

But if the late 19th century was the era of infrastructure investment, the early twentieth century was a period of a rapidly developing mass-oriented capitalism, and of the growth of modern medium-sized firms supplying a variety of consumer and capital goods to an expanding national and international market. The social composition of the ASME reflected these transformations. On the one hand, there were large numbers of corporate employees loyal to the utilities and related firms that employed them. On the other, there were growing numbers of professional engineers linked to medium-sized consumer-oriented businesses that opposed utilities control.

Although Frederick Taylor and corporate power are frequently linked in accounts of the origins of scientific management, Taylor was the leading apostle of independent professionalism. Indeed, Taylor expressed contempt for the financiers and their representatives in the ASME.⁵⁹ Within the ASME the astute political leader of scientific management, Frederick Taylor's associate Morris L. Cooke, "grasped the key fact that the hard core of resistance to scientific management came from the public utilities and railroads acting together as a sort of monopoly interest within the engineering profession. By shifting emphasis from the virtues of scientific management to the vices of the utilities, [Cooke] was able to broaden the base of his appeal and link the efficiency crusade to the national Progressive movement."⁶⁰ Moreover, Cooke understood the sectoral structure of his opposition, identifying "three groups that served as carriers of utilities influence: employers and officers of the utilities; engineers affiliated with their suppliers, such as the manufacturers of electrical equipment and steam boilers; and consultants whose practices depended upon the utilities."⁶¹ Thus, the input-output matrix of the securities bloc was well-known to the major technocratic leader of American Progressivism.

Unlike the conservatives who dominated the ASME at the turn of the century, and who were linked to large corporate organizations, especially the utilities, the milieu that formed around Frederick Taylor was drawn mainly from the machine-tool and light manufacturing industries.⁶² "In contrast to mass production, scientific management had its origin in and is to be found today [1928] chiefly in small and medium sized plants making variable items, or standard items variable as to detailed characteristics, or multiple purpose machines which require human regulation and attention as work varies."⁶³ One must bear in mind that the kinds of firms referred to as "light manufacturing" only really developed with the completion of the infrastructure--the transportation, power, and communications grid that was the *sine qua non* of a national market and modern capitalism. With the completion of this infrastructure the framework was established for the

development of modern, diversified, mass-oriented capitalism--and in this sense the deepening conflict within the ASME, and throughout American society, was inevitable. Reflecting this shifting balance of power, in 1906 Taylor, supported by a growing number of followers, gained the Presidency of the ASME.

The open political combat with the securities bloc that characterized the period after 1907 transformed what was before 1910 just a current within the ASME into an organizational strategy and structure in the course of the Eastern Rate Case. This led both to the formal organization of the Taylor Society and to the expansion of the Taylorites' role as the brains trust of the Progressive struggle to regulate railroads and utilities. On the eve of World War One, for example, Cooke and Brandeis formed the Utilities Bureau. Intended as a political and technical brains trust and service organization for Progressive municipal and state governments, it attracted critical cadre, such as Felix Frankfurter, but failed to gain the response that Cooke and Brandeis had hoped for.⁶⁴ Then, during the War, "... all of the officers and many members of this Society became completely absorbed in war work,"⁶⁵ especially in the Ordnance Department, the Emergency Fleet Corporation, and The United States Shipping Board, where they were responsible for initiating and implementing social democratic labor policies, including the 8-hour day, union recognition, and union-management cooperation.⁶⁶

From 1907 to 1919 the Taylor group within the ASME grew in influence, and by 1919 the Taylorites seemed to control the Society.⁶⁷ Similarly, Progressivism gained strength in other engineering societies, though the ASME remained in the vanguard of Progressive engineering.⁶⁸ On the crest of the short-lived post-war insurgency, the four major engineering societies--the ASME, ACE, AIME, and the AIE--formed, as an expression of Progressive unity, the Federated American Engineering Societies, with Herbert Hoover as its first president. Hoover immediately initiated the first major project of the new organization, a study of waste in industry. Of the seventeen members of the FAES appointed to plan the investigation, 11 were Taylorites. The second major undertaking of the new organization was the investigation of the 12-hour day in the steel industry. In this case, however, it was Morris Cooke who took the initiative. Indeed, Cooke, in the wake of the 1919 steel strike, had already carried out his own investigation with the help of Horace B. Drury.⁶⁹

By 1923, however, the Taylorites were in retreat, a retreat marked by the political defeat of Morris Cooke within the ASME.⁷⁰ As a result, the Taylor Society, increasingly alienated from the growing conservatism of the engineering societies and the ASME, struck out more on its own.

In the aftermath of war, and in the context of the problem of contracting or stagnating markets, the Taylor Society expanded its perspective to include the problem of sales and marketing, and by the mid-1920s the Society had become the major force in the proliferation of union-management cooperation schemes, and had become involved with the proto-CIO forces linked to Brookwood Labor College.⁷¹ And in his Presidential Address to the Taylor Society in 1928 Morris L. Cooke called for the creation of industrial unions.⁷²

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In this context the emergence CIO must be seen as a subordinate development within the broader praxis of the Keynesian elite.

Analysis of the key vote in the 1935 AFL proceedings shows an obvious sectoral pattern. The core of the AFL was rooted in the local economy of urban trades and services--the building trades, on the one hand, and building service unions such as the Fire Fighters, Hotel and Restaurant Employees, Teamsters, Street and Railway Workers, on the other hand.⁷³ Add to this core the bloc of railway unions, and several craft-based manufacturing unions (Bookbinders, Boot and Shoe Workers, Leather Workers, Cigarmakers, Glass Bottle Blowers, Potters, and United Garment Workers) and one has delineated the institutional sources of the anti-CIO vote. The three major blocs--the building trades, urban services, and railroad unions--accounted for nearly 90 percent of the anti-CIO vote.⁷⁴

Among those voting in favor of the CIO proposal, unions in the clothing, mining, and printing industries accounted for 84 percent of the vote. The clothing and accessory unions emerged out of the context of Brandeis-inspired union-management collaboration, and were embedded in the political economy of the dry goods sector of mass consumption. Indeed, it was at the initiative of the merchant elite that Brandeis was brought into the affairs of the clothing industry, and it was the merchants who pressured the manufacturers to accept collective bargaining.⁷⁵ Similarly, union-management cooperation schemes were in effect in segments of the publishing industry, thus accounting for the presence of the International Typographical Workers Union and the Printing Pressmen among the supporters of the CIO. (In this context note the close connection between the print media and the advertising strategy of the mass retailers). And by the late 1920s the UMW and John L. Lewis had a taste of union-management cooperation in the Rocky Mountain Fuel Company of Colorado, while Lewis's experience during and after World War I as a Wilsonian Democrat had brought him into contact with the Keynesians in the state apparatus,⁷⁶ and,

like Sidney Hillman of the Amalgamated Clothing Workers, Lewis had come to see the necessity of positive state intervention.⁷⁷

This excursion into the genesis of the CIO suggests the pivotal position occupied by the Taylor Society. After the formation of the CIO Francis Goodell, under the supervision of Morris Cooke, wrote *Production Problems: A Handbook for Committeemen of Local Lodges of S. W. O. C.* (Steel Workers Organizing Committee);⁷⁸ and Cooke authored, though Murray's name appeared on the finished product along with Cooke's, *Organized Labor and Production*.⁷⁹ Lee Pressman, CIO general council, began his career as one of Frankfurter's students, then did a stint in the Keynesian-dominated Agricultural Adjustment Administration, Works Progress Administration, and National Youth Administration, finally linking up with Sidney Hillman as general counsel for the CIO.

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By 1927--to resume our chronology--the Taylor Society had developed a broadly Keynesian approach to the economy. The February 1928 Issue of the Society's *Bulletin* reported on a special meeting--the high point of the Society's political efforts up to then--organized jointly by the Taylor Society and the Pollak Foundation, the think-tank funded by Wadill Catchings of Goldman Sachs, and the source of a major stream of Keynesian texts authored by Catchings and William T. Foster.⁸⁰ The titles of the key articles are suggestive: "Must Prosperity Be Planned? Can Effective Demand Be Adapted, Controlled and Graduated in Step with the Constant Increases in Productive Capacity?" by H. B. Brougham (Pollak Foundation); and "High Wages and Prosperity" ("I should like to lay before this meeting . . . my conclusion that the prosperity of the country will be hastened and increased more than in any other way, by rapid increase of wage rates, where machinery makes this possible.") by Henry H. Williams of the R. T. French Company.⁸¹

In 1928 the Keynesians underwent a qualitative escalation in their political struggles, working with Robert Wagner in the shaping of his pro-labor "Three Bills,"⁸² and by 1931 the Taylor society had become an important presence in the New York State Executive branch under FDR, where Morris Cooke was the Governor's chief advisor on electric power, and where the Taylor Society cadre became the core of Frances Perkins' efforts to develop an employment stabilization plan.⁸³ In 1931 the "the Taylor Society [was] asked by a member of Congress to prepare a bill providing for national planning."⁸⁴ And the Taylor Society, together with its circle of associates, provided the Keynesian witnesses for Senator LaFollette's Senate

Subcommittee on Manufactures *Hearings on the Establishment of a National Economic Council.*

The hearings, in fact, were a set-up engineered by LaFollette, in collaboration with, among others, Sidney Hillman of the Amalgamated Clothing Workers and Harlow Person of the Taylor Society--a set-up whose purpose was the neutralization of the growing corporatist appeal being made by Swope, Harriman, and others. LaFollette, in his conduct of the Hearings brought the main ranks of the Taylor Society's leadership into direct combat with Swope, Harriman, and other corporatists,⁸⁵ with LaFollette, as chairman, asking leading questions with the obvious intent of undermining the claims of the corporatists.⁸⁶ From that time onward the struggle against corporatism deepened. The Keynesians were strong enough to get sections of the National Recovery Administration--the Consumer Advisory Board and the Research and Planning Division--as their bailiwick, and it was from these bastions that the Keynesians launched a successful effort to discredit the corporatist NRA in 1934-35.⁸⁷

We should not be surprised, therefore, to find that by 1936 the Taylor Society cadre and sympathizers permeated the Second New Deal state apparatus. From the beginning of its organizational history in 1910 to its triumph in the Second New Deal in 1936, the Taylor Society--the leading scientific management organization of its time, the most theoretical, the most radical, and the most international⁸⁸--was at the core of the liberal reformist political formation that by the 1930s would be called "Keynesian."

In 1937 Harlow Person, in a long theoretical letter to Morris L. Cooke, analyzed the origins of the 1937 recession.

The manner in which the United States pulled out of earlier depressions was by making ownership pay the price of writing down inflated capitalization through widespread bankruptcies, and by making labor pay the price of unemployment. Following a period of drastic surgery of this kind, new owners acquired productive properties unencumbered, workers came back to work at lower wages, thus developing a situation favorable to profits and activity along conventional lines--and unfortunately to a resumption of the course that leads again through speculation and inflation to another depression.

In respect of the depression which began in 1929, it was recognized by January 1932 that psychologically the corner around which renewed prosperity was believed to lie was too dangerous to

be turned in the above conventional manner. The RFC [Reconstruction Finance Corporation] was devised to ward off bankruptcies of the big fellows. Later, a similar shoring-up was brought to bear more generally on industry, agriculture, and homeowners. Relief and public works were employed to restore purchasing power and stimulate business activity. These efforts were independent of simultaneous efforts to remove fundamental causes of depression. The stimulus of RFC was successful, but the burden of capitalization and debt carried over was too great for a spontaneous and rapid increase in business activity. The measure which had been taken to prevent universal bankruptcy was a measure which made impossible a rapidly accelerating progress out of the depression.⁸⁹

These remarks proved to be the swan song of Keynesianism, and suggest a way of approaching the kind of mega-corporatism embodied in that peculiar synthesis of corporatism, Keynesianism, and raw materials imperialism that came to characterize the Cold War welfare state. As well as containing an astute critique of the U. S. political economy at its most critical juncture in the twentieth century, this letter demonstrates two things of immediate relevance to the more limited purposes of this paper: that Second New Dealers were not naive trust-busters; and that sectoral conflict was the force field out of which both the Taylor Society and Keynesian ideology and politics emerged.

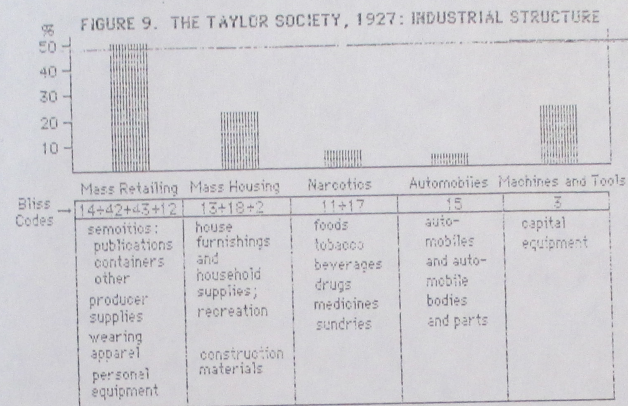
Now, instead of treating the Society as an undifferentiated noun, it is necessary to look at its internal structure *qua* network of inter-organizational relationships: the accumulation logic of mass capital.

iii. TS as accumulation logic of mass capital

The underlying structure of FF x TS is most readily revealed through analysis of the Taylor Society, which contained the greater detail of capital formations, inter-organizational linkages, personnel networks, and discursive behavior.

Figure 9 shows that the Taylor Society's *manufacturing* membership was comprised primarily of mass-oriented firms in dry goods and housing (50% and 23%, respectively). Together with a group of diversified, mass-oriented machine and instrument firms (whose sectoral orientation is not as obvious from Figure 9 alone), these firms comprised nearly all of the Society's manufacturing membership. Thus, analysis of the membership list of the Taylor Society shows that its firm members were contained within the

sectoral boundaries of mass consumption: retail trade and its manufactured inputs; housing finance and its manufactured inputs; and capital goods suppliers to mass production.⁹⁰



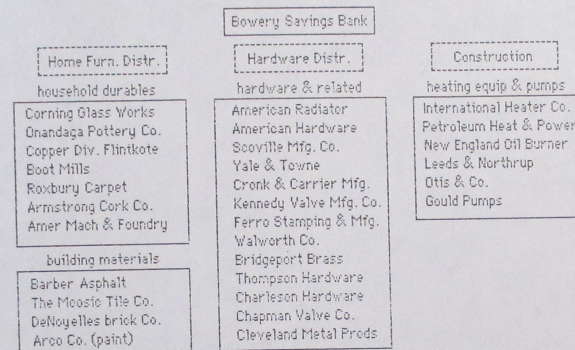
Source: "Membership List, May 1927," in the Morris L. Cooke Papers, box 66, Franklin D. Roosevelt Library, Hyde Park, New York.

Second, a closer look at the organizational composition of the Society reveals that only 54% of its members were drawn from manufacturing organizations (these were generally CEO's and other upper management personnel). The remaining 46% came from the producer services organizations and professions linked to mass capitalism (see Figure 13). In this respect the structure of the Taylor Society, as we shall see, reflected the political economic subordination of manufacturing to the service functions and organizations hegemonic within the logic of accumulation of mass capitalism. Even among the Society's manufacturing organizations, functional differentiation and asymmetrical linkage was the rule. It was not the horizontally organized concert of similar interests, but rather the vertically organized functional relations of realization, that provided the force field that shaped strategy and structure. This becomes apparent when one examines inter-organizational patterns among the Society's manufacturing membership.

Starting with the mass housing sector of the Taylor Society, we find an austere sectoral configuration containing, on the one hand, Henry Bruere (CEO of the Bowery Savings Bank and one of the influentials in the Mutual

Savings Banks Association--the largest supplier of capital to the housing industry); and, on the other hand, a remarkably compact set of capitals: the suppliers of manufactured inputs to the housing industry. Except for Leeds and Northrup's Morris Leeds, and several representatives of the Walworth Company, none of these manufacturing CEOs played a major role in the leadership of the Society. Bruere, however, was on the equivalent of the Central Committee of the Society.⁹¹

FIGURE 10. THE TAYLOR SOCIETY, 1927: MASS HOUSING SECTOR



Source: "Membership List, May 1927," in the Morris L. Cooke Papers, box 66, Franklin D. Roosevelt Library, Hyde Park, New York.

The intermediate service organizations in construction, real estate and distribution that are part of the chain of housing-oriented functional activities are represented in Figure 10 by the dotted boxes. Although not present in the Taylor Society (which included hegemonic not intermediate service organizations), such non-manufacturing housing and real estate firms are found among the regional supporters of the Second New Deal in the political configurations shown in the New York Closeup of 1936 (campaign contributions to FDR's reelection effort), and the 1938 Ezekiel lists of "Liberal Businessmen" (see Figure 5).

The tool and machinery sector of the Taylor Society (Figure 11), includes IBM and Eastman Kodak, two of the important Keynesian firms from the world of industrial capital. Although the major roles in the elite political world were going to bankers, merchants, lawyers, and technocrats, metal & machinery manufacturing firms that did play an active part were, like IBM

and Eastman Kodak, those in which the marketing function was most acutely and systematically developed.⁹²

FIGURE 11. THE TAYLOR SOCIETY, 1927: MACHINERY SECTOR

| | active | inactive | |
|---|---|---|--------------------------------------|
| diversified mass market oriented machinery | Leeds & Northrup Eastman Kodak IEM Smith Corona Burroughs American Multigraph Rhode Island Tool Jones & Lamson Tabor Mfg. Co. | American Cable Cleveland Twist Drill National Twist Drill The Osborne Mfg. Co. Simmonds Saw & Steel | tools; inter- national markets |
| | pro-Taylor Society | Brown Lipe Chapin(GM) Brown Lipe Gear(GM) White Motor Ohio Body Dodge Brothers Bowen Products C. G. Spring & Bumper | transportation equipment |
| securities bloc infrastructure suppliers | Westinghouse Electric AT & T Western Electric pro-AMA/anti-TS | | |

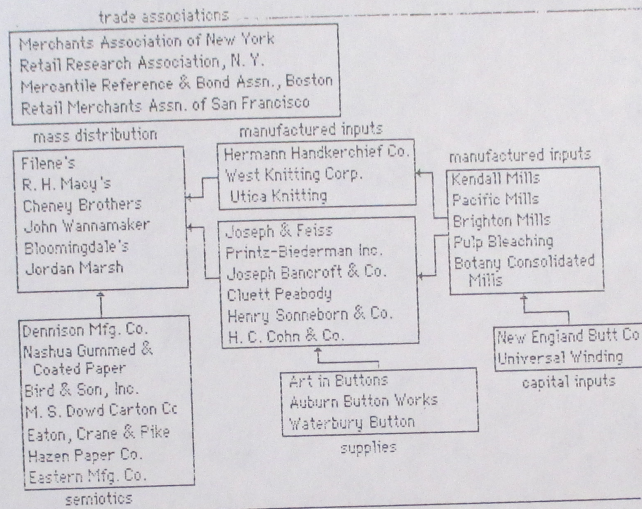
Source: "Membership List, May 1927," in the Morris L. Cooke Papers, box 66, Franklin D. Roosevelt Library, Hyde Park, New York.

The tool and machinery sector has been divided into active and inactive firms in order to correct the most widespread misconception of the Taylor Society's links to capital. Although what references there are to the Taylor Society's capitalist membership assert that "Big Businesses" such as AT & T came to control the Taylor Society in the 1920s,⁹³ such was not the case. During the 1920s the AT & T management sought to maneuver the Taylor Society into a subordinate position in relation to the much more conservative American Management Association (AMA), striving ultimately for its dissolution as an independent Keynesian formation. Morris Cooke and Harlow Person, the diumvirate of the Society, successfully fought off these attempts to weaken the Keynesian thrust of their organization.⁹⁴

The largest sectoral bloc among the Taylor Society's manufacturing firms is represented by Figure 12, the mass distribution sector. It is comprised not merely of clothing and clothing-related industries; it is a coherent complex formed by the actual input-output relations among these firms, and reflects the marketing-oriented functional hierarchies of this dry goods sector of mass capitalism. The mass distributors are included in this figure because they comprised the apex of an organizational complex oriented toward mass consumption, while service organizations, such as the

Merchants Association of New York, are included to show the full extent of the "service" functions contained within the Taylor Society.

FIGURE 12. THE TAYLOR SOCIETY, 1927: MASS DISTRIBUTION SECTOR



Source: "Membership List, May 1927," in the Morris L. Cooke Papers, box 66, Franklin D. Roosevelt Library, Hyde Park, New York.

The input-output flows indicated by Figure 12 are apparent. Clothing and accessory manufacturers sell to the mass retailers (or do a good deal of mass retailing on their own) and buy from textile manufacturers, who in turn must consume capital inputs, while button manufacturers feed their output into the clothing industry.⁹⁵ (There was intra- as well as inter-firm coordination in the dry goods sector of the Society. Other manufacturing firms in the Taylor Society included vertically integrated textile and clothing manufacturers that conducted their own retailing operations.⁹⁶)

Less clear, but of great importance, is the role of the *semiotics* industries, here defined as a subset of the paper, packaging, printing, and publishing industries. The sales effort that is part of modern mass marketing strategy has, from the late 19th century onward, involved a proliferation of symbolism, a heavy use of advertising in the print and later electronic media, and a growing emphasis on the symbolic dimension of packaging. This functional relationship between the semiotics industries and the mass distributors is concretized in the Taylor Society: Henry Dennison, a

manufacturer of labels and packaging, was one of the leading chief executive in the Taylor Society. His closest associate was Edward Filene, the most "progressive" of the important mass distributors in the United States.⁹⁷ Filene was one of the earliest employers of Louis D. Brandeis, a longtime close associate, and a major influence on Brandeis' political-economic outlook. Filene and Dennison were New England's leading Keynesian chief executives.

A striking empirical account of the primacy of semiotics in the genesis of the socio-technical system called mass production comes from David A. Hounshell's *From the American System to Mass Production, 1800-1932*. The "technological revolution" that is associated with the rise of mass production in the mid-nineteenth century in the United States was driven not by the logic of production, but by the logic of distribution. It was the clock manufacturers and distributors, Hounshell writes, who were riding a wave of bourgeoisification that generated an especially powerful desire for these regulating mechanisms. The penetration of capitalist time into the everyday temporal life of the citizen produced the need to inscribe oneself upon the new socius: to not only be *on* time, but to be (unfolding) *in* time. Thus, the clock, as a mid-nineteenth century commodity, was the first fetish to fuse mass distribution with mass production while simultaneously functioning to reorder space-time, and thus to become an operator upon the socius. Under these circumstances (given the low cost/value ratio for transportation services), the marketing potential for these simple devices was enormous, and manufacturers and distributors were driven to find new ways to meet their rapidly expanding opportunities. Thus, it was in the clock industry, precisely because of its less "high-tech" and more readily adaptable wood-based technology, with its greater tolerance of error (not the metals-based armaments industries with their more demanding accuracy requirements), that true "mass production" first developed in the United States.⁹⁸

Several remarks are required now. First, these hardware, clothing, and other firms in the Taylor Society were among the largest and most modern in their industrial sectors, and enjoyed, within their sectors, a degree of hegemony. This was especially true of the clothing industry, where the large, modern firms created a sophisticated industry-wide system of political-economic controls through collective bargaining.⁹⁹ The too easily used label "small business"--which might well cover most of the firms in Figures 10 through 13--misses the point that what is modern and at the same time hegemonic or leading within a subsector of specialization varies with the nature of markets and technologies. In terms of what is modern, rather than what is big, it is the Taylor Society's constituency that stands out above all for its political economic and socio-technical sophistication. This