

## Clark and Patten: Exemplars of the New American Professionalism

BY CHARLES F. COLLIER

### I

In many ways the reactions of John Bates Clark<sup>1</sup> and Simon Nelson Patten<sup>2</sup> to the thought of Henry George epitomize, almost perfectly, the main developments in American economics at the turn of the century. The period was the one in which this country produced its first internationally known economic writers and theorists, and surely George and Clark were among them. The period was also the one in which American economics "came of age," in the sense that there were sufficiently large numbers of economists to justify, or even make necessary, the formation of professional associations. Clark and Patten were both instrumental in founding the American Economic Association, and each served as its president. Moreover, the period was the one in which American economics, particularly as presented in academic institutions, became increasingly a specialized discipline. Up until about 1870 or 1880 American economics was written and taught by men who were often trained in other fields, such as law, political science, and philosophy. After about 1880 professors tended to have advanced degrees in economics and *tended* to concentrate their teaching efforts in it.<sup>3</sup> In this regard, George seems to be a particularly good example of the kind of self-educated "layman" economist whose era was fading away, while Clark and Patten are illustrative of the new generation of those with formal, advanced training in the subject. (Both Clark and Patten did their advanced study in Europe. They had to go to Europe for the simple reason that American universities did not have recognized graduate programs in economics at that time.) And this was a period during which economists in many parts of the world were making devastating critiques of classical economics.

Again, George, Clark, and Patten are of interest since each criticized classicism from a different viewpoint. George's writing is best viewed as an attempt to correct the flaws of classical economics and to resuscitate it. Clark's early writings called for a rejection of the classical *homo oeconomicus* on the grounds that "he" did not adequately represent humanity, and because Clark felt that the perfect competition assumed by the classicists did not exist. Although his later works illustrate his "conversion," especially on the issue of competition, they still differed enough from the classical works to place them

in the neoclassical tradition.<sup>4</sup> Patten rejected the classical view that the events that controlled humanity's destiny (events such as the increases in land rent predicted by Ricardo) were largely beyond man's control. He was generally far too optimistic to accept such premises. Also, he advocated far more governmental intervention than the classicists.<sup>5</sup> Then too, this was a period in which the very subject matter changed so much that the discipline's name was changed from (classical) political economy to (neoclassical) economics. Patten was generally a neoclassical economist, and certainly Clark was one of the founders of the school. George, in contrast, always viewed himself as a classical political economist in the vein of Adam Smith and he always viewed the new science of economics as a bastardization of the true science, political economy. In fact, he always used the word *economics* in a pejorative sense.<sup>6</sup>

In sum, each of the writers wrote on most of the major topics of concern at the turn of the century. It is not too much to say that George, Clark, and Patten *created* many of those topics of concern. And it is not too much to say that Clark and Patten developed many of theirs as reactions to the ideas of George.

## II

One major area on which the three differed was the kind of analysis that could be, or had to be, carried out. Specifically, the three writers adopted three different views with respect to the time period, and the changes that could occur in the time period considered. Here Clark's treatment was the simplest—and the one that best realized the limits of the then current tools. His analysis was *basically* static. Static analysis, as Clark used the term, referred to the analysis of a society in which the production techniques, tools, organization, distribution of income, population, amount of capital, and desires of consumers all remained unchanged.<sup>7</sup> He, of course, recognized that such states never had existed, and never will exist in the "real world," since all societies contain numerous dynamic elements. Still, he said, static analysis had served, and would continue to serve, several important purposes. First, and a matter of historical importance, Clark contended that many of the most important classical principles rested on static analysis. He argued, for instance, that when classicists sought the natural laws that governed the prices of goods, or when they sought the natural wage or the natural rate of interest, they were using the term *natural* in a sense that made it equivalent to Clark's term *static*.<sup>8</sup> Second, Clark argued that even in a dynamic society, the transactions that occur at any instant, or on any given day, are governed by precisely the same forces that, if acting alone, would bring society into permanent rest, or into a static state.<sup>9</sup> Third, Clark wrote, "It is my belief that students should become acquainted with the laws of Economic Dynamics, and that they can approach the study of them advantageously only after a study of Economic Statics."<sup>10</sup> His point seems to have been that one can understand changes in the levels of variables (dynamics) only if one understands the levels themselves (statics). Fourth, Clark seems to have realized that it is incredibly difficult to develop a dynamic theory that allows everything to vary at once. Given the state of the science of economic theory as it then existed, the best that one could do was attempt to approach dynamics by a series of successive

approximations involving more and more complex static states.<sup>11</sup> Clark thus developed a static analysis and confined his dynamics to inferences from the static analysis.

Patten's economics, in contrast, was primarily dynamic. His analysis was that of a society in which progress was the primary characteristic. Patten, for example, never assumed that the state of the art of production or the level of technological sophistication was constant, as Clark so often did. He also believed that all living organisms, human institutions, and societies tend to evolve continuously. He argued that once any environment becomes occupied by organisms, each having an appetite for food, a struggle tends to begin and each individual tries to appropriate, sometimes using physical power, a part of the region. Eventually, however, people realize that the food furnished by nature is only a small part of the amount that can be produced. Patten believed that attention then turns away from aggressiveness to cooperation in an attempt to increase the total food supply. That, however, introduces new moral codes, tending to impose sanctions upon those who now undertake the very actions that were once the primary actions taken to survive. Under the new codes the ultimate aim was said to be to increase *the group's* ability to maximize pleasure and minimize pain. Those who are too weak or too lazy to work will not survive in the new competitive struggle to aid the group. And, much more to the point of this discussion, Patten argued that those who continue their aggressive actions designed to monopolize the food supply will ultimately be destroyed by their own selfishness.<sup>12</sup> Moreover, Patten argued that as these developments occurred, people would discover more and more desires that could not be gratified by the natural food supply. As a result they would tend to devote more and more of their labor to the production of commodities that would satisfy these desires. In a statement using the ideas, if not the exact terminology of marginal utility theory, Patten argued that people will continue to work to produce these goods up to the point at which the marginal pleasure gained from the consumption of one more unit of a good equaled the marginal pain of producing it.<sup>13</sup> Patten argued that during some phases of economic development the general rate of wages would tend to fall, if everything else were held equal. He claimed that in any society the wants first satisfied will be those where gratification provides the highest level of utility to the consumers. Patten argued that since the highest level of utility was derived from gratification of these desires, consumers would pay, and laborers would earn, a great deal from production. But after these desires were gratified, less "important" desires would be gratified. Gratification of these less important desires would provide less utility to consumers, and consumers would, accordingly, pay less to have them gratified. This sequence would continue with the "importance" of the desires steadily diminishing, the amount of utility diminishing, and the amount consumers would pay diminishing, hence the amount producers would earn would also diminish accordingly.<sup>14</sup> Patten felt, however, that actually observed wages probably would not fall because technological advance and improvement in the arts of production would more than offset the above-mentioned developments. And if it should occur that the population of any community exceeded the limits of the food supply to support it, some individuals would leave that community to settle a new one. But, it was argued, the new settlement would represent a

higher level of civilization and a higher phase in the evolutionary process of humanity.<sup>15</sup> Patten's economics was, therefore, a dynamic, evolutionary economics.

George, in contrast to both Clark and Patten, chose to approach economics in both its static and its dynamic aspects. Readers of this essay are presumably familiar enough with *Progress and Poverty* so that a detailed explication of it is not needed. It will perhaps suffice to note that in book 3 of that work George attempted to survey essentially the same ground as Clark later did. Chapter 1 of that book is devoted to the (quite correct) proposition that the static laws of income distribution ought to have more unity than the classical system gave them. And, chapters 2 through 6 do attempt to provide a discussion of the several factor payments in turn. That George intended that all of book 3 be interpreted in a static framework is probably best shown by the fact that chapter 8, the final and summary chapter, is entitled "The Statics of the Problem Thus Explained." Then, in book 4 George attempted to consider the same topics that Patten considered. In that book George began with a chapter entitled "The Dynamics of the Problem Yet to Seek," and proceeded to analyze the effects of increasing population, improvements in the arts of production, and the effect of expectations raised by progress. Later chapters and other books attempt to explain the business cycle, the dynamic aspects of poverty amid increasing wealth, and "The Law of Human Progress." Clearly, these are attempts to dynamize the earlier discussion.<sup>16</sup>

### III

If one were to compare, contrast, and evaluate the views of the three writers, he would have to say that the task that George set for himself was at once the most ambitious and the most *potentially* fruitful. The economy can, after all, be analyzed both at one point in time and as it varies through time. And one may believe, as Clark clearly did, that ideally one *should* try to develop both a static and a dynamic analysis. Yet, one would also have to accept Clark's judgment that it was simply too difficult to develop both statics and dynamics, given the then available tools. One would have to conclude that Patten's dynamic theory—implying that people come to believe that the group's welfare is the most important concern, and implying that all new settlements represent progress to higher levels of civilization—was quite naive and quaint. It must also be stated that George's dynamic theory—relying in a crucial way on a wholly untenable theory of land speculation and a demonstrably incorrect analysis of dynamic rent theory<sup>17</sup>—was a less than happy aspect of his analysis. It is probably accurate to say that Clark, who always kept the limits of his tools in mind, was the most successful in his efforts.

The differences in the level of analysis also produced differences in the kinds of issues investigated. Clark was interested primarily in the issue of income distribution. Indeed, his most famous work was *The Distribution of Wealth*. Clark's decision to concentrate on distribution theory was quite logical, given the static framework that he adopted. When Clark held population, organization, amount of capital, and the state of the art of production constant, it followed that the amount of wealth produced per unit of time would be unvarying. It then followed that the principles underlying the dis-

tribution of that wealth or income were the most important issues to investigate.<sup>18</sup>

Since Clark explicitly stated that the mechanism underlying his theory was derived by following up on a lead advanced by George,<sup>19</sup> it seems wisest to turn attention to George's theory first. As is well known, George's rent theory was the undiluted classical Ricardian rent theory extended to all, not merely to agricultural, land.<sup>20</sup> The only especially interesting feature of George's handling of the concept was the fact that his version of the theory applied only to the extensive margin of cultivation. He had no theory of the intensive margin at all.<sup>21</sup> George's static wage theory was perhaps his single most important contribution to economic analysis. He imagined a worker with no special skills, no capital, and no previously accumulated stock of goods, and placed that worker on a plot of marginal land. The point was that since the land would not be totally barren, the worker would produce some product. But since George had given the laborer no advantages of any sort, it seemed entirely reasonable that the entire product should be ascribed to raw, unskilled labor power.<sup>22</sup> That product, said George, would become the wage for that particular worker. Moreover, the perfectly working market mechanism would insure that that wage would become the wage for all unskilled labor in the economy, if everything else were held equal. Skilled laborers, who supplied more units of exertion, would produce more units of product in a given time period. Since the product produced and the wage received were thought of as equivalent, the skilled laborers would receive a higher wage.<sup>23</sup>

George's static theory of interest, in contrast, was the weakest component of his system. George argued, in the first place, that since capital was, among other things, "stored up" labor, interest could be viewed as another form of wages. From this he deduced that the ratio of wages to interest must be constant.<sup>24</sup> Second, in order to account for the mechanics of the return to capital, he advanced his ingenious but generally discredited concept of the "reproductive modes" of interest<sup>25</sup>—which never gained widespread acceptance even among his adherents. It would scarcely be profitable to attempt here to summarize this concept or to review the reasons why it has been so universally rejected, but at least one commentator has noted its incompatibility with the rest of George's system,<sup>26</sup> while another has remarked upon its superfluity.<sup>27</sup> Whatever the philosophical merits of George's notion of capital as "stored up" labor, and of interest as thus a specialized form of wages, it has rarely been discussed in economic literature. One senses that many writers thought it too simple to warrant comment. In any case, George's deduction from it is without empirical support. The ratio of wages to interest is, in fact, not constant, and, even if it were, George never indicated any way to determine the value of the ratio.

George's dynamic theory of income distribution was derived from the Ricardian rent theory applied to the extensive margin, and from some of his own ideas about speculation, increased population, improvements in the arts of production, and material progress. Briefly, George argued that once population increased, the arts of production improved, and/or the amount of material wealth increased, the demand for land would also increase, causing rent to rise. Speculators, anticipating even further increases, would purchase land, and hold it idle or underused while waiting for its value to increase even

more.<sup>28</sup> Laborers, barred in large measure from the chance to work these speculative holdings, would either go to the city and become a class of urban poor, or move to hitherto submarginal plots of land and settle on them. When the new plots were settled, the rent on all plots already inside the margin would increase and rent would arise for the first time on the former marginal plots. Hence aggregate rents would rise. Moreover, since all wages ultimately were based upon the productivity of labor applied to marginal land, wages would inevitably fall as long as the margin of cultivation or building continued to extend downward and outward. And since the ratio of wages to interest was supposed to be constant, it seemed to follow that the amount of interest would fall as the amount of wages fell.

Clark's theory of income distribution shared at least two very important points with that of George. Clark, like George, believed that the classical distribution theory lacked unity since each factor payment was determined by a different rule in the classical theory. To correct that flaw Clark sought one general principle that would simultaneously determine all factor shares. Further, in his greatest work, *The Distribution of Wealth*, Clark explicitly acknowledged that the one principle he finally found was based upon a principle of the static Georgian theory.

It was the claim advanced by Mr. Henry George, that wages are fixed by the product which a man can create by tilling rentless land, that first led me to seek a method by which the product of labor everywhere may be disentangled from the product of cooperating agents and separately identified; and it was this quest which led to the attainment of the law that is here presented, according to which the wages of all labor tend, under perfectly free competition, to equal the product that is separately attributable to the labor. The product of the "final unit" of labor is the same as that of every unit, separately considered; and if normal tendencies could work in perfection, it would be true not only of each unit, but of the working force as a whole, that its product and its pay are identical.<sup>29</sup>

Clark's truly brilliant achievement was the generalization of that rule to *all* of the factors of production. Each factor contributed to the production process and each got as its compensation an amount equal to its contribution to the process. An analyst could estimate the contribution of any particular factor by adding or subtracting one unit of that factor and noting what happens to the total product. Under an exceedingly wide array of circumstances it is accurate to attribute the change to the addition or subtraction of the dose of the factor. That change, then, is a measure of the factor's productivity and in the Clarkian theory it serves as the basis for compensation.

While it is undeniable that Clark's theory was similar to, and derived from, George's, there were also critical differences. Clark's theory rested squarely on the law of diminishing returns to the factors of production, a law that George categorically rejected in *Progress and Poverty* and did not accept until he wrote his unfinished *Science of Political Economy*.<sup>30</sup> (The law states that as additional doses of a variable input are added to a constant amount of fixed inputs, after some point the product produced will increase at a decreasing rate, and that if even more doses of the variable input are added, after another point the total product will actually decline.) Clark reasoned that since, after

some point, the per dose productivity of the variable factor fell, since all doses of the factor were assumed to be homogeneous, and since pay and productivity are identical in pure competition, the pay to each dose of the factor would fall as more doses were applied. The reliance upon the law of diminishing returns to factors gave Clark's theory two immense advantages over George's. First, since the law is stated in terms of additional doses of a variable input being added to a fixed input, Clark was able to apply his theory to both the extensive and intensive margins, while George could apply his theory only to the extensive margin. Second, since any factor can be the variable one when the others are fixed, Clark's theory can be applied to any factor and is therefore quite general.

Clark then went on to make a crucial distinction that reflected a major difference with George—the distinction between capital and capital goods. Capital goods, said Clark, were specific and often immobile, and they had only a temporary existence. Capital, in contrast, was a general, mobile, and permanent fund. That is, capital goods were the specific tools employed in any productive process. Such goods are often immobile since they are often too large to be moved or since they may possess attributes that restrict the number of processes in which they can be used. And, since such goods depreciate and eventually wear out, they are only temporary. Capital, in contrast, is the complete fund of all capital goods, of any form, available now or in the future. Since it contains all capital goods of any form, capital is the general, amorphous, concept of investment opportunity. Since it contains goods available now or in the future, it can be moved or transformed in any way and is, therefore, completely mobile. And, since it consists of the “endless succession” of capital goods, it is permanent.<sup>31</sup>

Clark used the distinction between capital and capital goods to argue that there was really no important difference at all between land and capital. Clark argued that the claim that land was absolutely fixed in supply was true, but very misleading. He contended that in the static state, which he analyzed, the supply of *all* factors would be fixed, by definition. (Clark argued, correctly, that changes in factor supplies are part of dynamics, and hence excluded from his consideration.)<sup>32</sup> Moreover, the claim that land was unique because its earnings were differential returns or surpluses was also true, but again misleading. Part of Clark's great contribution stemmed from the fact that he saw that his whole theory of marginal productivity was a generalization of Ricardian rent theory. But that meant that the returns to *any* factor could be viewed as a differential return or surplus.<sup>33</sup> (In fact, Clark explicitly referred to such things as no-rent machines.)<sup>34</sup> There was, then, nothing especially unique about land, and Clark regularly wrote of “units of capital in land” to emphasize that fact.<sup>35</sup>

There seems to be no doubt that Clark's views evolved (and his views did evolve over a period of several years), at least in part, as a direct reaction to George's views. Frank A. Fetter, a contemporary of Clark and a close observer of his development, has advanced the idea that the “single-tax agitation” was probably the source of “immediate stimulation” for Clark's reformulation of capital theory.<sup>36</sup> More on this point will be said below.

Patten seems to have been the least concerned of the three with income distribution theory. In a significant sense that was logical, given Patten's

concern for dynamics. While there is, of course, a dynamic income distribution theory, it is not uncommon for those who are primarily concerned with the growth of income to give relatively little attention to its distribution.

Patten's distribution theory, such as it was, showed several crucial differences from the theories of George and Clark. In essence, Patten's rent theory was closer to Malthus's than Ricardo's in the sense that it placed heavy emphasis on social factors in rent determination. Like George, but for a different reason, Patten believed in a social law of increasing returns to factors of production. He contended that social innovations and mechanical inventions would more than offset the diminishing returns that applied to the factors considered separately.<sup>37</sup> Patten also seems to have rejected the classical idea that rent and profits vary inversely. And, unlike Clark, Patten did not believe that profits would tend to zero in competitive long-run equilibrium. His conclusion seemed to follow from the fact that he considered a dynamic economy. Since new industries were always developing and firms were always introducing new inventions, there was always some profit accruing to somebody somewhere. That, it was argued, was sufficient to prove that profits do not tend to zero.<sup>38</sup> It is not, however, perfectly clear that Patten realized that the traditional statement was to hold only in equilibrium and was never intended to hold in the case that he considered. He was, in fact, discussing a different proposition, not refuting a classical one. Interest was not felt to be a cost of production. Instead, Patten adopted what was essentially a time-preference theory of interest, which stated that when one saved, he gave up a certain amount of goods today for a preferred bundle of goods in the future. Given the fact that people tend to prefer goods in the present, one could be enticed into saving only if he were offered more goods in the future.<sup>39</sup> It is hard to find in Patten a definite statement of a law of wages that is of comparable analytical quality with the statements of Clark and George. Instead, Patten devoted most of his discussion to consideration of the social factors that caused changes in wages. These factors included the rate at which new job opportunities opened up, laborers' preferences for present over future goods (labor produces goods that will become available in the future, but it must be paid in the present; hence the wages paid were said to be some function of the present value of the future goods), the consumption habits of the citizens, the state of the arts of production, the foreign trade policy of the nation,<sup>40</sup> and, as discussed earlier, the rapidity with which diminishing returns to labor apply.

It seems reasonable to conclude that Patten's theory was a good deal less unified than were the others. George had a somewhat unified theory based upon the productivity of labor applied to marginal land and upon marginal rent theory. But it was Clark, with his marginal productivity theory, who had the most unified theory. And it was Clark who, in the final summary, has made the greatest contribution to the mainstream of economic analysis. Yet, it should not be forgotten that he built upon foundations laid by George.

#### IV

Each of the three thinkers also considered the ethical issues involved in income distribution. George's *Progress and Poverty* is, in fact, as much a moral as an economic treatise. Clark's first published response to it—the



transcript of his presentation in the single-tax debate at the 1890 conference of the American Social Science Association at Saratoga—put strong emphasis on ethical objections. These objections were elaborated in an article, “The Ethics of Land Tenure,” which appeared later that year in the initial number of *The International Journal of Ethics*. In April of the following year Patten published in the same journal “Another View of the Ethics of Land Tenure,” in which, while rejecting George’s program, he took issue with some of Clark’s objections to it, and accepted certain of its ethical assumptions. Later, however, his opposition to the single tax became so ferocious that, as we shall see, he was led to advocate a breach of intellectual honesty in order to combat it.

George considered the private appropriation of land value to be unethical as well as inefficient. The basis for that belief was, of course, his theory of property rights—a theory that held that an individual had valid property rights in anything he had created or acquired through voluntary transfer from one who legitimately owned it. Since no human being created the “original and indestructible powers of the soil,” nobody could ever claim legitimate property rights in them. Nor could the state confer such rights, because to do so would be to arrogate to some persons the natural opportunity made by God as a patrimony for all. It seemed to follow that the private appropriation of rent or land value was unethical. (This was not to say that landlords, personally, were to be morally condemned, but rather that the system itself was inconsistent with moral law.) Wages and interest, on the other hand, were quite properly subject to private ownership, being payments for productive services legitimately rendered.

Clark’s position should not be surprising, given the discussion earlier. He argued, as has been shown, that there is really nothing special about land, and that land is really just part of the investment concept called capital. Since he felt that this was so, he saw no reason to classify the private appropriation of rent or land values as unethical or in any way improper. In fact, he argued for just the reverse view, asserting that since the state had allowed, and sometimes even encouraged, private investment in land, it would be unethical to modify any of the rules regarding such investments after the investments had been made. Moreover, he said, it was simply efficient, from an economic point of view, to allow private investment in land, and private appropriation of rent or land value. Competitive market forces, he insisted, would operate to insure that the land was used in the most efficient way by the most efficient producers. In a passage directed at some “agrarian socialists,” Clark wrote that “pure capital, when invested in land, has the same rights that elsewhere belong to it.” To infringe upon these rights or to confiscate rent or land value would, he said, be not just robbery but “the quintessence of robbery.”<sup>41</sup>

While Patten was interested in social reform, he favored retention of the traditional structure of property rights, although modified by governmental intervention. Specifically, he condemned the single-tax proposal as unethical since it threatened to nullify what he understood to be valid private rights.

There is yet another way in which the question of ethics enters into this discussion—namely, the professional ethics of Clark and Patten in responding to George. It has always seemed to me that neither Clark nor Patten was entirely beyond reproach in this connection, although Patten was by far the worst

offender. Patten's opposition to the single tax grew so extreme that he ultimately came to favor restructuring the whole science of economics so as to exclude it as a logical deduction. Patten explicitly conceded that many of George's propositions and conclusions did, in fact, follow logically from classical economics. Then, after citing George as one who attacked the classical harmony of interest theory (in which Patten believed), he wrote:

If the new group of thinkers called themselves sociologists or historians they might be disregarded. But they openly claim to be economists; and the worst of the matter is, they have, so far as statement goes, the mass of the older economists on their side. Nothing pleases a socialist or a single taxer better than to quote authorities and to use the well-known economic theories to prove his case. The economists rubbed their eyes in surprise when this assault first began; but they soon realized that their favorite authors were not so perfect as they supposed and that economic doctrine must be recast so that it would rest wholly on present data. This, I take it, is the real meaning of the present movement in economic thought. It will not accept socialism; and to free itself from the snares into which it has fallen through the careless statements of its creators, it must isolate itself more fully from history, sociology and other disciplines that give undue weight to past experience.<sup>42</sup>

Patten thus proposed to radically reorganize the entire science so as to eliminate the propositions that George (and others) used to develop their arguments.

It really does appear that, from a purely scholarly standpoint, Patten committed a very serious crime. He literally proposed to pick his ethical conclusions in advance, pick the body of propositions that would lead to those conclusions, call that body of propositions "economics," and isolate himself from anything that might lead to other conclusions. This procedure amounts to nothing more than the rationalization of preconceived biases, and is clearly a travesty of scholarship.

Clark's procedure was more sound than Patten's because Clark was engaged in a many-sided discussion of capital theory. (Other participants included the Austrian marginalists, the remaining classicists, and the members of the German historical school.) In fact, the old concept of capital *was* flawed and did need to be revised. Still, one would feel more confidence in Clark's new definition of capital were it not for the fact that it gives the appearance of being specially tailored to lead to arguments for use against George.

## V

As stated in the opening paragraphs, the participants in this discussion wrote on—indeed, were responsible for formulating—most of the major topics of concern in economics at the turn of the century. The two later writers, Clark and Patten, often did not refer explicitly to George, and some of their references were indirect (such as the arguments that Clark directed against the "agrarian socialists"). Yet, there can be no doubt that both Clark and Patten were heavily influenced by George, although in different ways. Patten seems to have developed many of his ideas as a negative reaction to the work of George. Clark, although rejecting George's "remedy" and much of

his analysis, did not hesitate, as we have seen, to state that his own major contribution to economic theory was the direct result of following up a lead found in *Progress and Poverty*.

### Notes

1. John Bates Clark (1847-1938) received his undergraduate training at Brown and Amherst and his graduate training in Heidelberg and Zurich. He taught at Carleton College, Smith, and Amherst before permanently settling at Columbia University. His reputation was established with the publication of *The Philosophy of Wealth* (1885), a collection of essays written during the 1870s. *The Distribution of Wealth: A Theory of Wages, Interest and Profits* (1899) presented, formally, the complete marginal productivity theory, and advanced Clark to the front ranks of economists in the entire English-speaking world. His *Essentials of Economic Theory* (1907) was an attempt to build on his earlier foundation, but one that was not so successful as he hoped it would be. He is also famous as one of the founders of the American Economic Association, still the most prestigious of all professional associations of economists in this country. At the time of his death he was regarded as the "dean of all academic economists in America."

2. Simon Nelson Patten (1852-1922) received a doctorate from Halle (Germany) in 1878. However, he was unable to secure a university teaching position until 1889, when Edmond James James helped him to obtain an appointment at the Wharton School of the University of Pennsylvania, where he eventually became head of the economics department, and remained until his mandatory retirement at the age of sixty-five. His publications include 18 books (some on topics other than economics) and 130 articles. He is best known for his advocacy of protectionist policies.

3. One must say *tended* to concentrate on economics, because their specialization was often incomplete. At Carleton, Clark, for instance, was employed as the librarian, and as professor of political economy and history. But his actual duties also included teaching in so many other areas, such as rhetoric and moral philosophy, that he described himself as "Professor of Odds and Ends." See Joseph Dorfman, *The Economic Mind in American Civilization* (New York: Viking, 1949), 3: 189.

4. For a much more complete discussion of these and other points related to Clark's change of views, see Joel Jalladeau, "The Methodological Conversion of John Bates Clark," *History of Political Economy* 7 (Summer 1975, 209-26.

5. Patten's economic writings are analyzed in James L. Boswell, *The Economics of Simon Nelson Patten* (Philadelphia: Winston, 1934). A detailed analysis of Patten's differences with classicism appears in the first chapter.

6. See especially Henry George, *The Science of Political Economy* (1897; reprint ed. New York: Robert Schalkenbach Foundation, 1968), particularly pp. 128-29 and 207-9.

7. See John Bates Clark, *The Distribution of Wealth: A Theory of Wages, Interest and Profits* (New York: Macmillan, 1899), p. 28 and passim, and his *Essentials of Economic Theory, As Applied to Modern Problems of Industry and Public Policy* (New York: Macmillan, 1907), pp. 203-6, and Jalladeau, "The Methodological Conversion," pp. 216-19.

8. Clark, *Essentials of Economic Theory*, p. vi, and "The Dynamics of the Wages Question," *American Economic Review: Papers and Proceedings* 4 (February 1903): 131. Clark went on to add that in the classical system the main, if not exclusive, example of a dynamic theory was Malthusian population theory.

9. Clark, *Essentials of Economic Theory*, p. vii.

10. *Ibid.*, p. ix.

11. Jalladeau, "The Methodological Conversion," p. 219.

12. This paragraph has thus far relied quite heavily upon Boswell, *Economics of Simon Nelson Patten*, pp. 25-27.

13. Simon Nelson Patten, *The Consumption of Wealth* (Philadelphia: Ginn, 1901), pp. 28-30.

14. Simon Nelson Patten, "Another View of the Ethics of Land Tenure," *International Journal of Ethics* (April 1891), especially pp. 357-60.
15. Boswell, *Economics of Simon Nelson Patten*, pp. 25-26.
16. The references to the book and chapter titles in *Progress and Poverty* apply to any unabridged edition.
17. Charles F. Collier, "Henry George's System of Economics: Analysis and Criticism," Ph. D. dissertation, Duke University, 1975, especially pp. 247-60.
18. Jalladeau, "The Methodological Conversion," p. 209.
19. Clark, *The Distribution of Wealth*, p. xiii.
20. See George, *Progress and Poverty*, bk. 3, chap. 2.
21. Note that George always wrote in terms of displaced workers, or increased population, moving to the frontier and settling on hitherto submarginal plots. They were never permitted to become additional workers on already cultivated plots. The original Ricardian version of the theory correctly allowed for both cases.
22. Technically speaking, since the land was not totally barren, its productive powers would contribute something to the productive process. But since the land considered was marginal land, George had eliminated as much of the productive powers as he could have.
23. For a further discussion of this topic, see Collier, "George's System of Economics," pp. 16-22.
24. See George, *Progress and Poverty*, 75th anniversary ed. (New York: Robert Schalkenbach Foundation, 1954), pp. 198 f.
25. *Ibid.*, pp. 180-88.
26. James Haldane Smith, *Economic Moralism: An Essay in Constructive Economics* (London: George Allen and Unwin, 1916), p. 73.
27. Irving Fisher, *The Rate of Interest: Its Nature, Determination and Relation to Economic Phenomena* (New York: Macmillan, 1907), p. 28.
28. In fact, as Francis A. Walker pointed out, there is no valid reason why speculators should hold their land idle. But George assumed that they would.
29. Clark, *The Distribution of Wealth*, p. viii.
30. For Clark's acceptance and statement of the universality of the law, see *ibid.*, p. 49. For George's rejection, see *Progress and Poverty*, bk. 2, chaps. 3-4; for his acceptance, see *The Science of Political Economy*, especially pp. 357-64.
31. Clark, *The Distribution of Wealth*, chaps. 9-11, especially pp. 116-20 and 156.
32. *Ibid.*, p. 338.
33. *Ibid.*, p. 345.
34. *Ibid.* "The lowest grade of every instrument produces nothing, and is a no-rent article."
35. Such as *ibid.*, p. 344, to cite but one instance.
36. Frank A. Fetter, "Clark's Reformulation of the Capital Concept," *Economic Essays Contributed in Honor of John Bates Clark*, ed. Jacob Hollander (New York: Macmillan, 1927), reprinted in *Capital, Interest and Rent: Essays in the Theory of Distribution* by Frank A. Fetter, ed. Murray N. Rothbard (Kansas City: Sheed, Andrews and McMeel, 1977), pp. 126-28.  
Fetter is, no doubt, correct. For an early, not completely developed, version of this argument, see Clark, "The Ethics of Land Tenure," *International Journal of Ethics*, (October, 1890), pp. 62-79. Interestingly, in this article Clark never mentioned George by name. It is clear, however, that the "special assailants of the land system" discussed by Clark were George and his followers.
37. Boswell, *Economics of Simon Nelson Patten*, p. 30.
38. *Ibid.*, pp. 30-31.
39. *Ibid.*, pp. 60-63.
40. *Ibid.*, pp. 102-13.
41. Clark, cited by Fetter, "Clark's Reformation," p. 127. See also Clark's "Ethics of Land Tenure," pp. 62-79.
42. Simon Nelson Patten, "The Conflict Theory of Distribution," *Yale Review*, (August 1908), reprinted in *Essays in Economic Theory*, ed. Rexford G. Tugwell (New York: A. A. Knopf, 1924), p. 219.