Henry George's Influence on John Bates Clark:
The Concept of Rent was Pivotal to Equating Wages with the Marginal Product of Labor

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ABSTRACT. John Bates Clark's marginal productivity theory of income distribution has been portrayed as being derived from David Ricardo. This article traces the influence Henry George had on that theory in providing a standard for measuring labor's addition to aggregate output as comparable to what could be earned on no-rent land. Following George, John Bates Clark extended that standard to include no-rent capital.

I

Introduction

HISTORIANS OF ECONOMIC THOUGHT usually teach that John Bates Clark based his formulation of the marginal productivity theory of income distribution on "a generalization of Ricardo's theory of rent." (Rima 1978, 252) Scholars interested in the writings of Henry George, however, have often pointed out that Clark attributed his conception of the marginal product of labor to George's theory of rent. (Teilhac 1936, 172; Geiger 1941, 98; Bruchy 1972, 115; Dwyer 1982, 363; Genovese 1984, 133; Yeager 1984, 196–97) Despite this interest, George's influence on Clark has been analyzed only briefly. (Collier 1979, 266–67)

Because Clark and George had different objectives in mind when it came to explaining the distribution of income, Clark's indication of George's influence needs to be explained with greater detail. After all, Clark has a reputation as a pioneer in neoclassical economics, being "a central figure in the emergence of the marginal productivity analysis of distribution." (Baumol 1985, 2) George on the other hand anticipated many arguments of institutional economics and had little use for the marginalist school. (Horner 1993, 248–50) Nevertheless, George and Clark had common interests. Clark employed a socioeconomic perspective before his discovery of marginalism and based it on a populist frame of mind similar to George's. (Henry 1982, 175–77) He shared George's sympathy for the goals of labor unions and distaste for socialism. (Clark 1886, 37 and 68;

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Henry 1983, 377; Genovese 1991, 113 and 123) Clark was also willing to adopt good ideas whatever their source. This article traces out that adaptation with respect to George, starting with the problem Clark needed to solve.

II

Clark's Theory of Distribution

Clark's socioeconomic perspective formed an important component of his first major treatise on economic theory, *The Philosophy of Wealth*. (Clark 1886) Its premises resembled institutional economics, (Jalladeau 1975, 213) for it stressed the need of envisioning society as a social organism:

> It is not merely man as an individual that needs to be considered. A man is not independent. So close is the relationship between him and others of his race that his conduct is dictated and his nature transformed by it. Though a self-directing being of the highest organization, he is made by his relations to others, to be an atomic part of a higher organism—society. (Clark 1886, 37)

George shared Clark's appreciation for the usefulness of treating society as an organism and both recognized, as did Austrian economics, that analysis of the individual units of that organism were as important as analysis of the total picture. (Yeager 1954, 188)

As part of ongoing social change, Clark perceived a trend toward the consolidation of capital, which was replacing the individualist competition that previously existed. This trend altered the balance of power between capital and labor. (Clark 1886, 65-73) According to Clark, the "solidarity of capital" was being countered by "a solidarity of labor." (Clark 1886, 68) This opposed solidarity, however, fostered social strife, with each party claiming justice was on its side. At this point, Clark set forth the need for a standard regarding income distribution,

> If it is humanly possible to thus settle the questions at the basis of the law of wages, no scientific work can be more immediately and widely beneficent. These questions tend, if rightly answered, to public order; if wrongly answered, to communism; and if unanswered, to agitation and peril. (Clark 1886, 109)

Clark eventually settled on the marginal productivity theory of wages as providing a standard of justice to which labor and capital could both comply. Royall Brandis characterizes Clark's analysis of income as a factor return on the basis of fairness in no uncertain terms, "The return measured the contribution to production, the contribution to production measured desert, and, thus, reward and desert were equated and justice was done." (Brandis 1985, 873)

In his classic statement of marginal productivity theory in *The Distribution of Wealth* (1989), Clark made this equation quite clear, "It is the purpose of
this work to show that the distribution of the income of society is controlled by a natural law, and that this law, if it worked without friction, would give to every agent of production the amount of wealth which that agent creates.” Regarding wages, he added, “However wages may be adjusted by bargains freely made between individual men, the rates of pay that result from such transactions tend, it is here claimed, to equal the product of industry which is traceable to the labor itself . . .” The same rule applied to interest and profit. (Clark 1965, v) (The words italicized here presaged important work by other economists generations later.)

Clark devoted most of the book to explaining, justifying and applying this natural law. With some changes, Clark’s version of marginal productivity theory has become standardized in modern economic theory when it uses the concept of an aggregate production function to explain the distribution of income. (Tobin 1985, 31–32) Clark defined this aggregation approach as follows, “The pay of labor in each industry tends to conform to the marginal product of social labor employed in connection with a fixed amount of social capital, as such.” (Clark 1965, 116) At any time, society had a fixed amount of labor. It was the additional contribution made to total production by an individual unit of that social labor that determined wages.

Clark used his theory to provide the basis for a fair distribution of income. He could counter claims by socialists that workers were not getting all they produced. (Henry 1983, 376–78) His point was that while workers were paid in line with what they produced, “the whole product of industry does not go to the worker.” Capital added to production and deserved a share of total output. (Clark 1965, 82–84)

To make his approach operational, Clark needed to describe how the marginal product of labor could be identified and measured as a social outcome. His solution to this aggregate measurement problem came from George. Starting from Adam Smith’s notion that in an early state of society a person working without capital, or any payment of rent, would earn all of what was produced, Clark added, “Mr. Henry George has advanced an interesting theory which makes the gains of men who are in this condition set the standard of general wages.” (Clark 1965, 84) Clark’s basis for wage determination reflected George’s thinking on the topic. Since George did not find the economic system to be fair, his thinking with regard to income distribution needs to be explained before Clark’s use of it can be considered.

III

Henry George on Income Distribution

Clark supplied no citations to George’s writings in The Distribution of Wealth but in his earlier book, The Philosophy of Wealth, he specifically referred to the
third chapter of *Progress and Poverty*. Clark’s appreciation for George’s theory of wages at this time was clearly stated: “Certain opponents of Mr. Henry George have committed the strategic error of attacking his system at an impregnable point, namely, his theory of the origin of wages.” Although he found problems with George’s theory, as will be described below, Clark remarked, “On the single point, . . . that products are the source from which labor derives its maintenance, Mr. George’s reasoning is as conclusive as anything in mathematics.” (Clark 1886, 126)

Clark’s praise for George’s theory of wages did not extend to all of his work. In his overall appraisal of that work, Clark “referred to George’s theory ‘with all its absurdity.’” (Bruchey 1972, 105) Very likely, Clark would have found it objectionable that George wanted to explain why “widespread want is found in the midst of the greatest abundance” and that he placed the burden for “the cause of want and misery” on “the injustice of society.” (George 1954, 7 and 141) As noted above, Clark employed marginal productivity theory to explain how the distribution of income under ideal conditions was socially just. He wanted to refute theories which claimed the distribution was unjust and occasionally singled out George as one of his targets. (Collier 1979, 267)

As is well known, George found the root of injustice in rent on land. He defined rent not simply as the amount paid to superior land, but as an ownership return. As long as good land was abundant, no one would pay a premium for it. When all the good land was taken up, however, superior land earned a rent in comparison to inferior land. The natural productiveness of land led to the differential output that created rent, but ownership determined who received it. As George concluded, “Rent, in short, is the price of monopoly, arising from the reduction to individual ownership of natural elements which human exertion can neither produce nor increase.” (George 1954, 166–67)

When land was privately owned and not reproducible, the other factors had to pay a premium for its use. As a result, “the law of rent is necessarily the law of wages and interest taken together, for it is the assertion, that no matter what the production which results from the application of labor and capital, these two factors will receive in wages and interest only such part of the produce as they could have produced on land free to them . . .” Thus, in terms of a theory of distribution, George claimed that rent was a payment of the monopoly price of land and that this had harmful consequences for society.

Rent was a deduction from total output before wages and interest were paid. George described this outcome with blunt detail, “Produce − Rent = Wages + Interest.” Wages and interest were not a function of the output of labor and capital, but were based “upon what is left after rent is taken out.” No matter how productive labor and capital became, as long as rent kept
pace with their productivity growth, "neither wages nor interest can in-
crease." (George 1954, 171)

With the owners of the natural powers of land able to secure a premium merely for their ownership, the distribution of income could hardly be called fair. Instead, there would be "progress and poverty." For this reason, George saw the single tax on land rent as a solution for poverty. Few of his reputable contemporary economists subscribed to this tax. Clark several times opposed treating land as a special resource. (Collier 1979, 269)

Moreover, Clark was interested in the emerging issue of his day, the distribution of income between labor and capital. Rent on land scarcely figured in his writings, even though he admitted that any division of output "between capitalists and laborers, must, if the traditional theory of rent be tacitly accepted, be regarded as what remains to the producing classes after rent has been paid." To be sure, Clark hedged on his acceptance of the traditional theory, feeling that it needed "an extensive supplementing." (Clark 1886, 125n) Nonetheless, the concept of rent did figure into Clark's theory of wages, and it was here that George had useful insights for him.

IV

George on Wages

George's views on wages were set forth in two separate parts of Progress and Poverty, Book I (Wages and Capital) and Book III (The Laws of Distribution), Chapter 6 (Wages and the Law of Wages). Book I was primarily concerned with refuting the wages fund doctrine of classical political economy, which held wages to be determined by the total amount of capital in the economy at any given time. Since Clark found the wages fund to be in error at about the same time, (Clark 1886, 20–21 and 126–27) he might be expected to be a sympathetic reader of Book I.

Although George's argument was quite long, in essence he argued that wages were based on what labor produced, not on some preexisting stock of commodities for the maintenance of labor that preceded production. Moreover, in looking at what a worker produced, George took a marginalist approach. From the perspective of social production, he insisted, a worker "receives in return for the addition his labor has made to the general stock of wealth, a draft upon that general stock . . ." This result meant that wages represented for the worker "the wealth, or a portion of the wealth, his labor has already added to the general stock." (George 1954, 23 and 29)

By thinking of wages in terms of what workers added to total production, George had something akin to marginal productivity theory in mind. His state-
ment about labor's addition to the general stock of wealth resembled Clark's notion of wages as the contribution of a marginal unit of social labor, and predated it. Because Clark had read Progress and Poverty before his marginalist revolution, there is evidence to ascribe Clark's formulation of marginal productivity theory to George, despite their disagreement on other issues.

The influence was purely stimulative, however, because George never translated his rudimentary marginalism into a theory of wages. As Martin Bronfenbrenner has written, George used "marginalist ideas without marginalist language" and dismissed several early marginalist writers as perplexing. (Bronfenbrenner 1985, 16; see also Aslanbeigui and Wick 1991, 241) In his last, incomplete work, The Science of Political Economy, George characterized marginal utility as an "elaborate piling of confusion on confusion." His one reference to Clark lists Clark's definition of wealth with that of other notable economists, while his critique of a theory of income distribution refers to John Stuart Mill. (George 1981, 217, 123 and 430–69)

If George helped devise the marginal productivity theory of distribution, he never admitted to it. Regardless, in his own marginalist revolution, Clark did make use of George's law of wages from Book III, Chapter 6.

George based his law of wages on the notion that humans wanted to exert themselves as little as possible. With competitive wages, this meant that equal exertion under similar conditions should generate equal pay. No worker would supply greater effort than other workers without higher pay.

When workers determined whether the wages offered them were worth the effort, they took into account other opportunities available to them. As a result, George argued, "the terms at which one man can hire others to work for him . . . will be fixed by what the men could make in laboring for themselves." (George 1954, 205) At that time in the U.S., George observed, there was plenty of land on the frontier. Instead of working for someone else, labor could stake a claim and earn a livelihood on land. The amount that could be earned on that land set the minimum amount of wages. If employers offered wages below this amount, workers would go out and homestead.

The problem was a bit more complicated when there was land of different quality involved, for in that case the income of the labor included an implied rent for the land along with wages earned by labor. (George 1954, 206–07) Rent still had to be deducted from production to establish wages. Ultimately, however, wages were based on what labor on the poorest land could earn. Labor on no-rent land explained the general level of wages.
Supply and demand explained relative wages, but not their general level. As George put it,

> When it is said, as is commonly said, that the general rate of wages is determined by supply and demand, the words are meaningless. For supply and demand are but relative terms. The supply of labor can only mean labor offered in exchange for labor or the produce of labor, and the demand for labor can only mean labor or the produce of labor offered in exchange for labor. Supply is thus demand, and demand supply, and, in the whole community, one must be coextensive with the other. (George 1954, p. 208—9)

To explain the general wage level, George replaced supply and demand arguments with a law of wages that rested on no-rent land: “Wages depend upon the margin of production, or upon the produce which the laborer can obtain if at the highest point of natural productiveness open to it without the payment of rent.” (George 1954, 213) The general wage level rose and fell with changes in what could be earned on no-rent land. It was this postulate that Clark found so helpful.

V

**Clark on Wages**

Although he found it useful, Clark did not take over George’s theory of wages intact. As a description of what was taking place in the U.S., Clark objected to George’s law of wages on the grounds that even no-rent land required some capital be used and that it ignored the part rising land values had played in farmers’ incomes in the U.S. Even homesteaders on the frontier experienced appreciable gains on their land in a very short time. In addition, those gains were spent on further improvements, financed by credit, which transferred themselves into higher earnings for industrial capitalists and workers. (Clark 1965, 84—7) The spread of civilization brought widespread prosperity to labor and capital, not just to the owners of land.

Given these qualifications, Clark applied George’s concept to industry. There he found that the margin where workers kept everything that was produced was when they utilized “the poorest instruments that are kept in action at all.” He explained,

> To make the existing stock of capital goods available to the larger number of men, it would be necessary to work the worn tool, the rickety engine, the unseaworthy ship, etc., somewhat longer than it would have been used under former conditions. When it is at the point of abandonment, however, the labor that uses it creates wages only. (Clark 1965, 97)

Labor working with no-rent capital set the level of wages for the rest of society. This wage theory was “akin to that of Mr. George,” Clark concluded, if it was amended to read, “all men must accept what any of them could produce, if they chose to use marginal land and other valueless instruments.” (Clark 1965, 98)
At some level of production, there always were workers whose pay was low enough that employers were indifferent as to whether they should be hired and put to work with no-rent capital. Clark thus marked off a "zone of indifference," a sort of industrial frontier, where "men may come or go without affecting the employers' pockets." (Clark 1965, 102) It was in this zone that the natural law of wages and distribution operated, and the last workers hired in it set the wage level for all other workers.

This result would not appear to invoke the sense of fairness Clark sought. For Clark to tell workers that their wage depended on the addition to total output of workers in the worst case scenario on the grounds that all workers could be in that zone was not very inspirational. But Clark was concerned that the process of wage determination was fair, not whether its level added to the well-being of workers—another difference from George.

Despite what he gained from George, Clark disliked the notion of injustice that permeated George's definition of rent. To counter it, he defined rent in its more popular meaning as payment for the use of any instrument. (Clark 1965, 123-4) In addition, Clark's theory operated in a static world, wherein the total amount of labor and capital were as fixed as the quantity of land, although labor and capital were more mobile. Given this fixed amount, there were differential gains to be had for better capital and labor. Rent, in the differential sense, applied to all factors of production. Skilled workers could earn a rent above what inferior workers earned. (Clark 1965, 336-42, 350-51, and 360-63) Better capital also commanded a higher return. An income premium reflected society's willingness to pay for the use of the greater productiveness of the particular factor of production.

As for differences in wages, they did not alter the marginal productivity theory either. When the pay difference resulted from skills, Clark counted higher paid workers as several units of low paid workers. The marginal productivity theory applied to these units of labor and not to individual workers. (Clark 1965, 365) Since it was society that determined which skills were valuable, it followed that the pay of highly skilled workers was a social phenomenon, just as George had said of rent on land. For Clark, higher wages for workers were as much a feature of improved civilization as the increased rent of land. Clark had indeed extended the theory of rent to all factors of production and found in it a theory of social justice.

VI

Conclusion

It is clear from the above that Henry George stimulated John Bates Clark's formulation of marginal productivity theory as applied to labor. This influence
George and J. B. Clark

was not sufficiently powerful to accord George recognition as a member of the marginalist revolution. Instead, we must agree with Leland Yeager that "George did not understand the marginalist revolution in value theory that was getting under way in the last decades of his life." (Yeager 1984, 193) This assessment does not mean that we must slight George's contribution to economics, however.

George believed that supply and demand could not explain the general level of wages. That was why he employed what could be earned on no-rent land as the basis for aggregate wages, making it a key variable in determining the distribution of income. From the same perspective, Clark used rent as basis for explaining the wage structure, but he retained the marginal productivity theory to explain the overall distribution of income. It meant that the growth of capital could increase wages and bring progress and prosperity, but only under ideal conditions of competition. The idea of rent as an incremental return to monopoly power did not figure in marginal productivity theory.

On this disagreement, George was the more prescient. As Will and Dorothy Lissner point out, (Lissner and Lissner, 1991, 179–81) George understood that free enterprise required government intervention against business power to remain workable, a view Clark shared. But George added to this the insight that government itself could confer rent, skewing the distribution of income in a rent-seeking society, a point Clark never made. Neoclassical economics might have achieved better insights into the functioning of the modern economy if Clark had followed George more closely.

References

We are in debt to Professor Stabile for reviewing so clearly Henry George’s contribution to marginal productivity theory. As he concludes, “neoclassical economics might have achieved better insights . . . if Clark had followed George more closely.” However, Clark never intended to follow George except as a U-Boat stalks a troopship. I have documented this elsewhere (1994, 47–59). If Clark followed Ricardo, as Rima (cited by Stabile) alleges, it was for the same
end, namely to eliminate land and its distinctive rent from the lexicon of economics. Ricardo had to be sunk, too, and Clark did his best.

Clark should not get credit for originating the marginal productivity theory of distribution. Professor Stabile might have noted that said theory was developed by Henry George's sometime disciple, Philip Wicksteed (1894), well before Clark (1899). The title of Wicksteed's masterpiece, *The Coordination of the Laws of Distribution*, is obviously paraphrased from "The Correlation and Coordination of These Laws (of Distribution)" (George, 1879, Book III, Chapter VII, 218). Wicksteed was formalizing, in more elegant form, an insight from his friend George.

Wicksteed, unlike Clark, did that while retaining the identity of land as a distinctive factor of production. This could help explain why Clark failed to acknowledge Wicksteed. Clark may indeed have been "willing to adopt good ideas whatever their source," as Professor Stabile avers, but he was not always willing to give credit. Clark's main objective was to fuse and confuse land with capital, to undercut George's case for taxing land while exempting capital. To this end, it was necessary for him to "rediscover" the theory of marginal productivity in a new framework where land was merged with capital. If that involved cribbing, well, his powerful academic friends overlooked it. Wicksteed, after all, consorted not just with Henry George but with unseemly Fabians like G. B. Shaw and Graham Wallas.

It is insufficient to say Clark "shared George's . . . distaste for socialism," citing Clark from 1886. In 1886 George ran for Mayor of New York with full socialist support. Later, Clark regularly uses "socialism" and "agrarian socialism" as slurring codewords for Georgism - mischievously, because by then socialism was in bad odor, and George had broken with the Marxist socialists. Clark disliked all the distributive aspects of socialism, whereas George always remained a "land socialist."

Professor Stabile implies that George's marginalism was inadequate because he belittled marginal utility; and Professor Stabile agrees with Leland Yeager that George "did not understand the marginalist revolution in value theory . . ." I submit that he understood it all too well, with sure intuition, and therefore smelled a rat that eluded Professors Stabile and Yeager. The main function of this value-theory revolution, to rent-takers and their apologists, was to help confuse land with capital. The classical idea of capital as stored-up labor marked capital sharply off from land; the new demand-side approach to value made land and capital much the same. As Frank Fetter crowed, "now we have recognized utility, regardless of the origin of the good, as the measure of value. . . . When the utility theory displaced the cost-of-production theory of value, this change of the capital concept (to include land) became a logical necessity"
Ever since, orthodox economics has lacked a defensible concept of capital, a weakness grievously exposed in the recent "Cambridge controversy."

Professor Stabile rightly writes that Clark averred the growth of capital would raise wages. Since Clark fused land with capital, and let the land supply grow as capital grew, who could disagree? Absurd as it seems, that has been the orthodox view ever since. It is something else to believe that growth of capital proper is an unmixed blessing for labor, when capital can displace labor from a fixed land base. The historical displacement of labor by sheep in England, and by farm machines in the U.S.A. and Canada, had shown the problem. Professor Stabile only hints at this point, on which Henry George laid great store. It bears intense study and elaboration, but has not received it. George may be faulted, and has been, for overstating the matter. Clark and his followers may be faulted more, but have not been, for papering it over completely.

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References


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