

EXAMINATIONS, MERIT, AND MORALS:
THE MARKET REVOLUTION AND DISCIPLINARY
POWER IN PHILADELPHIA'S PUBLIC SCHOOLS,
1838-1868*

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"People write the history of the experiments of those born blind, or wolf-children, or under hypnosis. But who will write the more general, more fluid, but also more determinant history of the "examination"—its rituals, its methods, its characters and their roles, its play of questions and answers, its systems of marking and classification? For in this slender technique are to be found a whole domain of knowledge, a whole type of power." Michel Foucault.¹

In *Discipline and Punish*, Michel Foucault links the history of the examination to the deployment of a system of "disciplinary power" during the course of the seventeenth, eighteenth, and nineteenth centuries.² For Foucault, domination and social control in contemporary western societies are less a function of an omnipotent state, capitalist exploitation, class oppression, or psychic repression, than of an ubiquitous, decentralized, omnipresent disciplinary apparatus.³ While "sovereign" power is centered in the state, disciplinary power "is everywhere." It operates at the lowest extremities of the social body in everyday social practices or "discursive regimes"—it is "capillary" rather than centralized. Where sovereign power functions through judicial rituals of terror and repression, disciplinary power functions through highly localized "technologies of power"; that is, where sovereign power can usually be identified with a particular "structure," "institution," or "apparatus" of power, disciplinary power is "a whole set of instruments, techniques, procedures, levels of application, targets" or what he calls "a 'physics' or an 'anatomy' of power, a technology." Finally, where sovereign power is negative and focused on the body, disciplinary power is "positive" or "constitutive" and based on the accumulation of knowledge of individual subjects, creating what Foucault calls "power/knowledge" relations or "*pouvoir-savoir*." Such relations function in two ways. On the one hand, they construct individual subjectivities—regimented, isolated, and self-policing subjects or "docile bodies" that "may be subjected, used, transformed and improved." On the other, they create a vast web of regulations and mechanisms for the supervision, administration, and discipline of entire populations—a "bio-politics of the population." To investigate disciplinary power is thus to investigate both the "formation of the modern subject" or the "genealogy of the modern soul" and

“the development and generalization of disciplinary mechanisms” across the body politic.⁴

Of course, *Discipline and Punish* is a lot more than a simple description of the nature of disciplinary power. Foucault also intended it to be a particular kind of history—a “genealogy”—of the development of disciplinary power. Foucault notes that the earliest technologies of disciplinary power first appeared in medieval monasteries, but he argues that they developed principally during the course of the seventeenth and eighteenth centuries independently in army barracks, factory workshops, prisons, hospitals, schools, and the state itself as officials struggled to find new ways of controlling inmates and managing populations. By the end of the eighteenth century, institutional reformers, working more or less independently, had created a “new economy of power” that “allowed the effects of power to circulate in a manner at once continuous, uninterrupted, adapted, and ‘individualized’ throughout the entire social body.” This “new economy of power” primarily depended on two “technologies” or “procedures” of power: “hierarchical observation” and “normalizing judgements.” Combined, they form the “examination” and constitute the examination as a system of “*pouvoir-savoir*.” “Hierarchical observation” consisted of the continuous “surveillance” of subordinates by superordinates, whether by visual (“architectural”) means or through the keeping of extensive written records or “dossiers.” In principle, “panoptic” surveillance induced “in the inmate a sense of conscious and permanent visibility that assures the automatic functioning of power.” Ideally, individual subjects became the “bearers” of their own surveillance by internalizing a sense of perpetual visibility: “the perfection of power should render its actual exercise unnecessary.”⁵ “Normalizing judgements,” on the other hand, assumed a formal equality between individuals, but classified and distributed them along a “normative” continuum. Over time, normalizing judgements replaced status or judicial rights with “the power of the norm” as the currency of evaluation and formed the basis of a wholly new system of social control organized around a “penal accountancy” or a “micro-economy of privileges and impositions” and the “normalization” of behaviour rather than overt repression of the body.⁶

For Foucault, the critical moment in the development of the examination as a system of “*pouvoir-savoir*” came with the marriage of hierarchical observation and normalizing judgements during the eighteenth century.⁷ When combined, the two technologies transformed “the economy of visibility into the exercise of power” and created a “carceral archipelago” that gradually enveloped the entire population in a dense web of localized networks of disciplinary power:

The examination combines the techniques of an observing hierarchy and those of a normalizing judgement. It is a normalizing gaze, a surveillance that makes it possible to qualify, to classify and to punish. It establishes over individuals a visibility through which one differentiates them and judges them. That is why, in all the mechanisms of discipline,

the examination is highly ritualized. In it are combined the ceremony of power and the form of the experiment, the deployment of force and the establishment of truth. At the heart of the procedures of discipline, it manifests the subjection of those who are perceived as objects and the objectification of those who are subjected. The superimposition of the power relations and knowledge relations assumes in the examination all its visible brilliance....For in this slender technique are to be found a whole domain of knowledge, a whole type of power.⁸

Foucault stresses that the advent of the examination reveals an important historical reversal. The ascendancy of the examination facilitated the creation of written records—"dossiers"—that transformed invisible subjects into visible subjects by permitting the continuous surveillance and comparison of isolated individuals. Where sovereign power had individualized the wielders of power, disciplinary power individualized the objects of power. The file supplanted the chronicle; the measurement of deviance replaced the celebration of the heroic. Foucault concludes, therefore, that disciplinary power is "descending: as power becomes more and more anonymous and functional, those on whom it is exercised tend to be more strongly individualized. Disciplinary power is exercised by surveillance rather than ceremonies, by observation rather than commemorative accounts, by comparative measures that have the 'norm' as reference rather than genealogies giving ancestors as points of reference."⁹

This essay is a response to Foucault's lament that we do not yet possess a history of the examination. It is far from the kind of "general" history he called for. Rather, it focuses narrowly on the history of the examination system in Philadelphia's public schools from the beginning of the common school era in the late 1830s through to the late 1850s. In general terms, the essay supports Foucault's claim that the examination provided an important mechanism for the deployment of disciplinary power. However, it also suggests that an adequate account of the development and deployment of the examination system requires much closer attention to the contextual relationships between the "disciplinary revolution" and general social changes, and far closer attention to matters of "intentionality" and ideology, than Foucault thought necessary. The first difficulty arises from the fact that while Foucault hinted at the existence of a relationship between the process of state formation and the deployment of disciplinary power, he neglected to describe the relationship in any detail, particularly the manner in which localized, piecemeal micro-technologies of disciplinary power were incorporated into the state apparatus or how their deployment was related to the development of modern capitalism.¹⁰ In *Discipline and Punish* Foucault hints at a relationship between the disciplinary revolution and the industrial revolution, but his account is brief, highly schematic, and decidedly equivocal in its causal claims.¹¹

The second difficulty arises from Foucault's denial that ideology and intentionality ("projects") have any place in explanations of the deployment of

disciplinary power because power is not “possessed” by a subject.¹² For Foucault, power is not a substance, a possession, a privilege, or a property of individuals or groups. Rather, it is merely “exercised” in action and is discernible only in its “effects” on action or what he calls its “strategies.”¹³ Foucault’s theory of power has often been sharply criticized on this point, for it results in an entirely vacuous concept of social and historical process.¹⁴ Explaining historical events requires attention to both human agency and intentionality. This is not to say that history happens as humans will it, but only that history happens because humans will. As Charles Taylor points out in an essay on Foucault, “the text of history, which we are trying to explain, is made up of purposeful human action.” It is true that “not all patterns *issue* from conscious action, but all patterns have to be made *intelligible* in relation to conscious action.”¹⁵ And to explain “purposeful human action” requires some notion of ideology and some account of the intricate interplay of intention and ideology. Indeed, despite himself, Foucault could not entirely ignore the role of ideology, although he failed to give an adequate account of the complexity of the ideological sources of disciplinary power. For example, Foucault’s (limited) attention to the secular and utilitarian rationalism of Bentham belies his own methodological injunction against ideology even as *Discipline and Punish* ignores the role played by Quaker and Evangelical religious principles and aspirations in the deployment of disciplinary power.¹⁶

This essay attempts to avoid both kinds of difficulties in Foucault’s “genealogical” account of disciplinary power by providing a relatively detailed account of the relationship between the disciplinary revolution, the market revolution of the nineteenth century, and the intentions and meritocratic ideological commitments of the principal actors involved in the development of the examination system in Philadelphia. Specifically, the constitution of the examination system as a form of disciplinary power was a consequence of the desire of school officials to enhance the legitimacy of public high schooling and protect its political fortunes by transforming the classroom into a pedagogical facsimile of the competitive marketplace and the school into a meritocratic institution dispensing scarce educational credentials in a developing identity market for those hungry for social mobility and status.¹⁷ In more formal terms, the deployment of disciplinary power in public education in mid-nineteenth century Philadelphia primarily reflected the playing out of a particular kind of institutional logic—what I shall call “institutional isomorphism”—that linked the organization and governance of public education to an ascendant meritocratic ideology, to democratic political traditions, and to the penetration and rationalization of schooling by two processes linked to the market revolution of the nineteenth century: the institutionalization of an individualistic and commercial version of meritocratic ideology in public schools, and the growing demand for school credentials as a mechanism of social mobility. Indeed, in the final analysis, the deployment of the examination system was essentially part of that vast bourgeois project that Max Weber called the rationalization of the world.¹⁸

In the Beginning...

In 1818 the Pennsylvania state legislature created a system of publicly funded schools that permitted children of the poor to enrol gratis. In Philadelphia, the Board of Controllers adopted the Lancasterian system of classroom organization and appointed none other than Joseph Lancaster the first Principal of the Philadelphia Model School. In Lancasterian schools, students were grouped and instructed on a group basis by “monitors,” but they were continuously evaluated (“inspected”) and promoted on an individual basis by their own class monitors and by monitors specially appointed to examine students by subject area: “inspectors of reading,” “inspectors of arithmetic,” and so on.¹⁹ The Lancasterian examination system was, therefore, as much a technology of power as a technique of knowledge: it imposed a regime of continuous surveillance on the student body (“hierarchical observation”), it sorted them on a comparative and standardized basis (“normalizing judgement”), and it provided a mechanism for shaping individual subjectivity around the imperatives of individual competition.

The enthusiasm of the Board of Controllers for the Lancasterian system did not survive the transition to a common school system in the mid-1830s. Shortly after the passage of the 1836 common school legislation, the Board jettisoned the Lancasterian system of classroom organization and replaced it with a graded classroom system. Two years later the Board took advantage of an amendment to the 1836 act authorizing it to establish a high school for those who “possess the requisite qualifications.” It also appointed Alexander Dallas Bache, a great-grandson of Benjamin Franklin and a graduate of West Point, the first Principal of the Central High School for Boys [CHS]. On Bache’s recommendation, the Board abandoned Lancaster’s system of “inspections” in favor of a rigorous oral admissions examination in grammar, reading, arithmetic, and geography to regulate access to the new school.²⁰ On October 26, 1838, Central High School opened its doors to qualified boys.²¹ Likewise, when the Board opened the Normal School for girls nine years later, and the Girls’ High and Normal School [GHNS] in 1859, it also admitted students on the basis of their performance in a competitive admissions examination.²²

In addition, school officials introduced a system at both schools of promotions examinations that evaluated each student on a continuous basis. Beginning on the first day of high school, every teacher evaluated every student twice every hour—once for scholarship and once for conduct—and the results were recorded and aggregated at the end of each week. At the end of each month, the Principal added up all the demerits for poor conduct, deducted the “good reports” from the total, and then deducted that total from the aggregated scholarship grade.²³ Students were then rank-ordered on an interval-level scale that gave a precise mathematical measure of “merit.” This in turn determined the student’s position (or “seating”) in each class the following month.²⁴ Furthermore, quarterly, semi-annual, and annual examinations rank-ordered, promoted, and honoured students according to their relative positions.²⁵ Finally, towards the end of their

final year, students who were about to graduate “were subjected...to rigid written examination upon the studies of the last year of the course. The average obtained as the result of this examination was combined with the average obtained from the monthly rolls for the last year. This combination gives a final average by which their standing was determined.”²⁶ In one year alone a student at CHS would be subjected to almost 2,400 class evaluations, 24 quarterly exams, 12 semi-annual exams, and an annual exhibition. Over a period of four years, that would amount to a total of approximately 9,700 evaluations. The Girls’ Normal School adopted similar procedures when it opened in 1849.²⁷

Clearly, the examination system at the two high schools combined hierarchical observation and normalizing judgement in a system of disciplinary power far more precise and ambitious than the one deployed in Lancasterian schools. How then might the development and deployment of this examination system after 1838 be explained?²⁸ A rigorously Foucaultian answer would centre on the operation of impersonal “opposing strategies” whose “effects” are only revealed in the operation of disciplinary power and not in the “intentions” of human agents.²⁹ But as I shall try to show, an answer of this kind is not especially satisfactory. Rather, the development and deployment of the examination system in Philadelphia’s public high schools is better explained by a combination of two factors. One was simply serendipitous contingency: the fact that the founding principal of CHS, Alexander Dallas Bache, just happened to have attended West Point at the very same time that its famed superintendent, Sylvanus Thayer, had begun to install an elaborate examination system modelled on French military schools.

The second and more important factor centers on the role of a particular kind of institutional logic—“institutional isomorphism”—in linking the organization and governance of public education to an ascendant meritocratic ideology and to the market revolution. In very general terms, the gradual extension of market relations over the course of the eighteenth and nineteenth centuries was both cause and effect of the development of a pervasive “culture of individualism.” Over time, the culture of individualism “penetrated” and “rationalized” the major institutional spheres of American life: politics, the family, religion, and education. This task was generally carried out by institutional builders or reformers who acted as “carriers” or “agents” of the new culture.³⁰ In public education, at least in Philadelphia, this primarily occurred as the result of the deliberate efforts of school officials to institutionalize an individualistic and commercial version of meritocratic ideology as a way of enhancing the institutional legitimacy of public schooling by creating an approximate “isomorphism” between the internal organization of public schooling and the individualism and meritocratic republicanism of the broader cultural order.³¹ The demand for institutional legitimacy, in turn, reflected the vulnerability of school officials to political pressure in a highly decentralized system of democratic school governance and the growing demand for educational credentials as a mechanism of social

mobility and status attainment as a result of the impact of the market revolution, particularly the industrial revolution, on the structure of opportunity.

Contingency and the West Point Connection

When Alexander Dallas Bache proposed the introduction of the examination system into CHS to the Board of Controllers in 1838, he did not recommend a scheme that he had simply thought up *de novo*. Rather, he appears to have drawn heavily upon his experience of the examination system at West Point developed by Sylvanus Thayer, superintendent of the school when Bache had entered it in 1821. (He subsequently graduated top of his class in 1825).³² Thayer, in turn, had derived his views of academic government from two French academies, the *Ecole Militaire* and the *Ecole Polytechnique*, both of which Foucault identifies as leading centres of “disciplinary power” in France.³³ Thayer had visited the *Ecole Polytechnique*—the most famous scientific military school in the world at the time—in 1816 and had read intensively about the *Ecole Militaire*. Upon his appointment to West Point in 1817, he undertook a thorough revision of the course of studies and the government of the school. He began with a general examination of every cadet in the school that resulted in the dismissal of forty-three of them, one-fifth of the entire cadet corps. He then proceeded to install a new system of government based on an elaborate structure of academic and moral accountability that enmeshed every student in an impersonal, centralized, and comprehensive web of continuous surveillance and evaluation. First, Thayer borrowed from the French and German practice of dividing all cadets into small classes according to their “merit.” The Regulations for 1824, for example, specified that the “internal organization and arrangement of the respective classes shall be strictly according to the principle of merit.” Small classes would ensure that every student recited at least once in every class every day. In addition, Thayer introduced a rigorous entrance examination and required all cadets to submit twice a year to a series of comprehensive examinations to “carefully determine the relative merit of the cadets in each class, and in each particular branch of the studies of that class.”³⁴ He apparently assumed that the combination of small classes, continuous evaluation, and classification and promotion by merit would nurture the manly spirit of “emulation” that he believed was the basis of effective learning.³⁵

Secondly, Thayer developed an elaborate “grammatocentric” system of interlocking written reports that tracked the academic record and general behaviour of each student on a daily, weekly, monthly, and yearly basis.³⁶ Beginning in January, 1818, Thayer required all instructors to keep a “Day Book” in which the instructor was to “keep daily notes of their [cadets] progress and relative merit, and at the end of each week report thereupon to the Superintendent” in weekly Class Reports. In September, 1819, Thayer refined the numerical

grading system he had observed at the Ecole Polytechnique in which students had been graded on a daily basis on a scale of 3 for perfect to 0 for total failure. Thayer altered this to a "Scale of Merit" of 3 for "best" to -3 for "worst," with precise interval-level values for "very good" (2), "good" (1), "indifferent" (0), and "bad" (-1) in between. In so doing he created a standardized currency—a unit of measurement, a measure of value—of disciplinary power.³⁷ Two years later he created an annual list of those who had distinguished themselves in the examinations and a General Merit Roll that aggregated, weighted, and recorded daily recitation marks and examination marks for each subject. The weighted totals were then aggregated to give a General Merit score that rank-ordered the students in a competitive meritocratic hierarchy.³⁸

Thayer's examination system is important in a general way because it represented the first deployment of a mature, "grammatocentric" form of disciplinary power in American educational and industrial history.³⁹ It is also important because it provided a model of an examination system for Alexander Bache, the first principal of CHS. But it would be a mistake to conclude that a mere fortuitous circumstantial event—the attendance of Alexander Dallas Bache at West Point during the superintendency of Sylvanus Thayer—is by itself sufficient to explain the development of the examination system in Philadelphia's public high schools. Rather, the character, development, and deployment of the examination system also reflected the power of "institutional isomorphism"—to shape the organization of schooling in the context of an ascendant meritocratic ideology and the progressive transformation of American life with the extension of market relations into every nook and cranny of American life.

Merit, Competition, and the Organization of Schooling

From the very beginning of both high schools, admissions examinations were highly competitive. In its early years, officials at CHS failed between 40 and 60 percent of those who sat for the admissions examination. Overall, between 1839 and 1867, 29 percent of those taking the exam failed. For most of the nineteenth century, enrolments at CHS represented about 1 percent of male primary student enrolment; only one in fifty first-graders, or 2 percent, ever entered CHS.⁴⁰ The failure rate of GHNS's admission exam was even higher. Throughout his tenure at GHNS, from 1857 through 1865, P.A. Cregar boasted that fewer than half the candidates were admitted year after year. In 1857, for example, 58 out of 110 (52.7 percent) students were admitted; in 1858, 46 out of 108 (42.5 percent); in 1862, 74 out of 162 (45.6 percent).⁴¹ In addition, meritocratic principles shaped the internal life of the school. Although class background had a substantial effect on enrolment patterns at CHS, it did not significantly affect graduation rates, even after controlling for other independent variables in multivariate statistical analyses. Indeed, whether a student graduated or not depended primarily on grade point average: 72.5 percent of the students

with grade-point averages of 85 percent or higher graduated; for those with a grade-point average of less than 85 percent, only 19.8 percent graduated. In addition, in David Labaree's multivariate analysis of graduation rates, grade-point average was easily the strongest independent variable after controlling for other variables, accounting for 57.6 percent of the explained variance in the model.⁴² Overall, between 1850 and 1900, only 27 percent of the students who entered the school graduated. The graduation rate of the first cohort was relatively high (34.1 percent), but all the subsequent cohorts had much lower graduation rates: 23.5 percent of the 1850 cohort, 14.1 percent of the 1860 cohort, and 22.7 percent of the 1870 cohort. The meritocratic order was not nearly as strong at GHNS, although, as we saw, girls had to compete to gain admission to the school.⁴³

The mechanics of the admissions process reflected the efforts of school officials to keep the process as competitive as politically possible. To be admitted, a student needed to attain an average scholarship above a certain level. Between 1850 and 1867, as competition to enter the school increased, the Board of Controllers was able to increase the minimum score required for admission from 46 to 62, although on occasion it relaxed admittance standards when it felt that it was politically expedient to do so, as it did in 1863, for example.⁴⁴ Although the two high schools occupied monopoly positions in the high school credentials market, the school board's capacity to tighten competition in the admissions process was limited by the democratic structure of school governance. But within the constraints imposed by political considerations, the Board kept the admissions process as competitive as possible.

The Board's commitment to competitive examinations reflected the influence of two factors, one organizational and the other ideological. Organizationally, competitive examinations provided an informal market system of control over classroom practices in the lower schools and a useful incentive to student effort. Beginning in 1840, school officials began publishing the name of each student admitted to CHS, the grammar school from which they were admitted, and the aggregate mean score of all students by subject and by school.⁴⁵ The effect on the grammar school principals, teachers, and students was immediate and dramatic. The 1841 *Annual Report of the Board, The Report of the Special Committee to Examine the Central High School*, noted an improvement in the quality of instruction in the lower schools and traced this improvement to the influence of the high school admissions exam. The "reaction...which is produced upon grammar schools," the Committee reported, "...is of the most beneficial character. The teachers of the grammar school watch most anxiously its result, as involving in a measure the characters of their respective schools."⁴⁶ The President of the Board, Henry Leech, noted that "boys who are looking forward to obtaining places in the High School, have a powerful incentive to exertion; and teachers whose labors are to be estimated by the qualifications of their pupils, are in like manner stimulated. The Directors of the sections have the best test of the condition of their schools, in the numbers which they can obtain

admission for at the High School. Independently of the importance of this school as a college for preparing businessmen, it is well worth the amount which it costs for its beneficial effects upon the grammar schools of the district."⁴⁷ The opening of the Normal School in 1848, and later GHNS, created a similar system of informal, market-based control over the female grammar schools.⁴⁸ From its earliest days, therefore, the competitive admissions examination not only regulated access to relatively scarce high school credentials; it also made possible an informal market system of school governance based on a system of competition between teachers and an informal hierarchy of status between schools. Heirs to the intellectual vision of Adam Smith, school officials preferred to rely on the "invisible hand" of market competition rather than the visible hand of bureaucratic authority to regulate admissions into the high school and secure control over teachers and the classroom.⁴⁹

The affinity of school officials for market over bureaucratic solutions to the problem of school governance no doubt reflected their political and occupational perspectives. After all, most school officials involved in the creation and administration of the two high schools were Whig by political inclination and either businessmen or professionals by occupation. As such, they were familiar on a daily basis with the decentralized and informal disciplinary logic of the competitive marketplace, even if they had never read a word of Adam Smith.⁵⁰ But it was not merely their own experiences in the marketplace that attracted school officials to market solutions over bureaucratic ones; it also reflected their ideological affinity for an individualistic and meritocratic version of commercial republicanism and their assumption that the legitimacy and political welfare of the school would be substantially enhanced by the organization of the public school in accordance with meritocratic principles.⁵¹ On the one hand, examinations appealed to school officials because examinations institutionalized the antinomian social logic of the self-made man and the principles of an "abstract individualism" that underpinned it (the assumption that men were essentially architects of their own fortunes whatever their social background). At a time when the growth of market-generated inequalities threatened the intellectual integrity of the principles of equal rights and natural liberty, the antinomian social logic of the self-made man and abstract individualism prevented an ideologically dangerous confrontation between social inequality and social structure by reducing social inequalities to natural inequalities generated by individuals living in a condition of natural liberty. In a sense, examinations made feasible the idea that men entered what contemporaries called "the competitive race of life" as equals, that they were "the architects of their own fortunes," and that they morally deserved the entire stream of social benefits that flowed from their own unaided efforts.

On the other hand, the examinations also appealed because they helped promote the legitimation of high school education by combining a stress upon the extension of equal opportunity, the identification of a natural aristocracy, and the distribution of social rewards according to individual merit with an emphasis

upon the vigorous development of commerce and the protection of republican institutions. All through the 1830s Whigs had claimed that the survival, legitimacy, and prosperity of the republic depended on “enterprise,” internal improvements, and the leadership of a “natural aristocracy.”⁵² Belatedly but increasingly they had accepted the principle of equal opportunity through universal schooling. However, they insisted that public schooling should distribute educational and social rewards on the basis of individual merit as well as elevate public morality and intelligence. Common schools would advance morality, protect republican institutions, and distribute social rewards on meritocratic principles. For example, Samuel Breck, a leading Whig member of the state legislature and chair of the committee that introduced common school legislation in 1834, stressed that a system of free common schooling would protect life, liberty, and property and that it would institutionalize republican ideas of equality and meritocratic notions of individual achievement. “Let them all fare alike in the primary schools, receive the same elementary instruction, imbibe the republican spirit and be animated by a feeling of perfect equality,” he wrote. “In after life, he who is diligent at school will take his station accordingly, whether born to wealth or not. Common schools universally established will multiply the chances of success, perhaps brilliant success, among those who may otherwise forever continue ignorant. It is the duty of the State to promote and foster such establishments. That done, the career of each youth will depend upon himself....let them all start with equal advantage, leaving no discrimination, then or thereafter, but such as study shall produce.”⁵³ Similarly, Thaddeus Stevens married republican, democratic, and liberal principles of social order in his celebrated defence of common school legislation in 1836: common schools would extend equal opportunity, provide a cheap and accessible mechanism of meritocratic social mobility, undermine aristocratic assumptions of social hierarchy, legitimate market-generated inequalities, nurture morality and republican citizenship, and create a republican community free of class divisions and conflict. While members of the legislature should not doubt “the utility, and to free governments, the absolute necessity, of education,” they also needed to remind themselves that the common schools provided a mechanism of social mobility for “the meritorious poor.” Only then “should we no longer see the struggling genius of the humble obstructed, and as now, stopped midway in the paths of science, but we would see them reaching the farthest goal of their noblest ambition. Then the laurel wreath would no longer be the purchase of gold, but the reward of honest merit.”⁵⁴

The meritocratic component of Whig republicanism differed in important respects from the meritocratic principles of classical republicanism and even the liberal republicanism of Thomas Jefferson. Where Jefferson’s meritocratic commitments principally focused on the identification and selection of a political elite—a “natural aristocracy”—to govern the republic, the meritocratic republicanism of the high school system principally focused on promoting “individual achievement” in “business.” In effect, the meritocratic rhetoric of

the supporters of CHS was more entrepreneurial than political. In 1841, for example, Alexander Bache stressed that the purpose of the the school was not so much to provide a classical education for a political elite as “to provide a liberal education for those intended for business life...to prepare our pupils for, not to remove them from, business life.”⁵⁵ The same year, Henry Leech, the wealthy president of a local railroad company, a leading Whig politician, and the President of the Board of Controllers, emphasized that the system of free, common, and graded schooling placed the pupils “upon the footing of perfect republican equality.” At the same time, it allowed “no distinction, but that of *merit*...among the children. Education, from the lowest grade for the infant, to the highest for all the youthful citizens, is put within the reach of all.”⁵⁶ Likewise, the state superintendent of education, A.V. Parsons, after a visit to the school in 1842, remarked that the school taught its students “that *merit* alone is the distinguishing trait in the American character—that talents and integrity will elevate any one to a high superiority over rank or wealth—that no aristocracy can flourish, or even exist in this country.”⁵⁷ Similarly, Thomas Dunlap, a prominent Whig lawyer, successor to Nicholas Biddle at the United States Bank in 1839, and President of the Board of Controllers between 1831 and 1839, also stressed the meritocratic features of republicanism in a homily in 1851 on Central High School. “Ignorance in the masses is the ailment of usurpation and the safe-guard of tyranny,” he began. “Education, confined to the favored few, makes but a janizary guard for the tyrant. The only pedestal on which Liberty can stand erect, forever firmly poised, is UNIVERSAL EDUCATION.” He then went on to describe the high school as the “crowning stone of the arch” governed by the transcendent meritocratic principles of equal opportunity and individual achievement:

It is the School of the Republic,—it is emphatically the School of the People—founded by the people—maintained by the people—controlled by the people—responsible, under God, to none but the people....Free to all—amply sustained—skillfully organized for its purposed ends...knowing no patron, lay or spiritual—screened by no chartered privileges...controlled by no lordly or royal founder—trammelled by no antiquated usages or effete statutes—knowing no master but God and the People—opening its portals alike to the son of a President or a ploughman, a Governor or his groom, a millionaire or a hewer of wood—treating with equal justice—rearing with equal fidelity, and crowning with all its honors alike the one and the other, and demanding no passport to its blessings, or to its laurels, save that which the people demands, and forever will demand from all its sons—INDIVIDUAL, PERSONAL MERIT.⁵⁸

In short, competitive examinations institutionalized an abstract individualism and the meritocratic principles of Whig republicanism. While the admissions examination constituted the school system as a competitive educa-

tional market, promotions exams constituted the classroom as a competitive marketplace in which students competed for grades, promotion, and graduation. That is, the admissions exam integrated the high schools into a nascent credentials market, while promotions examinations joined the classroom to the market revolution. Competitive exams thus assumed a position in meritocratic ideology similar to the one assumed by free and competitive markets in capitalist doctrine: they promoted effort, achievement, and character, they invigorated learning, they opened up channels of educational mobility for the meritorious, they tested and rewarded competence, they punished the indolent, and they matched merit to social position. Success in competitive examinations created educational hierarchies and distributed educational and social rewards according to the same meritocratic principles that distributed rewards to enterprising entrepreneurship in the marketplace. In fact, success in examinations was really little more than successful entrepreneurship in an educational setting, an academic version of the self-made man celebrated by Calvin Colton and others. "Ours is a country, where men start from humble origins, and from small beginnings rise gradually in the world, as the reward of merit and industry, and where they can attain to the most elevated positions, or acquire a large amount of wealth, according to the pursuits that they elect for themselves," Colton wrote. "No exclusive privileges of birth, no entailment of estates, no civil or political disqualifications, stand in their path; but one has as good a chance as another, according to his talents, prudence, and personal exertions. This is a country of *self made men*, than which nothing better could be said of any state of society."⁵⁹

In a very real sense, therefore, the underlying social logic of the examination system was identical to the social logic implicit in the dominant image of America as a fluid and "classless" society based on continuous gradations of competitive individual achievement.⁶⁰ And the congruence was not just accidental or fortuitous: school officials had willfully shaped high schooling in accordance with meritocratic principles and used competition as an informal means of control over students and teachers. In addition, they had hoped that promoting an isomorphism between the organization of schooling and the meritocratic individualism of the surrounding institutional environment would protect public high school education from its ideological foes. At the same time, however, the examination system also reveals a fundamental tension at the heart of the social vision of the framers of the common school system and in the broader society. On the one hand, the social logic of the examination system contradicted the egalitarian premise of the common school system. Where the common elementary school system implicitly admitted the existence of a stratified society and sought to transcend it by providing free access to children of all classes, creeds, and ethnic backgrounds, the high school presupposed the desirability of a stratified society shaped according to meritocratic principles. Where the common elementary school system presupposed a republican community bound together by common moral bonds of industry and republican citizenship, the high school presupposed

a competitive market society in which individuals made their own way according to their own merits.

On the other hand, the examination system did not so much contradict the egalitarian premise of the common school system as fulfil its meritocratic promise. Where the elementary common school system institutionalized equal opportunity, a rigorous and competitive admissions examination limited access to the high school, which constituted a meritocratic institution dispensing scarce and highly valued credentials increasingly necessary to social mobility in a commercial republic. In effect, the admissions exam transformed the sociology of the common school system: the opportunity structure that school officials created was not a simple ladder of equal opportunity but a "limited access" version of a system of "contest mobility" governed by three rules: egalitarian access at the lower level, restricted access at the high school level, and the distribution of educational and social rewards according to the logic of competitive achievement.⁶¹

The new opportunity structure altered dramatically the rules of status attainment and class formation in nineteenth-century Philadelphia. Although officials represented the examination system as a socially impartial mechanism of educational and social mobility, in fact it embodied two cultural rules associated with an ascendant "culture of individualism" that was anything but socially neutral: the organization of schooling around the principles of "possessive individualism" and bourgeois images of competitive social relations, and an "abstract individualism" that assumed away the social construction of individual ability and examination performance skills. One effect of these two rules was to constitute the examination system as a class-structured system of social selection rather than a class-neutral one, while a second was to restrict access to high schooling and the credentials it conferred to those students with the social and cultural backgrounds necessary to pass the admissions exam, and whose families had the economic resources to bear the considerable opportunity costs of protracted secondary schooling.⁶²

The result is clearly apparent in the social demography of the two high schools. At both high schools the social backgrounds of the students admitted were far from representative of the social structure of the city as a whole. Indeed, students at both high schools came disproportionately from proprietary families. At CHS, as David Labaree reports, between 1838/40 and 1870, 47.1 percent of the student body came from proprietary households, 14.2 percent from employed middle-class families, 31.8 percent from the skilled working class, and 6.8 percent from the unskilled working class. By themselves, however, these figures do not indicate how representative this distribution was compared to the city as a whole. However, by dividing the percentage of students from each class category enrolled at CHS by the city-wide distribution for that class, we gain a measure (an index of representativeness, or i.r.) of how representative the enrolment distribution at CHS was relative to the city as a whole. Between 1850 and 1870 students from proprietary families were greatly overrepresented relative

to the percentage of proprietary families in the city (i.r. = 2.2, where 1.0 = parity); sons of the employed middle class were even more overrepresented (3.3); sons of skilled workers were considerably underrepresented (0.5), while sons of unskilled workers were even more underrepresented (0.3).⁶³

At GHNS, the degree of stratification was even higher. Overall, daughters from proprietary families accounted for 53.3 percent of student enrolment at GHS between 1850 and 1870. Middle-class students accounted for 12.9 percent, while the skilled working class accounted for 31.1 percent, and daughters of unskilled working-class heads accounted for 3.3 percent. Proportionately, daughters of the proprietary class were overrepresented 2.4 times in 1850 and 3.3 times in 1870; the index of representativeness fell for the employed middle class (from 2.3 to 1.2) and skilled workers (from 0.8 to 0.6), although it rose slightly for unskilled workers (from 0.04 to 0.17).⁶⁴ Overall then, the degree of stratification of the school's enrolments increased between 1850 and 1870.

The stratified social demography of the two schools undoubtedly reflects the operation of class-based social processes: the ability of families to absorb the opportunity costs of high school attendance, different educational aspirations, and the cultural practices that made success in examinations possible. But however much class-related processes influenced who sat for the admissions examination and the capacity to do well in it, admission to the two high schools was itself meritocratically determined. Admission depended on success in the admissions exam and success in that alone, however much meritocratic procedures favoured those with the appropriate economic resources and cultural practices.⁶⁵ Moreover, as status attainment and social mobility increasingly became a function of educational credentials, credentialling processes progressively mediated processes of status attainment and class formation.⁶⁶ The expansion of the wage-labour market, the separation of manual and non-manual work, the decline of independent proprietorship, and the industrialization of production all generated a growing demand for educational credentials as a means of promoting social mobility among significant sections of the Philadelphia proprietary, middle, and skilled working classes.⁶⁷ The growing demand for educational credentials in large part reflected the rational accommodation of the socially ambitious to the transformation of the occupational structure and the creation of new family-based strategies of economic survival and social mobility. In time, as the transformation of the economy and the growth of schooling subordinated the process of social mobility to educational credentialling, schooling became—along with the organization of work, the separation of work and family life, the sexual division of labour, church membership, home ownership, political activity, and labour market participation—a major locus and mechanism of class formation around which class practices were organized and class struggles fought.⁶⁸

There is more than a little irony in this. As the importance of educational achievement in promoting social mobility increased over the course of the century, the socially ambitious grew more and more dependent on educational

credentials. What had initially been the creation—and the creature—of ambitious members of the middle and proprietary classes, became instead an independent mechanism shaping the destiny and fortunes of their children. Those who had once been the agents of the market revolution had become its subjects. In effect, the extension of market relations progressively subjected Americans of all classes to the impersonal logic and discipline of what Marx described as “the silent compulsions of economic relations” in a system of market competition.⁶⁹ As Alexis de Tocqueville ironically observed in the early 1830s, “When all the prerogatives of birth and fortune are abolished, when all professions are open to all and a man’s own energies may bring him to the top of any one of them, an ambitious man may think it easy to launch on a great career and feel that he is called to no common destiny. But that is a delusion which experience quickly corrects....They have abolished the troublesome privileges of some of their fellows, but they come up against the competition of all. The barrier has changed shape rather than place.”⁷⁰

The competitive logic of the admissions examination, therefore, constituted this exam as a market-based system of disciplinary power—a “decentralized panopticon,” in John Lea’s words.⁷¹ J.P. Wickersham captured nicely the disciplinary character of the examination system in 1852 after visiting Philadelphia’s schools. “The schools are divided into five sections, with a teacher for each,” he reported. “An examination must in all cases be passed to reach a higher section from a lower. A pupil starting in a primary school, and graduating at the High School, must pass at least twenty-three general examinations, five in each of the lower schools, and eight in the high school. And these examinations are really such....Between continuance in a former class and a satisfactory examination, there is no alternative.” As a consequence, the examination system enveloped all students in the public schools within a common system of disciplinary power:

If the powers of ambition and emulation can be made subservient to the purposes of a true education (and I believe they can), the Philadelphia schools must be among the best in the world, for surely I have never seen or read of any in which these powers are more actively stimulated. I do not say it is done intentionally, or that other motives are not excited; but it is the natural result of the system as there administered. At any rate, it must have a tremendous effect.— Starting at the High School it reaches down through the whole series, until the inmates of the poorest hovel in the city are quickened and ennobled by its influence. The Old World may boast of its Universities, which in their palmiest days could number five or ten thousand; but here we have a system of schools, which far out rivals these, embracing already fifty thousand pupils, linked together by a common bond, every pulsation of whose organic life is felt from one extreme to the other.⁷²

The deployment of the examination system did not, however, reflect the successful institutionalization of an elite strategy of social control, let alone of the operation of impersonal “opposing strategies” whose “effects” are only revealed in the operation of disciplinary power and not in the “intentions” of human agents. Rather, its deployment reflected the choice of meritocratic competition as the dominant pedagogical practice of the school, a preference for market-based rather than bureaucratic structures of school governance, the desire to legitimate public schooling, and the ambient processes of class formation that fed the demand for educational credentials. In the final analysis, therefore, the organization of the examination system as a structure of disciplinary power reflected the integration of public education into the market revolution and the institutionalization of meritocratic principles.

Systematization, Democratic Politics, and Possessive Individualism

Almost from the very moment that CHS opened in the fall of 1839, school officials found themselves repeatedly embroiled in heated controversies arising from accusations in the local press that all too obviously challenged the institutional legitimacy of CHS: that the school was “elitist” and “aristocratic” and “unnecessary,” given that the only education that the masses needed was a practical and useful “English” education of the kind provided in the elementary schools. In response to these criticisms, school officials scurried to protect the high school by attempting to dispel the accusations of “aristocracy” and “elitism” and to develop various safeguards and procedures that signalled the school’s determination to prevent any kind of favouritism or nepotism in the administration of the admissions exam.

Charges of “elitism” and “aristocracy” first surfaced during April to June, 1840, in the pages of one of Philadelphia’s leading newspapers, the *Public Ledger*, in the form of a series of letters from “A Mechanic,” who complained that the admissions procedure into CHS permitted the sons of the rich who attended private schools to gain entry into the high school at the expense of the children of the poor and the workingmen of the city. Admittedly the Board had stipulated that no student could be examined for admission unless he had spent six months in the public schools, but this had merely resulted in an invasion of the public schools by the “sons of the rich.” Accordingly, he estimated that the establishment of the high school had denied some 3000 sons of the poorer classes a public education. He therefore demanded the closing of the high school and the opening of a “few more good English schools” where the sons of mechanics could learn “useful knowledge.” The high school, he wrote, “with its professorships, its extravagant salaries, and its other privileges and immunities, which now absorb so much of the school tax...ought to be abolished” and its funds committed to the provision of a general education to the children of the rich and the poor

that "will fit them for any situation in our republic...and render it impossible that they ever should be ruled by any demagogue."⁷³

Eleven months later, a series of letters to the editor of the *North American* admonished school officials for "the growing spirit of extravagant and injudicious expenditure" and for the lack of schooling for the children of the poorer classes. The general education of the great mass of the citizenry had been sacrificed in order that a few children of the wealthier classes "may receive a quasi-collegiate" education.⁷⁴ In April-May, 1842, the controversy broke out again, this time in the pages of the *United States Gazette*, echoing the same concern of the previous years: the disproportionate expense of the high school and the consequent lack of educational opportunity for the children of the poor. The critic estimated that the cost of educating "one son of a rich man...in Latin and Greek" at the "aristocratic" high school denied educational opportunity to "thirteen poor children."⁷⁵ Then, at the April 26th meeting of the Board of Directors of the First Section (at the time, the city had eleven sectional boards and a central board composed of representatives of each of the sectional boards), one of the directors, Charles Gibbons, introduced a series of resolutions intended to close down the school: that "the Central High School is not necessary to a healthy and effective system of common school education," that "the District is not able to support the said school under its present expensive organization," and that "the funds appropriated for the support of that school would be more usefully and more justly applied in the establishment and support of additional primary and grammar schools to receive the applicants now waiting for admissions." The resolutions were tabled and an *ad hoc* committee of five appointed to investigate the issues.⁷⁶

Meanwhile, on May 14, citing "the deplorable condition" of the school fund, the County Board of Commissioners appointed a committee to investigate the matter. On May 23 the committee reported back and demanded "systematic and thorough retrenchment" in public education expenditures.⁷⁷ A week later on May 31 the committee of the First Section School Board returned with a minority and a majority report. The authors of the minority report, Charles Gibbons and J. Coleman Fischer, the former a local judge and the latter the Clerk of the Select Council, repeated Gibbons's earlier assertions and argued that the survival and prosperity of the republic depended on an education that provided "useful knowledge" to all children in order that they might "understand their business and duties in life." Given its other educational needs, the city had little justification in funding an expensive public education for a minority of "classical scholars."⁷⁸

Closer examination of the rhetoric of the various critics reveals two very different perspectives. The first group of critics in the early 1840s had employed a grammar of opposition steeped in the language of Jacksonian democracy and equal rights: hostility to class privilege, monopoly, and aristocracy, and indifference to higher learning. To these critics at least, the high school was to education what the Bank of the United States was to banking and the economy.

They were not opposed to public education, but they would have no truck with any institution that smacked of class privilege, undermined equality, or created an aristocracy.⁷⁹ The second group of critics—Gibbons and Fischer, for example—opposed the high school on very different grounds. For these critics the common school law only anticipated the creation of a “good English education,” the high school was far too expensive, and its administration was not marked, as Gibbons and Fischer put it, by “economy, efficiency and energy,” or by “prudent and attentive directors.”⁸⁰ While Jacksonian critics had attacked the school for its elitism and aristocracy, Gibbons and Fischer argued that the aristocratic character of the school made it inappropriate for most students and far too expensive to be sustained by public funds.⁸¹ The attempt of Gibbons and Fischer to deny funds to the school board for the high school failed, although some 18 (out of 48) members of the city council supported the resolution to close the high school. However, the vote did not break down along party or class lines. While some Whigs supported the high school, others, including Gibbons and Fischer, wanted to close it. Moreover, there were no significant occupational differences between those who supported and those who opposed the resolutions: while more businessmen and professionals voted to keep the high school open, nearly all the votes to close the school were cast by businessmen and professionals.⁸²

Support for the high school came from a variety of sources: from the ranks of school board members, from within the skilled working class, and in the local press. A majority of the city directors voted to support the school; the Board of Controllers of the Fourth District passed a series of motions deploring the attacks upon the public schools by members of the Board of Controllers of the First District.⁸³ Supporters of the high school believed, as the authors of the majority report to the Board of Directors of the First Section in May, 1842, put it, that the “republican” character of a comprehensive graded school system provided all children with sufficient ability, irrespective of social background, with the opportunity to rise in social rank. Moreover, to abolish the high school would drive children from “the middle and higher walks of life” from the common school system, thereby “breaking up that fraternal and republican system of association of classes which our present public schools are so well calculated to foster.”⁸⁴

A significant number of working-class parents also supported the high school, at least if school enrolments are to be believed. Between 1839 and 1840, 40.4 percent of the students at CHS came from skilled working-class families; a further 4.9 percent came from unskilled working-class families. Admittedly, the percentage of students from the skilled working class had dropped to 21.8 percent by 1850, but nonetheless, at the time of the controversy, a sizeable fraction of the Philadelphia working class supported the high school. Moreover, at least some of the opposition among the mechanics of the city to the high school appears to have been fuelled by frustrated ambition in the credentials market and not just by ideological hostility to advanced schooling. The “Mechanic” who started the whole controversy in 1840, for example, complained of the fact that he would

not be able to send his sons to the high school because admissions had been dominated by the sons of the rich and because of the refusal of the school board to provide free textbooks. Only at this point in his argument did he demand the closure of the high school, although in subsequent correspondence, he reversed himself by urging the creation of additional grammar schools and high schools.⁸⁵ For at least one mechanic, therefore, equality of opportunity was not so much about social levelling as about extending the opportunities for individual economic mobility. An institution that limited access to a developing credentials market smacked of monopoly and class privilege; equal rights demanded equal competition. As so often happened in nineteenth-century America, competition in the marketplace generated class conflict even as it dissolved class consciousness, with the result that class struggles took the form of struggles over the structure of social mobility rather than over the structure of social relations.⁸⁶

Finally, the editors of local newspapers mounted a spirited defence of the high school that emphasized republicanism, equality, and social mobility under conditions of fair competition. The editors of the *Public Ledger*, for example, claimed that the public schools of Philadelphia "were free to all who choose to enter them," that "within their walls the distinctions of riches and poverty are unknown," and that "the only superiority that is acknowledged is a superiority of merit." The editors also argued that overcrowding in the schools was not the result of an invasion by the sons of the wealthier classes but of popular demand for education and the spirit of "equality." They also denied that the cost of the high school was extravagant," particularly in light of the manifest "benefits" it conferred upon the city and its youth.⁸⁷ Similarly, in a series of editorials in late May and early June, 1842, the editors of *The Pennsylvanian* argued that "the High School ought to receive the favor of every true republican" if they wished to protect republican institutions. The high school was "The Poor Man's College;" it enabled "the son of the poor mechanic to acquire the knowledge which has hitherto only been permitted to the rich," it provided for the cultivation of "natural talent," and it "tended to break down unnatural distinctions in society." Furthermore, the system of admissions was "such that all favoritism is necessarily excluded," and the public provision of higher education incited children in the lower grades "to increased exertion."⁸⁸ Not to be outdone, the editors of the *Daily Chronicle* and several other newspapers wrote a series of editorials defending the "republican policy of equalizing the benefit of liberal education among all classes of the community."⁸⁹ And lastly, the editors of the *United States Gazette* published letters from several correspondents during April, May, and June, 1842, who variously claimed that the cost of the high school was not excessive, that the high school exercised a "salutary" influence over the conduct of the lower schools, that it "stimulated the pupils of the grammar schools to industry and studious habits," and that the opponents of the high school were guilty of "aristocratic" bias in that the high school, and public schools generally, destroyed "the invidious distinction between rich and poor" and therefore exemplified "the true republican principle."⁹⁰

The high school then was not without considerable support in the community. Still, the controversy caused a great deal of anguish among school officials, prompting them to try to prove that the school was not "aristocratic" and to take steps that ensured the fairness of the admissions procedure.⁹¹ In order to challenge the claim that the school only admitted the sons of the rich, Alexander Bache began to publish, beginning in July, 1840, the occupations of the fathers of the successful applicants. (He did not publish the occupations of the fathers of the students who had applied for admission but failed the admissions examination). Later, both Bache and Hart made a point of emphasizing the percentage of students whose fathers were employed in the mechanical trades. In addition, Bache carefully detailed the expenditures of the school. Finally, he began to pay very close attention to the running and organization of the admissions exam. In his *First Annual Report*, Bache nonchalantly remarked that he had played no particular role in the first admissions exam administered in the summer of 1839. After the controversy broke, however, he took very great interest. In 1841, for example, he devoted almost his entire report to defending the school against the charges of its critics. Not only did he describe the social backgrounds of those admitted, insist on the practical nature of the curriculum, and detail the legitimate expenses of the school, but he also made a special point of noting that the students at the first admissions exam were "examined by numbers," that part of the examination was open to the public, and that the admissions test procedures had been publicized beforehand, all in order to protect the integrity of the examination process. He also noted that the admissions exam was partly written and partly oral, that the written exam was conducted personally by the Principal of the High School prior to the public oral exam, and that during the oral exam the written exams "were submitted to the inspection of the visitors."⁹²

What Bache started, John Seely Hart carried on with enormous energy during a seventeen-year tenure as principal beginning in 1842. Hart, like Bache, was keenly aware of the intense scrutiny of the admissions test by students, parents, the press, and grammar school principals. "In proportion to the importance attached to the examinations for admission," Hart observed, "is the jealousy with which they are watched, and the care with which they should be conducted," especially the need to avoid any suggestion of "favoritism."⁹³ The one significant alteration to Bache's examination system that Hart undertook was to replace oral exams with written exams by extending the scope of the written exams "to every branch of study" and having them conducted "by literary and scientific gentlemen in no way connected with the school."⁹⁴ Eventually, he abolished oral examinations altogether in order to prevent students with "a glib, off-hand way of expression from deceiving the examiner."⁹⁵ Meanwhile, he continued to defend the examination system publicly against all charges of favouritism and nepotism. By 1850 he was devoting fully twenty pages to a detailed description of the procedures used to ensure impartiality and fairness and copies of the forms used: students were identified by number rather than by name to ensure impartial grading; students were seated at "separate desks to prevent

copying from each other"; teachers roamed the examination room "guarding against reference to books, copying, communicating, or collusion of any kind among the candidates"; as a "further precaution against copying, four different sets of questions were prepared on each subject, each set being as nearly equal to the others in difficulty" and the students seated in a manner that ensured that no two students contiguous to each other took the same examination. After the examination, the students' papers were graded, averaged, recorded in rank order, and the students admitted to the school in rank order according to the number of places available. In addition, all of the papers relating to the examinations were "carefully preserved. That is to say, they are arranged in suitable order, and bound, and an index is prepared to facilitate reference to them....These volumes contain the marks given by the different Professors, the questions used in the written examination, the register of admissions and rejection, the certificates of age and attendance upon the public schools, and all the written answers handed in by the applicants. In other words, they contain all the evidence which the Professors had before them in admitting or rejecting any candidate."⁹⁶ Students applying to the Normal School were also required to pass a rigorous written exam that was subjected to similar controls to ensure impartiality and fairness.⁹⁷

From a "genealogical" perspective, the strenuous efforts of Bache and Hart to systematize the examination system resulted in the creation of a sophisticated grammatocentric form of disciplinary power. And clearly, there can be little doubt on this score: the substitution of written exams for oral exams and the use of nominal-level measures of relative merit constituted the examination system as a truly grammatocentric form of disciplinary power. Lancasterian schooling had cast a net of continuous observation, inspection, and normalizing judgement over students, but the technology of the Lancasterian examination system had limited its ability to institutionalize a truly panoptic form of disciplinary power. In Lancasterian schools, students were subjected to oral rather than written exams; normalizing judgements were ordinal rather than nominal level; and, as far as we know, school officials did not keep written records of student progress. Hart's examination system was a much more sophisticated affair: exams were written rather than oral; normalizing judgements were nominal level rather than ordinal (thus creating a standardized currency of evaluation); they included demerits for misbehaviour as well as merits for scholarship; and school officials kept elaborate records, not only of the examination results, but also of the exams themselves.

But to label the examination system in Philadelphia's public high schools as a mature, grammatocentric form of disciplinary power simply describes one of the important outcomes of systematization. Such a description fails to explain the sources of systematization: it identifies consequences, not causes. To explain the systematization of the examination system we need to turn elsewhere. In the first place, the democratic structure of educational politics forced the Board of Controllers to be at least nominally responsive to public opinion and political pressure. In addition, as we have seen, repeated challenges to the legitimacy of

CHS during the 1840s compelled Principals Bache and Hart to take extraordinary steps to ensure the fairness and impartiality of the admissions exam. Finally, systematization can be traced to a third source: the fact that the highly competitive admissions exam prompted intense—even invidious—interest in the administration of the exam by parents and teachers. And for very good reason: high school credentials were increasingly viewed by substantial numbers of socially ambitious parents from all social backgrounds as the preferred passport to occupational mobility and social status.⁹⁸ Parents closely monitored the conduct of the admissions exams, attended them as observers, petitioned the Board if they believed that their children were unfairly treated, and occasionally attempted to circumvent the Board's rules governing attendance at grammar schools and admission to the high schools. Likewise, anxious grammar school principals, whose careers depended on the relative performance of their students in the admissions exam, continually fretted about the integrity of the exam and closely monitored it. Under normal circumstances, pressures like these would be enough by themselves to prompt school officials to take elaborate steps to ensure the impartiality and integrity of the admissions exam.

To describe the examination system as a mature form of grammatocentric disciplinary power is thus to identify an important consequence of systematization rather than one of its sources. School officials did not see themselves as self-conscious agents of a disciplinary revolution. Rather, they were responding in a very pragmatic way—and responding because they had to, given the formally democratic structure of school governance—to very direct political pressures. In a sense, the constitution of the examination system as a disciplinary technology happened behind their backs: it was an unintended consequence, rather than a cause, of actions undertaken for other reasons. This is not in any way to diminish its importance: it is merely to identify the relevant cause-and-effect relationship that is easily obscured by Foucault's preoccupation with the operation of impersonal "opposing strategies" whose "effects" are only revealed in the operation of disciplinary power and not in the "intentions" or "ideologies" of human agents.⁹⁹ I agree that a focus on the "intentions" and "ideologies" of the relevant actors is not going to reveal the operation of disciplinary power, but they are far from irrelevant in explaining the deployment of disciplinary power. Foucault both ignores the importance of unintended consequences and places too much faith in obscure, impersonal "opposing strategies." In very much the same way that the initial deployment of disciplinary power in public education essentially piggybacked on the actions of school officials seeking to protect the institutional legitimacy and political well-being of public high schooling, so too occurred the refinement and deployment of a mature grammatocentric system of disciplinary power.

The creation of a grammatocentric form of disciplinary power was but one of the important consequences of systematization. Two others were also significant. The first of these was the creation of a nascent bureaucratic structure of control over the examination system even as the latter continued to function

as a market-based system of school governance. Eliminating the possibility of “favoritism” in the admissions process reduced the anxiety of parents and grammar school principals. Consequently, systematization reduced political pressure on school officials. As David Labaree suggests, the systematization of the admissions exam provides an example of “bureaucratization from below” fed by “consumer demand for high school credentials.”¹⁰⁰ Systematization protected school officials from disappointed parents and grammar school principals; it provided a “buffer” against political pressure and a means for legitimating public high schooling.¹⁰¹

One further consequence of systematization also deserves some attention: the effective rationalization of the pedagogical process generally, and the examination system particularly, into a profoundly important economic ritual centred on the competitive individual appropriation of educational property. The highly individualistic and competitive social relations of the admissions exam—the written exams, the physical isolation of students from each other, the procedures intended to prevent copying or co-operative and joint evaluation, the rank-ordering of grades and admissions, the zero-sum comparisons between students—were not just neutral pedagogical injunctions devoid of any social content, or pragmatic expedients designed to protect the school from political controversy. While they were clearly intended to accomplish that objective, they were also a lot more. In fact, individually and collectively these examination practices both expressed a particular cultural rule derived from the broader culture of individualism and promoted the social and spatial organization of educational practice around what Robert Connell and his colleagues call the competitive individual appropriation of school knowledge.¹⁰² Following the lead of C.B. Macpherson, I shall call this cultural rule “possessive individualism.”

The intellectual origins of this principle can be traced, in large part, to seventeenth-century political theory, and particularly to John Locke’s theory of property. “Though the Earth, and all inferior Creatures be common to all Men, yet every Man has a *Property* in his own *Person*,” Locke wrote in *The Second Treatise of Government*. “This no Body has any Right to but himself, the *Labour* of his Body, and the *Work* of his Hands, we may say, are properly his. Whatsoever then he removes out of the State that Nature hath provided, and left it in, he hath mixed his *Labour* with, and joyned to it something that is his own, and thereby makes it his *Property*.”¹⁰³ We might think of the examination system in similar terms: where Locke’s possessive individualist secured property rights by mixing his labour with the land, nineteenth- (and twentieth-) century students appropriated educational property by putting pen to paper in competitive examinations. Where abstract individualism neutralized the moral relevance of social background on examination performance, the organization of the admissions exam ritualized the appropriation of knowledge by constituting education as a highly ritualized “pedagogical exchange” that conferred ownership of a certain kind of intellectual property—educational credentials—in return for successful academic performance in examinations.¹⁰⁴ Atomized and abstracted students

appropriated knowledge individually and competitively rather than collectively or co-operatively: knowledge was a commodity to be appropriated and possessed by an individual rather than wisdom to be shared collectively. Or, to put the argument a little differently, we might think of the examination system as a ritual of entitlement: successful performance entitled students to highly valued educational property. To cheat was to steal; to perform successfully was to gain property rights over an educational credential. In effect, where the examination system relied upon what might be called the labour theory of knowledge to confer ownership of educational property on meritorious students, systematization guaranteed or underwrote the exchange value of the credentials conferred by the high schools on successful examinees.¹⁰⁵

From this perspective, therefore, the systematization and ritualization of the examination system regulated and legitimated the appropriation of credentials in much the same way that the law of contracts regulated property acquisitions in exchange relations generally. On the one hand, the social organization of the examination ritual reflected the ideological commitment of educational practitioners to possessive individualism and the competitive individual appropriation of school knowledge. On the other hand, it conferred ownership of educational property upon successful students through the ritualization and systematization of appropriation in the pedagogical exchange.¹⁰⁶ The social and spatial organization of the examination system thus ritualized and legitimated the reconstitution of the classroom as a competitive marketplace and the “pedagogical exchange” as a rationalized system of individual appropriation, even as the projection of abstract individualism onto students by school officials assumed away the effects of social background on examination performance.¹⁰⁷

The strenuous—and successful—efforts of Bache and Hart to protect the impartiality and integrity of the examination system thus reveals the same institutional logic responsible for the organization of the admissions exam as a system of competitive individual achievement: the democratic structure of educational politics that constantly pressured school officials to maintain the institutional legitimacy of public schools, the commitment of school officials to meritocratic and possessive individualist principles of schooling and to market-based rather than bureaucratic structures of school governance, and two processes of class formation, one centred on the “collective mobility project” of grammar school principals, and the other on the social mobility aspirations of ambitious parents who wished to get their children into the high schools in the context of a developing credentials market.¹⁰⁸ In the final analysis then, the systematization of the examination system reflected the ability of a pervasive culture of individualism and market pressures to promote the rationalization of schooling in the context of a democratic structure of school governance. In the process, the examination system enmeshed pupils, teachers, principals, and administrators in a web of disciplinary power, not because school officials deliberately and knowingly set out to do so, but because everyone involved—pupils, teachers,

principals, and administrators—were in various degrees both the willing agents and the unwilling subjects of the market revolution.

Merit and Morals: Moral Education and Meritocratic Ideology

Shortly before assuming his duties as Principal of CHS in 1839, Alexander Bache wrote that he intended to combine “moral and intellectual” education at the school, that he would eschew corporal punishment, and that he would rely on “general rules” to secure discipline and promote moral education.¹⁰⁹ To secure these ends, Bache, and then Hart after him, relied upon a two-part strategy. First, in order to ensure systematic, uniform, and effective enforcement of the disciplinary code, all disciplinary matters were centralized, as they were at West Point, in “the hands of the Principal” rather than individual teachers.¹¹⁰ And second, “a well defined system” of “accountability” ensured that anyone in the school could be held accountable for any failure to follow specified “duties.” “The duties of the school must if possible be so divided that nothing can either be done or left undone for which there is not SOME ONE ACCOUNTABLE,” Hart wrote in 1846.¹¹¹ However, accountability would not be cultivated in a disciplinary system based on corporal punishment. Fear would “beget an unnatural state of order that is injurious rather than beneficial. Where fear is the only motive appealed to, and instant punishment follows every offense, obedience and quiet may undoubtedly be secured.” But in such a system, “conscience will not be educated. No habit of self control will be cultivated. No just estimate will be formed of the real accountabilities of life.”¹¹²

In pursuit of the second objective, Bache and Hart relied on two expedients. The first involved the clear delineation of all the various duties of the students in a Code of Rules determined by the faculty and distributed to each student every semester. Though the Principal was accountable to the school board for the overall condition of the school, and each Professor was responsible for maintaining order, for instruction of the prescribed curriculum, for proper record-keeping, “and for his own room and the furniture in it,” the system of accountability weighed particularly heavily on the students. Each student, for example, had “a particular seat assigned to him in each room. This seating is a matter of record, accessible at any moment by the Professor. The Record of the seating, and the order of the exercises, always show by whom a seat was last occupied. The student is then held accountable for the condition of the seat at the time he left it.” And what was true of seating arrangements was also true of other aspects of schooling—student movement between classes, the distribution of texts, and so on.¹¹³ Accountability, Hart explained, ensured that students were trained to approach the fulfilment of their duties not as “a mere passive or negative” thing but as a matter of learning “habits of carefulness and attention, a feeling that something is ever required, a sense of responsibility at all times for his con-

duct.”¹¹⁴ Promoting such habits required the school to nurture those “motives bearing as much analogy as possible to those which the students are to be influenced in later life.”¹¹⁵ By teaching students the need to recognize that all behaviour has consequences, students would learn accountability through self-control and self-denial. At the same time, accountability also developed conscience—the internalized source of the student’s sense of duty. By making students aware of the longer-term consequences of correct behaviour, the disciplinary system promoted “right motives.” “Hope is appealed to even more than fear,” Hart emphasized. “We have rewards as well as punishments, merit marks as well as demerit marks.” “Scholastic distinction” is to be “prized,” he went on, “not only for the temporary eclat which it brings, but because it is a passport to public confidence after the student has left school.” Competition for grades and credentials promoted a prudent and utilitarian morality: “where the competition for honor is so keen as it is with us, those who are at all ambitious of excellence, are obliged to be exceedingly circumspect....A habit of punctuality and exactness in the discharge of duty, is thus produced on the part of all who seek to excel.”¹¹⁶

The second technique enveloped each student in a seamless web of surveillance, evaluation, and bureaucratic record-keeping that deployed both decentralized and centralized, impersonal and personal, forms of panoptic power: on the one hand, the “hierarchical observations” and “normalizing judgements” of the ubiquitous examination system along with the informal and personal surveillance of the students by the principal, and on the other, a “grammatocentric” rendering of “hierarchical observations” and “normalizing judgements” in written records. The government of the school depended, Hart wrote, on “steadiness and perseverance, rather than...violent measures.” Much in the spirit of Joseph Lancaster and Sylvanus Thayer, the “whole machinery of the school, like an extended piece of net-work, is thrown over and around him [the student], and made to bear upon him, not with any great amount of force at any one time or place, but with a restraining influence just sufficient, and always and every where present.”¹¹⁷ And the principal means of doing so was the evaluation system already described: an intensive system of reports, merits, and ranking.¹¹⁸

In the words of one professor, Hart’s moral calculus was the “grand principle” of the school’s disciplinary system.¹¹⁹ Hart himself explained that the approximately “three hundred thousand” evaluations during a student’s stay at the school created a “system of reports, by which the occurrences of every hour and every room are immediately telegraphed, as it were, in his record book, and there recorded and brought under his eye, in well digested tabular forms, not only keeps him thoroughly acquainted with the character of each pupil, but furnishes him with the means of pointing out to the parent the exact cause of his son’s success or failure.”¹²⁰ In addition, it provided him with a powerful tool for monitoring the state of the school; moral education and “the general administration of the school” were a function of the same moral technology. “Any material falling off from this standard in the general average of the school for a particular month,” he noted, “indicates...as surely as does the pulse of a sick man to the

physician, the existence of diseased action somewhere, requiring the application of appropriate remedies until the system is brought back to its ordinary and healthful condition."¹²¹

Then, suddenly, after two decades, the Whig system of classroom order and moral education collapsed. Shortly after he replaced John Seeley Hart as Principal of CHS in 1859, Nicholas Maguire set about changing the disciplinary system at the school. He did not abandon the system of institutionalized rules governing individual behaviour, nor of continuous evaluation of each student for scholarship and conduct, but he did end Hart's practice of deducting demerits for misconduct from academic grades. Henceforth, class position, promotion, and graduation would depend on scholarship and scholarship alone. Students would still be evaluated for conduct in every class every day, but demerits would not be deducted from academic grades. In what amounted to a meritocratic declaration of independence from Whig moral paternalism, Maguire explained that the old system "was evidently unjust and injurious. It destroyed all incentive to study; it deprived the student of those honors which he had fairly won by diligence and industry." It placed the mediocre but well-behaved boy on a par with the talented but slightly mischievous pupil. Scholarship and conduct should not be confounded: "The brightest students are not always the most decorous; nor do the most docile always exhibit the highest order of talent." So long as a student satisfied the basic minimum rules of conduct necessary for the orderly functioning of the school, he should be permitted to stay and be promoted on academic grounds alone. "A pupil whose intellectual standing entitles him to promotion, should be promoted, if his misconduct does not give sufficient warrant for his expulsion from school," he argued. A student's conduct should only affect his relationship to the school, not his academic progress in it. This was especially true in a school like CHS in which pupils were selected on the basis of their "*personal individual* merit, and who trained by experienced, intelligent, and conscientious grammar school masters, have won, by their diligence, proficiency and exemplary conduct admission into the institution."¹²²

As far as Maguire was concerned, therefore, judgements in the academic marketplace need no longer be based on a mix of performance and character; henceforth, educational achievement was to be a competitive market process. Merit would go to the successful performer, not the perfectly behaved boy; the meritocratic achiever was to replace the "Christian gentleman" as the dominant idiom of the school. However, Maguire did not intend his reforms of the disciplinary system to signal the end of moral education at the school. He simply wished to separate the evaluation of moral conduct from meritocratic competition and evaluation. To confound them was to corrupt them: deducting demerits from academic grades violated meritocratic principles of distributive justice. Neither did he wish to dismantle the system of disciplinary power installed by Bache and Hart. But he was prepared to alter its internal organization. Where Bache and Hart had relied upon a highly integrated system of surveillance and normalizing judgement to promote self-control, Maguire weakened the level of integration by

separating moral and scholarly evaluation. At the same time, he placed far greater emphasis on the discipline imposed by meritocratic competition and emulation (that is, by normalizing judgement) and much less upon the more formal or bureaucratic techniques of disciplinary power. In a sense, the “invisible hand” of meritocratic competition eclipsed continuous surveillance and hierarchical observation as the dominant technique of discipline in the school. The competitive pressures of the academic marketplace would deploy disciplinary power in the manner of a decentralized panopticon; conscience and character would be as much an outcome of market competition in the school as a cause of success in it. After 1859, then, the disciplinary system at CHS was anchored principally by meritocratic competition and normalizing judgement.

It would be easy to assume that the separation of merit and morals at CHS reflected an isolated event in the history of one institution. But such an assumption ought to be resisted. Instead, Maguire’s reforms reflected much broader institutional and cultural developments associated with the extension of market relations and the maturation of bourgeois culture over the course of the nineteenth century: the exhaustion of Whig moral paternalism, the triumph of a post-Whig ethic based on performance rather than character, and the growth in the relative importance of market-based mechanisms of social discipline.¹²³ On the one hand, Maguire’s reforms can be understood as a product, expression, and agent of the decline of “sentimental culture” and the remaking of the American middle class. As Karen Halttunen recently documented in *Confidence Men and Painted Women*, the decline of “sentimental culture” in the 1840s and 1850s was reflected in a shift from an emphasis upon the “sincerity” or morality of performance to the skill of performance, and in a new worldly acceptance of self-display, social formalism, ceremonial ritual, and the marketplace world of the stranger, hypocrisy, and the “confidence game.” Where sincerity had provided the moral schema of an emergent middle-class culture, its abandonment reflected the remaking of middle-class culture around the ethic of meritocratic social mobility.¹²⁴ Or to put the argument somewhat differently, in severing scholarship from conduct, Maguire helped rationalize an emergent identity market by demoting character as a useful currency or “grammar of representation” and replacing it with a purified and secular academic credential whose exchange value was not influenced, at least in principle, by extrinsic moral considerations.¹²⁵ And for a good reason: purified academic credentials enjoyed a distinct advantage as a unit of measurement or currency in the identity market: the exchange value of a purified academic credential could be far more precisely determined than the exchange value of “character” or “conscience,” however much Bache and Hart might have tried. In effect, academic credentials quantified learning far more exactly than character and were, therefore, a far more suitable form of credentialing currency. Maguire’s reforms did not go unopposed, but in the long run his reforms prevailed, even as he himself was forced from the school in 1866.¹²⁶

On the other hand, Maguire's reforms also reflected the transformation of the institutional basis of social control in nineteenth-century America: where social control had been primarily based on direct, hierarchical observation and religiously based forms of moral education during the first half of the century, after mid-century social control depended increasingly on the "decentralized panopticon" of market competition and meritocratic evaluation and secular forms of moral education.¹²⁷ Indeed, in a very general sense, Maguire's reforms might be seen as a form of institutional recalibration—a re-creation of institutional isomorphism—in light of changes in the institutional environment occasioned by the progressive extension of market relations and the secularization of bourgeois culture. By severing moral considerations from the logic of market competition and private motives from public performance, Maguire served as a kind of agent or "carrier" of an ascendant market culture and played the same role in public education in Philadelphia that Bernard Mandeville, Adam Smith, and others had played in eighteenth-century economics, the removal of equity considerations from the theory of contract had played in the making of modern American contract law in the late eighteenth century, and the "culture of individualism" in the rationalization of nineteenth-century American Protestantism and republicanism.¹²⁸ If the architects of the Whig examination system had, in effect, worked out a compromise between impersonal market competition and conventional Protestant verities, Maguire, good and ambitious Catholic that he was, rejected the compromise and undid the Gordian knot that inhibited the further rationalization of the identity market.

Conclusion

In this essay I have argued that Michel Foucault's notion of disciplinary power provides an extremely useful perspective from which to view the history of a profoundly important educational practice—the examination system. Beginning with the introduction of Lancasterian principles in 1818, public education deployed the primary techniques of disciplinary power—hierarchical observation and normalizing judgment—in a relatively unsophisticated way. However, with the opening of CHS in 1839, disciplinary power came into its own, as school officials, borrowing from Sylvanus Thayer at West Point, refined the techniques of normalizing judgement, linked moral evaluation and academic performance, and developed an elaborate structure of written records to create a comprehensive grammatocentric form of panoptic power.

But despite the utility of Foucault's notion of disciplinary power as a description of the examination system, a Foucaultian perspective does not adequately explain the origins, character, and functions of the examination system. The organization and deployment of examinations in a system of disciplinary power did not just happen because school officials inadvertently discovered or invented new "techniques" of disciplinary power that they then grafted onto the

examination system or because they knowingly viewed themselves as agents of a disciplinary revolution. Rather, the deployment of disciplinary power piggybacked on a powerful institutional logic: the efforts of school officials to institutionalize meritocratic and possessive individualist principles within public education. In part these efforts reflected the deep commitment of school officials to these principles; in part they reflected a growing demand for scarce educational credentials; and in part they reflected the vulnerability of school officials to popular political pressure and the fact that the legitimacy and political future of public high schools in Philadelphia depended on an approximate correspondence between the social relations of the classroom and the broader social relations of the surrounding society.¹²⁹

In sum, the organization of the examination system as a structure of disciplinary power was an effect—indeed, in good measure, an unintended consequence—of the penetration of public education by the cultural and ideological forces associated with the market revolution of the nineteenth century and the constitution of public schooling as a bourgeois institution. As an expression of bourgeois aspirations (the meritocratic project) and bourgeois assumptions (the competitive individual appropriation of school knowledge), the examination system helped transform public education into a market-like institution modelled upon bourgeois images of competitive individual achievement by acting as the gatekeeper of the meritocratic project, underwriting the exchange value of educational credentials, and providing an informal but powerful market-based system of school governance. At the same time, the widespread acceptance of meritocratic notions permitted Americans to resolve—or at least finesse—the intellectual tensions between liberalism and republicanism and between Jacksonian and Whig ideologies. And to the extent that it did, the intellectual victory of meritocratic individualism promoted the formation of what George Thomas describes as a hegemonic “market culture” linked to ambient processes of “individuation” and the “penetration” and reorganization of social life generally by and around market relations.¹³⁰ Foucault’s conception of disciplinary power might have very much depended on his reading of Nietzsche, but to understand the deployment of disciplinary power, historians will surely need to pay a lot more attention to Marx and Weber than to Nietzsche. In the final analysis, the deployment of disciplinary power in Philadelphia’s public schools primarily reflected the reorganization of schooling as a class institution and the making of a class society.

NOTES

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1. M. Foucault, *Discipline and Punish: The Birth of the Prison* (New York, 1977), 185.
2. Apart from *Discipline and Punish*, see also M. Foucault, *The History of Sexuality. Vol. 1: An Introduction*, trans. R. Hurley (New York, 1978); *Power/Knowledge*, ed. C. Gordon (New York, 1980); *The History of Sexuality. Vol 2: The Use of Pleasure* (New York, 1986); *The History of Sexuality. Vol 3: The Care of the Self* (New York, 1986); *Language, Counter-Memory, Practice*, ed. D. Bouchard (Ithaca, 1977); P. Rabinow, ed., *The Foucault Reader* (New York, 1985). For especially useful reviews of Foucault's work, see A. Sheridan, *Michel Foucault: The Will to Truth* (London, 1980); P. Dews, "Power and Subjectivity in Foucault," *New Left Review* 144 (Mar./Apr. 1984): 72-95; J. Bernauer and D. Rasmussen, eds., *The Final Foucault* (Cambridge, Mass., 1988); B. Smart, *Foucault, Marxism and Critique* (London, 1983); A. Megill, *Prophets of Extremity* (Berkeley, 1985), pt. 111; C. Lemert and G. Gillan, *Michel Foucault: Social Theory as Transgression* (New York, 1982); H. Dreyfus and P. Rabinow, *Michel Foucault: Beyond Structuralism and Hermeneutics* (Chicago, 1982); J.G. Merquior, *Foucault* (Berkeley, 1985); P. Major-Poetzl, *Michel Foucault's Archeology of Western Culture* (Chapel Hill, 1983); S. Cohen and A. Scull, eds., *Social Control and the State* (New York, 1983), 75-105, 141-88; N. Fraser, "Foucault on Modern Power: Empirical Insights and Normative Confusions," *Praxis International* 1, 3 (Oct. 1981): 272-88; D.C. Hoy, ed. *Foucault: A Critical Reader* (New York, 1986); J. O'Neill, "The Disciplinary Society: From Weber to Foucault," *British Journal of Sociology* 27, 1 (Mar. 1986): 42-60; and S. Ball, ed., *Foucault and Education: Disciplines and Knowledge* (New York, 1990).
3. Or, as Foucault himself puts it, his analysis of power aims to "cut off the king's head." Foucault, "Truth and Power," in *Power/Knowledge*, ed. Gordon, 121.
4. Foucault, *The History of Sexuality*, 1:92-93; *Discipline and Punish*, 215-16, 136-38, 170, 30, 222. Foucault's notion of "genealogy" is his way of distinguishing his own intellectual method from that of traditional history with its preoccupation with the search for "origins" and various "indefinite teleologies"—the idea of progress, dialectical materialism, etc. For Foucault, the practice of "history" is mired in a quest for power; genealogy seeks to expose the relations between power, knowledge, and the body in modern societies. For useful discussions, see Sheridan, *Michel Foucault*, 113-34, and Dreyfus and Rabinow, *Michel Foucault*, chap. 5.
5. M. Foucault, "Truth and Power," in *The Foucault Reader*, ed. Rabinow, 61; *Discipline and Punish*, 201; see also 172. Foucault argues that the military camp was the first general model of hierarchical surveillance, but that it was soon followed by hospitals, schools and workshops. Bentham's Panopticon ("all seeing") was simply the culmination of a long history and exemplified rather than invented the basic principles of "hierarchical surveillance" in its purest architectural form.
6. Foucault, *Discipline and Punish*, 170, 176-78, 180, 183-94.
7. For a compelling argument that Foucault's claim that the examination system was an invention of the eighteenth century is surely wrong, see K. Hoskins, "Foucault under examination: The crypto-educationalist unmasked," *Foucault and Education*, ed. Ball, chap. 3. Drawing on the work of Philippe Ariès especially, Hoskins argues that, contrary to Foucault, the examination "as an educational practice within the culture of the *logos* was an invention of the twelfth century" rather than the eighteenth century, and that the source of Foucault's mistake can be traced to the fact that he confused "the invention of formal academic examination with the invention of modern academic examination. The difference between them is that the former was an oral form of examination, primarily, and the assessment made was on a qualitative

- as opposed to a quantitative basis. Written examination and arithmetical marks appear to develop, and then to predominate, from around 1800. The change in format and technology is decisive. Only the modern modes of testing activate the full power of writing (where everyone is required to write in order to demonstrate the inner truth about themselves) while putting an objective numerical value upon and inside you." (45, 46).
8. Foucault, *Discipline and Punish*, 170, 176-78, 180, 183, 187, 184-85.
 9. *Ibid.*, 193.
 10. And I say this despite Foucault's belated attempt to address the problem in his analyses of "bio-power," "pastoral power," and "policing" in his later works. See, for example, Foucault's "Politics and Reason," in *Michel Foucault*, ed. Kritzman, chap. 4, and "The Subject and Power" in *Michel Foucault*, ed. Dreyfus and Rabinow, 208-26. I describe these and other difficulties in Foucault's approach to the history of disciplinary power in "The Market Revolution and Disciplinary Power: Joseph Lancaster and the Psychology of the Early Classroom System," *History of Education Quarterly* 29, 3 (Fall 1989): 381-418.
 11. First, Foucault argues for an interdependent and reflexive relationship between the industrial and disciplinary revolutions: "Each makes the other possible and necessary; each provides a model for the other." One revolution did not parent the other; the two revolutions grew up together, feeding and nurturing each other, linked together by a "whole intermediary cluster of relations," and united by a common interest in promoting the usefulness and moralization of the population through a "parallel increase in usefulness and docility." But second, because the techniques of disciplinary power first appeared independently in monasteries, education, the military, and medicine a century or more before the rise of industrial capitalism, Foucault also suggests that the disciplinary revolution is the older and stronger brother. While the disciplinary revolution did not cause the industrial revolution, it provided an essential precondition of its success: the triumph of industrial capitalism depended upon the earlier deployment of disciplinary power during the seventeenth and eighteenth centuries and its extension and consolidation afterward. Technologies of disciplinary power made possible the disciplining of bodies and populations and the accumulation of capital; it became possible to make men, women, and children work efficiently and productively only after they had been disciplined and "caught up in a system of subjection." The body "becomes a useful force only if it is both a productive body and a subjected body." And finally, Foucault also employs a third argument—namely, that capitalism determined the "modalities" of disciplinary power. "The growth of a capitalist economy," he writes, "gave rise to the specific modality of disciplinary power, whose general formulas, techniques of submitting forces and bodies, in short, 'political anatomy', could be operated in the most diverse political regimes, apparatuses or institutions." Foucault, *Discipline and Punish*, 136-38, 218, 221.
 12. In his "Two Lectures," for example, Foucault urges that an analysis of power "should not concern itself with power at the level of conscious intention or decision; that it should not attempt to consider power from its internal point of view and that it should refrain from posing the labyrinthine and unanswerable question: 'Who has power and what has he in mind? What is the aim of someone who possesses power?' Instead, it is a case of studying power at the point where its intention, if it has one, is completely invested in its real and effective practices. What is needed is a study

- of power in its external visage." Foucault, "Two Lectures," 97-98, 102, and "Truth and Power," in *Power/Knowledge*, ed. Gordon, 118.
13. Foucault, *Discipline and Punish*, 26-27; "The Subject and Power," in *Michel Foucault*, ed. Dreyfus and Rabinow, 216-17.
 14. For one such criticism, see Charles Taylor, "Foucault on Freedom and Truth," in *Foucault*, ed. Hoy, 83-90. For an effective defence of Foucault on this point, see D. C. Hoy, "Power, Repression, Progress: Foucault, Lukes and the Frankfurt School," *ibid.*, 124-35.
 15. Taylor, "Foucault on Freedom and Truth," 87-88. Emphasis in the original. See also Thomas Haskell, "Capitalism and the Origins of the Humanitarian Sensibility, Part 1," *American Historical Review* 90 (Apr. 1985): 346-47, esp. note #22.
 16. See, for example, Michael Ignatieff, *A Just Measure of Pain: The Penitentiary in the Industrial Revolution* (New York, 1978), chap. 3, and "State, Civil Society and Total Institutions," in *Social Control and the State*, 87-88. See also David Ingleby, "Mental Health and Social Order," *ibid.*, 178-79.
 17. I developed an earlier version of this view of educational change in "From Contest Mobility to Stratified Credentialling: Merit and Graded Schooling in Philadelphia, 1836-1920," *History of Education Review* 16, 2 (1987): 21-42. I am particularly indebted to David Labaree's history of the Central High School of Philadelphia, *The Making of an American High School: The Credentials Market and the Central High School of Philadelphia, 1838-1939* (New Haven, 1988), chaps. 1, 4, 7. For an excellent Foucaultian account of the English examination system from which I learnt much, see K. Hoskins, "The Examination, Disciplinary Power and Rational Schooling," *History of Education* 8, 12 (1979): 135-46.
 18. For similar arguments, see John Lea, "Discipline and Capitalist Development," in *Capitalism and the Rule of Law: From Deviancy Theory to Marxism*, ed. Barry Fine et al., (Harmondsworth, 1979), 79, 81; S. Spitzer, "The Rationalization of Crime Control in Capitalist Society," in *Social Control and the State*, chap. 13; Thomas Haskell, "Capitalism and the Origins of the Humanitarian Sensibility, Parts 1, 2" *American Historical Review* 90 (April, June 1985): 342, 547, 550.
 19. J. Lancaster, "Improvements in Education as it Relates to the Industrious Classes of the Community," in *Joseph Lancaster and the Monitorial School Movement: A Documentary History*, ed. C.F. Kaestle (New York, 1973), 66, 67, 64, 70, 74-77.
 20. Controllers of the Philadelphia Public Schools [CPPS], *Minutes*, Dec. 19th, 1839; *21st Annual Report*, 1839: 8-11; *22nd Annual Report*, 1840: 9, 24-26. I have explored the disciplinary character of Joseph Lancaster's pedagogy in "The Market Revolution and Disciplinary Power," 381-418.
 21. CPPS, *23rd Annual Report*, 1841: 11, 4.
 22. CPPS, *30th Annual Report*, 1848: 126-29.
 23. "Good reports" were usually distributed on a class basis: if a class had been particularly good, a professor could give a class a "good report." Each student in the class thus earned some moral credit that could be deducted from the demerit score.
 24. Lancaster, on the other hand, rank-ordered students ordinally, and as far as we know, did not keep written records. Interval-level scales are mathematically precise measures of a variable because they derive from a common scale; ordinal-level rankings are not and do not.
 25. CPPS, *30th Annual Report*, 1848: 126-27. See also *38th Annual Report*, 1856: 185, 176, 178, 181-85; *42nd Annual Report*, 1860: 178-79.

26. CPPS, *26th Annual Report*, 1844: 94.
27. At GHNS, educators constructed a similar examination regime built around a regime of daily recitations and quarterly examinations, the strict bureaucratization of procedure and record keeping, and the ritualization of appropriation. See CPPS, *30th Annual Report*, 1848: 126-27; *39th Annual Report*, 1857: 161; *45th Annual Report*, 1863: 248.
28. Asking the question this way, of course, is to ask an historical rather than a genealogical question, but I see no need to be embarrassed by it. Indeed, one of the central limitations of Foucault's genealogical method is that it fails to ask fully historical questions about the development and deployment of localized systems of disciplinary power in the past. But without a properly historical account of disciplinary power it is simply not possible to provide an adequate causal, or epistemologically satisfying, account of disciplinary power, however valuable a genealogical approach is in identifying important subjects of historical investigation.
29. Foucault, *Discipline and Punish*, 26-27; "The Subject and Power," in *Michel Foucault*, ed. Dreyfus and Rabinow, 216-17.
30. My view of the market revolution was initially shaped by my reading of Carl Polanyi's *The Great Transformation: The Political and Economic Origins of Our Times* (Boston, 1944). However, George Thomas's recent study of cultural change and the market revolution provides a more analytically useful approach to the market revolution. For Thomas, as for Polanyi, the key economic development of modern times was the expansion of market relations and the subsequent rationalization of economic life generally with the integration of local economies into regional, national, and even international economies and processes of state formation. But the market revolution involved a great deal more than simple economic change. Over time, the "incorporation of a community into a rational market" produced "fundamental change in social life and cultural order. Emerging national institutions govern the economy in place of communal rules. Exchange relations are no longer bound by community relations, identities, and authority, but become organized around individual choice, rational calculation, and national economic development." In particular, the market revolution was both a cause and an effect of the ascendancy of "a culture of individualism" that gradually "penetrated" and "rationalized" various institutional spheres. Thomas himself focuses on the penetration and rationalization of religion and politics by reformist social movements acting as "carriers" of a new individualistic "ontology" that both expressed and promoted a new "cultural order centered on the individual (citizen) as the prime mover." G. Thomas, *Revivalism and Cultural Change: Christianity, Nation Building, and the Market in the Nineteenth Century United States* (Chicago, 1989), 5, 38, 37, 14, 5-6, 42-48.
31. My understanding of the logic of "institutional isomorphism" owes much to two sources: the "institutionalist" organizational theory of John Meyer, R.W. Scott, and Brian Rowen, and the recent sociological history of George Thomas. Meyer, Scott, and Rowen have tried to combine the so-called "loose coupling" hypothesis with an institutionalist account of school organization. They accept the loose coupling hypothesis—the putative absence of strong market and bureaucratic controls over classroom instruction. But they also attempt to explain the palpable uniformities of schooling, and for this they draw upon institutionalist theory, particularly Philip Selznick's argument that the institutional environment is the source of organizational structures, rather than the efficient co-ordination of task, activity, and exchange as in orthodox Weberian theory. They argue that "institutional" organizations emerge

in institutional environments "with elaborate institutional rules." As Meyer and Rowan wrote in 1977, "In modern societies, the elements of rationalized formal structure are deeply ingrained in, and reflect, widespread understandings of social reality. Many of the positions, policies, programs, and procedures of modern organization...are manifestations of powerful institutional rules which function as highly rationalized myths that are binding on particular organizations." Or, as they suggest a few pages further on, "organizations are structured by phenomena in their environments and tend to become isomorphic with them." Institutional rules thus "define types of roles and programs as rational and legitimate. These structures in turn encourage the development of specific bureaucratic organizations that incorporate these elements and conform to these rules." Institutional organizations are essentially passive consumers of these institutional rules that are generated in society at large, particularly the state. Schools are "institutional" organizations that "arose to bring the process of education under a socially standardized set of institutional categories, not necessarily to rationalize the 'production processes' involved in carrying out this work." As institutional organizations, "school organizational structures reflect environmentally created institutional rules concerning education." Because organizational attention "is directed toward maintaining conformity with the socially standardized categories of the educational system...little effort is expended in the control and co-ordination of instructional activities." See J.W. Meyer and W. Richard Scott, "Institutional and Technical Sources of Organizational Structure: Explaining the Structure of Educational Organizations," in *Organizational Environments: Ritual and Rationality* (Beverly Hills, 1983), 48, 46, 49; J. Meyer and B. Rowan, "Institutional Organizations: Formal Structure as Myth and Ceremony," *American Journal of Sociology* 83, 2 (Sept. 1977): 343, 346. But see, in addition, P. DiMaggio and W. Powell, "The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields," *American Sociological Review* 48 (Apr. 1983): 147-60; G. Morgan, *Images of Organization* (Newbury Park, 1986); L. Perrow, *Complex Organizations: A Critical Essay*, 3rd ed. (New York, 1986). I drew upon this literature to explain the organizational history of public schooling in Philadelphia in "The Organization of Schooling and Organizational Theory: The Classroom System in Public Education in Philadelphia, 1818-1918," in *Research in Sociology of Education and Socialization. Vol. 9: Historical Approaches*, ed. R. Corwin, (Greenwich, Conn., 1990).

The second—and later—source is George Thomas's recent work, *Revivalism and Cultural Change*. Thomas describes institutional isomorphism thus: "In summary, a cultural or institutional order is integrated according to an underlying structure. The fundamental structure is an ontology (a cultural myth or metaphor) that is a binding context or environment for institutions and institutional spheres. While emphasizing that there is a unity and therefore a circularity between a given institution and its context, I speak analytically of an institution's external cultural environment as being applied to the organization of and the activity within the institution. This application process results in specific rules that reproduce the broader structure. In this process the structure of the external ontology causally effects the structure and organization of knowledge within a given institutional sphere. Organizations, institutions and institutional spheres therefore tend toward isomorphism with the structure of their cultural environment and therefore with each other." Consequently, "the greater the isomorphism between an institution and its environment," the greater the legitimacy of the institution (18, 24).

32. For Bache and West Point, see F.S. Edmonds, *History of the Central High School of Philadelphia* (Philadelphia, 1902), 66-67; "Alexander Dallas Bache," *Dictionary of American Biography*, ed. D. Malone (New York, 1936), 1: 461-62; G.V. Fagen, "Alexander Dallas Bache," *Barnwell Bulletin* 18 (1941): 75; M. Odgers, *Alexander Dallas Bache: Scientist and Educator, 1806-1867* (Philadelphia, 1947), chap. 2.
33. Foucault also suggests that the Ecole Militaire was the inspiration for Bentham's *Panopticon*. See *Discipline and Punish*, 172, 181, 316. For the condition and nature of French military and technical education at the time, see F. Artz, *The Development of Technical Education in France* (Cambridge, 1966), chaps. 3, 4. Perhaps Max Weber was right to have suspected that "The discipline of the army gives birth to all discipline." H.H. Gerth and G. Wright Mills, eds., *From Max Weber: Essays in Sociology* (New York, 1967), 261.
34. For details of the West Point system, see "Regulations of the U.S. Military Academy, 1824," in War Department, *Miscellaneous Documents* (Washington, D.C., 1824), 1: 13-46; "Regulations of the U.S. Military Academy, at West Point" (New York, 1832); "Report of the Board of Visitors of the United States Military Academy, at West Point, June 1826," reprinted in *American Journal of Education* 2, 4 (Apr. 1827): 223-40, esp. 228-29; "Sylvanus Thayer," *Dictionary of American Biography*, 18: 410-11; S. Ambrose, *Duty, Honor, Country: A History of West Point* (Baltimore, 1966), 67-77; T. Fleming, *West Point* (New York, 1969); E. Boynton, *History of West Point* (New York, 1863), 218-19; K. Hoskins and R. Macve, "The Genesis of Accountability: The West Point Connections," *Accounting, Organizations and Society* 13, 1 (1988): 38-59; "Accounting and the Examination: A Genealogy of Disciplinary Power," *ibid.*, 11, 2 (1986): 37-73. The quotations are from the "Regulations of the U.S. Military Academy, 1824": 20, 21. I am especially grateful to Keith Hoskins of the University of Warwick who urged me to pursue the "West Point connection."
35. "The United States Military Academy at West Point, New York," *American Journal of Education* 3, 6 (June 1828): 328, 332-33. See also "Report of the Board of Visitors on the Examination of the United States Military Academy at West Point, June 1827-8-9," *American Journal of Education* 4, 5 (Sept.-Oct. 1829): 398.
36. "Grammatocentric" is not Thayer's term, but a term coined by Hoskins and Macve to designate the development of a particular aspect of bureaucratic control, viz., one "based on ubiquitous written archives and examinations utilizing mathematical grading." Hoskins and Macve, "The Genesis of Accountability," 38, 59; "Accounting and the Examination," 118.
37. Indeed, the introduction of nominal-level measures of norms are to behaviour in a disciplinary society what currency is to exchange in a market economy.
38. "Regulations of the U.S. Military Academy, 1824": 23, 39, 30.
39. Yale had led the way with the competitive grading of senior orations in the late eighteenth century and the substitution of a precise numerical scale for descriptive adjectives in 1813. Harvard followed suit in 1830. M.L. Smallwood, *An Historical Study of Examinations and Grading Systems in Early American Universities* (Cambridge, 1985), 41-54. For the importance of West Point as a source for the deployment of disciplinary power in industrial organizations, especially railroads, prior to the Civil War, see Hoskins and Macve, "The Genesis of Accountability," 53-65, and P.D. Hall, *The Organization of American Culture, 1700-1900: Private Institutions, Elites and the Origins of American Nationality* (New York, 1984), 229-33.

40. Calculated from CPPS, *Annual Reports*, 1839-67.
41. CPPS, *39th Annual Report*, 1857: 147; *40th Annual Report*, 1858: 147; *44th Annual Report*, 1862: 221.
42. Labaree, *The Making of an American High School*, Tables 3.5-3.8.
43. At GHNS, a different pattern developed, although some caution is required in interpreting the results of the statistical analysis. The GHNS data set did not include information on whether or not a student graduated; the school records included only two measures of school achievement—length of stay and whether or not the student entered teaching. Since students did not need to graduate in order to teach, the teaching variable could be used as a proxy for graduation only with some reservation. Unlike CHS, the great majority of the students at GHNS stayed for the length of the programme (two years in 1850, three years in 1860). In 1850, the mean length of stay was 1.92 years; in 1860, 2.8 years. And again, unlike CHS, length of stay was related to class background but not systematically to class rank—the mean length of stay for students from the proprietary and middle classes was significantly lower than the mean length of stay of daughters from skilled working-class homes. Grades and length of stay were related at a statistically significant level but not in a manner that would support a meritocratic model of school achievement: the shorter the stay, the higher the grades; the longer the stay, the lower the grades. Grades, however, were not related at a statistically significant level with class background. When subjected to multivariate analysis, the inverse relationship between length of stay and grades and the non-linear relationship between class and length of stay remained. These results are reported and discussed in length in my “Philadelphia High School For Girls, 1850-1880: Enrollment and Achievement,” Working Paper, University of Pennsylvania, 1983.
44. CPPS, *Report of the Committee of the Controllers of Public Schools of the System of Admission to Boys and Girls High School*, Philadelphia, 1863, 7-11; *Resolutions as Adopted By the Controllers of Public Schools...Relative to the System of Admissions to the Boys' and Girls' High Schools* (Philadelphia, 1863), 15-16.
45. CPPS, *22nd Annual Report*, 1840: Tables IV and V opposite p. 34.
46. CPPS, *23rd Annual Report*, 1841: 42.
47. *Ibid.*, 12-13. In succeeding years Leech reiterated the same point again and again. See, for example, CPPS, *26th Annual Report*, 1844: 4, 9.
48. CPPS, *41st Annual Report*, 1859: 13, 127-30, 170-81; *42nd Annual Report*, 1860: 199.
49. *The North American and Daily Advertiser*, May 9, 1842; CPPS, *26th Annual Report*, 1844: 56; *29th Annual Report*, 1847: 12; *31st Annual Report*, 1849: 86; *32nd Annual Report*, 1850: 85.
50. The members of the Board of Controllers responsible for creating CHS and its examination system were predominantly businessmen and professionals (with lawyers predominating); approximately two-thirds belonged to the Whig party or to the anti-Jackson wing of the Democratic Party. For details, see S. Shanken Skwersky, “Who Ran the Schools?” Unpublished seminar paper, Graduate School of Education, University of Pennsylvania, Winter 1981, 54, 67.
51. Of course, meritocratic principles in a variety of forms had been espoused long before the 1830s. By then, at least three varieties can be identified in the United States: a political version centred on political rule by a “natural aristocracy,” a notion that can be traced back to the American Revolution and ultimately to the civic humanism of the Renaissance; an entrepreneurial version based on success in the marketplace that

can be traced to the rise of possessive individualism in the seventeenth century and on through the political economy of Jeffersonian and Jacksonian America; and a religious version located in the theology of nineteenth-century American Protestantism, and the Second Great Awakening in particular, that can be traced to, even as it replaced, Calvinist versions of sin and salvation. Oddly, most histories of the common school movement neglect the meritocratic component of common school ideology. Carl Kaestle, for example, makes no mention of the meritocratic character of the common school "ideology." He argues instead that a "cosmopolitan" variant of "Native Protestant" ideology centred on "republicanism, Protestantism and capitalism" animated and justified the reform movement. To my mind Kaestle's account of the ideology of the common school reform movement, and of the common school reform movement generally, is the best account we have in print. Yet his neglect of the meritocratic character of common school reform ideology is a serious limitation. See C. Kaestle, *Pillars of the Republic* (New York, 1983), chap. 6.

52. For the importance of meritocratic ideology in Whig social thought generally, see J. Ashworth, "Agrarians" and "Aristocrats": Party Ideology in the United States, 1837-1846 (New Jersey, 1983), chap. 2; R. Welter, *The Mind of America, 1820-1860* (New York, 1975), chap. 8; and D.W. Howe, *The Political Culture of the American Whigs* (Chicago, 1979), chaps. 2, 4.
53. *Report of the Joint Committee of the two Houses of the Pennsylvania Legislature on the subject of a System of General Education*, Samuel Breck, Chairman (Harrisburg, 1834), 3-4. See also J. Ingersol, *Memoirs of Samuel Breck*, (Philadelphia, 1863), 24; *Philadelphia Gazette and Universal Daily Advertiser*, Oct. 6, 1834.
54. "The Famous Speech of the Hon. Thaddeus Stevens of Pennsylvania in Opposition to the Repeal of the Common School Law of 1834, in the House of Representatives of Pennsylvania, April 11, 1835," published by the Thaddeus Stevens Memorial Association of (Philadelphia, 1904), 4, 5; "Speech of Thaddeus Stevens, House of Representatives of Pennsylvania, March 10, 1838," *Pennsylvania School Journal* (Feb. 1891): 335. See also D. Smith, "Thaddeus Stevens and the Politics of Educational Reform, 1825-1868" (Ph.D. diss., Rutgers University, 1968).
55. CPPS, *24th Annual Report*, 1842: 25.
56. *Ibid.*, 6, 14; *McElroy's Philadelphia Directory for 1840*, 143.
57. "Letter of the Hon. A. V. Parsons," in CPPS, *25th Annual Report*, 1843: 55. Emphasis in the original.
58. T. Dunlap, "Introductory Address of the Commencement of Central High School, February 12, 1851" (Philadelphia, 1851), 15-16 (emphasis in the original); *McElroy's Philadelphia Directory for 1837*, 61.
59. C. Colton, *The Junius Tracts* (New York, 1843-44), no. 7: 15.
60. Or, as John Cawelti observes, apropos the fate of eighteenth-century notions of success and society in the "age of the self made man": "The theory of natural aristocracy was overshadowed by a philosophy of individual success and the concept of the republican community gave way to the image of a loose association of individuals, each making his own way in world." Cawelti, *Apostles of the Self Made Man*, 43. The classic analysis of this development is of course de Tocqueville's *Democracy in America*, ed. J.P. Mayer (New York, 1969).
61. The term "contest mobility" was coined by Ralph Turner. See R. Turner, "Modes of Social Ascent through Education: Sponsored and Contest Mobility," *American Sociological Review* 25 (1960): 121-39. For the notion of a "limited access" meritocracy, see A. Bastian et al., *Choosing Equality: The Case for Democratic*

Schooling (New York, 1985), 33. In an important sense the admissions examination in Philadelphia played a similar role to the one played by competitive examinations in Victorian England. Examinations at Cambridge before 1747 and at Oxford before 1800 were principally oral in nature and designed to certify candidacy and test competence. Subsequently, with the introduction of written, competitive exams and the creation of an honours list, examinations became the foundation of a system orientated to the creation of competitive meritocratic hierarchies. Despite the efforts of Jeremy Bentham and other liberal reformers, however, the influence of meritocratic principles remained limited to the universities until the introduction of competitive examinations into the Indian and Home Civil Service between 1853 and 1870. When that happened, meritocratic principles of social selection triumphed over the prescriptive patronage practices of the ancien regime. For the social history of the examination system in England, see H. Perkin, *The Origins of Modern English Society, 1780-1880* (Toronto, 1972), 252-70; J. Roach, *Public Examinations in England, 1850-1900* (Cambridge, 1971); S. Weisman, ed., *Examinations and English Education* (Manchester, 1961); R.J. Montgomery, *Examinations: An Account of Their Evolution as Administrative Devices in England* (London, 1965). Of course, England came rather late to the use of competitive examinations to staff its state apparatus. Imperial China had been doing it for close to 1500 years. See M. Weber, "The Chinese Literati," in H.H. Gerth and C.W. Mills, *From Max Weber: Essays in Sociology* (New York, 1958) chap. 17; P.-T. Ho, *The Ladder of Success in Imperial China: Aspects of Social Mobility, 1368-1911* (New York, 1962); T.H.C. Lee, *Government Education and Examinations in Sung China* (New York, 1985). The French had begun to do so in 1791; see E.J. Hobsbawn, *The Age of Revolution, 1789-1848* (New York, 1962), chap. 10 ("Careers Open to Talents"). Germany introduced competitive examinations in 1800 for its civil service.

62. On the notion of "abstract individualism" generally, see S. Lukes, *Individualism* (New York, 1973). For a self-conscious application of it in the context of the market revolution of the nineteenth century, see Thomas, *Revivalism and Cultural Change*, esp. chap. 3; for an implicit application in education, see W. Ryan, *Equality* (New York, 1982), chap. 2.
63. Calculated from Labaree, *The Making of an American High School*, Tables 3.2, 3.3, 3.4. Proprietary-class families include those designated as professional, proprietors of goods or services, manufacturers, and masters. In the US Census of Occupation masters are included among skilled workers; but because this ignores the fact these individuals were employers or self-employed, they properly belong in the proprietary class. Labaree established whether such individuals were masters by comparing all skilled workers with city business directories; all skilled workers listed in the city directories were designated as masters. The employed middle class includes clerk, white collar supervisors, and miscellaneous white collar occupations.
64. Calculated from D. Hogan, "Philadelphia High School For Girls, 1850-1880." But if the social background of those who gained admission into the high schools was not representative of the city as a whole, it is not at all clear what produced this skewed distribution. We only know the class background of those admitted; we do not know the social backgrounds of the students who sat for the admissions exams. It is entirely possible, for example, that class-based processes of self-selection and elimination removed disproportionate percentages of students from working-class families from the pool of students who sat for the exam, in addition to the disadvantages created by the non-possession of the appropriate kinds of what is sometimes

- misleadingly called “cultural capital.” There is a wealth of contemporary data on processes of self-selection and elimination and the profound effect that they have on school achievement. See, for example, P. Willis, *Learning to Labor* (Westmead, 1978); R. Connell et al., *Making the Difference* (Sydney, 1985); P. Bourdieu and J.-P. Passeron, *Reproduction in Education, Culture and Society* (1970; Beverly Hills, 1977); J. Ogbu, *The Next Generation: An Ethnography of Education in an Urban Neighborhood* (New York, 1974).
65. It is worth repeating that this is not to say that family background did not influence who went to high school. It is only to argue that admission to the two high schools was not simply a function of ascriptive privilege, but of a specific combination of meritocratic achievement and social ascription. Admissions were formally a function of achievement but ascriptive factors in all likelihood shaped the opportunity to sit for the admissions exam or the capacity to pass it.
 66. Processes of “class formation” refers to the manner in which specific social groups construct and reconstruct a distinctive class culture within a given social structural context. It is important, however, to distinguish between two different notions of class formation. It can refer to *processes* of class formation, where the emphasis is placed, in the first place, upon the “structuration” of group life by the structure of social relations and their associated institutional arrangements, and second, upon the creation of distinctive class cultures. It is this sense that historians refer to “the making” of a class—the ways in which individuals sharing common social characteristics come to create a distinctive class culture, although not necessarily class consciousness. But the notion of class formation can also refer to the existence of social groups that have all the major attributes of a mature, historically active class grouping— i.e., a distinctive social group sharing common patterns of social behavior, institutions, intellectual traditions and sensibilities, a consciousness of itself as a class, and a willingness to act as class. But because processes of class formation are much more pervasive than the existence of historically conscious class groupings, it is possible, indeed it is very common, to have a class society without classes in the traditional Marxist or even Thompsonian sense. This is not because *processes* of class formation are rare processes—they are not—but it is only very rarely that processes of class formation actually produce distinctive, historically active class groupings. As Robert Connell et al. suggest, “Classes are not abstract categories but real life groupings, which, like heavily travelled roads, are constantly under construction: getting organized, divided, broken down, remade.” (They add, parenthetically, that “significant parts of this activity occur in and around the schools.”) See Connell, *Making the Difference*, 33, 139, 140, and S. Blumin, *The Emergence of the Middle Class: Social Experience in the American City, 1760-1900* (New York, 1989), chap. 1, 258.
 67. Labaree, *The Making of an American High School*, chap. 2; Blumin, *The Emergence of the Middle Class*, chaps. 3, 4; D. Hogan, *Merit, Markets, Morals and Citizens: A History of Public Education in Philadelphia, 1818-1918* (forthcoming), chap. 2.
 68. Yet, oddly, most accounts of middle-class formation in the nineteenth century ignore the pivotal role played by educational credentialling as a major mechanism of social mobility and status attainment in a changing economy. In his study of the proprietary and middle classes of Rochester in the 1820s and 1830s, Paul Johnson argues that evangelical Protestantism was the key to the making of the modern American middle class. “An explanation of how the middle class became modern (or bourgeois, or democratic) must come to terms with revival religion,” he writes. “To put it simply,

the middle class became resolutely bourgeois between 1825 and 1835. And at every step, that transformation bore the stamp of evangelical Protestantism." For Carol Smith-Rosenberg, it is the development of separate gender cultures. For Karen Halttunen, it centers on the moral culture of the middle class, specifically, the quest for sincerity. For Mary Ryan, it centers on domesticity. Stuart Blumin casts his net much wider but avoids committing himself to a single structuring principle of middle-class life. The "structuration" of middle class experience," he writes, centers on "work, consumption, residential location, formal and informal voluntary association, and family organization and strategy." Although this is a broader formulation than other historians have developed, it too ignores the importance of education. In fact, only two major studies of middle-class formation pay any attention to the role of education in the making of the American middle class, those by Mary Ryan and Burton Bledstein. See P. Johnson, *A Shopkeeper's Millennium* (New York, 1978), 8; M. Ryan, *Cradle of the Middle Class: The Family in Oneida County, New York, 1790-1865* (New York, 1981), chap. 4; B. Bledstein, *The Culture of Professionalism: The Middle Class and the Development of Higher Education in America* (New York, 1975); C.S. Rosenberg, *Disorderly Conduct: Visions of Gender in Victorian America* (New York, 1985); K. Halttunen, *Confidence Men and Painted Women* (New Haven, 1982); S. Blumin, "The Hypothesis of Middle-Class Formation in Nineteenth-Century America. A Critique and Some Proposals," *American Historical Review* 90 (1985): 312, and *The Emergence of the Middle Class*.

69. Karl Marx, *Capital* (Harmondsville, 1976), 1: 899. See also M. Weber, *The Protestant Ethic and the Spirit of Capitalism*, trans. T. Parsons (New York, 1958), 181. This conclusion parallels George Thomas's argument that to view markets as institutions not only underscores the fact that "markets and market action are constituted by cultural rules," but the additional fact "that the political-cultural aspects of market penetration do not form a superstructural order that functions to legitimate a particular interest, but constitute an integral accounting frame of the market." Consequently, "the expansion of the market as a social institution organizes life in particular ways and therefore not only structures interest, but also constitutes and is constituted by political, cultural and moral structures." Thomas, *Revivalism*, 14, 61, 62.
70. A. de Tocqueville, *Democracy in America*, 2: 537.
71. John Lea, "Discipline and Capitalist Development," in *Capitalism and the Rule of Law*, 79, 81.
72. J. Wickersham, "The Public Schools of Philadelphia," *Pennsylvania School Journal* 1 (1853): 465. Elsewhere, Wickersham wrote approvingly and at length on emulation as a motive to study when defined as "desire on the part of some pupils to equal or surpass others in the pursuit of knowledge." He admitted that emulation could be abused and that it became so when it was defined or practised as "an effort to equal or surpass another in the pursuit of an object," for example, "in the struggle to gain a prize, a position, or to obtain good Merit-Marks." But given that emulation was part of human "nature," he believed that when used properly it could be "made a powerful means of securing advancement in learning" and "to give culture to character." J. Wickersham, *School Economy. Treatise on Preparation, Organization, Employments, Government and Authorities of Schools* (Philadelphia, 1871), 138-45.
73. *Public Ledger*, April 30, May 13, June 5, 1840.
74. *North American*, March 11, 13, 1841.

75. *United States Gazette*, May 2, 5, 10, 18 and 31, 1842.
76. *United States Gazette*, April 27, June 23, 1842. Unhappily, the Minutes of the First Section have been lost, although the *Minutes* exist for the period between 1827 and 1841.
77. *United States Gazette*, May 16, June 6, 1842. See also May 24, 1842, and the *Public Ledger*, May 18, 1842.
78. *United States Gazette*, June 23, 1842.
79. Such views, of course, were hardly new, since they had been popular among artisanal leaders in Philadelphia since the late 1820s. Universalist or Free Thought in religion, producerist in economic theory, Painite republican in politics, and anxious about the growing proletarianization of the artisanal working class, artisanal leaders repeatedly urged the destruction of any and all forms of monopolistic and aristocratic power and privileges and demanded the extension of equal rights to all white male citizens. In 1830 the editors of the *Mechanics Free Press* traced “nearly all the evils which oppress the labouring man, to the existence of exclusive privileges.” In 1829 the convention of the Working Men’s Party resolved to oppose any candidate for office “who will not be friendly to an equal and general system of education.” The next year a joint committee of the city and county Workingmen’s Party declared that “the original element of *despotism* is a MONOPOLY OF TALENT” and attacked the granting of state funds “to colleges and universities...exclusively for the benefit of the wealthy” since such funds “serve to engender an aristocracy of talent, and place knowledge, the chief element of power, in the hands of the privileged few; but never even secure the common prosperity of a nation nor confer intellectual as well as political equality on a people.” *Mechanics Free Press*, January 23, 1830 and October 3, 1829; “Report of a Committee of Philadelphia Workingmen,” in *Working Man’s Advocate*, March 6, 1830, and reprinted in R. Welter, ed., *American Writings on Popular Education* (Indianapolis, 1971), 33-44. See also S. Simpson, *The Working Man’s Manual* (Philadelphia, 1831), chap. 25.
80. *United States Gazette*, June 23, 1842.
81. Three years later, as a member of the County Board, Gibbons again attempted to have the school closed. See *Public Ledger*, Sept. 4, 1845; *The Daily Chronicle*, Sept. 5, 6, 8, 1845; *The Pennsylvanian*, Sept. 5, 1845; *Native American*, Sept. 9, 1842.
82. The party affiliation of members of the board was derived from the *Journal of the Select Council of the City of Philadelphia*, 1841-1842, and the *United States Gazette*, June 18, 1842. Occupational backgrounds were derived from *McElroy’s Philadelphia Directory* for 1842.
83. *The Inquirer*, June 15, 1842.
84. *United States Gazette*, June 23, 1842.
85. *Public Ledger*, April 30, June 5, 1840.
86. In a more theoretical vein, we might see this as an example of the way in which the distribution of mobility chances, including educational opportunity, shaped the process of class formation in nineteenth-century America. As Anthony Giddens suggests, the formation of classes “is facilitated by the degree to which mobility closure exists in relation to any specified form of market capacity” of which the most important are “ownership of property in the means of production; possession of educational or technical qualifications; and possession of manual labour power.” Mobility processes and processes of class formation are tightly linked—class and mobility processes are neither independent nor contradictory. Market structures thus play a pivotal role in the continuous construction and disintegration of class group-

- ings; they generate pressures that at the same time both promote and inhibit class formation. Or, as Bob Connell et al. suggest, mobility concepts are simply metaphors “which require us to think of social structures as ladders or pyramids, and social situations as their steps and ledges” whereas in fact, “mobility—or more exactly, the events and processes to which the term refers—is both constituted by and helps to constitute class relations. Class practices are organized around this possibility, class relations are structured by it, and class struggles are fought over it.” See A. Giddens, *The Class Structure of the Advanced Societies* (New York, 1973), 107-8, and Connell, *Making the Difference*, 140.
87. *Public Ledger*, May 13, 1840; see also *ibid.*, June 22, 1840.
 88. *The Pennsylvanian*, May 31, June 2, 4, 1842.
 89. *Daily Chronicle*, Feb. 25, Mar. 2, 9, Apr. 14, May 2, 1842; *The Advocate*, June 4, 1842; *The Courier*, June 4, 1842; *The Evening Journal*, June 2, 1842; *The North American and Daily Advertiser*, May 9, 1842; *Spirit of the Times*, May 30, 1842. The quotation is from the *Daily Chronicle*, Mar. 9, 1842.
 90. *United States Gazette*, Apr. 29, May 4, 9, 16, June 2, 3, 10, 1842.
 91. One sign of how seriously they took the controversy is the fact that John Seeley Hart pasted copies of all the newspaper clippings he came across on the controversy in a special book.
 92. CPPS, *22nd Annual Report*, 1840: 22, 24, 35, 36; *23rd Annual Report*, 1841: 24, 41-42; *25th Annual Report*, 1843: 25-29; *Minutes*, Oct. 11, 1841; Feb. 8, 1842.
 93. CPPS, *32nd Annual Report*, 1850: 85.
 94. CPPS, *25th Annual Report*, 1843: 64, 87; *26th Annual Report*, 1844: 87, 94. In general terms, written exams had four distinct advantages over oral exams: they were a more effective and impartial measure of student learning, they provided school officials with a precise and powerful tool of teacher accountability across and within schools, they facilitated the creation of meritocratic hierarchies within schools, and they created a permanent record for general “inspection.”
 95. CPPS, *32nd Annual Report*, 1850: 92.
 96. *Ibid.*, 85, 89, 91, 92, 99, 100.
 97. CPPS, *29th Annual Report*, 1847: 17-20. The Principal of the Normal School (after 1859, the GHNS), was no less preoccupied with the fairness and impartiality of the admissions. The First Annual Report by the Principal of the Normal School, A.T.W. Wright, reported identical precautions against “improper influence” or “partiality” and to “prevent communication” between students in the course of the exam. *Ibid.*, 17-21; *31st Annual Report*, 1849: 116-17; *32nd Annual Report*, 1850: 224-26.
 98. See note 67.
 99. Foucault, *Discipline and Punish*, 26-27; “The Subject and Power” in Michel Foucault, ed. Dreyfus and Rabinow, 216-17.
 100. Labaree, *The Making of an American High School*, chap. 3. However, Bruce Curtis has reminded me that R.D. Gidney, W. Millar and D. Lawr have developed similar arguments in the context of Canadian educational history. See R.D. Gidney and D.A. Lawr, “Bureaucracy vs. Community? The Origins of Bureaucratic Procedure in the Upper Canadian School System,” *Journal of Social History* 13 (1980): 438-57; and R.D. Gidney and W. Millar, “From Voluntarism to State Schooling: The Creation of the Public School System in Ontario,” *Canadian Historical Review* LXVI (1985): 443-73.

101. "Buffering" is an important element of institutionalist arguments in organizational theory, although it is generally used to describe the strategy of school administrators to isolate instructional processes from market controls.
102. Connell, *Making the Difference*, 120-24.
103. J. Locke, *The Second Treatise on Government: An Essay Concerning the True Origin, Extent, and End of Civil Government*, ed. P. Laslett (New York: Mentor, 1965), 328-29. C.B. Macpherson describes Locke's theory of property and the theory of political society that he attached to it as the basis of a doctrine that Macpherson calls "possessive individualism"—the doctrine that views each individual as "essentially the proprietor of his own person or capacities, owing nothing to society for them. The individual was seen as neither as a moral whole, nor as a part of a larger social whole, but as owner of himself....The individual, it was thought, is free inasmuch as he is a proprietor of his own person and capacities....Society consists of relations of exchange between proprietors. Political society becomes a calculated device for the protection of this property and for the maintenance of an orderly relation of exchange." See C.B. Macpherson, *The Political Theory of Possessive Individualism: Hobbes to Locke* (Oxford, 1962), 3.
104. In a sense, of course, educational credentials are unlike other forms of intellectual property—patents, royalties, copyrights—and physical property in that credentials cannot be alienated in exchange, that is, bought and sold as a commodity. Still, by virtue of the fact that credentials have exchange values that are very largely a function of demand and supply, that although the owners of credentials can not alienate their credentials, they can secure an income stream from the sale of their credentialled labour power (that is, the use value of the credentials), and that the purchasers of credentials acquire the use value (if not the possession and ownership) of the credentialled labour power, it seems appropriate to describe credentials as a form of intellectual property. Paul Willis introduced the notion of a "pedagogical exchange" between student and teacher in *Learning to Labor*. For a somewhat different view of the examination as ritual, see R. Firth, "Examination and Ritual Initiation," in J. Lauwerys and D. Scanlon, eds., *Examinations* (London, 1969), 235-43. For a provocative use of the idea of ritual, see W. Ong, "Latin Language Study as a Renaissance Puberty Rite," in *Rhetoric, Romance and Technology: Studies in the Interaction of Expression and Culture* (New York, 1971), 113-41.
105. The labour theory of knowledge might thus be understood as a particular derivation of Locke's broader and more generic labour theory of property. See Locke, *The Second Treatise on Government*, chap. 5. The quotation is from note 27, p. 329. Jacksonian Democrats and Whigs of course were happily familiar with Locke's theory of property, although some aspects of it made Whigs nervous. See Welter, *The Mind of America*, chap. 5.
106. Of course, this hardly exhausts the symbolic richness of the examination system. From an Althusserian perspective, we might also view the rise of the examination system as a bourgeois social ritual as a key source of the school's operation as a primary ideological apparatus of the bourgeois state; or, as Ivan Illich might suggest, the rise of the examination system is emblematic of the displacement of the universal church by the omnipresent school dispensing a secular sacrament—credentials or educational property—rather than holy grace, and promising upward social mobility rather than heavenly salvation. Examinations are to social mobility what the sacraments are to salvation in the Catholic church; examinations are at the very center of the contemporary soteriological drama. At the risk of stretching the point a little,

- Hart is the Thomas Aquinas of the examination system. See L. Althusser, "Ideology and the Ideological State Apparatus," in *Lenin and Philosophy and Other Essays* (London, 1971). Weber's theory of rationalization suggests the same kind of conclusion as well.
107. More broadly, the examination system symbolically linked the fetishism of commodities in the broader society to the commodification of learning in schools and the replacement of competence with grades and credentials as the currency of educational institutions.
 108. The term "collective mobility project" is Magali Larson's. See M. S. Larson, *The Rise of Professionalism: A Sociological Analysis* (Berkeley, 1977).
 109. A.D. Bache, *Report to the High School Committee of the Board of Controllers of the Public Schools, December 12, 1839*. Revealingly, the editor of one Philadelphia newspaper, the *North American*, who assumed that without the direct exercise of the personal authority of the teacher and Principal there could be no discipline, castigated Bache for his "anti-government" notions of discipline. *North American*, December 12, 1839.
 110. CPPS, *32nd Annual Report*, 1850: 133-34, 140.
 111. CPPS, *28th Annual Report*, 1846: 169-70; *32nd Annual Report*, 1850: 134-36, 138.
 112. CPPS, *35th Annual Report*, 1853: 125.
 113. CPPS, *28th Annual Report*, 1846: 169-70; *32nd Annual Report*, 1850: 134-36.
 114. CPPS, *32nd Annual Report*, 1850: 138.
 115. CPPS, *35th Annual Report*, 1853: 125.
 116. CPPS, *35th Annual Report*, 1853: 120-21. In other words, CHS was not to be, in Willard Waller's terms, a "punishment-based" bureaucracy. See W. Waller, *The Sociology of Teaching* (New York, 1965).
 117. CPPS, *32nd Annual Report*, 1850: 139-40; *35th Annual Report*, 1853: 126.
 118. See pages 51-52 above.
 119. Testimony of Professor B.H. Rand, *Report of the Special Committee on Communications from Messrs Vogders and Gerard, Together with the Testimony* (Philadelphia: Board of Controllers of Public Schools, 1862), 88. See also 10, 34-35, 38-39, 60, 84. By the 1840s the practice of deducting demerits from academic grades was not uncommon, at least in leading colleges. See Smallwood, *An Historical Study of Examinations*, 70-74.
 120. CPPS, *25th Annual Report*, 1842: 65.
 121. CPPS, *25th Annual Report*, 1842: 80.
 122. CPPS, *41st Annual Report*, 1859: 132-35 (emphasis in the original); N. Maguire, "Reply to the Communications of Messrs. Gerard and Vodge," 8-10. Maguire's "Reply" is an appendix to the *Report of the Special Committee*. See also various testimony in the *Report* itself, esp. 29, 38, 39, 50, 51, 64, 65, 68, 84, 88-9, 95. It is difficult to avoid the temptation to speculate on Maguire's motives, since the fact that it was Nicholas Maguire who severed the relation between academic and moral education possibly throws a small but a revealing light on the relation between processes of class formation and changes in moral education practices. It is of no small significance that Maguire, an ambitious son of Irish Catholic immigrants who had risen through the ranks of teachers, become a highly successful grammar school principal by virtue of his ability to get his students into CHS, and in a spectacular jump succeeded in securing the principalship of CHS—a classic immigrant middle class social mobility success story. It is perhaps likely that Maguire, a Democrat, feared that Whig moral paternalism would work to the disadvantage of sons of Irish

- immigrants because it represented an opportunity for a kind of sponsored mobility by entrenched elites that was entirely inconsistent with the rigorous system of contest mobility that had served him so well.
123. For a general analysis of these developments, see D.B. Davis, "The End of the American Enlightenment" and "Attempts to Shape the American Character," in *The Great Republic: A History of the American People*, ed. B. Bailyn et al. (Lexington, Mass., 1977), 1: chaps. 13, 15.
 124. Haltunen, *Confidence Men and Painted Women*, 187-89, 153-59, 195-97. See also Wishey, *The Child and the Republic*, 82-84.
 125. On the social role of "character" as the major credential of a nascent market economy in the early nineteenth century, see P. Hall, *The Organization of American Culture, 1700-1900: Private Institutions, Elites and the Origins of American Nationality* (New York, 1984), 89-90. See also Bledstein, *The Culture of Professionalism*, and W. Sussman, "Personality and the Making of Twentieth Century Culture," in *New Directions in American Intellectual History*, ed. J. Higham and P. Conkin (Baltimore, 1979), 213-14. I have also written of the role of the "conscience" as a particular "grammar of representation" in an emergent market society in "Moral Authority and the Antinomies of Moral Theory: Francis Wayland and Nineteenth Century Moral Education," *Educational Theory* 40, 1 (Winter 1990): 95-119; and "Modes of Discipline: The New England Pedagogy, 1820-1850," *Journal of American Education* 99, 1 (Nov. 1990): 1-56. I have derived the notion of "grammar of representation" from Jean Christophe Agnew's notion of a "grammar of motive." See J.C. Agnew, *Worlds Apart: The Market and the Theater in Anglo-American Thought, 1550-1750* (Cambridge, Mass., 1986). For an excellent "disciplinary" account of the role of the conscience in mid-nineteenth century Ontario pedagogy, see B. Curtis, *Building the Educational State: Canada West, 1836-1871* (London, Ontario: The Athlouse Press, The Falmer Press, 1988).
 126. *Reports of the Committee on Central High School and the Special Committee Appointed to Investigate All the Departments of the High School* (Philadelphia, Board of Controllers, 1866).
 127. In suggesting that social control depended increasingly on secular forms of moral education after mid-century I have in mind Thomas Haskell's account of the relationship between the extension of market relations and the development of the conscience. For Haskell, the development of the distinctive cognitive capacities caused by the spread of market relations nurtured not only a distinctive "cognitive style" but the conscience itself. Capitalism did not so much violate the Christian conscience as nurture it. "Historically speaking," Haskell writes, "capitalism requires conscience and can even be said to be identical with it. The 'tremendous labor' of instinctual renunciation on which promise keeping rests...is an absolute prerequisite for the emergence of possessive individualism and market society." Promise-keeping promoted capitalism by providing part of the moral code necessary to support a contractual society. Haskell acknowledges that "self-denial" and "conscience and promise keeping" were around "long before capitalism," but he insists that the triumph of capitalism, which he defines in terms of "mutual promises" and "contractual relations," was not possible until promise-keeping became a "cultural norm," a complex event he locates in the eighteenth century. The triumph of capitalism, in other words, was as much a product of the ascendancy of self-denial and promise-keeping as it was of the legitimation of ambition and the atavistic pursuit of self-interest; the conscience was both a cognitive product and moral guarantor of a

- market economy. In sum, the development of the conscience was a process internal to the history of capitalism, and not something external or hostile to it. Haskell, "Capitalism and the Origins of the Humanitarian Sensibility, Part 1," 342; "Capitalism and the Origins of the Humanitarian Sensibility, Part 2," 547, 552-53. But see also, Howe, *The Political Culture of the American Whigs*, 300-2.
128. Haskell, "Capitalism and the Origins of the Humanitarian Sensibility, Part 1," 339-61; "Capitalism and the Origins of the Humanitarian Sensibility, Part 2," 547-66; Thomas, *Revivalism and Cultural Change*, chaps. 3, 4, 5. On the separation of morality from the "science of economics," see L. Dumont, *From Mandeville to Marx: The Genesis and Triumph of Economic Ideology* (Chicago, 1977). For the replacement of the "equitable" conception of contract by "the will" conception, see M. Horowitz, *The Transformation of American Law, 1780-1860* (Cambridge, 1977), chap. 6.
 129. This argument suggests that despite all the criticism of Bowles and Gintis's notion of the "correspondence principle," my own view is that there is some life left in the notion yet, although perhaps not quite in the manner in which Bowles and Gintis conceived it. See S. Bowles and H. Gintis, *Schooling in Capitalist America* (New York, 1976).
 130. Thomas, *Revivalism and Cultural Change*, 43-52.