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The Neoclassical Advent: American Economics at the Dawn of the 20th Century

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For the U.S. economy, the last quarter of the 19th century brought the closing of the western frontier, agricultural hardship in the south, the rise of large corporations and trusts, and the emergence of a serious labor movement. The fledgling American economics profession, shaking off the mediocrity of its traditional laissez-faire apologetics and prodded by the institutionalist school of Richard T. Ely, struggled to document and prescribe for the confounding mix of industrialization, urbanization, and rural crisis. The productivity of the emerging industrial economy had been recognized by all, even the radical reformer Henry George. At the dawn of the 20th century, the concern of almost every major debate was not how to lift long-term growth or improve efficiency, but rather, what standards and what institutions should determine the distribution of the bounties of the new economy. At the center of these debates, the issue increasingly turned on the relevance of the new neoclassical economic theories of John Bates Clark and his followers.

In 1900, the workaday world of the relatively small community of serious economic researchers focused on applied issues in public policy and industrial organization. Two journals of economics were already well-established by the turn of the century: the *Quarterly Journal of Economics*, based at Harvard and founded in 1886, and the *Journal of Political Economy*, based at the University of Chicago and founded in 1892. (The American Economic Association, founded in 1885, did not begin the regular publication of the *American Economic Review* until 1911, although the Association earlier published its proceedings as well as a monograph series.)[1]

[1] Two other major academic journals regularly published the work of professional economists. The *Political Science Quarterly*, produced at Columbia, covered a wide range of social science topics including economics, as did the *Yale Review*.

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Economic researchers at this time produced a steady flow of articles on currency regulation, public utilities, railroad regulation, industries such as steel, labor relations and unions, as illustrated in Table 1. However, when these largely descriptive works suggested policy proposals, the normative theories underpinning those proposals were typically vague or completely unspecified. Most authors simply appealed to commonsense goals, such as "a stable currency" or "good labor relations."

The prominent institutionalist school, strongly influenced by the almost millennial theories of the social gospel movement (as discussed in this journal by Bateman and Kapstein, 1999), emphasized the inequities of the emerging economy and looked forward to a new, more cooperative system of production. Following the lead of Henry George, the institutionalists roundly criticized the old dismal classical theories of the wage fund and Malthusian population growth. Most often, the institutionalists argued that labor deserved a greater share of what was produced, but were hard-pressed to define how much greater. In advocating the establishment and nurturing of new institutions in labor relations, banking, and utility regulation, institutionalists often implied that fair process would suffice to guarantee sound outcomes.

On the eve of the 20th century, John Bates Clark published in 1899 *The Distribution of Wealth: A Theory of Wages, Interest and Profit.* With this volume, neoclassicism matured into a major intellectual force within American economic thought, with Clark as its defining figure.[2] Clark was sensitive to the claims of social reformers and concerned at the institutionalist confusion over norms. His central goal was to establish an analytical standard of the rightness or wrongness of the economic relation between labor and capital. Clark (1899, p. 4) wrote:

> The welfare of the laboring classes depends on whether they get much or little; but their attitude toward other classes—and, therefore, the stability of the social state—depends chiefly on the question, whether the amount that they get, be it large or small, is what they produce. If they create a small amount of wealth and get the whole of it, they may not seek to revolutionize society; but if it were to appear that they produce an ample amount and get only a part of it, many of them would become revolutionists, and all would have the right to do so. The indictment that hangs over society is that of 'exploiting labor.' 'Workmen,' it is said, 'are regularly robbed of what they produce. This is done within the forms of law, and by the natural working of competition.' If this charge were proved, every right-minded man should become a socialist; and his zeal in transforming the industrial system would

[2] This article focuses only on the American version of neoclassicism. Like the Americans, British neoclassicists such as Marshall and especially Pigou also evinced a strong interest in normative standards, but they did so from an ethical matrix quite distinct from the American vision. The intertwining of these two traditions and their mixing with the continental approach of Walras and Pareto constitute a large chunk of the intellectual history of economics in the 20th century.

Table 1
Articles in American Economic Journals by Subject, 1897–1902

Topic	*Quarterly Journal of Economics*	*Journal of Political Economy*
Currency Regulation and Money	13	17
Public Utilities and Railroad Regulation	11	9
Labor/Unions	12	9
Trusts and Industry Studies	10	7
Taxation (Including Tariff)	4	6
Economic History	3	15
Population and Ethology	4	4
Theory (Value, Distribution, Capital)	8	6
Methodology	12	2
Other	10	11
Total	87	86

> then measure and express his sense of justice. If we are to test the charge, however, we must resolve the product of social industry into its component elements, in order to see whether the natural effect of competition is or is not to give to each producer the amount of wealth that he specifically brings into existence.

Clark concluded (p. 3) that in perfectly competitive markets,

> . . . where natural laws have their way, the share of income that attaches to any productive function is gauged by the actual product of it. In other words, free competition tends to give to labor what labor creates, to capital what capital creates, and to entrepreneurs what the coordinating function creates.

Clark's analytical approach and his normative purposes hardly went unchallenged. Moreover, the great majority of economists in the United States continued to work in an institutionalist vein up to World War II. Nevertheless, by viewing the American neoclassical advent in the context of its own time, we can gain a deeper understanding of both American economics at the turn of the 20th century and the early character of the school that came to dominate our discipline.

The Closing of the Frontier and the Common Worker

American neoclassical economics in the last decade of the 19th century grew up in an intellectual legacy heavily shaped by *Progress and Poverty*, a best-selling radical reform manifesto written in a curiously scholarly tone by the self-taught journalist/economist Henry George (1882). The openness of the agrarian frontier had played a critical role in American ideology; indeed, the fate of the country's experiment in democracy was widely viewed as dependent on its ability to support a broad independent population of yeoman farmers. George (p. 82) clearly subscribed to this popular ideology and shared in the great concern it generated over the closing of the American frontier in the late 19th century.[3]

George was an apostle of technological progress and believed that growth was virtually limitless. However, he also believed that wages were ultimately set by what workers could earn for themselves on marginal frontier land. From a historical view, the argument made some sense. Employers in the early 19th century could hardly attract free workers with wages offering less than what could be acquired on the frontier. As the economy expanded and waste lands became less and less attractive, George argued, wages must necessarily fall.

Why wouldn't improvements in technology add to the wages of workers? George argued that access to these technological improvements was limited to urban locations where population density was high and land was scarce. In this setting, all of the increment was captured by urban land owners in the form of rent, leaving workers at their reserve wage (Whitaker, 1997). Thus, workers could become ever more productive and nevertheless receive a smaller and smaller share of their product. Although George's argument was supported by little empirical data, it clearly struck a sensitive nerve in the body politic, invoking one of the deepest national symbols—the open frontier—and using its disappearance as a focal point for popular anxiety over urbanization, industrialization, and inequality.

John Bates Clark accepted the relevance of George's central ethical concern. Workers must have a fair share of the growth occurring around them.[4] Also, like George, Clark (1899, p. 9) took as his notion of fairness the proposition: "To each what he creates." Not only did Clark believe this as an ethical postulate, but he feared that without justice for labor, the nation risked serious violence and revolution.

Clark saw George's theory as a positive step in the restructuring of classical wage theory. The central question was to characterize situations in which the product of labor was distinct from that of capital. But, according to Clark, George

[3] The great American historian Frederick Jackson Turner (1961, p. 37) famously dated the closing of the western frontier to 1890. However, modern scholarship argues that by the 1870s, when George was writing, the role of the frontier and new agricultural settlement had already been greatly reduced, and could no longer serve as ready means to self-sufficiency for the large majority of city and town workers.

[4] Like many of his contemporaries, John Bates Clark had been nourished on the exceptionalism of American Protestant thought and the social gospel. A number of commentators like Tanaka (1990) and Tobin (1985) identify a "J.B. Clark problem" in the shift in Clark's thinking between his early historicist-social gospel period and his subsequent commitment to neoclassicism. The analogy here is to the "Adam Smith problem"—that is, the considerable difference in tone between Smith's *Theory of Moral Sentiments* and his later *Wealth of Nations*. In contrast, a diverse group of writers claim to see a fundamental continuity in Clark's thought, including Morgan (1994), Everett (1946), J.M. Clark (1952), Henry (1995)—although sometimes the continuity is quite different from one commentator to another! My argument here falls into neither camp, arguing instead that Clark came to demand an absolute standard and in so doing was led to neoclassical thought. On Clark's early history and beliefs, see Henry (1995). On Christian socialism in American economics see Bateman (1998) and Bateman and Kapstein (1999).

had defined labor's marginal opportunities far too narrowly. After the closing of the frontier, rural squatting could never absorb any substantial share of the labor force and hence was not a realistic alternative for a significant number of workers. Clark looked away from the agricultural hinterlands, in search of a much broader "zone of indifference."

Just as some land could command no rent, so also capital goods, worn down by time and use, eventually reached a point where they too had no value in the market. Yet labor, combined with these no-rent capital goods, could often produce enough to cover wages. Clark found such a no-rent margin in virtually every modern industry: for example, antiquated, worn-out or poorly located mills and furnaces; railroads so inefficient they could only cover operating expenses; unseaworthy ships; and stocks of unstylish merchandise that barely paid salesmen to handle them. Clark (1899, p. 96) wrote: "Everywhere, in indefinite variety and extent, are no-rent instruments; and if labor uses them, it gets the entire product of the operation. Let the general rate of wages rise, and many of these instruments will be thrown out of use. Let the rate then fall, and the utilizing of them will be resumed."

As Clark virtually admits, this "zone of indifference" was a generalization of George's rural squatter frontier. But by broadening the "zone of indifference," Clark greatly softened the meaning of a closing frontier. Wages were not doomed to fall as the frontier receded. All of industry generated scrap capital goods and situations with which labor might sustain itself. These opportunities were continually being reproduced by the depreciation of capital goods.

In his marginalist breakthrough, Clark pointed out one other circumstance in which the product of labor could be effectively isolated from that of capital or land. Under competitive conditions, the last worker hired would produce an amount that just covered his or her payment, and so labor's product in this situation would accrue to labor alone. The force of free competition would equalize the wage at the "extensive margin" of no-rent capital goods and the "intensive margin" of the last worker hired. Over time, in a dynamic economy, disappearing free land would be more than offset by the quantitative and qualitative increase in capital goods in general.[5]

Was Marginal Productivity Theory a New Apologetics?

This new and very American version of neoclassicism had a relatively modest impact on the "normal science" of most economists. Some prominent economists thought that marginalists in general had pushed their points too far. For example

[5] Notice however, that Clark hadn't explicitly refuted George's notion of limited substitutability between capital and urban land. Nor had he considered George's hypothesized externality from urban density. Rather, he had implicitly assumed complete substitutability between land and other capital goods under conditions of perfect competition. On the subsequent history of "product exhaustion," see Blaug (1985). On modern treatments of the externalities created by density, see Arnott and Stiglitz (1979).

in an American Economic Association session discussing the future of economic theory at the turn of the century, Fred M. Taylor (1901) misread the tea leaves rather badly when he announced, "I do not believe that marginal utility is to play an expanding role in the new economics. . . . [T]his theory has reached its high water mark." The journals continued, much as before, to present largely descriptive pieces. The empiricism of American institutionalism, far from retreat, was just gaining steam in 1900. Such research efforts were largely unaffected by the neoclassical emergence.

However, some economists of the institutionalist school, and particularly Thorstein Veblen, feared that the new normative analytics amounted to a new apology for the status quo. This critique gained a modicum of credibility when viewed against the background of turn-of-the-century academia dominated by powerful moneyed interests eager and willing to police the writings of political economists. For example, Richard Ely and John Commons, two leading institutionalists who were both sympathetic to labor's struggle and both critics of the status quo, had their university careers greatly endangered by "academic trials" in the 1890s.

Veblen and any number of more recent observers have found the early neoclassicists guilty of deriving their normative standard from their description of the market.[6] However, these criticisms seem a fundamental misreading of Clark's project. Clark does not begin with a statement of fact, but with a normative standard he sees as fundamental; that is, the right of labor to what it creates. He then attempts to "prove" a "normative theorem"—that a static, highly idealized, competitive economy will satisfy this standard. Only then does he turn to the question of whether the real world matches the model one.

Admittedly, Clark, taken by the aesthetics of his "natural laws," had claimed at a number of points that his theoretical construct could be identified, at least approximately, with the real-world economy. Many years later, even a largely sympathetic George Stigler (1941, p. 207) found that Clark's "naïve productivity ethics" had "afforded some grounds for the popular and superficial allegation that neoclassical economics was essentially an apologetic for the existing economic order." Stigler argued that Clark had performed a disservice to economics and left neoclassicism "a made-to-order foil for the diatribes of a Veblen." Paul Samuelson (1947) reached much the same conclusion, as have others.

But such comments fail to appreciate the heart of Clark's American neoclassical project. While Clark had contributed to the original confusion, he quickly clarified his position and underscored the potential divide between actual wages and marginal products. As the neoclassicals became confident in their moral defense for an idealized form of free competition, the neoclassical policy problem

[6] Such a procedure amounts to breaking Hume's dictum that "ought" statements cannot be built up out of "is" statements. See Blaug (1985, pp. 706–708). Veblen's position was put forward at length in the midst of an American *methodenstreit* that pitted him against his old teacher Clark. The relatively large number of methodological papers listed in Table 1 for the *Quarterly Journal of Economics* reflects the fact that this journal served as the major battleground for this struggle.

became how best to intervene in an economy rapidly moving away from free competition. Free competition was not so much a description of the world as a normative standard against which to measure the world.

Neoclassicism in America cogently and early expressed progressives' frustration with the changing economy of 1900. Like other progressives, but in a much more structured manner, the neoclassicists built their norms as an extension and idealization of a mid-19th century American community. The neoclassical standard, far from being a robber barons' apology, looked backward in a effort to recapture and perfect the character of that lost community. When the first American neoclassicists proceeded to compare the real economy to their idealized one, they most often found the former wanting.

In the labor market, Clark asserted throughout his life that the fundamental inequality in bargaining power between labor and capital required extra-market institutions. Even under earlier more competitive conditions, the ideal norms of his model had not been met. Clark (1907, p. 501) found: "In the making of the wage contract the individual laborer is at a disadvantage. He has something which he must sell and which his employer is not obliged to take, since he can reject single men with impunity." Clark drew a picture in which the desperation of workers put constant downward pressure on wages, a danger made considerably worse by the ongoing concentration of capital in the late 19th century.

Clark (1907, ch. 25) explicitly favored "local organization" of unions to guarantee that employers didn't take advantage of their better bargaining position.[7] He also foresaw an ever-widening role for formal wage arbitration under the authority of government (Clark, 1887, ch. VIII). Indeed, on wages, Clark (1907, p. 469) ends up about as far from laissez-faire as an economist could conceivably be: "The state is bound to ascertain and declare what rate is just, to confirm the workers in their positions when they accept it, and to cause them to forfeit their right of tenure if they refuse it." Clark envisioned a massive, non-market restructuring of the wage-setting process replacing the market with an engineered "normal standard."

How different was this neoclassical viewpoint from that of the institutionalists? Not very different at all. Thus in 1904, Ely's *Elementary Principles of Economics*, written jointly with George Wicker of Dartmouth, expounded much the same picture as Clark. In discussing wages, Ely and Wicker (p. 27) found, "Between the lower limit set by the standard of subsistence or by the standard of life, and the upper limit, set by the value of the laborer's contribution to product, wages will fluctuate according to the relative bargaining strength of the two parties to the wage contract."

Ely and Wicker provide little guidance as to what might determine the upper limit they mentioned, while the neoclassical emphasis on marginal productivity

[7] In advocating "local organization," Clark distinguished such a union from one representing a "general organization of labor in a subgroup." The latter, in collusion with employers, would be in the position to extract monopoly profits. Interestingly, though, Clark also echoed his position in *The Philosophy of Wealth* by offering some support for a "universal organization of labor" which would discipline its members and prevent one segment benefiting at the expense of others.

obviously was quite explicit. Elsewhere, however, Ely, glad to see economic theory "concerning itself with principles which can be made the basis of the awards of boards of arbitration," commented favorably, if somewhat noncommitally, on Clark's approach with its attempt "to ascertain the true product of labor, which should be then assigned to labor" (Ely, 1903, p. 385). In this manner, institutionalism and neoclassicism proved quite compatible on the central issue of the day. In practice, neoclassicism allowed an institutionalist like Ely a great deal of room to craft particular policy positions.

If, on the left hand, neoclassicism could be largely reconciled with progressivism (despite Veblen's perorations), on the right hand, it hardly found an easy time with the strong traditional advocates of laissez-faire. J. Laurence Laughlin of the University of Chicago was the outstanding representative of the old school. He had no sympathy for Ely. But just as surely, he had little use for neoclassicism. In Laughlin's (1906) view, wages were determined in competitive markets by the relative abundance of capital and labor and that was all there was to it. All the talk of marginal productivity only complicated matters, turning economics into an arcane and speculative discipline. Laughlin instinctively pulled back from the new neoclassical standards with their emphasis on fair shares and potential claims of exploitation. As to labor legislation, Laughlin's (1909, p. 371) position was simple: "It is high time that the weak and narrow minded recourse to the State for legislation on every conceivable subject should be abandoned for a greater growth of self-help and a more independent and self-confident manhood." Far from welcoming neoclassicism as providing a rationale for defending laissez-faire, Laughlin saw no need for neoclassical analytical subtleties and normative standards. From where Laughlin and other laissez-faire economists sat, no apologies were needed.

Returns to Capital

Clark's theory of distribution emerged in the midst of an international debate about capital and interest. In addition to Clark, the chief protagonists were Eugen von Bohm-Bawerk, Frank Fetter and Irving Fisher. For the most part this extended controversy was an intra-party affair among marginalists trying to fix exactly what they meant by capital, a problem they hardly resolved. But in the course of the debate an old and important normative question emerged: Is there any sacrifice of the capitalist that corresponds to the disutility experienced by the worker?

For Clark, labor's fair wage was defined by labor's marginal contribution. Clark was emphatic in offering this theory as an alternative to various socialist and Marxist explanations that claimed for labor a right to the whole product. Clark's neoclassical theory of distribution explicitly argued that capital, like labor, contributed to production. The "production ethics" of full competition therefore granted capital a share of the revenue.

But Clark's identification of the marginal product of capital did not mean that he also claimed a corresponding marginal disutility associated with this factor of production. Quite the contrary. For him, abstinence was a one-time event associated with savings. Somewhat ominously, the father of American neoclassicism explicitly denied the existence of a "calculable connection" between the disutility of abstinence and the values that could be placed on the long, indeed virtually infinite, stream of returns (Clark, 1899, p. 398). For Clark, saving remained a largely exogenous act based on family and status concerns unrelated to present value calculations.

Among Americans, it was not Clark, but Irving Fisher (1907) who suggested that, in competitive markets, the marginal productivity of capital or what Fisher called the "marginal rate of return on sacrifice" must be equated to marginal time preference or "impatience." Fisher thus inaugurated that formal parallelism in the treatment of labor and capital that has dominated American neoclassicism in the last half of the 20th century.

It was not in Clark's nature to question seriously the legitimacy of the ownership of private capital. More than one critic has considered this observation damning of Clark's claims to be seeking ethical truth (for example, Henry, 1983). But the early neoclassicism of Clark left considerably more room for progressive policy than Fisher's. For example, the taxation of investment income in Clark's world would be expected to have little if any effect on the supply of savings, nor for that matter would falling interest rates be expected to endanger the accumulation of capital. Such differences would not have been lost on the broad audience of institutionalists observing the debate from the sidelines.

Did Neoclassicism Excuse Monopoly?

Although Clark had championed government arbitration between corporations and unions, he did not support a similar role for government in setting prices. Early in his career, Clark (1887), like Richard Ely, had been uncertain as to the usefulness of price competition. However, he came to believe that price-setting explicitly accepted monopoly, froze out potential competitors, and provided little incentive for technological innovation. But how then were monopolies to be controlled?

Clark took a somewhat awkward middle ground. He went so far as to suggest that the most efficient form of industrial organization in certain cases might well be one in which a large centralized firm achieves economies, but holds down prices for fear of "potential competition." (In a number of ways, Clark is anticipating here the modern theory of "contestable" markets.) Where effective, Clark held that potential competition could restore many of the positive virtues of full competition as emphasized in his own neoclassical model.

The difficulty, of course, was that the check of potential competition worked unevenly over the modern industrial scene. "At some points," Clark (1907, p. 383) wrote, "it restrains the corporations quite closely and gives an approach to the ideal results, in which the consolidation is very productive but not at all oppressive; while elsewhere the check has very little power [and] oppression prevails . . . "

The role for the state became to build these forces of "potential competition." "Plundering monopoly" must be restrained and "honest wealth" preserved. The state must lay "hands on industry to-day for the very reason which yesterday compelled it to keep them off—the necessity of preserving a beneficent rivalry in the domain of production" (Clark, 1907, p. 390). The government must prevent trusts from engaging in unfair business practices, like predatory pricing, "factor's agreement" (tying) and collusion with freight companies. In these ways, the government must work to clear the ground for honest potential competitors and to hobble monopoly power. Clark (1901, p. 473) wrote: "If the trust uses its clubs on the competitor, the law will use its own clubs on the trust."

Not surprisingly, institutionalists tended to be dubious of potential competition. In general, like most progressives, they favored direct regulation or public ownership of natural monopolies (for example, Commons, 1904). Richard Ely (1900) approached the problem with great tact and a willingness to search for common ground. He concluded (p. 252), "But there are cases in which we can rely upon a combination of residual and potential competition, and possibly when the arguments of Professor John B. Clark, the most scholarly advocate of potential competition, are analyzed, they do not mean any more than the present writer is prepared to admit."

The neoclassical approach allowed considerable room for alternative policy directions. Ely sensed this plasticity in Clark's formulation. But more importantly, Ely seems aware that Clark has again identified a consistent standard. In asserting the normative relevance of the benchmark of full competition, the neoclassical position had achieved a clarity embarrassingly lacking from institutionalist formulations of fairness. One might approach the problem a good deal more radically than Clark, but still acknowledge the significance of his neoclassical standard.

Dynamics

At the core of Veblen's criticism of both classical and neoclassical economics lay his demand for a fresh scientific approach to evolutionary economics. In his view, this new economic science must banish all talk of "natural" and "normal." It must reject statics and build a new dynamics based on well-grounded theories of cumulative causation.

Veblen's criticism is hard to credit, because like the classical economists before them, the first American neoclassicists clearly insisted upon a distinction between an economy in unchanging equilibrium and one experiencing dynamic development. The defining characteristic of neoclassicism, as opposed to mechanistic marginalists, lay in neoclassicism's insistence on not deserting the classical attention to broad historical explanation.[8]

In Clark's works (1899, 1907), five dynamic forces are identified repeatedly which together propel the evolution of society: population growth, capital accumulation, technological change, organizational change, and the multiplication and refinement of human wants. Each and all of these disrupt static equilibria and set the economy on new paths.

Despite all the social problems and dislocations generated by dynamic forces, Clark felt sure the dominant tendency remained one of progress. In the midst of turn-of-the-century prosperity, the recent economic history of the United States supported such a prediction. "The normal wealth of the world will be greater, and the natural level of wages will be far higher, in the year 2000 than they are to-day, if the greater forces of economic dynamics continue to work," Clark (1899, p. 33) argued.

Central to Clark's conception of progressive evolution was the pace and impact of technological change. Clark insisted on a direct structural link between competition and technological change. The prime rationale for his antitrust policies hinged on the need to promote the positive dynamic influences of competition on innovation. Similarly, Clark's argument for wage arbitration grew partly out of his concern about limiting downward pressure on wages growing out of otherwise highly beneficial labor-saving improvements. In both cases, the institutional reforms are tailored to maintain static fairness with an eye to long-run dynamic efficiency.

In characteristic fashion, Clark approached the problem of technological change as one of ethics and fairness. Clark (1907, p. 255) considers the case in which a new labor-saving technology will replace 20 workers, and asks: "Do they themselves get any adequate offset for this, or does society as a whole divide the benefit in such a way that those who pay nearly the whole cost get only their minute part of the gain?"

Clark considers a number of short-run factors that might be expected to mitigate the negative welfare effects of labor-displacing innovations. For example, the costs of change will be reduced the less erratic the pace of innovation, the greater the portion that can be borne by new entrants to the labor force, and the more general the skills of industrial production. Clark is optimistic on all these counts. But still there will remain instances in which skilled workers will be replaced and left with only their "more general aptitudes" to win them "an average rate of pay." In this case, the harm to such displaced workers must be measured in the long run not against their admittedly minimal share of direct benefits from the specific displacing improvement, but against their share of all changes occurring over their work lives. With no particular empirical evidence, Clark (1907, p. 299) concludes:

[8] See Myint (1949) for a discussion of the distinction between neoclassicism and the marginal utility school.

" . . . in the course of a lifetime the balance is in favor of progress even in the case of the average victim of the movement . . . "

Clark's ethical standard for judging the distribution of the long-run benefits of progress is close to modern concepts of Pareto superiority. Even those most directly harmed by technological changes should ultimately experience a welfare improvement, and if this distributional standard is not met, then he justifies a role for public intervention. While not as analytically sophisticated as his treatment of marginal products, Clark's approach to dynamics is characterized by the neoclassical search for well-defined normative standards.

Writing early in the 20th century, Veblen (1909) held "neither Mr. Clark nor any of his associates . . . have yet contributed anything at all appreciable to a theory of genesis, growth, sequence, change, process, or the like, in economic life." It is hard to say what exactly Veblen meant by "appreciable." Clark had taken on a hard problem. The long-run determinants and consequences of technological change continue to challenge economists today. But Veblen was disturbed not so much by Clark's failure to solve the question of technological dynamics, but rather by Clark's focus. Veblen insisted that the neoclassicists had largely ignored the central problem of explaining the cumulative causation of the "institutional fabric and institutional change." From our vantage point a century later, we know that the dynamics of institutional change, too, has proven a difficult problem. Suffice it to say that in their common insistence on pushing toward dynamic theory, each school, institutionalist and neoclassical, had glimpsed problems that would bedevil their new profession throughout the next century.

Neoclassicism and the Lasting Problem of Normative Standards

American neoclassicism of the early 20th century, as led by John Bates Clark, possessed a complex—perhaps even contradictory—character. Neoclassicists attacked the radicalism of Henry George and rejected Marx's labor theory of value, but expressed a strong concern that workers not be exploited. Neoclassicists described natural laws of the distribution of income, but argued that these laws could only be sustained in the real world through state-supported labor arbitration and antitrust activity. Neoclassicists recognized and welcomed the benefits of the economies of scale of the new large corporations, but also supported public intervention and regulation to guarantee the survival of competition. Neoclassicists built up an analytical theory of static equilibrium, but sought to describe the larger laws of motion of capitalist development. Neoclassicists acknowledged the contributions of market forces, but were committed to using the agency of the state to guarantee the economy's progress and fairness in the new century.

Many of Veblen's artfully worded criticisms of the neoclassicists rang somewhat hollow even at the time. Even if the neoclassical dynamics were not the ones that institutionalists preferred, it is undeniable that the neoclassicists did embrace a dynamic approach. Even if neoclassical economists did not produce the radical critique of society that some institutionalists would have preferred, it is undeniable that they did not shirk from advocating an expanded and progressive role for the state in a number of areas. At bottom, the early American neoclassicists showed themselves to be open-minded to a wide range of analytical approaches and policy suggestions (Goodwin, 1973; Morgan and Rutherford, 1998).

Over the 20th century, repeated efforts have been made to expunge values and norms from neoclassical economics. But American neoclassical economics has never really capitulated. At root, neoclassicism has affirmed the necessity and usefulness of creating and defending a normative economics based on an idealization of full competition. It did so in 1900 much as in 2000, not as an apology for the status quo, nor as a justification for laissez-faire, but rather as a prerequisite for constructive action by a progressive state.

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