## E.R. BROWN (1979): Rockefeller Medicine Men: Medicine and Capitalism in America, University of California Press, Berkeley

E. R. Brown has done a great service in uncovering the hidden influences that shaped the development of biomedicine in the United States at the turn of the 19<sup>th</sup> century and consequently affected the medicine was practiced in the Western world thereafter.

His work tells the hidden story of the financial, political, and institutional manipulations whereby a diverse and eclectic range of healing modalities available to the North American public was summarily pared down to a singular style of medicine that would become the predominant medicine of the Western world and a major force in global medical culture during the 20<sup>th</sup> century.

This was brought about largely by the collaboration of the American Medical Association, the philanthropies of Andrew Carnegie and John D. Rockefeller, and the development of a revolutionary curriculum by the Johns Hopkins School of Medicine. Brown documents the story of how a powerful professional elite gained virtual hegemony in the Western theatre of healing by effectively taking control of the ethos and practice of Western medicine.

E. Richard Brown describes how, in 1905, the American Medical Association's new Council on Medical Education funded by Carnegie and Rockefeller commenced serious activity. They employed the services of Abraham Flexner who proceeded to visit and "assess" every single medical school in the US and Canada.

Within a short time of this development, medical schools all around the US began to collapse or consolidate. By 1910, 30 schools had merged, and 21 had closed their doors. Of the 166 medical schools operating in 1904, 133 had survived by 1910, and 104 by 1915. Fifteen years later, only 76 schools of medicine existed in the US. And they all followed the same curriculum.

Brown shows how both social and political processes were consciously manipulated by a medical elite acting in concert with immense corporate wealth to create a system of medicine that better served economic and hegemonic intentions than social or humanitarian needs.

Even while eliminating all potential competitors in the medical marketplace, the AMA undertook a radical reorganisation in order to consolidate its power over the medical profession by aggressively recruiting local and state representatives. It simultaneously implemented a massive and coordinated drive to elevate the social and financial status of those in its fold.

The American Medical Association had 8,400 members in 1900. By 1910 its membership had swelled to 70,000 – an eight-fold increase within a short decade.

Brown has a sharp eye for discerning the subtler elements within these developments. He eloquently brings to light the motives that supported the transformation of medicine in North America at the turn of the twentieth century.

Brown constantly returns to the fact that scientific medicine has been narrowly technological and ideologically conservative in its orientation. But he also acknowledges the possibility of creating a socially just medical paradigm that is committed to eliminating the inequities of class and racism, that is environmentally conscious, and that is supportive of personal and social realities.

This book will be very useful to all who would seek to better understand the issue of professionalisation in the health sciences, and to those who may be simply curious regarding the hidden interests that have helped to steer Western medicine towards its present impasse.

The crisis in today's health care system is deeply rooted in the interwoven history of modern medicine and corporate capitalism. The major groups and forces that shaped the medical system sowed the seeds of crisis we now face. The medical profession and other medical interest groups each tried to make medicine serve their own narrow economic and social interests.

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This book sees scientific, technological medicine not as the determining force in the development of modern health care but as a tool developed by members of the medical profession and the corporate class to serve their perceived needs. pp 3-4

From this triumvirate came the influential philanthropies that asserted extraordinary leadership in shaping social, economic and political order of the twentieth century. Rockefeller, the individualistic captain of industry from the rough and tumble old order that was being transformed at the turn of the century, supplied the money but left the directing to his lieutenants. Gates, the transition figure from unbridled individualism to the discipline of the corporation, provided systematic methods and a rudimentary strategy for asserting corporate capitalism's needs for supportive social institutions. Junior, emerging gradually as the nation's foremost representative of modernism in corporate relations with labor and the public, brought a refinement and sensitivity to the philanthropic work being developed by Gates. The programs and strategies that emerged from this center of financial power had an enormous impact, especially on medical care and health systems in the United States and throughout the world.

Gates and John D Rockefeller Jnr. conceived of a more strategic role for philanthropy - the transformation of social institutions. They worked to make the nation's colleges and universities into a system that would more efficiently yield technically trained and properly socialized professionals and managers for the system.

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Medicine's almost fantastic transformation from rank ignominy to Olympian heights of status exemplifies the powerful consequences of an interest group adapting itself to the needs of the dominant class.

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Scientific medicine was taken up seriously in America in the mid-nineteenth century by a small group of elite medical practitioners. It was perceived as a medium of professional uplift. By offering a somewhat more effective form of practice, it enabled them to increase their credibility and to reduce competition. Scientific medicine enabled the development of strong political organization within the profession itself, and attracted the political and economic support of the wealthy.

This early elite group formed from an early core of wealthy students who undertook their medical training in Europe - particularly the medical school of Edinburgh. By 1800, only 100 American doctors had received such training. Only three medical schools in America - at Pennsylvania, Dartmouth and Harvard - offered any lectures to supplement the apprenticeship system operating at that time.

The chief complaints of the most prominent professional spokesmen by the end of the [nineteenth] century were the "surplus" of doctors, "low" incomes, and the low social status of the profession.

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What much of the sociological literature ignores in examining the process of professionalization is how essential political power is in gaining and maintaining professional status.

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American medical science came of age with the opening of the Johns Hopkins medical school, modeled after the German university medical schools with a heavy emphasis on research in the basic medical sciences. At Hopkins, for the first time in the United States, the laboratory science faculty were to be full-time teachers and researchers, supported by salaries adequate to live on and unencumbered by the distractions of private practice. Virtually the entire Hopkins faculty was trained in Germany. Hopkins, and then Harvard, Yale and Pennsylvania became the indigenous producers of scientific medical faculty.

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Scientific medicine wrapped the modern doctor in an aura of therapeutic effectiveness, and the limited improvements gave support to that aura. Furthermore, the technical expertise associated with scientific medicine helped to mystify the role and work of the physician more effectively than did the older notions of the aetiology of disease, unpleasant remedies, and transparent codes of "ethics." Scientific medicine thereby supported the claims of the profession for a monopoly of control over all healing methods. These benefits . . . were effective in undermining sectarian medicine, midwifery, and other forms of competition.

The AMA became the vehicle for political action within the profession and the larger society. The reformers used the technical requirements of training medical scientists to set standards and then evaluate medical schools according to those standards. With few exceptions - Johns Hopkins the shining example among them - virtually all 19<sup>th</sup> century medical colleges were weak when judged by these standards." p 84

While Rockefeller used chemists and engineers in developing his Standard Oil empire, his chief assets were unbridled ambition and an intuitive and cunning sense of opportunity and organisation. He accumulated the largest fortune among all the robber barons by paying his workers as little as possible and by ruthless methods in the marketplace. . . He did not fully share his son's and his later managers' appreciation of the importance of science in developing the base of industrial capitalism. pp 110-111

With the rapid development of an industrial base in the United States during and after the Civil War, employers in many industries viewed their workers as disposable resources. Particularly with increasing mechanization in industrial production, a decreased demand for skilled workers, and an unlimited supply of desperate immigrants, the work force became a sea of men and women to be plucked up by employers as needed and later tossed out. Workers who were maimed, killed, or simply worn out by their jobs were replaced by other bodies from among the unemployed.

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Members of any society or social class whose existence is intimately tied to industrialism will find scientific medicine's explanations of health and disease more appealing than mystical belief systems. The precise analysis of the human body into its component parts is analogous to the industrial organisation of production. From the perspective of an industrialist, scientific medicine seems to offer the limitless potential for effectiveness that science and technology provide in manufacturing and social organisation. Just as industry depends upon science for technically-powerful industrial tools, science-based medicine and its mechanistic concepts of the body and disease should yield powerful tools with which to identify, eliminate and prevent agents of disease and to correct malfunctions of the body.

In 1904, Arthur Dean Bevan, a surgeon on the staff of the Chicago Medical School, helped to establish and took control of the AMA's Council of Medical Education. Every medical school in the country was inspected and rated according to the Council's decree. Those which rated poorly either upgraded, amalgamated, or folded. In 1907, Bevan proclaimed at the national conference, "We must secure for them (the medical schools) state aid and private endowment. . . We must start an active, organised propaganda for money for medical education." p 142

In 1907 Bevan invited Henry S. Pritchett, president of the Carnegie Foundation for the Advancement of Teaching, to examine the survey materials collected by the council. Meeting at the Chicago Club, Bevan and Pritchett saw eye to eye on the value of a Carnegie-sponsored study of medical education. For Bevan, the Carnegie study would be the big guns in the campaign for medical education reform. Pritchett was sympathetic to that concern.

Bevan's request for a study of medical schools fit well with the [Carnegie] foundation's general program and provided an opportunity for the foundation to move into reforming professional education. Pritchett discussed the proposed study with Charles Eliot, president of Harvard and a trustee of the Carnegie Foundation, Rockefeller's General Education Board, and the Rockefeller Institute for Medical Research. He also talked with Dr Simon Flexner, director of the Rockefeller Institute. Flexner suggested a director for the study, his brother Abraham. The suggestion meshed well with Pritchett's conception of the study as contributing to the reform of higher education.

The social class and status of medicine would be raised, together with the incomes of physicians, to a level appropriate to its role in society. These changes were made

necessary, according to Flexner, by the requirements of scientific medicine as well as by medicine's new social role. . . .

Reducing the supply of physicians was no mere by-product of Flexner's program. "The improvement of medical education cannot," he argued, "be resisted on the ground that it will destroy schools and restrict output: that is precisely what is needed." pp 149-150

Once the Flexner Report was released, the AMA acquired the strong ammunition it needed. Medical schools began to close down right, left and centre. Pritchett of the Carnegie Foundation became disturbed at the vehemence of the AMA's purges and charged that it was, in fact, breaching the understanding that had won his initial support. By 1918 it was clear to Pritchett that the AMA would wreck all medical education for blacks if left to its own devices . . . Pritchett protested the "grave injustice done to the negro schools by the council's *de facto* policy of not extending to them the same leniency given to white schools in the South." . . . The policies of the zealous AMA reformers were closing medical schools and disrupting the attempts to build a uniform school system, all without regard for the public interest as defined by the leading foundations. . . Within a decade of his cordial meeting with Bevan at the Chicago Club, Pritchett had come to view the council's power in much the way Dr Frankenstein viewed his own creation.

A virtual revolution transformed American medicine from 1890 to 1925. The medical profession ascended from ignominy and frustrated ambition to prestige, power, and considerable wealth. . . .

This American success story is attributable to several historical developments. First, industrial capitalism created a new role for science and its application. Science was elevated from a gentleman's avocation to a vital element in the competition for increased productivity and decreased labor costs. Scientists seized the opportunity to be of service to the masters of this new economy, and they were in turn rewarded with money and facilities for their work and prestige for their achievements and themselves.

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By providing the carrot of subsidy to capital-hungry medical schools, foundations secured a position of enormous power in medicine from 1910 to the 1930s. In this period, foundations gave some \$300 million for medical education and research. Rosemary Stevens concluded, "Foundations were thus the most vital outside force in effecting changes in medical education after 1910." p 193

Although foundations continued to provide leadership in medical affairs, the State soon took over from the foundations the dominant financial role in the reform and development of medical care. The State continued foundation-developed strategies of rationalizing medical care and developing technological medicine. p 195

[T]he State, like the foundations and wealthy individuals before it, continued to promote and develop a narrowly technical and ideologically conservative type of medicine - despite the overwhelming evidence that broad factors in the physical and social environment have at least as great an impact on health states as the microbiological factors that receive most of the attention.

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Scientific medicine has claimed for itself the credit of dramatically reducing the early mortality that has characterized human experience until recent times. Many informed critics have drawn attention to the influence of various other activities. The reorganization of agricultural practices in the 18th century resulted in a vastly improved availability of food supplies; later in the 19th century, urban sanitation cleaned up the filth of cities, and created clean water supplies for the population. All this before the concept of specific aetiology, or germ theory had become even vaguely operational. Concurrently, there occurred a progressive reduction in birth rates and family size. The implementation of the newly-developed therapeutic and preventative procedures of biomedicine in the twentieth century further contributed to an already well-established improvement in public health.

For members of the corporate class, technological medicine has legitimized their economic and political dominance by diverting attention from the consequences of their control - that is, from such 'social costs' as class inequalities, domination based on race or sex, occupational hazards, and environmental degradation. For the medical profession, the knowledge generated by medical science and the techniques of medical technology provided the basis for physicians' claims to a monopoly of authority over the practice of medicine.