A Century of Economic Thought as Examined through American Trade Unionism

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Since its inception as a distinct discipline, the evolution of economics has been marked by a consistent trend towards increased sophistication of analytical methods and reliance upon mathematics in particular. The development of economists' treatment of labor unions in peer-reviewed journals over roughly the last century is an excellent microcosm of the evolution of the field itself. This paper, using labor unions as a lens through which to view this progression, traces the gradual changes in how economists addressed many of the persistent concerns of the discipline.

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To follow the evolution of economic thought in the United States by observing economists' changing attitudes towards unionism is akin to mapping a river with an enormous network of tributaries. As in biology, the term evolution here does not imply that later economists were necessarily superior to their predecessors, but rather that economists have both shaped and interacted with their respective intellectual climates, and their changing concerns and conclusions have reflected this dynamism. The field of economics has morphed continuously since its divergence from its parent disciplines, but the problems it attempts to answer remain rooted in its origins. If economics is, according to the recent observation of Steven Levitt, a set of tools for analyzing how people get what they want, then only the methods of inquiry ever truly change. As we follow the evolution of economics by examining economists' treatment of labor unions over roughly the last hundred years, we can see that the questions asked change more infrequently than the manner in which they are addressed.

Development of American Economic Thought through World War I

American economic literature dating from the turn of the 20th Century regarding labor unions demonstrates significant changes in economists' methods over time. Today literature from this period would likely be covered in a political science, philosophy or even sociology periodical. For example, Edward Cummings's *Quarterly Journal of Economics* paper, "A Collectivist Philosophy of Trade Unionism," provided a qualitative discussion of the democratic underpinnings of trade unions' rise in the latter decades of the 19th Century (Cummings 1899). Cummings paid little attention to any modern empirical measurements such as labor efficiency, productivity or wages, and instead focused more on the philosophy of unionism. Cummings called trade unions, “a typical and spontaneous manifestation of the methods and results of pure democracy…a microcosm reproducing the experience of political democracy…” (153). He also elaborated on the differences between unionism and individualism and their contrasting merits, but the overall picture leaves the modern economist without any useful material for statistical analysis. George E. McNeil’s paper, “Trade Union Ideals,” published in the *Publications of the American Economic Association* in 1903, reveals a similar lack of quantitative analysis, instead he asked mainly ethical questions as to the righteousness of force or the threat of force unions historically employed against strikebreakers (McNeil 1903). The latitude granted to economists publishing in this journal to make arguments without any empirical evidence was exemplified by McNeil’s analysis of production costs:

> *The cost of an article is regulated by more than the number of the articles demanded, that is, by the condition of the market, than by any other cause. Each additional movement toward a shorter workday, each accomplishment of a shorter workday, is probably the greatest material and moral influence for the uplifting of humanity. The most highly paid labor produces things at much less material as well as moral cost than can any low paid labor. The improvements in processes of manufacture and of distribution follow advances in the wages to laborers (226-227).*

In similar fashion, Robert F. Hoxie, whose catalogue of works included a detailed report titled “Trade Unionism in the United States,” frequently referred to the social, philosophical and psychological dimensions of unions while abstaining from any statistical or mathematical tools. Hoxie’s work represented the standard for economic journals at the time, which placed little emphasis on using such techniques to present evidence of the market outcomes associated with unions. This is not surprising, considering that although Hoxie was a University of Chicago professor with a keen interest in labor unions, his largest contribution to the field was his classification of the different kinds of unions so as to make sense of the multitude of contradictory views surrounding them (Hoxie 1914). Regarding the state of unions in the early 20th century, Hoxie commented that, "It is not a mere question of wages and hours, of shop conditions and the narrow economic rights of employer and employee, and it cannot be solved by a mere resort to economic theory. On the contrary it is a complex of economic, legal, ethical, and social problems…" (Hoxie 1914).

In 1908, J.B. Clark, one of the leaders of the marginalist revolution in the United States, published "The Theory of Collective Bargaining," an analysis of whether trade unions augment or impede industrial systems. Clark's paper was more sophisticated than many of the American papers being published in his time, as his analysis utilized simple graphical illustrations of his theory and examined the concept of marginal labor productivity rates and their relation to wages (Clark 1908, 33). Regarding as an accepted fact that there, "is a standard to which wages tend to conform, and that this standard is in some way based on the productive power of labor," Clark explored the question of whether or not organized labor brings the pay of laborers closer to that standard (24). Clark proposed at the outset that a monopoly on labor, like a monopoly on capital, disrupted the market and forces some labor out of its natural field. He explained that, "This class would create a monopolistic gain and absorb it for itself, while all other laborers would pay tribute" (25). Clearly, Clark had begun to move past the purely philosophical questions that consumed many of his predecessors and was attempting to conduct a Paretian analysis of the distribution of gains from collective bargaining.

As the field of economics developed in the United States, its first subdivisions became distinctly noticeable. Labor economics emerged as a distinct sub-discipline, and labor economists often viewed "the labor union as [a] positive agenc[y] of social reform" (Debs[1] 1905). Richard T. Ely[2] reinforced Debs' point of view, saying, "It is thus stated, in effect, that the labor question, or- more accurately- the many labor problems of our time require legislation, and it is obviously implied that economic science must furnish guidance to legislation" (Ely 1907, 125). Ely explained that legislation should indeed be enacted to promote healthy reform and that there exists "a connection between economic theory and labor legislation" (124). Other economists supported the progressive stance of labor economics. In a discussion about collective bargaining theory among members of the American Economic Association in 1909, economist A.C. Miller commented that, "Few economists of the present day would question the economic legitimacy of trades union action, if directed toward proper limits, as a mode of adjusting the terms of the wage contract or of settling other conditions affecting the employment of labor" (Miller et al 1909, 40).

The development of economics in the beginning of the twentieth century fostered the creation of new schools of thought, evidenced by the emergence of labor economics and the study of trade unionism. For example, along with Ely, John R. Commons perceived a

[1] Eugene Victor Debs – (1855-1926) American socialist leader. Elected to the Indiana State Legislature in 1884, Debs founded the American Railway Union in 1893. An industrial union as opposed to a trade union, the ARU included all railroad workers. Debs founded the Social Democratic Party, forerunner of the American Socialist Party and was its presidential candidate in 1900 and 1904 *(Wikipedia)*.
[2] Richard T Ely – (1854-1943) Founder of the American Economic Association in 1885. Also worked at Johns Hopkins University and later at the University of Wisconsin where he was one of the founding members of the American Institutionalist School. Teacher and mentor to John R. Commons and Wesley C. Mitchell. *(http://cepa.newschool.edu/het/profiles/ely.htm)*

need to improve economic theory by abandoning traditional atomist concepts in favor of a focus on collective action. Commons played a crucial role in shaping the Wisconsin tradition by supporting the 1911 passage of the first workers' compensation law as well as many other pieces of legislation that he and his colleagues believed would improve the standard of living and working conditions for laborers in the state.[3]

Political, cultural and military events frequently shaped the problems that economists dealt with, but they also changed the way that economists saw their role in society. In his article titled "Clearing the Ground: The Demise of the Social Gospel Movement and the Rise of Neoclassicism in American Economics," Bradley W. Bateman pointed out that contemporary economists often fail to think about the "*historical currents* that carried [economists Keynes, Commons, Hayek, von Mises] away from the center of the profession" (Bateman 1998, 29). Similarly, he emphasized the importance of what was called the Social Gospel Movement in shaping the evolution of twentieth century economic thought. The movement, which lasted unofficially from about 1865 to 1920 and centered around the principle of bringing the Kingdom of God to Earth, emerged following the industrial revolution and American Civil War during which "American's traditional self-image as a rural society of pious individuals quickly faded away" (33). Labor unions were of particular concern for those engaged in the Social Gospel Movement, as several of its principles as listed in the Social Creed of the Churches championed the need for living wages in every industry, regulation of working conditions, and other union-oriented issues (40).

[3] Wisconsin Labor History Society. *Milestones in Wisconsin Labor History*. [updated 2005; cited 1 February 2006]. Available from http://www.wisconsinlaborhistory.org/milestones.html.

During the early 1900's, a number of prominent economists including J.B. Clark, John R. Commons and Richard T. Ely were each affected by the Social Gospel Movement in America. Bateman described how each of the aforementioned were at some point influenced by American Christian socialism and how, "together they demonstrate the tension that was central to the pluralism [of economic thought] that existed up to the Second World War" (Bateman 1998, 37-38). Bateman further explains the strength of the Social Gospel Movement with regard to economics by noting:

> *The Social Gospel message was compatible with several types of economic analyses, as long as the focus of the analyses was clearly ethical in nature… Thus, during the first two decades of the twentieth century, the Social Gospel message served the function of sanctioning plural approaches within the economics profession. It defined a mood and temper among a large part of the profession that were stronger than any one school of thought (38-39).*

By the end of the First World War, however, the Christian influence from the Social Gospel Movement had dissipated, leaving America with "a scientific economics that sought to make the nation more efficient and to control its economy" (Bateman 1998, 48). Bateman described the aftermath of the Social Gospel Movement and World War I by explaining that the institutionalists "in this new 'realistic' world of efficiency and scientific management" replaced the "moral earnestness of the Christian Progressives" (45-46). Ultimately, the uniquely ethical and social approach towards economics, and the study of unionism in particular, that was popular during the earlier parts of the twentieth century were clearly shaped in part by the Social Gospel Movement. Labor unions were primarily addressed from social, moral, philosophical and legal perspectives during this period, reflecting the movement headed by Clark, Commons and Ely in which "American economics [focused] on 'ethical' solutions to social problems" (Bateman, 48).

At this point, we have seen the relative absence of substantial quantitative analysis with regard to trade unionism and the field of economics as a whole; this trend would change with the onset of the First World War.

Postwar Developments in American Economics

The Social Gospel movement was a driving force behind the work of economists such as J.B. Clark, but by no means was it the only significant change impacting economic research in America. Around the time of the War's onset, national governments began to understand the need to collect more economic data, which had an important impact on the American labor movement. Warren M. Persons, author of "Statistics and Economic Theory," explained the importance of the War in initiating greater data collection than ever before: "the accumulation of new statistical series has been greater in the United States during the 6-year period just elapsed [1919-1925] than in any similar period of the past … The recent increase in statistical material has resulted largely, of course, from the stimulus of the war-time necessity for information" (Persons 1925, 180). This trend is also well exhibited by progressive labor statistician Leo Wolman's paper, "The Extent of Trade Unionism." Wolman emphasized the changing nature of both unionism and the field of economics:

> *The quantitative analysis of phenomena is assuming in the study of the science of economics a position of increasing importance. Recognition is at last, if grudgingly, being given to the fact that discussions of the influence of economic forces and tendencies are of great or of little value in proportion as there exists some numerical measure of the strength or extent of these forces. Particularly is this the case where the discussion is concerned with the intricate problem of tracing the influence of such an institution as modern trade unionism. A prerequisite to an intelligent study of the labor movement consists in an accurate*

statistical estimate of the extent and ramifications of the movement (Wolman 1917, 118).

After addressing the need for greater quantitative analysis with regard to trade unionism, Wolman focused much of this article on topics including territorial distribution, relative growth and population in varying industries of unions, frequently citing statistical data

Other fields also prospered from the shift towards more readily available economic data and statistics. Over a decade following Wolman's publication of the aforementioned, Harvey E. Fisk, a member of Bankers Trust Company, New York, stressed the importance of international statistical data collection in the field of national income accounting. He noted that, "The hope is expressed that a growing appreciation of the value of statistics of national incomes may lead other nations to emulate the thorough methods of the American and British workers in this field and may soon make available, annually, comparable estimates of the national incomes of all nations" (Fisk 1930, 20). Thus, like the Social Gospel Movement in the early part of the twentieth century, the First World War and the interwar period were crucial in shaping the increased reliance upon statistical data in the analysis of unions and the broader field of economics in the United States.

Unions continued to receive attention from economists, politicians, lawyers and activists during this period and the literature provided insight into the relative merits of organized labor (Ave-Lallemant 1921). In a speech to the American Engineering Council of the Federated Engineering Societies on November 19, 1920, Herbert Hoover favored collective bargaining over compulsory arbitration. Hoover declared that, "[unions], if our society is to go forward instead of backward, should be considered as the fortunate development of the influential groups through which skill and mutual consideration can be assembled for cooperation in the solution of these questions" (Ave-Lallemant 1921, 238).

It was this climate that was to shape attitudes towards unions at the time. The prosperity of the pre-Depression postwar years precipitated a shift in focus towards improving the standard of living throughout the country. The collective position towards organized labor at the time was generally quite favorable. Agreeing with Hoover's position, Wilson Compton[4] used the example of the railroads to argue against industrial arbitration by noting that, "Narrowly economic considerations have been confused in the presence of broadly social considerations, and public welfare with the class-conscious representations of employees and of employers" (Compton 1916, 330). Like Compton, many economists supported the use of unions to petition for better working conditions. For example, Columbia economist Henry Seager noted that, "Economists can…render a more valuable service by urging the need of such standards than in joining in the current hue and cry against strikes" (Seager 1923, 4).

Questions of the possible efficiency losses created by unions however reflected the concerns of politicians and businessmen about the strength of American industries. In particular, the debate surrounding "closed shop" versus "open shop" models of union organization was a microcosm of the greater ideological struggle to justify the presence of monopolistic labor consortiums in a market economy. Some economists were concerned with identifying successful collective bargaining arrangements to signify the importance and competence of unions in American industry. Leo Wolman offered a picture of one such of arrangement between the Glass Bottle Blowers' Association and

[4] Wilson Compton was a diplomat and later president of the State College of Washington (1944-1951), which later became Washington State University.

the National Glass Vial and Bottle Manufacturers' Association (Wolman 1916). At the time of his writing, the agreement had survived in one form or another for nearly a quarter of a century. From 1899 onward, the manufacturers' association and the trade union each submitted their demands at a preliminary conference and then what could not be settled immediately was taken up at their respective separate conferences. This mechanism, according to Wolman worked well, as the union respected the agreement and its fairness. In addition, labor in the industry was highly disciplined. Wolman observed that, "The skilled branch of the glass bottle industry is about 90 per cent organized," and that, "Vigorous organizing campaigns by the union resulted in the organization of many of the non-union plants" (557).

Just eleven years later however, H. LaRue Frain used the glass bottle blowers as an example of waning union bargaining power (Frain 1927). The introduction of laborsaving glass-blowing machines led to reduction in real daily wages from 1920 to 1924. Frain pointed to a telling example: "Whereas three men could produce, by hand, between 40 and 50 gross of cologne bottles (1/8 to 1/4 ounce) in eight hours, the flow device with one operator could produce about 80 gross, an approximate increase per worker of about 500%." (436). Membership in the union fell along with the decline of overall skill needed to make glass bottles. Once the union could no longer maintain a monopoly on the labor needed to run the plant, they accepted reductions in wage rates despite the rising costs of living. When prohibition led to sharp downturns in the glass bottle industry, wages went down again, consistent with what J.B. Clark expected of an intelligent union: one that made its wage claims based upon the marginal product labor (Clark 1909, 33).

The contrast between the Wolman and Frain papers is instructive in two ways. First, it highlights the degree to which American economists were invested in analyzing American industry for its competitiveness and efficiency at the time. Increases in labor productivity of the type Frain described coincided with the sharp increases in personal income and average production during the postwar years, contributing to the period's economic expansion.[5] This brief era of seemingly unconstrained optimism surrounding American industry was to eventually culminate in October of 1929 with Yale economist Irving Fisher's now infamous declaration that stock prices had reached a permanently high plateau. Second, the level of feedback in the economic community demonstrated here by Frain's return to the glass bottle industry study shows that the level of peer review among American economists during this time was significant. Perhaps even more importantly, Frain's analysis of the marginal productivity of labor and the increases brought by more advanced machinery demonstrated the degree to which neoclassical ideas had permeated the American economic community at the time.

American Economics in the Depression Years

The Depression years necessitated further change for economic thought. Many Americans lost faith in the feasibility of a free market economy, and the future of capitalism was at risk (Gruchy 1939). Economist Allan Gruchy[6] analyzed the economists at the forefront of the debate over the merits of capitalism in his article, "The Concept of National Planning in Institutional Economics" (Gruchy 1939). Gruchy described the

[5] Refer to pages 28 and 34 of Hansen's "Factors Affecting the Trend of Real Wages" for empirical support.
[6] Founder and former president of the Association for Evolutionary Economics. Professor of Economics at the University of Maryland for 50 years and author of several economic texts *(The New York Times online, Archives)*.

generation's institutionalist economists as those who "have felt themselves called upon to use their accumulated knowledge about the economic system as a tool for social and economic criticism and for the definition of the proper ends of our economic system" (121). Furthermore, Gruchy explained that, "The institutionalists have thus combined the functions of scientist and social critic" in order to "solve the difficulties which [they] encounter[ed] in the economic world" (123). The instability in the economic community framed the debate over the merits of a centrally planned economy, dramatically affecting the course of economic thought.

The Great Depression brought with it difficult fundamental questions for American economists, such as whether or not laissez-faire capitalism was the optimal economic organizational model (Hoover 1938). The merits of central planning and socialism were discussed openly in society. An excellent indication of this can be found in a speech given by Duke Professor Calvin B. Hoover in 1937. For his presidential address at the Tenth Annual Meeting of the Southern Economic Association, Hoover delivered a speech titled "Some Problems of Economic Planning by Government." Hoover conceded that the structure of the laissez-faire economy had deteriorated, but he nevertheless maintained that, "under conditions of depression at least, the existence of administered prices [in any industry] has the effect of largely destroying the automatic price controls of the economic system (282). Hoover also argued that problems of agricultural surpluses, deficient savings and capital investment, monetary policy and inadequate wage controls were reasons to shun central economic planning. As a practical matter, Hoover noted in his concluding remarks that he saw no easy way to protect legislators and administrators from the pressure groups that would seek to influence those involved with the planning.

Hoover's emphasis on the need for economists to find answers to the problems that surfaced during the Depression further highlighted the seriousness of the debate among economists regarding the future of capitalism.

The political and legislative environment at the time was an inescapable force in determining the path that the development of American economics and trade unionism followed. H. Gregg Lewis's extensive research and his personal class notes have provided historians of economics with a precise understanding of the relevant factors surrounding the evolution of the field. In a retrospective on the history of unions and labor economics, Lewis wrote, "In my judgment, the main cause of this spread of unionism was the intellectual revulsion against free markets that in the Great Depression became New Dealism and led to the National Industrial Recovery Act, the Wagner Act, and to the interpretations of existing law in a manner more favorable to unions. … This movement … to regulate unions as though they were public utilities may continue and produce more legislation" (Lewis, Box 9).

The debate pitting proponents of central planning against the defenders of capitalism had consequences for labor economics as well. Harry Millis addressed the question of how to encourage employers to hire more workers while still preserving decent wages and the rights of workers (Millis 1935). Millis summed up the dilemma by saying that, "Unionism may result in an uneconomic distribution and use of a nation's productive capacity. But without control through collective bargaining or through law, sweated wages and sweated industries are not highly exceptional" (7). Millis's paper echoed the concerns of many of those both within and outside the economic community.

Labor unions found themselves in a transitional phase during this period. Philip Taft examined what he perceived to be fissures in the labor movement in a 1937 paper titled "Problems of Structure in American Labor" and again in a 1939 paper titled "Some Problems of the New Unionism in the United States" (Taft 1937, 1939). Taft, a union supporter, pointed to a number of problems he saw in the organizational structure of unions (including the merger with the Committee of Industrial Organization) and proposed that the future of labor unions was uncertain in the absence of reform (Taft 1937). Lyle W. Cooper, author of "The American Labor Movement in Prosperity and Depression," analyzed union activity over time, noting that the "chief factors responsible for the existing weakness of the organized labor movement in the United States are revealed by an examination of conditions preceding the current depression" (Cooper 1932, 641). The literature published during this period indicates a considerable crossroads for labor economics and for the study of unions in particular.

Meanwhile, the quantitative methods economists were using to present their ideas were becoming increasingly sophisticated. Comparing papers published during the Depression to papers published around the turn of the century shows that in the economic community, more technical standards were emerging for what constituted a convincing argument in economics. The contrast between the early 20th century papers of Cummings and Hoxie on one hand and Martin Bronfenbrenner, a Duke economist writing in the late 1930s, on the other is enlightening in this regard. In a 1939 paper, Bronfenbrenner utilized the Cobb-Douglas function to propose that the demand for labor in the United States was elastic, meaning that, "total labor income decreases as wages rise" (Bronfenbrenner 1939, 793). He then addressed the question of whether or not the function was actually applicable to the labor market (for if it were not then the statistics would be meaningless), by suggesting that the Cobb-Douglas function was incapable of determining long-run equilibrium. Applying the Cobb-Douglas function to a variable population in the long-run, Bronfenbrenner noted that, “the interests of the workers are better served by maximum real wages than by maximum total labor income, assuming an (optimum) working population sufficiently small so that there is full employment at this wage” (796). He then concluded that, “Thus, even though union restrictive policies sacrifice the interests of the working classes to those of employed unionists in the short run, their long-run effects may prove beneficial,” provided that wages were not raised so high that real wages suffered in the long run due to insufficient labor supply (796). Bronfenbrenner’s paper also underscored one of the major shifts relating to the study of unionism and collective bargaining. Whereas the late nineteenth-century economists were more concerned with the philosophical underpinnings of organized labor, Bronfenbrenner and his contemporaries were using neoclassical tools and especially more advanced mathematical techniques to analyze real-world outcomes of unionism, which relied on thorough available data. The changing concerns of economists in tandem with increasingly sophisticated mathematical techniques were mutually stabilizing forces that shifted economics to a more quantitative science by the end of the Depression.

Economics in the United States after World War II

Immediately following World War II, the questions economists addressed in the United States mirrored many of their Depression-era concerns. Once again, crafting an optimal wage policy and promoting job creation were at the front of the national agenda.

As has often been the case throughout our nation's history, the political climate influenced economics, and labor economics in particular, rather directly. Arthur Ross[7] exemplified this trend when he explored the relationship between fair wages and employment levels in an article titled "What Is Responsible Wage Policy?" He dismissed the commonly accepted "employment effect," the idea that an increase in wages would cause a rise in labor costs, leading to a rise in total cost which would increase the price of the good being produced thus leading to a decrease in demand and ultimately higher unemployment (Ross 1948, 270). Although an increase in wages might theoretically lead to a decrease in employment, this process could not be accepted as fact as there was "a great deal of free play at each link in the chain" (270). Because this so-called employment effect had too many ambiguities to clearly show that an increase in wage would necessarily create a proportional decrease in employment, Ross insisted that the "wage bargain must almost always be made without consideration of its employment effect" and that larger priorities- such as a the establishment of secure unions and peaceful bargaining were more important (281, 283).

Ross's analysis of the labor market's responses to changes in the wage rate is clear evidence of the strong foothold neoclassical ideas held in America at this point in time. However, two years after Ross published his article, Kirk Petshek criticized Ross for his lack of emphasis on the importance of economic analysis in collective bargaining decisions. According to Petshek, Ross's "chain [was] not nearly as loose or as important

[7] "The end of World War II was characterized by a redefinition of labour economics research. The main aspect of this change was the progressive curtailment of the apparent isolation that labour research had experienced from its economic foundations. This increasing closeness with economics, meaning neoclassical economics, was certainly related to the emergence of a new generation of labour (economist) researchers. Among this new generation we would find the names of most of those that would dominate the field for the following two decades, such as John Dunlop, Clark Kerr, Richard Lester, Gregg Lewis, Melvin Reder, Albert Rees, Lloyd Reynolds, and Arthur Ross" (Teixeira 2003, 6).

as was assumed" and consequently, "there [was], then, little to support the argument that unions completely disregard employment when they determine wage demands" (Petshek 1950, 99). The disagreement between Ross, Petshek and others sheds light on the debate over the wage-employment relationship. While some, like Ross, thought this was a relationship that could not easily be evaluated and was thus not utilized by union leaders, others, like Petshek insisted that the "wage-employment relationship is visible for the union, albeit darkly at times, and influence should be brought to bear which can be exerted on union leaders to create clearer visibility" (99).

In his article, Ross recognized economists Fritz Machlup and Richard Lester, who had an ongoing disagreement regarding the application of marginal analysis to the determination of a fair wage rate. Lester wrote that, "According to [University of Buffalo economist] Professor Machlup, 'the business man' in deciding 'how many to employ' does so according to the principle of equating 'marginal net revenue productivity and marginal factor [labor] cost.' The business man 'would simply rely on his sense or 'feel' of the situation'…" (Lester 1947, 137-138). Lester stringently opposed the marginalist approach to research, and particularly the opinions of Machlup and Brown economist George Stigler and argued against the use of marginalism to determine fair wages and subsequent employment levels. He added that, "[companies'] labor-market policies do not strictly follow demand, supply, or mere price considerations" (Lester 1947, 147). Although the numerous articles for and against marginalist theory published in the *American Economic Review* by Lester, Machlup, and Stigler did not specifically focus on American unionism, they were most certainly relevant to the ongoing debate regarding a fair wage level and its relationship to employment. The ongoing discussions between the aforementioned economists provide further evidence that frequent correspondence was common, and allowed for the further development of ideas that shaped the discipline.

Post World War II Policy Impact on Labor Economics

Legislation following World War II also had important implications for labor economics and trade unionism in particular.[8] John A. Hogan explained the effects of the Taft-Hartley Act:

> *[T]he Taft-Hartley Act was used as a powerful lever by union leaders to pry out the stay-at-home union vote in the 1948 political campaign. ... Indeed, perhaps the most important result of the Taft-Hartley Act and the state labor legislation of 1946 and 1947 was the 'shock effect' of these laws on union leaders. Union officers and leaders were 'alerted' to an extent seldom witnessed in the history of organized labor in this country. ... they made the rank and file feel what they felt- that these laws threatened the existence of the union (Hogan 1949, 319).*

Hogan's paper underscored the importance of the union shop elections in "form[ing] an interesting and significant episode in the history of organized labor in America" (321).

Edwin Witte,[9] who received his PhD under John R. Commons, wrote favorably about the effect of the Taft-Hartley Act on the resiliency of trade unions. In 1950 he authored a similarly pro-union analysis titled "Role of the Unions in Contemporary Society" (Witte 1950). Witte outlined the various advantages of the United States' system of trade unionism including higher wages, employee benefits, group insurance, health and welfare funds, increased worker solidarity, "job control" and improved employee morale

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[8] Three years after the National Labor Relations Board was established under the National Labor Relations Act (Wagner Act) in 1935, the Fair Labor Standards Act was enacted. At least as significant for American labor, however, was the passage of the Taft-Hartley Labor Act of 1947. Co-sponsored by Republican congressmen Hartley and Taft, the Act was intended to limit the capabilities and rights of union workers. While some of its original objectives were fulfilled, Edwin Witte, explained that, "The restrictions upon the political activities of unions have backfired," as demonstrated by Truman's 1948 electoral upset of Thomas Dewey (Witte 1949, 405).

[9] PhD, University of Wisconsin; Chairman of the Department of Economics at the University of Wisconsin and the former President of the Industrial Relations Research Association.

(9-13). Furthermore, Witte defended unions by noting that they, “do not, however, have monopolistic control of wages or other conditions of employment, to say nothing about production, prices, or profits. They do not control government and, acting alone, have little prospect of gaining such control in the foreseeable future” (4). Witte emphasized the link between free trade unions and “the survival of democratic government” and subsequently insisted that, “unions have become one of the most important of the present-day American institutions” (14).

Agreeing with Witte’s general argument, Joseph Shister, author of “The Theory of Union Bargaining Power” (1943), defended unions by concluding that the pattern of economic growth in America is relatively unaffected by our system of trade unionism. Although Shister acknowledged that collective bargaining may indeed increase the cost to employers in the form of higher wages or increased employee benefits, he reiterated Witte’s point that, “In the area of direct collective bargaining, the impact of unionism has been relatively negligible” (Shister 1954, 224). Shister also noted that although the current labor union was more business-minded than politically minded, the *potential* for unions to influence government policy and national politics was substantial (223-224). At the time of Shister’s 1954 analysis, union membership totaled roughly 16 million members and was “An immense reservoir of political strength” (224). Despite these conceivable effects, however, Shister maintained that American trade unionism had not been and likely would neither be a monopolistic force nor the primary determinant of American economic growth.

American Economic Thought in the Second Half of the Century

Fear surrounding the potential spread of Communism would have implications for economic thought in the post War era. A number of economists believed that unions could behave as monopolies and might ultimately be detrimental to American free enterprise. As early as 1948, Phillip Taft wrote:

> *Plans for infiltrating into labor unions and converting them to radical organizations are based upon a belief that labor unions can serve as effective instruments for producing social change, or upon the assumption that they are political organizations. The fraternal and political activities of labor unions are offered as proof that they are more than economic institutions for improving the position of their members (Taft 1948, 580).*

Theodore Levitt explained in a 1952 article titled, "Institutional Ultimates in American Labor Unionism" that, "One of the most persistent fears expressed in many quarters in recent years is that big labor unionism is slowly transforming our economy into one that will eventually be primarily monopolistic" (Levitt 1952, 51). Concern surrounding the "death of free enterprise" abounded amongst anti-union circles as many economists (and non-economists) believed that American unionism during the middle of the twentieth century was "comprehensively critical of the present economic organization" (51).

Fittingly, it was during this time that many labor economists began to focus on the quantitative and empirical effects of labor unions' potentially monopolistic powers. Supporters of a market-based economy feared that unions would be detrimental to our nation's economic principles and goals. H. Gregg Lewis commented on the transition towards increasingly empirical analysis, noting that, "Before 1945 the economics literature contained little quantitative work on the wage consequences of unionism. Since World War II, however, a substantial amount of empirical research on one or another facet of unionism and wages has been done by economists" (Lewis, Box 9). With regard to the fears surrounding the higher prevalence of American labor unions, Yale economist Charles E. Lindbloom wrote that, "Unionism is destroying the competitive price system" and results in the "systematic disorganization of markets and persistent undercutting of managerial authority" (Witte 1950, 3). Although expressing less immediate fear, other economists such as Sumner H. Slichter noted that the United States was becoming a "laboristic society" (3).

The Focus on Union versus Non-Union Wage Differentials

Few areas of economic inquiry benefited as richly from the discipline's increased reliance on empirical data and applied mathematics as the study of union versus non-union wage differentials, which became one of the chief concerns of economists during the 1960s and 1970s (Lewis 1939-1990). Lewis, considered by many to be one of the fathers of labor economics, contributed some of the defining literature on the subject. Lewis, who was born in 1914 and taught at the University of Chicago and later Duke University, focused much of his energy on the study of unions and the economics surrounding them. In 1963 he published *Unionism and Relative Wages in the United States* and in 1986 *Union Relative Wage Effects: A Survey*. It was not, however, his books alone that were his legacy. Lewis's letters, notes, teaching materials, course examinations, and correspondences all provide critical evidence of the history surrounding the evolution of labor unionism and economics in the United States.

Though Lewis's work spans roughly sixty years, his meticulous notes offer insight on critical junctures in the study of American unionism. For example, Lewis's records include extensive correspondence with his former graduate student Albert Rees.

Their letters consist of pages of typed analysis and hand-written corrections regarding such topics as the rise and fall of real wages and the effects of labor unions. With regard to the increasingly empirical nature of union analysis by economists during the late 1970's Lewis wrote[10]:

> *As Prof. Rees remarks in his introduction to his Economics of Work and Pay the dominant tradition in the teaching of labor economics in the U.S. until fairly recently was essentially an institutionalist one that puts heavy emphasis on trade unions, collective bargaining and the law in relation to labor. The ~~impact~~ approach followed was essentially description and little use was made of the analytical tools of economics… There were some exceptions, to be sure, to this tradition. I think I am neither immodest nor inaccurate in saying that the first real break away from this tradition occurred here at the University of Chicago in the early 1950's when I and Prof. Rees, who had been one of my students, began teaching the "new" labor economics or human resource economics, as it was often called, using an analytical- empirical approach to labor problems. Not long thereafter, Prof. ---[11], made the break away from the tradition at Stanford and Gary Becker, also one of my students, went to Columbia (where he was soon joined by Jacob Mincer) to teach the new labor economics there. Even now, however, the dominant tradition is still the old one, I suspect, though I am sure that by the end of the 1970's the new labor economics will be the dominant one.*

Lewis's own work on wage differentials was recognized and applauded internationally. Numerous correspondences between Lewis, his students and other economists reveal his unique and transformative approach to the subject of labor unionism and to the broader study of American economics. In a chapter from *American Economists of the Late Twentieth Century*, Jeff E. Biddle described Lewis as,

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[10] From handwritten lecture notes; introduction to Lewis's Economics 240 class taught at Princeton University in the spring of 1974.
[11] Handwritten name unintelligible.

... a man of remarkable integrity both in his personal life and in his scholarly work. He had a strong sense of duty- duty to his department and to his students, to his fellow economists, and to the ideal of the careful and impartial scholar. As an economist, statistical theory and neoclassical economics were his tools, and he applied them meticulously and masterfully both to theoretical and empirical questions (Biddle 1996).

Lewis was clearly an important participant during the 1960's and 1970's when questions surrounding the study of unions were increasingly empirical in nature. His work on union wage differentials and both the positive and negative effects of unions often included rigorous theoretical and empirical analysis (Biddle 1996, 180-181). He concluded that while unionized workers procured about 10-15 percent more than similar non-unionized workers, the exact wage gap varied throughout the labor force (180). Moreover, Lewis postulated that it would be unusual to have a wage gap greater than 25 percent and instead expected a relative difference of only 5 percent for most industries (Biddle, 180).[12]

Although perhaps the most prominent, Lewis was not the only economist focused on the study of union-induced wage differentials. During this period, a number of economists analyzed the subject from varying perspectives and by applying different statistical methods, showcasing once again the field's ever-increasing dependence on mathematics. In 1964, David E. Kaun[13] wrote on this topic, analyzing the work of J.E.

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[12] Refer to Lewis's "The Impact of Unionism on the Distribution of Wage and Salary Income" (Box 9, H. Gregg Lewis Papers, Rare Book, Manuscript, and Special Collections Library, Duke University, Durham, North Carolina) for additional support of Lewis's wage differential analysis. Lewis provides both charts and qualitative analysis to support his studies on unions' affects on wage differentials.

[13] "David Kaun was affiliated with the University of Pittsburgh and the Brookings Institution before coming to UCSC in 1966. His major research interests have been in the areas of the quality of work and higher education, the ideological basis underlying economic paradigms, military defense procurement and defense industry contractor behavior. His present research concerns the quality of public-policy analysis flowing from the nationís multitude of right-wing funded 'think-tanks' *(http://econ.ucsc.edu/Faculty/facKaun.shtml)*.

Maher. In 1956, Maher had concluded after studying seven industries that there were "no significant differentials between the workers in union and nonunion plants" (Kaun 1964, 403). He emphasized, "differentials…were most likely a function of variations in size of a plant, method of wage payment, size of city, and other variables" (403). Kaun disagreed with Maher's findings, and by using Department of Labor data following the 1956 minimum wage increase he concluded that the opposite was true. Because of his mathematical fluency, Kaun was able to control for establishment size, city size, ownership characteristics and a number of other factors in his calculations to enhance their plausibility (Kaun 1964). Had he been writing a generation earlier, Kaun may not have been able to find enough economists at the University with the mathematical literacy to digest his paper.

Terry G. Foran revisited the topic of union wage differentials in 1973, apparently frustrated with the inconsistent conclusions of the various empirical studies on the matter (Foran 1973, 269). Foran noted that many of the studies had treated unionism as "a necessary but not sufficient condition in the creation of wage differentials," and he aimed to figure out the degree to which unionism was a sufficient condition in their creation. Foran built on the Ross-Goldner and Levinson wage studies for their extensive data and conclusions on union and non-union wages.[14] The two studies showed that newly formed unions were capable of generating wage differentials, negative changes in unionism were associated with a compression of the wage gap and that continuing unionism was not a causal force in the creation of differentials (270-271). Foran's basic postulate was that unions base their wage demands upon the elasticity of the marginal revenue product

[14] Foran used for his study two of the most important pre-postwar economy wide studies of the effects of unionism on manufacturing. These studies analyze the absolute and percentage changes in wages from 1933 to 1946.

curve, and that elasticity and wages vary directly with each other. Ultimately, Foran concluded, “the result of union bargaining will be the creation of a wage differential which will become stable with the passage of time” (273). More importantly, Foran’s calculations confirmed the Ross-Goldner/Levinson theses, demonstrating that while prolonged unionism may not be a sufficient condition in the creation of a wage differential, “new unionism” could be sufficient.

Two years later, Ronald Oaxaca weighed in on union-non-union wage differentials. He preceded his analysis by saying that “ideally [economists] would prefer to compare the effect of unionism on the wages of union members relative to the competitive wage” (Oaxaca 1975, 529). Since the competitive wage was generally not observed, however, Oaxaca and other economists were forced to substitute the observable non-union wage instead. Oaxaca’s empirical results showed several patterns that could be generalized. Union-non-union wage differentials appeared to be greatest in the south (534). This could possibly have been explained, Oaxaca stated, by the fact that union wages were generally set nationally while the non-union wages were most likely set regionally. The wage gap would logically be greatest there because non-union wages were lowest in the south partially due to the lower cost of living. Regional differences in union wages were smaller than regional differences in non-union wages, which reinforced Oaxaca’s notion about the national setting of union wages. Oaxaca was careful to point out, however, that his paper was intended to estimate the impact of union membership and not unionism per se (536). The total impact of unionism would depend on the extent of union organization in the industry.

The Decline of Quantitative Analysis in Unionism

Commenting on the relative import of trade union analyses in the field of economics, George E. Johnson noted in 1975 that since the 1940s, the percent of articles in the *American Economic Review, Journal of Political Economy* and *Quarterly Journal of Economics* dealing with questions concerning unionism fell from 9.2 percent to 0.4 percent (Johnson 1975, 23). This decline in interest did not surprise Johnson, who noted that "the fraction of the civilian work force organized by unions ha[d] remained roughly constant at about 25 percent since the early 1950s" (23). Moreover, unionism in its present form had been in existence since roughly the same period, and questions of its virtues were no longer a relevant matter of public policy, as the presence of unions was simply taken as given. Perhaps as important was the fact that many labor policies concerning discrimination, income maintenance, anti-poverty programs and a variety of other issues vastly overshadowed unionism.

In the past two decades the academic focus on unions has shifted from an economic-oriented perspective to a more historical one. In contrast to the middle of the twentieth century, when labor union discussions were most commonly found in economic journals and contained pages of quantitative analysis, contemporary union attention is frequently focused in journals related to history or philosophy. Similarly, a unique field has emerged to accommodate the historical study of economics and labor unions in particular. Thus it is not surprising to find contemporary articles such as "American Labor Law: Its Impact on Working Class Militancy, 1901-1980" listed in the journal *Social Science History*. As labor unions have simply become a fact of American industry, the need for debate on their merits has waned, and the literature concerning contemporary trade union analysis has become less quantitative and more historical.

The study of unions now finds itself in a place similar to where it began. In its infancy, economics was a field most often addressed in a political, legal or philosophical context. Empirical research did not materialize in economic journals in the United States until well into the twentieth cent when analysis of issues like unions became more quantitative and empirically rigorous. In the past generation however, as the study of unionism has lost some steam, it has gained a much more historical context, once again disappearing from economic journals and reappearing in areas concerned with other political and social sciences.

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