs, is yet another strand within the public service mission. It can be seen as an outgrowth of the land-grant notion of service to rural communities (Ward, 2003, p. 31). During the Progressive Era, U.S. cities were growing, and academics contributed many solutions to urban problems.¹¹

The landmark “Wisconsin Idea” (1904) realized most completely the public service ideal among state universities during the early 20th century. This was due to the commitment of the University of Wisconsin to serve the entire population of that rural state (Brubacher & Rudy, 1976, pp. 164–165). Governor Robert La Follette, a Progressive, advanced the “Wisconsin Idea,” which rested on a pair of components: the entry of

university faculty expertise into state government planning, and the establishment of university extension services throughout the state (Veysey, 1965, p. 108; see McCarthy, 1912, chap. 5). University President Charles R. Van Hise agreed with and worked toward La Follette's goals. Earlier in his career, "Van Hise had served as a visiting lecturer at Chicago and was deeply impressed with Harper's Chautauquan ideas of bringing a university to all the people by extending its influence far beyond its own campus" (Brubacher & Rudy, 1976, p. 165). In reality, considerable groundwork for the "Wisconsin Idea" was laid during the 1890s (Veysey, 1965, p. 104). In 1892, the University of Wisconsin recruited the Chautauquan Richard T. Ely, a famous Johns Hopkins economist, to organize statewide extension courses (Kett, 1994, p. 186). Concurrently, Ely was appointed as founding director of the School of Economics, Political Science, and History, which prepared students for civil service positions and provided faculty advisory services to the state government (Lucas, 1994, p. 176).

At the University of Chicago, a private institution, the founding President William Rainey Harper promoted the missions of research (above all), graduate and undergraduate teaching, and public service. Financed by Rockefeller, Harper's famous master plan (1892) incorporated radical Chautauquan innovations—"Summer Quarter," extension services, correspondence courses, and university press—to expand access and to better serve the public (Goodspeed, 1916, pp. 135, 136–137, 143; Portman, 1972, p. 20; Scott, 1999, pp. 404–409). In fact, Brubacher and Rudy (1976, p. 406) identify Chicago as an early form of democratic "multiversity."

Drawing national and international attention, the "Wisconsin Idea" influenced many other state universities to elevate public service as a core mission equal to teaching and research (Brubacher & Rudy, 1976, pp. 166–168; Lucas, 1994, pp. 174–175, 292). A prime example is the University of Minnesota, under President George E. Vincent (1911–1916). George was the son of Chautauqua cofounder, John H. Vincent, and he earlier served as an administrator at Chicago with Harper (Morrison, 1974, p. 83). Gray (1951, pp. 148, 173–178, 210–214) affirms that Vincent built a first-class graduate school and established statewide extension services. Nationally, under the Smith-Lever Act of 1914, cooperative (university) agricultural extension through county agents was established.

Only in the United States did universities conduct all types of organized laboratory research. When organized research was introduced in America during the 1870s and 1880s, undergraduate and graduate instruction was separated. Because graduate schools of arts and sciences

trained researchers, all forms of research, even applied, were conducted (Ben-David, 1977, pp. 3587–3588). These graduate schools produced professional researchers who were efficient and well adapted to industrialized science (Nakayama, 1984, pp. 173, 176-178).

After 1900, universities found themselves increasingly restricted by the rising costs of doing specialized research, especially *big science*. Earlier, large undergraduate enrollments, state support, alumni gifts, and philanthropic endowments were enough to finance the expensive research and graduate education project. It was between the wars when regular sources of funding were designated for academic research. These were private sources, coming mainly from the huge philanthropic foundations of industrialists like Carnegie, Rockefeller, and others. For example, a long-term grant from the David Guggenheim Fund established a school of aeronautics for the California Institute of Technology. Smaller amounts of funds came from private industry, like chemical, food, and pharmaceutical companies. A case-in-point is the Massachusetts Institute of Technology, which established a world-class department of electrical engineering first through annual funding from General Electric and later from AT & T. Ultimately, the result of large-scale financing during the 1920s and 1930s was the intended one of the foundations: to raise the stature of universities and advance American science. Through the twenties and thirties, steadily rising enrollments and state funding also contributed to the construction of science and engineering facilities on campuses. Agricultural research was supported by state and federal governments (Bowie, 1994, pp. 8–9; National Science Foundation, 1982, p. 2–4); new discoveries were transmitted to the public through the flourishing system of university agricultural extension (Brubacher & Rudy, 1976, p. 405).

Interwar critic Flexner (1930/1994), who advocated pure research, decried the American university's "reckless effort to expand, and thus to cater to various [social] demands" (p. 179) and to be a "'service' station" (p. 45). Although James Duderstadt (2000, p. 134), a recent University of Michigan president, does not reject today's public service mission, he, too, questions the pursuit of service activities that are isolated from the core teaching and research missions—so-called "mission creep."

Public service via making available to society academic research was a strong tendency of the American graduate school, more so than for its German counterpart. Before World War II, the universities' service activities were more indirect than direct. Since that war, however, universities have become more directly involved in the work of government and industry (Brubacher & Rudy, 1976, p. 305).

Since World War II, there is a revolutionary shift in funding, as the federal government becomes the dominant patron of the major research universities (public and private). The university also becomes larger, more complex, and expands in number. From the onset of the war, American universities were called upon by the federal government to perform research for the war cause as part of the public service mission. Academic scientists contributed such military inventions as the atomic bomb, radar, and napalm, in the winning effort. War's end in 1945 meant defeat for Germany and Japan, but, unfortunately, signaled the start of the Cold War (1945–1991) between the U.S. and the U.S.S.R., the world's two superpowers. Universities had to conduct federal government-supported research on a permanent basis for the nation's defense, health, energy development, space program, and economic growth. Most of this massive federal support was for the physical, life, and engineering sciences—basic and applied research missions. Private foundations continued to fund academic research in the social sciences (Geiger, 1993, pp. 332–337; Bok, 1990, pp. 2–3).

Individual state support for the public service mission of their universities is massive. The 50 states “provide some direct support for university research programs generally related to the states’ economies, human services, and natural resources” (National Science Foundation, 1982, p. 30).

Beginning in the 1970s, novel kinds of university partnerships emerged, most notably the Silicon Valley computer industry and the Research Triangle complex. Such arrangements were powerful alternatives to government funding of the research mission.

Thereafter, during the 1980s and 1990s university, corporate, and political leaders worked together “to shift research away from basic and military fields to civilian technoscience research . . . [to serve] postindustrial needs” (Slaughter, 1998, p. 62) in a global economy. Yet, critics now warn that while this is a legitimate part of the public service mission, commercial pressures threaten traditional missions and institutional autonomy.

Indeed, some analysts fear that the Western university is no longer a social institution but an industry, subservient to blind market forces like any other business (Gumpert, 2000). In his *The University in a Corporate Culture* (2003), Eric Gould critiques the public service mission this way: “We have taken a more entrepreneurial than theoretical route to self-definition. . . . [W]e speak rather too easily of service to society without including a strong rationale for what we mean by service” (p. ix).

Toward the 21st century, leaders in academia call for a *strengthening* of the public service mission (Bringle & Hatcher, 2000, p. 273). Former Harvard President Derek Bok (1990, pp. 2–11) reaffirms the importance

of the duty of service but questions if the academy is really doing enough to solve America's severe social problems or to promote civic responsibility among students. C. Peter Magrath (1999, pp. 3–4), president of the National Association of State Universities and Land-Grant Colleges, cites the viability of the 19th-century land grant model. Originally serving agricultural communities, it now applies to the state and region and even extends to the nation and the world. Magrath proposes that the 21st-century university adopt one general mission: service to the public, supported by teaching, learning, and new research discoveries. In a similar vein, Ernest L. Boyer (1990, pp. 16, 21–23, 75–80) of the Carnegie Foundation for the Advancement of Teaching unveils a new vision of scholarship that more flexibly defines the teaching, research, and public service missions. Most important for the renewal of society is the scholarship of service (application).¹²

Supporting this vision indirectly, the influential sociologists Talcott Parsons and Gerald M. Platt (1973) contribute a theory: “The modern university, especially in its American version . . . has become the lead component of an extensive process of change permeating modern society at many levels” (p. 3). The current trend in higher education is toward “engagement,” which “unlike service, connotes reciprocal relationships” with communities (Ward, 2003, p. 50).

How does the U.S. public service mission contrast around the globe with universities' mission of nationalization (service to the government of the nation-state), discussed earlier in this essay? A true convergence now appears to be taking place worldwide. On the one hand, service to the public in America is broad enough to include local, state, *and* national stakeholders. After all, since World War II, the U.S. government has become the major patron of research universities. Yet the representative democracy, with its system of checks and balances, ensures that national interests do not overbear. On the other hand, worldwide, many national universities are now discovering that public service and outreach activities can also improve society at local and regional levels. Dramatically illustrating this point, around the world there are several government-funded “bilingual universities” with missions linked to serving regional needs (Purser, 2000, pp. 451–459).

As a model to the world, the United States's colossal, multifunction university or “multiversity” has been highly successful. The multiversity generally pursues the threefold mission of teaching, research, and public service. Post-World War II governments have increasingly moved toward industrialization and democracy, following the Western pattern. Accordingly, many nations have established their own multiversities (Domonkos, 1977, pp. 2036–2037). In fact, Polster (2000, p. 37) states

that all Canadian, most OECD, and many developing nations' universities now produce and transmit a wide range of knowledge to the public.

Postmodern University: Internationalization as a Vital Mission

North America, Europe, and Japan, along with some Pacific Rim nations, now appear to stand on the brink of the postindustrial age. Therefore, what are the 21st-century prospects for the mission of the traditional university?

According to Bell (1973, p. 212), Drucker (1993, p. 8), Kerr (1995, p. 6), and others, knowledge—not capital, land, or labor—is the basic resource of postcapitalist society. The “information age” and “knowledge society” are terms used to describe this emerging civilization. Consequently, the university is the pivotal institution in the rapidly globalizing, postmodern environment because it produces (research mission) and transmits (teaching and public service missions) the bulk of society's new information (Bell, 1973, pp. 245–246; Kerr, 1995, pp. 66, 86). Nevertheless, a hazardous undertow is the aforementioned commercialization of knowledge, influencing the teaching, research, and public service missions. International (i.e., WTO-GATS) and national regulation of intellectual property in technoscience promote the privatization of information. This global, commercial pressure could threaten the survival of the university, diverting funding and slowing basic research, which damages teaching and the ability to provide “universalistic” public service and thus further undermines public support (Polster, 2000, pp. 19–22, 25, 28, 39n).

As an emerging mission of the university, internationalization, or service to the body of nation-states, involves the multiple missions of teaching, research, and public service or nationalization. Frequently, internationalist and nationalist goals may conflict due to economic, political, or cultural differences. Despite the complexities, an apparent convergence of higher education policies is now afoot worldwide.

Historically, the university has stood as a key international organization, from the Middle Ages through today. Illustrating this point, the 19th-century German research universities, as well as 20th-century Britain's Oxford and Cambridge, once imperial universities, drew legions of students from abroad. Similarly, when the American superpower emerged, it attracted international student populations in the millions. Moreover, Sadlak (1998, p. 100) points out that higher education has already laid important foundations for globalization, knowledge-based human activities, and democratic political systems.

The university and knowledge production are increasingly international during the postmodern age (Altbach, 1998, pp. xviii–xx). Learned

institutions, says Altbach (1991), are headquarters “to most basic sciences but also to the increasingly complex system of journals, books, and databases which communicate knowledge worldwide” (p. 293). Related developments that Peter Scott marks in *The Globalization of Higher Education* (1998, pp. 120–121) are a new superleague of research universities in the world and the controversial philosophies of postmodernism and poststructuralism that stress not absolute but rather relative truths and pluralism. Kerr (1994, pp. 12–16, 21, 24) distinguishes four main aspects of internationalization: the flow of new information, faculty members, students, and curricular content. This process is stimulated by an apparent convergence of higher education structures and policies worldwide. Despite the profound economic, scientific, and academic advantages of internationalization or regionalization, there may be costs involved. Most damaging can be the loss of distinctive cultural heritages in the pursuit of universalism.

Organizations and treaties that actively promote the internationalization mission of universities among their member states are the EU, ASEAN, NAFTA, and APEC (Sadlak, 1998, p. 105). For instance, the EU is boldly creating the European Research Area, “connected internationally, often even beyond the EU-15 research communities” (p. 395), with the aim of enabling the European Union “‘by 2010, to become the world’s most competitive and dynamic knowledge economy’” (qtd. in Pohoryles, 2002, p. 389). As a pioneering global network, Universitas 21 was formed in Australia in 1997 to help its members to become “international” universities and to accredit them (Sadlak, 1998, p. 105). Distance education technologies are critical to the success of this new venture.

Postmodernists argue that a “postinstitutional” society is inevitable, as “thick” medieval institutions such as the university, are replaced by “thin” modern or postmodern structures that resemble flexible, global networks (Zijderveld, 2000, pp. 20, 36). If this argument is true, the traditional bricks-and-mortar university will dramatically transform its structure, and it will formulate a new mission: internationalization.

Given the reality that the knowledge society is global in its economics, transportation, communication, and problems (social, political, and environmental), educational theory will likewise have to follow suit and become universal. Ideally, the educated person will appreciate diverse cultures and traditions, but within a Westernized world—another difficult reality—in preparation for global citizenship (Drucker, 1993, pp. 141–143, 212–215). Still, the Canadian liberal arts advocate Paul Axelrod asks, “will their schooling at all levels simply mirror and reinforce the bottom-line demands of the global economy?” (2002, p. 7). Demanding reform, Henry Giroux (2001) envisions the university as

part of a grassroots movement (ironically, across national borders) against the “dangerous threats that globalization currently poses to social, economic, political, and cultural democracy” (p. 6).

Around the world, “a growing number of HE [higher education] institutions articulate in their mission a growing commitment to internationalization . . . [which] takes a multitude of forms” (Sadlak, 1998, p. 104). Right now, here are examples of well-known American institutions that espouse internationalism in their published mission statements: George Washington University (international understanding and exchange), University of Michigan (service to the world), Pennsylvania State University (world campus), and Boston College (global citizenship). Worldwide, there is a new emphasis on international or multicultural curricula—a global education mission—and on increasing foreign student populations, international exchange of students and faculty members, and research collaborations between institutions in different nations (Scott, 1998, pp. 108–109, 116–122).

Ultimately, postindustrialism accelerates globalization and economic interdependency. Therefore, these dominant trends, so deeply intertwined with higher education, may determine that the next vital mission of the university to emerge will be internationalization. In future decades, academic systems, out of pure necessity, will likely internationalize their triad mission of teaching, research, and public service. For Bill Readings (1996), the erosion of the nation-state by transnational capital is forcing a sea change in the academy’s very reason for existing. The university is now replacing the modern ideal of propagating national “culture” (sociopolitical mission) with a model of managerial “excellence” (corporate mission)—thus needing to compete in the global marketplace. It is becoming a transnational corporation itself, serving global consumers rather than national subjects. Amidst the ruins of modernity, Readings imagines that this emerging, nonideological university will open up unprecedented possibilities for freedom of communication and ethical thought. The postmodern university hopefully will not abandon its traditional social responsibilities (Gould, 2003, p. 9; Readings, 1996, pp. 192–193). Internationalization (service to the body of nation-states) is potentially the new social mission that arrests the transformation of higher education into just another knowledge industry.

Now, with the development of the postmodern university underway, it is most useful to examine how and why multiple, macrolevel missions have evolved over the past 850 years. This analysis shows that the medieval European university, emphasizing the *teaching* mission, arose under pre-nation-state conditions. Next, the early modern university of Europe and Latin America adopted the *nationalization* mission, or

service to the government of the nation-state. In contrast, the formative U.S. college advanced the *democratization* mission, or service to the individual of the nation-state. Simultaneously, the German (or Humboldtian) university, still under pre-nation-state conditions, promoted the *research* mission. Throughout the 20th century, the modern American university elevated the *public service* mission, or service to the public of the nation-state. Today, rapid globalization and postmodern society point toward a future *internationalization* mission for the university as a service to the body of worldwide nation-states.

To be sure, there is plenty of room left for debate and discussion regarding the current issue of institutional mission. What this historical interpretation offers is a new perspective on the dynamics of university mission in the West and the rest of the globe. Key concepts are the transformational nature of mission, the multiplicity of missions, and service as a major theme running through all missions of the university across epochs. Observers are frequently struck by the resilience and adaptability of such an institution born in the Middle Ages. Holding fast to these phenomena will assist parties who seek to reinvent or revitalize the university to meet the needs of our time. This complex social institution has a valuable, historical mission. Accordingly, it cannot be ignored by policy analysts, administrators, or faculty members at any level.

Notes

¹Graham Peeke (1994, pp. 1–2, 9) asserts further that “mission establishment,” especially in Britain, provides a strategic perspective for both the marketing and management of the whole higher education sector.

²Philosophically influential, too, are such writers as Sir Walter Mobley, Thorstein Veblen, Robert Maynard Hutchins, Karl Jaspers, and Harold Taylor (Allen, 1988, p. 15; Brubacher, 1982, pp. 7–8).

³Kerr coined the term “multiversity” in his work on the late 20th century American university, *The Uses of the University* (1963).

⁴While national universities are still dominant in Latin America, there has been substantial growth in the private, nonprivate sector of higher education since the mid 20th century.

⁵Here are some names of new Renaissance professorships: anatomy, medical botany, Scripture, criminal law, and mathematics (Grendler, 2002, pp. 198, 415, 472).

⁶Research by Roger L. Williams (1991, pp. 3, 4, 89), shows that the 1887 Hatch Act actually provided the first annual federal appropriations for agriculture and some general academic programs of U.S. colleges.

⁷Paralleling the natural sciences was the rise of the social sciences in the German universities. Disciplines such as experimental psychology (William Wundt was at Leipzig), economics, and historical sociology emerged (Ben-David, 1971, pp. 124, 127–129).

⁸Yet, Veysey (1965, pp. 12, 60n) points out that aspects of the public service idea can be traced back to the utilitarian science of Francis Bacon and to the practical skills teaching of the Enlightenment. On the other hand, this American tendency drew little inspiration from the utilitarianism of John Stuart Mill.

⁹Since the 1990s, “service learning” has blossomed on campuses with their local communities across America. President Clinton’s National Service program and other organizations stimulated these efforts.

¹⁰One prominent opponent of the public service mission, Abraham Flexner (1930, p. 17), believed that the new social sciences, if they were to become genuine “sciences,” had to be detached from actual reform work, everyday activities, and such.

¹¹Ward (2003, pp. 33–34), cites the Chicago school of sociology, with its sociological methods tied to the city and its inhabitants. With increasing university faculty involvement in public controversy, major academic freedom questions arose, leading to tenure protection.

¹²For a further discussion of the “scholarship of service,” see Boyer (1994, March 9).

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