

Excerpt from Beyond the Typewriter: Gender, Class, and the Origins of Modern American Office Work, 1900-1930 by Sharon Hartmann Strom (1992) excerpted from p. 62-83

. . . . Competence, intelligence, and dedication could get women only so far, because it was partly the exclusion of women and other "undesirables" that made the new business professions attractive to men. Traditional male jobs in both clerking and the professions were undergoing profound changes. The growing rationalization, mechanization, and feminization of office work was beginning to limit middle-class men's opportunities in traditional clerking. The expansion of academic training in the business professions and the growing importance of the professions in general gave middle-class men, along with upwardly mobile men from the working class, a new set of occupational alternatives. Men from older elites also had a vested interest in the new business expertise. They were seeing the traditional influence of medicine, law, and the ministry threatened by the rise of corporate business and were under pressure to find more modern ways of exercising power. [T]hese forces interacted to produce a particularly virile (the word is used intentionally) professional identity in business administration and engineering, and a somewhat more ambivalent sexual identity in accounting, statistics, and personnel management. It was no accident that these identities emerged just as white, upper-middle-class, college-educated women were able to launch a real assault on the bastion of male professional privilege. As male professionals oversaw the feminization of the lower levels of office work, they were determined to keep their own world as free of women as possible.

The exclusion of women from the business professions was not completely successful. . . [W]omen certainly had more chances to wield influence in business by 1930 than had been the case in 1900. Few women became engineers or business executives, but some managed to be accountants, statisticians, and personnel workers. The overall picture of women in business remained bleak, despite the surge in numbers of women professionals.

Between 1900 and 1930 the census showed that numbers of professional, technical, and kindred workers grew by more than two million. Altogether there were 2.68 times as many of these workers in 1930 as there had been in 1910. Women seemed to maintain their share of the professional pie; they constituted about 35 per- cent of all professional workers in 1900 and 45 percent of them in 1930. However, they were overwhelmingly concentrated in professional occupations which were considered appropriate for women, even though most of the professions required equivalent levels of undergraduate training (Table 4). In fact, the decades in which the business professions emerged saw a greater polarization than ever of the professions along lines of gender. Men sought to fend off the challenge that the women's rights movement was raising to their dominance of public and professional life by restricting access to professional, education and training; they claimed the more prestigious professions were inappropriate for women. As the professions became more important in American life, their gendered identities seemed to take on even more significance. As historian Nancy Cott has argued, "Male professions fending off female interlopers suggested that they considered the presence of women colleagues above a certain point incompatible with their own vision of professional excellence, a threat to professional esteem. Unambiguous male predominance became an, essential condition of continued professional identity and distinction. Both women and men found it difficult to avoid signifying the gender of the business professions. Sexual difference became an important typology for evaluating and encoding them.

'We Have No Other Merchandise than Ourselves': The Professions and Professionalization in American Life

As their numbers and importance grew after 1900, professionals became more self-conscious as a class and more aggressive in promoting their own interests. They faced an occupational contradiction; although the professions were more central than ever to American life, many professionals were losing their traditional independence. The professional was increasingly likely to be a salaried employee hired to provide specialized expertise in the production of human resources, technology, science, and knowledge. One contemporary observer described the professional worker of the teens as a person who sells "experience, judgment, ad- vice. We have no other merchandise than ourselves." In Barbara Ehrenreich and John Ehrenreich's definition, the professional- managerial class is a group of 'salaried mental workers," that does not own the means of production or produce goods; it manages, teaches, and pacifies those who do.

The professional managerial class, in other words, becomes a buffer between those who own or control the means of production and those who sell their labor for wages.

The professions of engineering, accounting, business administration, and personnel management were especially likely to be cast in the role of 'producing capitalist class relations.' These professions gained new importance just as the more traditional professions were undergoing dramatic change. At the turn of the century, most professional groups replaced a haphazard system of education, training, and apprenticeship with more stringent and formalized requirements. It took several decades to accomplish the upgrading of the professions, but the growing trend was toward requiring new combinations of standards for professional status, including college degrees, certifying examinations, licensing regulated by the states, and, frequently, postgraduate training as well. While some of these changes were aimed at improving training, they were also designed to limit access. In an increasingly democratic and widely educated society, women, people of color, and the working class posed more of a threat to the dominance of white, upper-class men than they had in earlier decades.'

Ironically, the ideology of professionalism at the turn of the century seemed to present an opening for womanly influence. Elizabeth Kemper Adams observed that professionals might be viewed as "workers in the public interest and officially or unofficially in the public service.... In many ways they seem to stand at present as the ideal mediators between capital and labor." The supposed detachment of professionals from the interests of both the ruling and working classes appeared to put them in a position to defuse the conflict between haves and have-nots that was so frightening to middle-class Progressives in the teens. As purveyors of middle-class culture in the nineteenth century, women volunteers had seemed ideal intermediaries. Some of the women's professions that appeared at the end of the nineteenth century, like social and library work, were to some degree extensions of this idea.

Middle-class benevolence, however, was different from the commanding expertise that the redesigned professions hoped to offer. Business professionals in particular did not see womanly benevolence (or womanliness in general) as positive qualities. Promoters of the new professionalism like Frederick W. Taylor and Louis D. Brandeis, emphasized its inherent manliness. They wanted to dissociate their practical, tough-minded solutions to society's problems from what they viewed as the "effeminate" tendencies of the old-fashioned social reform or the utopian thinking of turn-of-the-century visionaries like Edward Bellamy. In their handbook on personnel management in 1921, for instance, two psychologists promised to forego the "kind of pabulum" administered by the "the old women of both sexes" who had run old-fashioned welfare programs in industry.

Engineers, according to one historian, saw "their proposals as substitutes for progressive reforms, not as supplements to them." Their epithets for Progressive reformers included "utopist" and "dilettante," terminology frequently used in the past to question the sexual identity of male reformers. The business professions were not only careers, they were also masculine callings central to the maintenance of an orderly society. They would impose disciplined system on the chaos of capitalism so that the social and sexual order would be preserved. Even though women had helped to mediate social problems in earlier decades, they now needed to step aside or to confine themselves to assisting roles.

Harrington Emerson, an early scientific management engineer, evoked a clear sexual division of labor in explaining why the primary goal of his generation (of men) was to eliminate waste and make efficiency a political idea. Society was moving to a new level of organization that required group planning and enterprise. Women, Emerson claimed, could be credited with the "germs of civilization," because of their endurance and intuition. But manly ways of thinking or what Emerson termed, "principles of efficiency," were required to "take over and develop on a gigantic scale," what women had begun: "women makes tepees, but men build . . . sky-scrapers, . . . [and] organization must replace intuitions." As Samuel Haber has observed, the gendered outlook required for the new professions was indisputably masculine: "An efficient person was an effective person, and that characterization brought with it a long shadow of latent associations and predispositions; a turning toward hard work and away from feeling, toward discipline and away from sympathy, toward masculinity and away from femininity."

Many intellectuals of the progressive period, including the founders of the business professions, sought to link their academic training and intellectual values to a masculine American tradition of heroism rooted in pragmatism, experimentation, and exploration, while rejecting pure idealism as inherently feminine and merely sentimental. Casting activities of the new profession in the heroic mold was critical to making

them manly. What might be viewed by others as technical labor, paper-pushing, delegation of important tasks to others, and mere money-making had to be portrayed as adventurous, noble, and indispensable to the national purpose. Engineers and businessmen emphasized the way in which they were pioneers conquering "new frontiers," subduing industrial disorder in much the same way their ancestors had "tamed" the wilderness. According to Arch W. Shaw, business publisher and early instructor at the Harvard Business School, "the manufacturer-merchant" had become "a pioneer on the frontier of human desires and needs." Louis Brandeis thought the best businessmen were pioneers breaking new paths that "will become the peopled highways." This posturing as pioneers, perhaps, reflected the same kind of crisis of masculinity and search for heroism found in the life of Theodore Roosevelt, whose affinity for both western-style adventure and engineers was well known.

Sometimes business professionals made their fantasies of classic male adventurism explicit. At the General Electric Company, for example, male managers and executives were sent to summer camp, beginning in 1922, to encourage company loyalty and solidarity. They performed forest rituals and dressed up like Indians, lumberjacks and Roman soldiers. No women were ever invited, and the camps became, according to historian David Nye, a "sanctuary where regression to premarital bonding was actively encouraged.

The new professionals often made claims for masculine identities that bordered on the grandiose. One engineer thought the engineering "way of thinking ... enables us successfully to think of any kind of thing," and another asserted that "it matters not whether the problems before him are political, sociological, industrial or technical, I believe that the engineering type of mind ... is best fitted to undertake them." George S. Morison, who spoke to fellow engineers at the American Society of Chemical Engineers in 1895, claimed that engineers "are the priests of material development, of the work which enables other men to enjoy the fruits of the great sources of power in Nature, and of the power of mind over matter. We are priests of the new epoch, without superstitions." E. E. Hunt, a self-proclaimed Taylor disciple and assistant to U.S. Secretary of Commerce (and engineer) Herbert Hoover, claimed in 1924 that "scientific management is becoming a part of our moral inheritance. Taylor has won a victory for the science of management which is no less overwhelming than Pasteur's victory for bacteriology." Taylor himself claimed that engineers could educate "not only the workmen but the whole of the country as to the true facts." H. L. Gantt described the engineer as "a man of few opinions and many facts, few words and many deeds," who "should be accorded the leadership which is his proper place in our economic system. The necessity of maintaining the sexual purity of a profession that thought of itself as a priesthood was self-evident.

These kinds of claims often gained support from many social critics and Progressive reformers who, like Thorstein Veblen and Theodore Roosevelt, found the alleged objectivity and practical know-how of the engineer appealing. As the earliest proponents of scientific management, engineers were often as critical of big business and political corruption as Progressive reformers. Taylor repeatedly argued, as did his disciples, that reform in industry must come largely within management itself. The engineer Morris Cooke was an outspoken critic of urban utilities, an advocate of municipal reform, and a hero of Progressivism. But the average engineer's tendency to ally with the business class ultimately made him more a servant of the corporation than its effective critic, more an advocate of social control than of social change." "Real power was likely to be exercised by those who owned or directed the means of production: businessmen and chief executives. Business or Public administration—the science of managing large organizations came to have more esteem than the technical knowledge of engineering.

The engineer never quite achieved the powerful status Gantt and others claimed for him, partly because the professional business administrator began to push him out of the limelight. By World War I the corporate executive was becoming an icon of the American character. Louis Brandeis, who had been so attracted to scientific management in the Eastern Rates case, proclaimed the virtues of big businessmen in his essay "Business: A Profession." He asserted that the successful corporate businessman performed "achievements comparable ... with those of the artist or the scientist, of the inventor or of the statesman." As businessmen became more professional and therefore more socially responsible, Brandeis argued, the term big *business* would lose its 'sinister meaning,' and would take on a new definition: "Big Business" will then mean business big not in bulk or power, but great in service and grand in manner. 'Big business' will mean professionalized business, as distinguished from the occupation of petty trafficking or mere money-

making. And as the profession of business develops, the great industrial and social problems expressed in the present social unrest will one by one find solution."

Leon C. Marshall, author of a rigorous textbook on business administration and a professor at the University of Chicago Business School, also claimed broad influence for the professionally trained businessman: "Business is, after all, a pecuniarily organized scheme of gratifying human wants, and, properly understood, falls little short of being as broad, as inclusive, as life itself in its motives, aspirations, and social obligations [,] ... as broad as all science in its technique." The business professional, in the words of another promoter, was unquestionably male, upper-class, and deserving of wide-ranging influence: "A successful banker is composed of about one-fifth accountant, two-fifths lawyer, three-fifths political economist, and four-fifths gentleman and scholar-total ten-fifths-double-size. Any smaller person may be a pawnbroker or a promoter, but not a banker."

Nonetheless, promoters of the profession of business administration faced a number of problems in establishing its legitimacy. Classical academia had always scorned anything connected to money-making as beneath the lofty activity of pure thought or professional service. Yet most men who graduated from college at the turn of the century went into business, a fact traditional educators began to feel they had to acknowledge more formally. The growing need for college-trained executives and administrators was also apparent. Male college graduates needed professional degrees to assume executive positions. Such credentials would legitimize their power and set them apart from both commercial college graduates and technicians (including engineers), who were increasingly from middle- and working-class backgrounds. While president Charles Eliot was initially reluctant to bring the study of business to Harvard, he noted that more than half of the class of 1907 had gone into business as he sanctioned the establishment of the Harvard School of Business Administration in 1908. A flurry of speeches and articles surrounded these attempts to put the professional in business on a par with his colleagues in law and medicine.

By the 1920s there were enough business degree holders to compete with the engineers, who had laid initial claim to many upper-level managerial positions. Although there would continue to be a vocal group in big business which argued the "college man" was of no use to business because he had not been brought up through the ranks, most of the industries in the forefront of scientific management techniques thought highly of placing college graduates in administrative positions. They held men with advanced degrees from institutions like Harvard, the University of Pennsylvania, and the University of Chicago in particular regard. A Westinghouse Electric executive complained that although "there are not enough of the best men, men who become recognized leaders," and far too many of "the lower grades of college men ... there are of course the cases of men who have done advanced work in certain lines and are worth much more than the ordinary 'run of class' graduates."

Initially, there was a great deal of confusion over what should constitute a business curriculum in a university setting. One thing was definite: university business training should not replicate what the commercial colleges did by teaching specific skills in bookkeeping, typing, and stenography. Accounting was obviously integral to the study of business on the university level, but it was also very popular in correspondence schools, night courses, and business colleges. Economics was a discipline that seemed to belong in the academic study of business, but it had already found a home in the social sciences and usually remained in colleges of arts and sciences. Educators at the elite institutions of business administration thought scientific management might integrate all of these fields and give them a discrete academic identity. Frederick W. Taylor regularly talked to deans of business and engineering schools and was approached by Dean Edwin Gay of the Harvard Business School to teach courses in scientific management. Indeed, the first curriculum at Harvard was designed around Taylorism at its core."

A final problem remained, however: to establish just what it was that distinguished business administrators from engineers and accountants. In the grander conceptions of business administration, graduates of the prestigious professional schools portrayed themselves as conceptualizers of scientific management, and engineers as its technicians. In this scheme of things, it was the professional administrator, not the engineer, who would actually chart the course of the ship of business: engineers, accountants, managers, and salesmen would simply execute his orders.,

The purported ability of the male business professional to employ the scientific method was a critical aspect of his power. The way in which the Taylorites acquired the mantle of science for the new business professions—partly by the simple fact of changing the term *systematic management to scientific management*—was a stroke of genius, even if an obvious one. The growing prestige of professionals at the

turn of the century was in large measure based on the idea that advanced education, particularly in the scientific method, would bring both objectivity and modern methods to old ways of doing things.

Employing subjective ideas about women's biology, early commentators tried to argue that women were simply unsuited to the rigors of scientific thought." But the widespread movement of women into higher education quickly dispelled the possibility that women and their male allies would accept such rhetoric at face value. More overt methods of excluding women would have to be found if they were to be kept out of the male-dominated professions.

Maintaining Sexual Purity: Engineering and Business Administration

By 1910 nearly 40 percent of all college students were women, as were 47 percent of all students in four-year colleges by 1920. Although most elite institutions in the country were closed to women, fine women's schools and coeducational universities offered women first-rate educations. By 1915-16, in fact, 75 percent of all women college students attended coeducational institutions. They were determined not only to obtain college degrees, but also to study science and to enter the professions.

Women college and university students faced stiff opposition in some quarters. Leaders of many coeducational institutions had become alarmed over the growing 'feminization' of college life. The presence of so many women reinforced an already keen sense of inferiority to eastern Ivy League schools. At Chicago, where between 1892 and 1902 women received 56.3 percent of all the Phi Beta Kappa awards and by 1912 were 52 percent of the student body, sex-segregated classes were instituted in large courses. At the University of California, President Benjamin Wheeler advocated a new junior college system partly on the grounds that women would be more likely to attend college in their local communities and thus leave the university to qualified men. At Stanford, where women were winning many academic awards and nearly equaled men in the graduating class of 1901, administrators turned to a quota system that admitted three men for every woman; the policy was not overturned until 1933. Wesleyan abandoned coeducation altogether in 1912 and did not resume it until 1970.¹¹¹

Those women who were admitted to coeducational schools often faced hostility from male faculty and students. They were often discouraged from entering professional schools or faced outright discrimination if they applied. In fact, the emergence of the new professional curricula at many large state institutions was partly seen as a way around the "problem" of coeducation, or, in other words, as a way for male students to avoid taking classes with women. Charles R. Van Hise of Wisconsin was particularly interested in the possibility of using specialized programs in business and engineering to create academic spheres for men that would be uncontaminated by women. 'Segregation by choice of vocational or technical school is good,' he claimed, and will go farther At the present time, provision has been made for nearly complete segregation on a large scale by the establishment of courses and colleges which are practically for one sex or the other. The colleges of engineering, law, commerce and medicine are essentially men's colleges.' Although Van Hise claimed these schools were open to women, he assured educators "their opportunities have been taken advantage of only to a limited extent" by female students. The result was that at an institution like the University of California, where women comprised about 40 percent of the student body between 1898 and 1913, most of the professional schools and vocational departments were 90 to 100 percent male. The low proportions of women in professional schools had little to do with lack of interest in studying science; at California more than half of all students in the natural sciences were women."

The professions used several methods to exclude women. These began at the college level and continued on to professional training. medical schools were the first to be besieged by significant numbers of women applicants, which came just as medicine was trying to upgrade training and professionalize in the late nineteenth century, Medical schools hit upon quota techniques for limiting the number of women (and some categories of men, particularly Jews and African Americans). While giving the appearance of fairness by not excluding the undesirables altogether, quotas made it extremely difficult for more than a selected few of the outside groups to achieve professional status. The effect of quotas was amplified by strictly limiting opportunities for apprenticeship training (such as hospital internships) and through a tacit understanding among members of the medical profession that undesirables should not be allowed to practice at the better hospitals. Medicine and other professions managed to severely limit the number of "undesirables" who could practice. The effect on women in medicine was clear. The proportion of

physicians who were female reached a peak in 1910, and by 1930 there were fewer women physicians than there had been twenty years earlier."

Engineers faced an easier task than doctors in excluding women. Women did not seem to be as attracted to engineering as they were to medicine, and those who were found nearly insurmountable obstacles to training for employment. Engineering became a profession literally overnight; between 1890 and 1900 alone the number of students studying engineering in college grew from about a thousand to about ten thousand just as increasing numbers of women were entering colleges and universities. Most engineering schools were established for male students between 1870 and 1890 as technical institutes, and most continued to deny admission to women. But universities and coeducational colleges developed engineering curricula as well, and many of these were theoretically open to women. The dean of the College of Engineering at the University of Colorado reported that in 1923 three women were enrolled at the school and that a few former women students had been successful in finding employment. Alice C. Goff, a 1915 graduate of the University of Michigan, managed to find work with a Youngstown steel company and by 1924 was a squad boss in charge of eight to twelve men, although she found "that many firms were prejudiced against employing young women."

Educators at Michigan and Colorado seemed to be exceptions to the rule against encouraging women students in engineering. Coeducational schools with engineering departments were often actively hostile when women tried to enroll. At Cornell's highly regarded engineering school the hostility of male students was legendary, and the administration remained ambivalent about women's presence well into the twentieth century. By failing to provide adequate on-campus housing for women students, both Cornell and MIT effectively used bed space to prevent significant numbers of women from entering prestigious professional programs. Florence Luscomb, who lived in Boston and thus could attend MIT as a nonresidential student, graduated in architecture in 1909. She recalled that there was a record number of twelve women in her class, in either Chemistry or architecture. Most of the student societies, such as the Engineering Club, did not accept women members, and it was the tradition at MIT for men not to associate with women students. One of Luscomb's classmates had originally enrolled in engineering 'but shortly ... became convinced that she could never get a job with any engineering firm, and as she had to earn a living she switched to architecture.

The professional engineering societies were also often unwilling to encourage women engineers. Nora Stanton Blatch became a junior member of the American Society of Civil Engineers when she graduated from Cornell but was refused full status in 1916, when the Society of Civil Engineers voted 1,746 to 1,352 to exclude women. She was dropped from the list of members despite her protestation that she met all the listed requirements. She sued the ASCE in court for excluding her but lost her case. By 1922 the American Institutes of Civil, Mechanical, Electrical, and Mining Engineers had a combined total of sixteen women members. Alfred D. Flinn, director of the United Engineering Society, reported to Emina P. Hirth of the Bureau of Vocational Information in 1922 that 'in 30 years' experience as a civil engineer' he had encountered very few women in engineering. Although most of the schools and engineering societies did not actively bar women, Flinn thought that unnecessary; the loneliness of women's lives as engineering students and society members was all too obvious.

Most male engineers treated the subject of women in engineering with disdain. James F. Kemp, an instructor of geology at Columbia, stated flatly that women would be as welcome in mining engineering as 'snakes in Ireland.' A Pittsburgh engineer, John Needles Chester, noted that although engineering was theoretically **open** to all who aspire to succeed," he did not "approve of women entering any field" that would 'subtract from their womanliness to military leadership,' he asserted, "the profession of engineering is the most masculine [E]ngineering incorporates everything from the kid glove position to the roughest and most hazardous field work I believe ... it will be years before women could place themselves at parity with men in this field, either as to responsibility that would be entrusted to them, or compensation meted out.

Engineering remained the most difficult of all the professions for women to enter throughout the twentieth century, and without access to engineering women were essentially excluded from the material development and managerial structuring of the corporate process. The recruitment of large numbers of engineers began with the growth of corporations and other kinds of bureaucratic institutions in need of designers, planners, and managers. By the turn of the century new specialties in mechanical, electrical, and mining engineering were beginning to overshadow civil engineering, but all of the varieties still involved

hands-on work in the industrial process itself, which was inherently viewed as 'men's work': the building of bridges, the design of factories, the invention of new mechanical processes for industry, and the efficient use of human labor. Engineers were, at least early on, asked to perform administrative and personnel functions, and many of them rose to positions of executive responsibility in the teens and twenties. The engineering profession seemed especially unsuitable to women.

With few chances for engineering education and even fewer chances of employment, women could not afford to challenge male dominance in engineering. The number of engineers climbed to about 130,000 in the census of 1920, but only forty-one were women. Helen A. Smith had a degree in electrical engineering and worked for the Rochester Gas and Electric Corporation, but she spent her days promoting the consumption of home lighting and designing store windows. Helen Klein, a radio engineer for the Crosley Radio Corporation, dejectedly admitted in 1930 that there were few opportunities for the handful of women trained in engineering, partly because engineers were assumed to be potential managers. Even if the woman engineer could obtain an engineering job, she could not expect to be promoted to a managerial position because "a woman controlling a department of men is often unsuccessful. They resent her position and co-operation is never obtained." Some male engineers thought women might be suitable in engineering if they confined themselves to stenography and drafting. Women engineers corroborated this point. "There is a strong tendency on the part of employers to keep women at drafting and computing," said Nora Stanton Blatch. The former wife of Lee De Forest, inventor of the vacuum tube, Blatch finally established her own business in order to do "real engineering." Kate Gleason of Rochester, who had learned the art of machine design in her father's workshop, graduated from Cornell and then took charge of his car works factory. But Gleason and Blatch had connections and capital that were clearly beyond the reach of most women in engineering.

Women were studying mathematics and the sciences successfully by 1900 and entering most other professions in significant numbers if not large percentages. There is no reason to believe that engineering required some special intellectual ability that put it on a different plane from the other scientific disciplines; outright discrimination seems the most likely explanation for the almost total paucity of women. When the degree of discrimination and exclusion was added to the condemnation women faced for taking up a "masculine pursuit" like engineering, the obstacles may very well have been so overwhelming as to convince them there was really no point in even considering engineering throughout most of the twentieth century. Hence Alice Rossi's finding in 1970, when women were still only 2 percent of all students in engineering colleges, that most young women 'could not assimilate the notion of becoming engineers," and 'there was no single occupation that they thought their male contemporaries and their parents would be less pleased to have them pursue.."

Male business administrators faced greater obstacles to discouraging women than did engineers. Business administration did not require hazardous field work and was fundamentally a "desk job." Women had access to the general kind of training required for the field. Vocational business colleges had always been open to women, and many coeducational schools also offered business courses, although business curricula at collegiate schools were widely diverse in character. Some were two-year programs in the junior and senior years, as at Wisconsin and Minnesota, others were four-year, degree-granting programs as at the Wharton School and the University of Chicago, and beginning with the Harvard Business School in 1908, a few offered postgraduate degrees in business administration. While the elite graduate institutions forged ahead in developing a curriculum around the principles of scientific management, what should constitute a course of business study at more inclusive schools remained murky. Whatever their design, business curricula were immediately popular. By 1926, the Federal Bureau of education estimated that more than 57,000 undergraduate students were majoring in business programs at the college or university level.

Columbia University developed its business program out of a set of adult extension classes offered through the Teachers' College, and the program had initially attracted many women students. Some of the women who studied business at Columbia were former college students seeking training so they could get jobs other than teaching; others worked in offices in New York City and took business courses at night in the hopes of obtaining better jobs. Although male undergraduate students and evening students originally took the same courses, there was growing concern at Columbia to develop a professional business school that would be on a par with prestigious business schools at other universities. In 1913 students seeking secretarial training were separated from business students, who were put into a professional degree

curriculum. The secretarial students were offered a one-year certificate. The result was a clearer separation of female and male students into 'appropriate' areas of business, with added benefits for Columbia as an employer as well. Although some women continued to take academic courses in business, the Columbia Business School's historian, Thurman Van Metre, noted that its secretarial certificate program "developed a supply of efficient, intelligent secretaries," some of whom were employed in the offices of the university. In 1916 Columbia went further by requiring that business degree candidates have two prior years of liberal arts training, at either Columbia or Barnard, and in 1931 the business school faculty was formally separated from the extension staff of the Teachers' College and moved to the Columbia faculty.

Schools of business at other men's schools sought to hold the line against admitting women students. The Wharton School did not admit women students until 1938, and then on a limited basis in especially designed courses such as "Consumers' Problems in Marketing." The Harvard Graduate School of Business Administration kept its doors barred to women until 1963. Henry T. Copeland, an early faculty member and assistant to the first dean, admitted that "Within a few years after the Business School was opened, inquiries and even strong demands had come from several women who wished to be admitted to the School." Beatrice Doerschuk, assistant director of the Bureau of Vocational Information, was researching women's access to business education in 1920. She wrote to Copeland asking whether the Harvard Business School had any plans to open its doors to women. Copeland responded that although "the question of admitting women ... has arisen on two or three occasions in the past the school has not considered it expedient to modify the restrictions on admission."

One alternative to the exclusion of women at the elite business administration schools would have been the establishment of collegiate programs of business at the more exclusive women's colleges. But women's private colleges in the East continued to focus on liberal arts training and to view vocational curricula with suspicion. Like their counterpart Harvard, they saw undergraduate study in the liberal arts as crucial preparation for professional training in the sciences, education, medicine, and law. The "Seven Sisters" (Mount Holyoke, Vassar, Smith, Bryn Mawr, Barnard, Wellesley, and Radcliffe) did send a larger proportion of their students on to professional careers than other schools. But women educators at the elite schools remained ambivalent about the new emphasis on business and vocationalism in education because it was precisely the absence of these that made their institutions parallel to the highly thought-of schools for men.

Early generations of faculty and administrators at the Seven Sisters also had doubts about encouraging women to work in heterosocial but male-dominated environments like corporations. They were committed to building female institutions, where women could perpetuate feminine morality and friendship. They wanted to expand the number of occupations open to women, but their thinking about sexual differences remained ambiguous. Although they wanted to *show* that women were the intellectual equals of men, they also tended to think that women were more sensitive, more caring, and generally morally superior. Women educators were all in favor of producing more women doctors and lawyers, partly because the discrimination against women in these professions, suddenly worse than ever, was a long-standing bone of contention in the women's rights movement, but also because these seemed to be the "nobler" professions, not connected, at least in their minds, with baser motives of profit-making and materialism.

After 1910 this ideology began to break down somewhat, although it remained a potent force at most elite women's schools. Many of those who attended college in the teens and twenties were impatient with the homosocial environment of women's colleges younger college women were also clamoring for occupations other than teaching. Home economics, nursing, psychology, and social work were all fields that welcomed women and provided real alternatives to the classroom, and many women's schools began to offer at least some of these courses of study as alternatives. Most women's schools offered courses in economics and statistics, and nearly all schools offered limited credit or noncredit courses in typing and stenography, well aware that many of their graduates would have to fill back on office work for earning a living. The Katharine Gibbs secretarial schools specialized in the training of college women for office work, but women students had to turn elsewhere for teaching in business administration, accounting, and engineering.

There were very real practical obstacles to establishing business curricula at the elite women's schools. No doubt the danger of turning into a glorified 'secretarial science' school loomed large in the minds of educators at places like Radcliffe, Barnard, or Bryn Maur. Many potential donors and alumni probably disapproved of women's study of 'masculine' pursuits; most jobs in the business professions were closed to

women anyway. The cost of adding new schools or courses was substantial and remained formidable. Most prestigious women's schools ran their operations on a relative shoestring, especially in comparison to their better-heeled male counterparts. In 1925 and 1926, for instance, Harvard received more than \$9 million in gifts, and Wellesley, which of all the Seven Sisters raised the most that year, received only three-quarters of a million.

A rare but important exception to the general exclusion of business curricula at women's schools was Bryn Mawr's Carola Woerishoffer Graduate Department of Social Economy and Social Research, which offered study in industrial relations and personnel administration. The Woerishoffer Department, established in 1911, was originally intended to train students for 'organized activities for social welfare,' and encouraged strong training in the social sciences. In 1918 it became one of the most important locations of the new training programs for women employment managers, under the direction of the economist and statistician Anne Bezanson. Radcliffe College, by contrast, did not develop a program in personnel and business management until 1937. In a sense, however, both the Bryn Mawr and Radcliffe programs remained within acceptable gender boundaries because they steered women toward the most 'feminine' of the business professions, personnel management, and were seen by some male educators as -a way of staving off women's demands for admission to graduate schools of business administrations

Despite all of these obstacles to studying business administration, women were taking business curricula in large numbers at other kinds of institutions by the 1920s. A survey of four-year programs at colleges and universities by the Federal Bureau of Education showed that 2,534 women obtained degrees in business between 1914 and 1928, with significant increases toward the end of the twenties; by 1928 women received slightly more than 17 per- cent of all the degrees granted. Many others took some business courses while they majored in another disciplines

Wherever these business courses counted as the real thing was a different matter. At coeducational institutions such as Stanford, the University of Chicago, New York University, and the large mid- western state universities, women took legitimate courses in ac- counting, statistics, and employment management. But approximately one-third of the coeducational collegiate schools of business offered a curriculum in secretarial science, and many women who took business courses were acquiring typing and stenography skills to qualify themselves for work in the "real world" after they graduated." Student demand and administrators' ideas about women's roles in business both influenced these choices. 'It is probably true that a school of business associated with a state university will feel the urge to establish secretarial work more keenly than some others schools do," said one college administrator. "Schools located in large cities might feel this urge because there is a strong demand for college-trained secretaries and because the institution owes it to its student body to provide the training.' Because women were 'not wanted in public accounting' and were "barred from most other first-class positions that commerce boys usually enter,' he went on to say, the business school was obligated to offer them commercial courses. Business curricula, then, frequently steered women into clerical work and diffused any aspirations they might have had to enter business administration or accounting,