

FRANCIS WAYLAND: PERSPECTIVES OF A NINETEENTH CENTURY POLITICAL ECONOMIST ON THE "BUSINESS" OF HIGHER EDUCATION

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INTRODUCTION

To what extent should criteria of market efficiency guide resource allocation in higher education? Most of us in the academy do not believe that what goes on in the "ivory tower" should be judged by market standards; but those outside academia have not all been persuaded that the "business" of higher education should enjoy such exemption. The Bush Administration's Department of Justice, for example, has brought the Sherman Act to bear on data sharing within the Ivy League in relation to tuition charges, faculty compensation, and financial aid. Moreover, potential donors to higher education are significantly influenced by a supplicant institution's capacity to exercise business-like budgetary discipline.

How usefully can lessons from political economy inform decision-making in the "industry" of higher education? This paper inspects the contributions made by the Reverend Francis Wayland (1796-1865), who authored the most widely-read political economy text in pre-Civil War America and served for nearly three decades as President of Brown University. Wayland's views on the conduct of educational business and on classical political economy fitted together hand-in-glove. Indeed he insisted that both the processes and the products of higher education should be judged by economic principles.

Wayland assigned high urgency to educational reform. In his judgement, institutions that claimed the status of "colleges" were rarely worthy of that designation. Most of them offered little more than superficial exposure to dead languages to young men from the professional classes. This was out of touch, he maintained, with the needs of a new and growing country. He called for curricular innovations to make practical learning widely available and for sweeping changes in the organization of collegiate establishments.

In some measure, Wayland's thinking on educational issues was influenced by efforts of the Jeffersonians at the University of Virginia to break away from the curricular norm. He was certainly aware of developments there. Wayland, however, was unsympathetic toward one feature of the Jeffersonian style; a devout Baptist, he had no taste for "free-thinking" on matters of Christian doctrine. In his view, the promotion of useful education and the promotion of the faith were inextricably linked.

WAYLAND'S VERSION OF POLITICAL ECONOMY

Wayland was largely self-taught in political economy. Trained for a career in the Baptist ministry, he had a reputation in Boston as a dynamic preacher. His interest in political economy emerged largely as a by-product of his presidential duties at Brown, which he assumed in 1827. In the denominational colleges of New England at that time,

it was standard practice for the president—invariably a clergyman—to instruct members of the senior class in moral philosophy. Wayland re-labelled his lectures as “political economy.” He converted them into *The Elements of Political Economy* [1838]. This work had an influence that extended well beyond Rhode Island; it went through eighteen editions before 1861.¹

To Wayland, the “invisible hand” should be understood as the divine hand. Nevertheless, his organization of subject matter drew heavily on the standard classical tradition as transmitted by Say and McCulloch and he appropriated many of its central propositions without modification. Free markets were beneficent and a widening division of labor was a carrier of progress. Government’s role was carefully delimited. Its central function was the protection of private property (a precondition for an orderly and progressive society).

But Wayland’s interpretation of the message was not just a replay of classical doctrine. At a number of crucial points, he re-wrote the standard argument. He challenged the proposition that labor in services was “unproductive” and suggested that it was irrational to hold such an opinion. In his scheme of things, those “laborers” who engaged in the “industry of discovery or investigation” were essential to the community. These “philosophers” were engaged in identifying fundamental “laws” and making them known to the public. Work in the professions was also distinctly productive. As he put it: “The business of the clergyman is to teach us in what manner we may avail ourselves of the *moral laws* of the Creator. The lawyer teaches us how to avail ourselves of the laws of that *civil society*, of which we are members. The physician teaches us how to obey the *physiological laws* under which we are created, so that we may be relieved from sickness, or preserved in health” [1838, 50].

Wayland also revised the Ricardian doctrine of rent. The “natural and indestructible powers of the soil” might account for part of the differential in land rents—but for only a part. Experience in America did not mesh with the Ricardian model, which implied that the most fertile lands would be brought into cultivation first. The facts of America’s westward expansion belied that argument. Nor did it follow that landowners on the eastern seaboard would suffer, despite the relative inferiority of their agricultural holdings. Demand for land—and the rent associated with its ownership—depended on more than the inherent fertility of the soil. Rents were also determined by the attractiveness of land for commercial, industrial, and residential purposes. Advantages of situation, particularly access to means of transport, were important. Wayland further insisted that “the price of land depends much on the intellectual and moral character of a neighborhood.” He observed that “there are towns in New England in which, within a few years, the price of real estate has doubled, for no other assignable reason, than that of the literary and moral advantages which they hold out to residents.... Hence we see, that, besides the advantages which intelligence and virtue confer upon the character of a people themselves, there is also an additional advantage, in the rise of property which they produce” [Ibid, 358-9].

In Wayland’s reading of the “laws” of political economy, there were no overtones of inherent divergences in the interests of various classes in the community, nor was there any suggestion that the emergence of a stationary state was a real and present danger. His world was one of natural harmonies in which economic improvement could continue without interruption. The essential requirement was sustained accumulation of capital to increase the demand for labor and, in turn, to banish Malthusian fears about excessive population. Wayland held that the prospect for this outcome was bright

because the acquisition and application of new knowledge should make continued investment attractive. Nevertheless, there would be problems if the population succumbed to indolence, intemperance, vice, and wasteful extravagance. The laws of the Creator and of political economy were at one in denouncing such behavior.

THE PRINCIPLES OF POLITICAL ECONOMY AS APPLIED TO THE CRITIQUE OF AMERICAN HIGHER EDUCATION

Wayland took his understanding of political economy seriously. For him, it was not enough to profess it. It was also important to apply its lessons to practical life. This meant that its insights should guide the line of “business” he knew first hand—college education.²

In 1842, Wayland presented to the national audience his *Thoughts on the Present Collegiate System in the United States*. The argument he made was informed by views about the efficacy of markets. As Wayland saw matters, the American higher education “industry” was in a sorry state. Potentially, higher education should be in great demand. After all, it should be the instrument for moral and cultural uplift, as well as the transmission of useful economic knowledge. Yet far too few people took advantage of the productive services it could supply. This was all the more remarkable because college education was priced below its cost. From the perspective of classical political economy, this was “unnatural.” When elaborating this point, Wayland presupposed that the “natural price” should be equal to the “cost of production.” He calculated the relevant cost of production as follows: “We should first estimate the amount of capital invested in buildings, libraries, apparatus, and charge upon this sum the ordinary rate of interest. We should add to this, the salaries of professors and other teachers at the rate of remuneration ordinarily earned by persons employed in similar labor” [1842, 134]. Though he did not use the term, Wayland had command of the concept of “opportunity cost.” He was convinced that able faculty members were substantially underpaid in comparison to professionals of comparable abilities, skills, and responsibilities.

If college education was thus priced below its natural value and still could not attract customers in socially desirable volume, how could this circumstance be explained? Wayland held that “this state of things is neither owing to the poverty of our people nor to their indifference to the subject of education” [Ibid., 17]. The problem arose because colleges were not offering the public what it wanted. This mismatch between what colleges supplied and what the public demanded had separable, though related, aspects: (1) inadequacies in performance within the established curricular framework, and (2) shortcomings in offerings available in the program of studies.

In Wayland’s diagnosis, the quality of work performed in colleges had suffered severely because the market’s incentive mechanisms had not been allowed to operate. Teachers were normally paid at fixed salary scales stipulated for their respective ranks. Rewards were thus not linked to performance. Such a system, he argued, was assuredly ill-designed to call forth maximum effort.³ The quality of performance in the academy was also compromised for another reason. Because faculty compensation was not competitive with the earnings of such professionals as lawyers and doctors, many of the country’s ablest minds could not be attracted to academic careers.

What then was the remedy? For Wayland, it was self-evident that market principles should be invoked. Fixed stipends should be eliminated; teachers should instead be

remunerated by fees collected from the students they attracted. He was persuaded that consumers would soon learn to recognize quality and be willing to pay for it. Such a system would weed out the incompetent, reward the competent, and attract able new entrants. The price of education would probably go up, but as things stood, it was too low for the good of education. Wayland even speculated about what might have happened if his scheme had been put in place from the beginning: "a professional career would have been opened to every collegiate instructor as wide and as far reaching as to men in every other department of intellectual exertion. Talent of the highest rank would have been attracted to our colleges." This, in turn, would have produced a major restructuring of the academic "industry." As he put the matter: "Instead of a great number of small and ill-supported colleges, we should have had a small number of real and efficient Universities." Moreover, the benefits from this change would be enormous. Wayland believed that it "would have increased the learning and intellectual vigor of the nation a hundred fold" [Ibid., 75].

But this was only part of his proposed therapy. An academic career could also be made more attractive if faculty members were relieved from "police duty," i.e., obligations to supervise student conduct in dormitories. These chores could be eliminated if students were not required to reside in college-provided housing. Not only would this reform spare good teachers from petty distractions, it would also free up financial resources to strengthen a college's central function. Capital locked up in buildings for student residences could be reallocated to libraries and laboratories. Such a step, Wayland recognized, would not be feasible unless colleges required more of their students at the point of entrance—in particular, that students be mature enough to exercise self-discipline. This objective could be partially met by making admission examinations more demanding and by introducing "premiums" (cash prizes) to reward outstanding academic achievement. The premium system should also be used to recognize academic excellence in college. In short, market incentives should stimulate qualitative improvement in the performance of students and faculty. Wayland was not comfortable with financial grants to needy students because he believed that those who got something for nothing would fail to value it. His formulae were designed to reward academic productivity at all levels.

If these proposals were not revolutionary enough, Wayland was even more radical in his recommendations for redesign of the curriculum. Many of the ills of higher education, he maintained, were attributable to the absence of significant differences among institutions. Most provided a standardized traditional menu. This system could be faulted on two counts. In the first place, the number of prescribed subjects was excessive—too large to permit a student to pursue any one of them in depth. Wayland held that there should be more scope for concentration within the pattern of studies: "instead of learning *many* things *imperfectly*, we should learn a *smaller* number of things *well*" [Ibid., 108]. Secondly, colleges should open up a wider array of subjects. The public, he believed, was hungry for learning. It was now time for colleges to adapt to its tastes. This meant reaching out to a new clientele and breaking the homogeneity of the existing pattern. There was nothing sacred about catering primarily to candidates for a B.A. degree who aspired to enter one of the learned professions. Courses should be offered to persons who did not necessarily seek a degree; residential requirements should be waived; and a variety of certifications of study should be introduced (with no rigid term assigned to the time required to qualify for them).

In 1842, Wayland did not offer a detailed blue-print for a new scheme of academic organization or degree structures. But the orientation of this thought was already well-defined. "Why should not professors in Colleges deliver courses of lectures which would be attractive to the whole community," he asked, "and why should not the means which are at present available to a part be made available to the whole? It would open to the instructor a wide and attractive field of professional exertion. It would enlist in favor of the College all the sympathies of the public, and it would spread before the whole people such means for intellectual improvement as the necessities or tastes of each individual might demand" [Ibid., 144]. In Wayland's judgment, this scheme had two further recommendations: (1) it "would tend so strongly to promote the growth of wealth and civilization and refinement among us"; and (2) it "would so surely annihilate that division of the community into classes, which, already, in spite of our democratic institutions, threatens the direst evils to our republic" [Ibid., 156].

The central themes of classical political economy thus informed Wayland's analysis of the plight of American higher education. His prescriptions for improvement were part of the same package. Consumer sovereignty should guide the allocation of educational resources and price incentives should motivate suppliers. The widening of the market would induce specialization and bring productivity improvements that would benefit everyone.

FROM THEORY TO PRACTICE AT BROWN, 1850-55

Wayland's *Thoughts on the Present Collegiate System in the United States* [1842] received little attention in the 1840s. Even at his own institution, he had not persuaded the governing authorities to adopt much of his platform. As early as 1841—before the publication of his book on the subject—Wayland had urged the Brown Corporation to give serious thought to his recommendations for reform [Wayland, 1841]. A few modest changes were, in fact, made: cash prizes for superior performances by students were introduced in 1842-43 and an "English and Scientific course" of one or two years duration was launched in 1847-48, attracting seven students in the following year. (The catalogue described the objective of this program as follows: "It is believed that such a course will furnish to those who are preparing for Mercantile pursuits, or for the higher employments of Agriculture and Manufactures, the means of securing, at moderate expense, an education specially adapted to their wants.")⁴ Meanwhile Brown's overall position had deteriorated. Enrollments were declining and the resulting loss of revenues led to dismissals of tutors and salary cuts for the remaining professors. By the close of the 1840s, Wayland was ready to play for higher stakes.

Wayland's faith in the social benefits of his market-oriented approach to education was surely genuine. Product differentiation—linked with measures to spur efficiency in resource use—was desirable in principle. But, if he could not move the national industry to change its ways, he did have leverage on the policies of one firm within it. Brown could act unilaterally. In the circumstances of the late 1840s, the case for doing so had more than just detached high-mindedness to recommend it. A Wayland-directed initiative at Brown offered the prospect of improving its competitive position and increasing its market share. Wayland forced the issue in 1849 by submitting his resignation to the Corporation, presumably to jolt the governing body to action. When asked to withdraw his letter of resignation, he readily did so—subject to the condition that a special "Committee of Advice" be formed to work with him in charting the

The result was a *Report to the Corporation of Brown University on Changes in the System of Collegiate Education* which was completed in March 1850.

The substance of this document was largely Wayland's handiwork. The principal themes of his 1842 book were reiterated. The standard curriculum was indicted for spreading studies too thinly. In the words of the Report: "We have now in the United States...one hundred and twenty colleges pursuing in general this course. All of them teach Greek and Latin, but where are our classical scholars? All teach mathematics, but where are our mathematicians? We might ask the same questions regarding the other sciences taught among us" [Wayland, 17-8]. It was small wonder that colleges had fallen out of favor. The report concluded that "our colleges are not filled because we do not furnish the education desired by the people.... Is it not time to inquire whether we cannot furnish an article for which the demand will be, at least, somewhat more remunerative?" [Ibid., 34].

The committee called for curricular reforms providing greater scope and for concentration in selected studies in accordance with student preferences. The objective was a framework in which "every student might study what he chose, all that he chose, and nothing but what he chose." In addition, new courses of instruction should be introduced "as the wants of the various classes of the community require." The fixed term of four years of study should also be scrapped. [Ibid., 51-2].

To those familiar with Wayland's views on higher education, there were no surprises here. In arguing the rationale for these changes, the language was forceful. The proposed reform was "just." Every man willing to pay for them had a "right," the Report asserted, "to all the means which other men enjoy, for cultivating his mind by discipline, and enriching it with science." But important groups in the community had been shunned by educators. In the whole country, it was noted, there was not a single institution "designed to furnish the agriculturist, the manufacturer, the mechanic, or the merchant with the education that will prepare him for the profession to which his life is to be devoted." Moreover, it was "expedient" to provide knowledge of the "useful arts." "A knowledge universally diffused of the laws of vegetation might have doubled our annual agricultural products. Probably no country on earth can boast of as intelligent a class of mechanics and manufacturers, as our own. Had a knowledge of principles been generally diffused among them, we should already have outstripped Europe in all those arts which increase the comforts, or multiply the refinements of human life..." [Ibid., 56-8].

The report recognized that such sweeping reform would require fundamental changes in the conduct of university business. Augmenting the number of subjects offered (particularly in the "practical" studies)—when combined with consumer sovereignty—meant that the "corporation cannot pretend any longer to hold themselves responsible for the support of every professor.... Like every other man, the instructor will be brought directly in contact with the public, and his remuneration will be made to depend distinctly upon his industry and skill in his profession..." [Ibid., 62]. A further consequence was foreseeable: decline in the study of Latin and Greek. The authors of the report were not alarmed by that prospect. As they saw matters: "if by placing Latin and Greek upon their own merits, they are unable to retain their present place in the education of civilized and Christianized men, then let them give place to something better" [Ibid., 74].

All of this was consistent with Wayland's vision of incorporating allocative market mechanisms into university operations. Wayland personally supported one further

reform along these lines (a point also drawn from his thinking in 1842). The college should specialize in the education business and get out of the housing business. This would release time for faculty members to strengthen their professional competence; no longer would they be expected to serve as dormitory disciplinarians. But when Wayland argued that students should go to the private market for housing, the Brown Corporation balked. It refused to sacrifice rental income from dormitories and directed faculty members to tighten their supervision. [Bronson, 1914].

The essential features of Wayland's curricular innovations were implemented, beginning in the academic year 1850-51. A multi-track degree structure was introduced. The Bachelor of Arts degree was restructured to serve those "who desire to prepare themselves for the different professions, and yet, from unavoidable circumstances, are unable to pursue a complete course of liberal education. In order to render it accessible to such students, the number of studies is limited, and a large liberty of choice is granted..." [Catalogue, 1850-51]. Meanwhile, the Master of Arts degree, which had formerly been conferred automatically to graduates with three years' seniority upon the payment of a modest fee, became an earned degree. Apart from a provision that some substitutions could be made for studies formerly prescribed, the requirements for this degree replicated those previously attached to the Bachelor of Arts. A new degree—the Bachelor of Philosophy—was introduced with lower requirements for candidacy. It could be completed without any exposure to the ancient languages; its course options included "agriculture," "science applied to the arts," and "chemistry applied to the arts"; and the full course of study could be completed in three years [Ibid.].

To serve the anticipated new clientele, a number of additional professorships were authorized, including civil engineering and natural philosophy, chemistry applied to the arts, and agriculture. Along with these changes, a modified version of Wayland's scheme for faculty compensation was introduced. For the academic year 1851-52, professors could choose a fixed stipend of \$1200 or a base stipend of \$500 plus the fees they could collect from students. All but two of them elected to try the novel option. The following year the terms were amended—a base stipend of \$900 was offered, plus half of the fees gathered from students.

THE FALLOUT FROM THE GRAND EXPERIMENT

The initial results of the curricular innovation were decidedly mixed. In the first three years of full operation of the system, total enrollments expanded. Aggregate student numbers—which stood at 174 in 1850-51—reached 283 in 1853-54. It was also noteworthy that the geographical draw widened: in the last year of the old system, 22 percent of the students came from outside New England, but the representation of this group rose to 28 percent of a larger aggregate in 1854-55. No less impressive was the fact that about half of the students from beyond the New England region were from the mercantile and manufacturing centers of the Middle Atlantic states [Bronson, 1914, 284, 289]. The demonstrated appeal of the lectures delivered by the professor of chemistry applied to the arts in 1853-54 was also satisfying. His course on the chemistry of metals—which was directed to craftsmen working with the precious metals—attracted an audience of more than 330 [Ibid., 277].

But there were disappointments as well. The chair authorized for a professor of agriculture was never filled and the first two appointees to the new chairs of civil engineering and applied chemistry left abruptly after only a brief tenure. (Ironically,

they were both invited to terminate their engagements because they were suspected of laxness in enforcing disciplinary regulations. It will be recalled that Wayland had lobbied unsuccessfully to eliminate this type of duty [Ibid., 296-7].) More serious was the perception on the part of older faculty that the new system had brought a decline in the quality of academic work. Not only were many of the new arrivals inadequately prepared, they stayed for shorter periods than would have been tolerated under the *ancien regime*. And with degree requirements watered down, academic standards seemed to be eroding across the board. Faculty morale suffered from Wayland's "fee for service" approach to compensation. No amount of fine-tuning seemed capable of quieting dissatisfaction with this procedure. By 1856 the Wayland pay plan had been abandoned.

A fatigued and disheartened man, Wayland resigned the presidency of Brown in mid-1855. In 1856, his successor summarized the disaffection with the "new system":

It is well known that the best students of preparatory schools which would naturally direct their pupils to this college, now go elsewhere.... This results chiefly from the interpretation which is generally given to our peculiar and lowered standard of degrees as an open act of underbidding other colleges, and as a scramble for an increased number of students. Even the personal relations of our professors are humiliating, so that their intercourse with the officers of other colleges is a source of mortification rather than of pleasure.⁵

The bulk of Wayland's restructuring of academic organization and management was quickly undone. By 1861, the Executive Board of the University could report that "in the order and the course of study, Brown University does not now differ essentially from her sister Colleges of the United States," though "the increased opportunities for practical education are still offered."⁶

CONCLUDING REFLECTIONS

Wayland's attempt to apply the principles of classical political economy to the business of education failed the market test at Brown. The results obviously were quite different from those he had expected. The firm under his management emerged from the experiment in a weakened competitive position. Nor was he any more successful in reshaping the national education industry. One of the outcomes he sought—i.e., increased specialization of firms and greater differentiation between them—was accomplished in the later decades of the nineteenth century. But that result was shaped primarily by the Morrill Act (which launched the land-grant colleges) and by private wealth committed to the founding of research-oriented universities, not through the application of Wayland's version of political economy.

From a latter-day vantage point, Wayland's attempt to treat colleges and universities as private firms was fundamentally flawed. He was certainly aware of the positive "externalities" (though he did not use that term) generated by higher education. Indeed much of his enthusiasm for reform stemmed from a conviction that it would increase the nation's productivity and enhance its social cohesion. But he was too much a captive of *laissez-faire* orthodoxy to grasp the full significance of this finding. Thus, he could not take the next step: a recognition that colleges and universities are producers, not of

normal goods, but of quasi-public ones. As such, the price system fails to remunerate them fully for the benefits they produce. Supplementary forms of funding are required if educational services are to be available in optimal quantities. The argument that the higher education "industry" can be treated as if it were a standard business thus breaks down.

While this aspect of Wayland's approach can be rejected, it does not follow that all of the questions he raised should be dismissed out-of-hand. How effective (or otherwise) are existing incentive systems, for example, in spurring maximum productivity from both faculty and students? How central are certain functions—e.g., institutional provision of housing and restaurant services—to an institution's primary mission? Could these functions usefully be "privatized?" Today's academic institutions may choose answers different from those which Wayland would have supported, but some of his questions may still be worth pondering.

NOTES

I am indebted to my colleague, Stanley Lebergott, for helpful comments.

1. O'Connor [1944, 324] In addition, some 13,000 copies of an abridged version were in circulation by 1854. About 50,000 copies of the unabridged edition had been distributed by the late 1860s. [Murray, 1891, 208]
2. Wayland's stature as a notable educational thinker has been widely recognized. See, for example, the treatment of Wayland in such works as Cremin [1980], Rudolph [1962], and Veysey [1965].
3. This idea was certainly not original to Wayland. Adam Smith had argued in favor of this proposition in *The Wealth of Nations* when indicting academic incompetence in the University of Oxford.
4. Catalogues of the Officers and Students of Brown University, *passim*.
5. President Barnas Sears to the Executive Board of the Brown Corporation, July 5, 1856 (as quoted by Bronson, [1914, 321]).
6. "A Sketch of the History and Present Organization of Brown University," by the Executive Board of the Brown Corporation, 1861 (as quoted by Bronson, [1914, 325]).

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