Relevance of the Land Grant Mission in the Twenty-First Century[*]

—by Neil E. Harl[**]

Each of us is a creature of our intellectual upbringing. We are shaped, molded, pummeled and prodded by our environment. Prominent among the forces bearing down upon our personal development is the string of educational experiences to which we have been exposed. Begging for a modicum of forbearance for what might be viewed as a modest overstatement, among this crowd heavily salted with academics, I would dare to say that a university or college has probably been the dominant development force, next perhaps to our parents; and the university may have exceeded the influence of family.

As academics, collectively as an institution and as a society, we bear an enormous burden in assuring that future generations are shaped as completely, as objectively and as humanely, as has been done by the institutions we have known. Permit me to state, up front, that I am worried, worried that we may be allowing the institutions we hold so dear to be reshaped, remolded and recast in ways that are alien to the contours of institutions of higher education we have known and loved.

What has been unique

American institutions of higher education are the great beneficiaries of centuries of intellectual development at European universities, especially those of England, that forged the notion that free and untrammeled inquiry, in an environment featuring the snug harbor of academic freedom, is clearly in the public interest. It encourages a balanced development of the mind, works to instill sensitivity and humanity into our endeavors, and, coincidentally, serves to prepare the world for the challenges of change. We owe an immense debt to the pioneering institutions on the continent that shaped the model that we so willingly inherited more than two centuries ago.

The Morrill Act. Not quite a century and a half ago, a new dimension began to take shape on this continent, the concept of the land grant university. Born out of the seemingly boundless expanse of territory yet to be developed in what eventually would become these United States of America, the voice of Justin Morrill and others began to challenge the prevailing notion that education was principally for the wealthy, the privileged and the fortunate. The land grant idea was to open institutions of higher education to the sons and daughters of shopkeepers, artisans and farmers. The history of the land grant idea indicates that the original notion was to provide an opportunity for a "liberal and practical education" for the industrial classes and farmers with an emphasis on an education within the grasp of the non-elite in society. The grant of lands with the enactment of the Morrill Act of 1862 made possible the flowering of the seminal idea.

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Rep. Justin Morrill of Vermont introduced a resolution shortly after being elected to the Congress. The land grant legislation did not become law, however, until 1862. The Land Grant Act of July 2, 1862, creating the land-grant college concept, became known as the "Morrill Act."[1]

E. D. Eddy Jr., Vice President and Provost of the University of New Hampshire, discussed the history of the Act in his 1956 book, *Colleges for Our Land and Time: The Land Grant Idea in American Education* (Harper & Brothers):

> "Morrill began his efforts in behalf of agricultural colleges within three months of becoming a member of Congress. On February 28, 1859, he introduced the following resolution in the House:
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> > 'That the Committee on Agriculture be…requested to inquire into the expediency of establishing…one or more national agricultural schools upon the basis of the U.S. Naval and Military schools in order that one scholar from each congressional district and two from each state at large, may receive a scientific and practical education at public expense."
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> "The resolution was lost by the objection of a Representative from South Carolina.
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> "The following year, on December 14th, the first Land-Grant College bill was introduced by Morrill: 'An act donating public lands to the several States and Territories which may provide colleges for the benefit of agriculture and the mechanic arts….'
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> "The opposition to the measure was swift and pointed. It came largely from the Mid-West and South. Senator Rice of Minnesota sneered, 'We want no fancy farmers; we want no fancy mechanics,' while Senator Mason of Virginia cried out, 'It is one of the most extraordinary engines of mischief…misusing the property of the country…an unconstitutional robbing of the Treasury for the purpose of bribing the States.' Senator Clay felt that 'the honest tillers of the soil (do not) desire the patronage of Congress…all they ask is sheer justice and no favor. They ask that you let them alone to work out their own progress; that you will keep your hands out of their pockets.'
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> "Despite the opposition, the passage through the House was swift and sure. The final vote in the Senate on February 7, 1859, was 25 to 22.
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> "Eighteen Southern senators and four Northern Democrats were in the minority.
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> "But it was not that simple. James Buchanan was in the White House. He is said to have bowed to Southern pressure. His veto message came back on February 22, 1859….
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> "While Morrill bided his time, the country was changing in such drastic fashion as to make the opportunity come earlier than perhaps he dreamed possible. The effect of the Civil War had been felt in Congress by 1861. The Southerners had withdrawn and with them had gone much of the insistence on the rights of individual states. In a riper time, therefore, Morrill stepped forward once again. On December 16, 1861, a new bill was presented in the House of Representatives.

[1] 7 U.S.C. § 301, 12 Stat. 503 (1862). For years, some individuals, mostly from Illinois, asserted that the legislation originated from Professor Jonathan B. Turner rather than Justin S. Morrill. See E. J. James, *The Origin of the Land Grant Act of 1862*, University of Illinois, University Studies, Vol. IV, No. 1, Nov., 1910.

The second Morrill Act was signed by President Benjamin Harrison on August 30, 1890. It extended the land grant benefit to 16 southern states and to some historically black, southern colleges. Native American colleges were added in 1994. Zimdahl, "The Mission of Land Grant Colleges of Agriculture," Amer. J. of Alt. Agr., Vol. 18, No. 2, 2003, p. 105.

"It was 'new' because it contained several substantial changes from the one previously vetoed by Buchanan. The major differences were: (1) the omission of the territories; (2) the increase of the land grant for each member of Congress from 20,000 to 30,000 acres; (3) the exclusion of benefits to States while in the act of rebellion; and (4) the requirement to teach military tactics. This last important feature was an obvious result of Civil War concern.

"The heart of the measure appeared in Section 4:

> 'That the moneys so invested or loaned shall constitute a perpetual fund, the capital of which shall remain forever undiminished…and the interest of which shall be inviolably appropriated, by each State which may take and claim the benefits of this act, to the endowment, support, and maintenance of at least one college where the leading object shall be without excluding other scientific and classical studies, and including military tactics, to teach such branches of learning as are related to agriculture and the mechanic arts, in such manner as the legislatures of the States may respectively prescribe, in order to promote the liberal and practical education of the industrial classes in the several pursuits and professions in life….'

"The Senate passed the measure on June 11, 1862, by a vote of 32 to 7. The House concurred on June 19th with 90 in favor and 25 opposed, of whom 21 were from Western states. This, it should be noted, came during one of the darkest hours of the Civil War. It remains a remarkable example of forward-looking legislation in the midst of calamity.

"Once again the Land-Grant College bill made its way to the White House. But this time a different man sat in the presidential chair. … As a Whig, Lincoln believed the Constitution to be far more flexible than Buchanan's rigid interpretation. He was not inclined to oppose federal measures for interests close to the common people. Lincoln was a man undoubtedly far ahead of his times, but a new education in agriculture and the mechanic arts had never been one of his strong concerns. Nevertheless, it was a part of the progressive legislative pattern and philosophy to which he gave leadership. He signed the bill on July 2, 1862."

History of the Hatch Act

Later, a public commitment to research directed to the needs of the farmers in the Hatch Act of 1887 added a second dimension to the land grant university. The Hatch Act of March 2, 1887[2] provided for a permanent appropriation to each state of $15,000 per year for the purpose of establishing an agricultural experiment station. In the legislation, "State agricultural experiment station" was defined to mean "a department which shall have been established, under the direction of the college or university or agricultural departments of the college or university in each State in accordance with an Act approved July 2, 1862…or such other substantially equivalent arrangements as any State shall determine."

The Smith-Lever Act

The third function, extension, was given shape, form and funding by the Smith-Lever Act of 1914. That Act was enacted with the following specifications as to scope of effort and institutional affiliation:

> "In order to aid in diffusing among the people of the United States useful and practical information on subjects related to agriculture…[and] home economics…and to encourage the application of

[2] 7 U.S.C. § 361a *et seq.*

> the same, there may be continued or inaugurated in connection with the college or colleges in each State, territory, or possession, now receiving, or which may hereafter receive, the benefits of…this chapter, agricultural extension work which shall be carried on in cooperation with the United States Department of Agriculture…."[3]

The three functions, long viewed as co-equal in the land grant university, proved to be a remarkably prescient response of government and of the academic community to the needs of the rapidly developing agricultural and industrial sectors of the new world.

The shift toward emphasis on research

For several decades, the three functions were viewed as equal in importance; in recent time, the pendulum has swung away from an emphasis on teaching and extension and toward research in land grant universities. My plea is to restore a greater degree of balance among the functions. It is my belief that this can be accomplished and must be accomplished if we are to expect the kind of generous public support the land grant university has traditionally enjoyed.

A land grant university has multiple constituencies to please—students, peers in the respective disciplines, users of extension information and taxpayers. If we slight any one of the groups, we will pay a price. In my view, we are paying less attention to students, to users of extension information and to taxpayers and more to worrying about whether we are impressing the disciplinary peers around the world who establish the pecking order of institutions. It is becoming increasingly clear that state support is at risk—the land grant university needs to demonstrate that it cares about and is responsible to the needs and wants of people and their real world problems. That is an integral part of the land grant mission.

A good case can be made that, in our rush to impress peers elsewhere, we have created an environment that has not been conducive to excellence in teaching and that has been down right antagonistic to the extension function. I am not putting down research. Far from it. Each land grant university in the country and the world needs a strong research function. But it should not be allowed to crowd out the teaching and extension functions. Unfortunately, in some university academic departments, recruitment of new faculty hires for positions with a substantial teaching or extension component emphasizes the research record and prospects for a strong research program with no more than a passing glance at teaching experience and ability and with even less attention to extension interests and abilities. When teaching or extension is mentioned it is all too often in a setting of characterizing those functions as some sort of pesky, bothersome requirement that should be minimized as soon as possible. I agree that a critical requirement of someone in teaching or extension is to be perennially camped at the leading edge of thought in the discipline. But it is clear that a good researcher is not uniformly and necessarily a good teacher or extension faculty person.

What is to blame?

How did we end up in such a state? Where did we take the wrong turn in the academic road—a wrong turn that was apparent to some nearly two decades ago? As one of the early

[3] 7 U.S.C. § 341.

observers of the trend, Schuh asserted in 1986, "The land grant universities have lost their way."[4]

Desire for a higher ranking. There are many contributing factors but prominent among them is the cacophony of pronouncements, often uttered more for political gain than from a genuine desire to excel on the national stage, that a particular institution was striving to be the best—or one of the best—land grant universities in the country. Five colleges (the University of Arizona, Purdue University, the University of Nebraska, Ohio State University and Texas A&M University) as of 2000 stated in their mission statement that part of their mission was to become the premier agricultural college in the United States.[5]

Thus, the mantra has been to become the best (or one of the best) land grant universities without specifying the criteria as to what is "best." This came at a time when the land grant mission was in the process of being eclipsed by a drive for prominence nationally. Some statements by administrators (and some interpretations of the goal by faculty and others) have taken that to mean that "best" is defined by the respective disciplines which literally means that only research is counted. Moreover, the research is weighted in terms of publications in the most highly ranked journals (which, in turn, are ranked by the respective disciplines in terms of a premium being placed on theoretical as opposed to applied research and are read mostly by those in that discipline). Thus, teaching is not considered (even though many administrators, from time to time, have stated that teaching is the number one goal on the campus), extension activity is given no weight (even though occasionally statements are made by administrators that extension is an important function of any land grant university and certainly represents an important constituency of the land grant university), and applied or mission-oriented research is ranked less highly than theoretical research.

The reward system reflects the institutional priorities. As Derek Bok, former president of Harvard University, has stated, "…rewards for excellent research far exceed those available for excellent teaching."[6] All of this tends to skew the evaluation system and the reward system as well as the search for replacement faculty. In some departments in colleges and universities, this distortion has reached such a state that it is virtually impossible to hire for a tenure track position for an extension or teaching position. In many searches, those functions do not count at all even though lip service is given to non-research components. Indeed, it is difficult to hire someone with a strong interest in applied or mission-oriented research even with no teaching or extension component to their job description.

It is critically important that university goals be stated clearly in terms of how performance is to be evaluated. Over time, a singular emphasis on theoretical research makes it difficult, if not impossible, to carry out applied or mission-oriented research and is a barrier to a quality teaching program as well. It is my view that a land grant university should be evaluated on the basis to which all three traditional functions are carried out with none rated above the others. I believe that it is possible for a university to excel in all three areas and they should. We

[4] Schuh, "Revitalizing Land Grant Universities: It's Time to Regain Relevance," Choices, Second Quarter, 1986, pp. 6-20.
[5] Zimdahl, "The Mission of the Land Grant Colleges of Agriculture," Am. J. of Alt. Agric, Vol. 18, No. 2, 2003.
[6] Bok, "Universities in the Marketplace: The Commercialization of Higher Education," 2003, p. 160.

have fallen victim to the mentality, emanating from the non-land grant institutions, to narrow the criteria as to what is "best" by looking at the research programs and performance.

We need a substantial reorientation of effort—not to downgrade theoretical research, but to lift up a model of excellence in terms of a comprehensive approach to evaluating and rewarding all program dimensions, ranging from theoretical research to mission-oriented research to extension and teaching. Anything less is intellectually dishonest and a betrayal of the great land grant tradition. To give lip service to the importance of all three functions but to recognize only one is intellectually dishonest.

Fiscal pressures on universities. A second reason for skewed priorities has been the enormous fiscal pressure brought on, in part, by the decline in public support. The assumption of three or four decades ago that 70 percent to 80 percent of the cost of higher education should come from public support has declined to 25 percent or even less. As Mark Yudof, Chancellor of the University of Texas System, has stated, higher education's share of state spending in the United States fell by 14 percent just from 1986 to 1996.[7] The result has been sharply higher tuition, fewer services, aggressive patenting, the outsourcing of everything from dining hall food to janitorial services, a push for more distance education, the sale of rare campus treasures (the sale of the university-owned television station, WOI-TV and the sale of the Iowa State University Press, on my campus, and the sale of the broadcast rights on frequency 580-AM on this campus to benefit intercollegiate athletics, as examples) and a full-court press to obtain gifts from the private sector.

Where will this lead?

So what has caused the dramatic decline in public support of institutions of higher education? Is it just the recession of 2001-2003 that's responsible for cuts in support? Or the recent recession in tandem with the rattling of financial markets and the breakdown of ethical standards in the private sector world?

I think not. While those forces have some degree of responsibility, a more fundamental shift in the politico-economic world appears also to bear part of the blame. In a very subtle but clearly perceptible move, governments at all levels have been bent on reducing taxes, narrowing the tax base and reducing the capacity of governments to support services traditionally provided by the public sector, including higher education. The economy of this country is still functioning at near record levels but priorities as to what that economy is to support have changed. The result is that tax cuts disproportionately benefiting the wealthy enable the sons and daughters of the wealthy to matriculate at about any institution they choose, particularly in light of the much criticized legacy admissions programs. In the meantime, the sons and daughters of middle class and lower class families scramble for access to a university education.

Similarly, diminished resources for extension pose little problem for upper income families. Those families can access those services from private sector sources. But those services are an essential link to a rapidly advancing world for middle income and lower income families. The land grant university traditionally has provided the "gold standard" of objective

[7] Yudof, Mark G., "Is the Public Research University Dead?" Chronicle of Higher Education, Jan. 2002, p. B-24.

evaluation of information coming at an ever-increasing pace to farmers and others in rural America.

It is a puzzle as to why this politico-economic shift, of seismic proportions, is occurring at this stage in the development of this, the wealthiest and most powerful country in the history of the human family. A casual observer might say it relates to threats to our security and the need to devote resources in that direction. But this mindset was evident long before September 11, 2001. Others might say that it relates to the misguided belief that we as individuals are solely responsible for generating the income and wealth that came our way (when in fact we stand as pygmies on the shoulders of the generations that have gone before who created the basic elements for the productivity we now enjoy). Still others see in this trend a pernicious turn toward selfishness—as a country and as individuals. One can see that phenomenon emerging perhaps for those who already have achieved economic success but it's not limited just to those who have climbed to the top rungs of the economic ladder.

Whatever the reason, this shift in our thinking deserves careful study and thought.

So what fate awaits us if we continue down the present path of reduced public funding, a decline in extension activity and even less emphasis in the teaching function as land grant universities attempt to emulate the most highly ranked private institutions? Certainly we can expect even further declines in public support *as taxpayers come to view the land grant institutions as indistinguishable from the private universities*. Even heavier reliance on tuition, gifts and grants will further diminish the extension function. Complete extinction within just a few decades may well occur. That will further estrange the general population from the leavening and regenerative forces of higher education. The charge levied against the private universities of a century and a half ago as elitist will resonate once again throughout the land, leaving the land grant idea as a curious anomaly of the 19th and 20th centuries.

Influence of fund providers

Another force that has achieved alarming momentum, and that promises to diminish the reputation of objectivity of institutions of higher education is the incursion of grant and contract funding from private sector firms that are positioned to influence the research agenda (and the extension agenda) and, in some instances, to attempt to influence research outcomes. Coming at a time when the appetite for additional funding was growing more rapidly than growth in traditional sources of funding, and continuing through the greatest fiscal drought the country has seen in several decades for institutions of higher education, many universities have been willing to sell their souls, to compromise objectivity and to allow private sector firms with an agenda unlike that of the university, to influence what research projects are undertaken, to determine how the findings are disseminated (if they are disseminated) and to assure that findings not consistent with the granting firm's objective function are buried in an intellectual graveyard which can be ignored by administrators and not seen by the general public. As Derek Bok has written, "universities have paid a price for industry support through excessive secrecy, periodic exposeś of financial conflict, and corporate efforts to manipulate or suppress research results."[8] The former Harvard president goes on to state that "the university's reputation for scholarly

[8] Bok, Universities in the Marketplace: The Commercialization of Higher Education, p. 77, 2003.

integrity could well be the most costly casualty of all."[9] Bok continues, "once the public begins to lose confidence in the objectivity of professors, the consequences extend far beyond the academic community. At a time when cynicism is so prevalent and the need for reliable information is so important, any damage to the reputation of universities, and to the integrity and objectivity of their scholars, weakens not only the academy but the functioning of our democratic, self-governing society. That is quite a price to pay for the limited, often exaggerated gains that commercialization brings to even the best-known institutions."

The Berkeley experience[10] with Novartis is undoubtedly the most visible example of the sacrifice of the vaunted reputation of the university for detachment and objectivity. On many campuses, the relationship of the university with private firms involving the release and commercialization of germ plasm poses problems that deserve close scrutiny. On my own campus, a research project report written by one of our senior engineering professors was rewritten and released over the objections of the professor involved under pressure from the firm supporting the research.

The public, as well as some disciplinary groups, are pushing for greater transparency in terms of revealed support for research and policy work produced on college and university campuses. The medical profession has pressed for disclosure of funding and consulting ties by researchers in the publication of research findings. Indeed, the Kansas legislature considered bills in 2002 that would have required disclosure of private sector ties through contractual or other linkages.[11]

We have moved in the direction of substituting large agribusiness as the primary constituency of the land grant university for the broad constituencies of decades past. We will likely never know the price that is paid in loss of standing and prestige among the general public, from that substitution, eclipsing by several fold the gains enjoyed from enriched funding.

As Press and Washburn who wrote the widely cited article, "The Kept University," in Atlantic Monthly, ask, explaining one of the more subtle effects of outside funding that focuses research attention—

> "Will the Paul Bergs of the future [Berg is a Nobel prize-winning biochemist] have the freedom to explore ideas that have no obvious and immediate commercial value? Only, it seems, if universities cling to their traditional ideals and maintain a degree of independence from the marketplace. This will not be easy in an age of dwindling public support for higher education."[12]

It is not necessary to forsake all outside funding. What is necessary is to commit to a regimen of objectivity that is staunchly defended by governing boards, administrators and faculty alike. If that is not done, the reputation and standing of the entire university system will decline and erode to the point that institutions of higher education will be unlike other research

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[9] *Id.*, p. 117.
[10] Press, Eyal and Jennifer Washburn, "The Kept University," Atlantic Monthly, Vol. 285, No. 3, p. 54, 2000.
[11] See McEowen, Roger A., Peter C. Carstensen and Neil E. Harl, "The 2002 Senate Farm Bill: The Ban on Packer Ownership of Livestock," Drake J. of Agr. Law, Vol. 7, No. 2, 2002, F.N. 50, p. 281.
[12] *Id.*

organizations. The uniqueness of the institutions of higher education will surely decline and ultimately disappear.

Recommendations for action

So what should land grant universities do to rechart their courses in order to function more in the public interest? Permit me to mention a few priority needs—

- The National Association of State Universities and Land Grant Colleges (NASULGC) should be encouraged to convene a blue-ribbon task force, broadly representative of teaching, extension and research, to recommend a course for the new century and beyond, that involves a functional evaluation system that recognizes all three functions. It is critically important that the singular pursuit of excellence, on the basis of only one of the three traditional functions of a land grant university, be appropriately tempered by attention to extension and teaching as co-equal functions.

- Land grant university administrators should monitor closely the selection process of extension and teaching faculty to assure a fair and balanced review of candidates in light of the allocation of time in the position for teaching, extension and research.

- Each land grant university should have in place internal guidelines for protecting the integrity of the academy in the face of external support including public disclosure of funding sources, clear understandings on publication of findings and the "back dooring" of research findings to sponsors.

- Land grant universities should foster and promote widely a brisk dialogue on the land grant mission and tradition in the rapidly changing milieu of the twenty-first century.

- Land grant universities should seek funding as aggressively for extension as is done for research.

- Land grant universities should be encouraged to solicit a more permanent base of financial support for extension through creation of an endowment and for endowed chairs dedicated to extension education.

Conclusion

Returning to my worries, my greatest concern is that the land grant university is on a trajectory that will narrow, dramatically, the traditional constituency of the land grant university to the point of invisibility. In my view, that would be a tragic legacy to leave future generations that will surely struggle with change in their world just as we have struggled with change in ours. The difference may well be that future generations will lack the willing partner that has helped our generation to understand and cope with that change.

My other concern is that the university itself will be forever transformed by outside influences to such an extent that the legacy of the university will be substantially diminished.

There are those among us who speak glowingly of the merits of economic power and *laissez faire*, who see little reason for special efforts to provide educational opportunity for the less advantaged, who tend not to see in a robust extension effort a strengthening of our economy and system of governance and who give little encouragement to the land grant mission. In refutation of those who fail to recognize the richness of a system that has provided access to the regenerative forces of higher education, both in formal programs of study and in applying knowledge to problems in the real world, one can only hope that many more recognize the contribution to the common good and will support a vibrant land grant system with marching orders to keep faith with the land grant tradition.

So it comes down to a question, primarily, of who is our constituency? Is it students, future generations who benefit from the great body of transmitted knowledge and, indeed, all of society? Or will the constituency be narrowed with a focus on a relatively small group of peers in the discipline and large private sector firms with almost imperceptible attention to students, the transmission of culture and those in society who have benefited so much from their land grant university? That choice is being made as we speak here today.

Sources

Bok, Derek, Universities in the Marketplace: The Commercialization of Higher Education, 2003 (Princeton University Press).

Eddy, E. D., Jr., Colleges for Our Land and Time: The Land Grant Idea in American Education, 1956 (Harper & Bros.).

Fish, Stanley, "Give us Liberty or Give Us Revenue," Chronicle of Higher Education, Oct. 31, 2003, p. C-4.

James, E. J., The Origin of the Land Grant Act of 1862, University of Illinois, *University Studies*, Vol. IV, No. 1, Nov. 1910.

Press, Egal and Jennifer Washburn, "The Kept University," Atlantic Monthly, Vol. 285(3), pp. 39-54, March, 2000.

Schuh, G. Edward, "Revitalizing Land Grant Universities: It's Time to Regain Relevance," Choices, Second Quarter, 1986, pp. 6-10.

Yudof, Mark G., "Is the Public Research University Dead?" Chronicle of Higher Education, Jan. 11, 2002, p. B-24.

Zimdahl, Robert L., "The Mission of the Land Grant Colleges of Agriculture," American Journal of Alternative Agriculture, Vol. 18, No. 2, 2003.