Wage Theories of Gunton and Clark

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COMPARISON OF THE WAGE THEORIES OF GUNTON AND OF CLARK

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This is to certify that the thesis prepared under my supervision by

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is approved by me as fulfilling this part of the requirements for the degree of Bachelor of Arts in Pol. Sci.

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George Gunton and John Bates Clark occupy widely differing places in American economic thought. One is regarded as rather erratic in his work, while the other is considered by many as one of the Americans who has made distinct contribution to economic literature. Each has evolved a theory of wages which is mostly new and which has created much discussion. Some have thought that though these theories differ so much apparently, that, if they were examined, the theories would be found to rest upon the same laws. To study these theories, to offer a criticism of each, to see wherein they differ, and, most important, to discover if it can be said that they are the same when analysed is the purpose of this thesis.

It is well to consider just what a theory of wages should be. Gunton gives the following definition:"The true theory of wages must freely set forth the general principles upon which, under all normal, social and economic conditions, the movement of wages takes place and explain the law or order of that movement and the social influences which tend to impel or retard it". In his discussion he attempts to satisfy the demands made by his definition.

Clark says, a labor law must be a natural law, based on natural impulses in men and in society. A wage theory must be universal in

"Wealth and progress. P. 71.
"Quarterly Journal of Economics. April 1891.
its application, and must interpret the phenomena of a normal and permanent production. A difference is seen in the definitions. While Gunton sets before himself the task not only of finding what determines the present return to labor, but also how this amount is increased or diminished, Clark's task is merely to find how the amount which labor normally receives is determined. It seems essential that a wage theory must explain all the necessary phenomena connected with wages. Labor is productive, and labor causes sacrifice, hence labor must receive wages. Adam Smith's simple law that labor gets what it produces no longer suffices, for with great capitalistic production it is not easy to discover what labor produces. A theory of wages must not merely explain why wages are paid, but must account for the fact that wages in one county are high, while in another low, in some industries high, in another low and that various groups of workers are paid various wages.

Gunton's theory of wages is developed in his work, "Wealth and Progress", and restated and further refined in his "Principles of Social Economics" published in 1891.

Gunton approaches the problem of wages from a humanitarian standpoint. To state it in his own words; "the problem of eliminating poverty is the problem of the hour. The only way in which this can be accomplished is by increasing wealth. It cannot be done by redistribution, for there is not enough wealth in existence to make any appreciable improvement in the general condition of the masses."

"Wealth and Progress. P. 4."
Therefore, the problem of poverty is a question of increasing wealth. This explains the attitude which Gunton takes toward the wage question. He has no sympathy with those demands made by some laborers and by some of their friends for a more equitable distribution of existing wealth, but would have more wealth created. Concentration of wealth means increased production to him, and increased production means higher wages. This point of view should be kept in mind for a clear understanding of his study.

Gunton's wage theory cannot be understood without an outline of the argument leading up to it. Hence a short extract of this reasoning will be given. Distribution as an economic process has no existence apart from production. Economic distribution is an inseparable and indispensable part of the process of production, and cannot take place in any other way. Wages form a part of the phenomena of distribution, but laborers are employed as a productive means. Increased distribution cannot take place without increased production, therefore, wages cannot be increased without increasing production. The most sordid manufacturer must sell his products. It is only as he can dispose of them that he derives any benefit from productive wealth. The problem is how to increase the wealth per capita to enable that increase to find its way to the laboring classes. And as the capacity of hand labor is nearly uniform while that with the aid of machinery varies many hundred times, the increased use of machinery in the process of production will

*Wealth and Progress page 2.
increase the aggregate wealth. And by increasing real wages, this wealth will find its way to the laboring classes."

Mr. Gunton then shows how beneficial capital is. * "The laborers in the counties where much capital is used are better off than in those countries where it is not used. Hence, capital instead of robbing labor aids him not because of any generosity on the part of the capitalist, but by the economic law which prohibits the use of capital except on the condition that it will yield increasing returns. Increasing use of machinery is not the cause of high wages and improved social conditions, but the successful use of machinery is made possible only by the increased consumption and higher wages of the masses. The owner of wealth will not devote it to production as capital unless he can gain something thereby. In order to do this, he must do one of three things, either give the laborer less, change the consumer more, or else produce a larger amount in the same time. The first and second conditions are impossible. The third is the only alternative. But there is the further economic condition, the product must all be sold. Manifestly, therefore the social utility, and, hence, the economic possibility of adopting improved methods of production depends upon the increased consumption of wealth by the community, that is, by the masses, which in modern society means increasing wages." So far, it is seen that Gunton is preparing for his statement of the law.

Mr. Gunton defines wages as the value or price of labor or serv-

vice as such. There can be no wages in the sense in which he uses the term unless labor as such, is bought and sold. He says, "Labor under the wage system is bought and is subject to all the conditions of exchange, hence, its price (wages) must be necessarily determined by the same general law governing that of all other things in the domain of exchange. The normal price of any commodity is determined by the cost of production, which includes reproduction, but not the cost of making or replacing each particular article, nor the average cost of making that kind of article, but by the cost of making or replacing that portion which is produced at the highest cost. Apply the law of price to labor. The cost of labor to the laborer is the cost of his living; and other things being the same, the cost of his living will be determined by the number of his habitual wants. The laborer cannot or will not sell his labor continuously for less than it costs him, but it is equally true that he cannot for any length of time together sell it for more than it costs him. It would fall to that amount in one of two ways; if the standard of living remained the same, either the rate of wages per day would fall, or the laborer would work fewer days in the week or fewer weeks in the year."

Having made these premises, Gunton draws his conclusion, and this conclusion is the basis of his theory, it is his law of wages. Whether these premises can be granted is open to doubt, but the criticism of them has been reserved until the conclusion of his rea-

*Wealth and Progress. P. 79.
**Wealth and Progress. P. 84.
soning is reached. Remembering that he regards labor as a commodity upon the market just as any other commodity, what is it that determines the marginal cost? Gunton believes that, "The chief determining force in the general rate of wages in any country, class, or industry is the standard of comfort of the most expensive families furnishing a necessary part of the supply of labor in that class or industry." He puts his thought into the following chain of reasonings.

1. Wages are the price of labor.

2. The price of labor is governed by the cost of producing the most expensive portion of the necessary supply.

3. The cost of producing labor is determined by the standard of living for the family.

4. The standard of living is determined by the habitual wants and customs or the social character of the people.

This is his theory of wages and the reason why he holds it. In the criticism which follows, his position will be attacked from the very start.

At the beginning, Gunton said that the problem of wages was not one of more equal distribution, but one of more production. He maintained that there is not enough wealth in the world to make much difference how it is divided; what is needed is to produce more, and for the laborers to get a share of this. This statement needs to be qualified. I believe that the fact of unequal, at least such gross

inequality in distribution, causes more disturbance in the labor world than poverty. It is during good times, when men find plenty of work and fair wages, that strikes occur. Dissatisfaction in labor circles in this country is not because the laborers do not get enough to maintain a fair standard of living, but they see some men getting much more than they do. And there is enough income in the country which, if equally divided, would make a substantial difference in wages. Professor Leone Levi during 1884 made a careful investigation of incomes in Great Britain. He found that the average yearly income of a working family was 38 £. but, if the total national income had been equally divided among all the families throughout the State, there would have been an average annual income of a little less than 172 £. This is in strange contrast with Gunton's claim that the problem of wages cannot be concerned with a better distribution of wealth, but is concerned wholly with an increased production of wealth. Poverty is a relative term, and so long as unequal distribution remains, we shall have the poor classes. Hence, the problem of wages cannot be simply a problem of poverty.

One of Gunton's first premises is that labor is a commodity like any other commodity subject to exchange. This premise is not correct. That labor is a commodity, if it may be termed such, with very little in common with other commodities, save that it is subject to exchange, is an economic fact so well established that it seems trite to discuss it. Labor is a commodity which cannot be separated from the producer; it must be used constantly and instantly or it
will never be used; in many cases it must be sold for some price, for upon its being sold, human life depends; and, lastly, labor is a commodity which perhaps more than any other can be deemed a scarcity article. These differences are sufficient to distinguish it from any other article of exchange. Some commodities may possess a few of the above characteristics, but no other possesses all. Because of this fact, no comparison leading to valid conclusions can be made between labor and any other article of exchange.

But granting that labor is a commodity to be sold like any other commodity what is it that fixes its price. Gunton thinks that*, "It is the cost of living of the highest standard of comfort of the family which is necessary in a certain industry. By the cost of a thing is not meant what it may have cost somebody else, but what its owner actually gave for it or would have to pay to replace it. The cost of labor power then, is what it would cost the laborer to furnish it. Obviously the cost of his labor power to the laborer is the cost of his maintenance or living. The family and not the individual is the economic unit in the labor market. The laborer will often work for less than would supply him with exceptional comforts and luxuries, but he will not continuously work for less than will furnish him with those things, which by constant repetition and force of habit, have become necessaries."

It will be noticed that what Mr. Gunton evidently has in mind is that the standard of comfort fixes wages. The standard of comfort means the conventional necessaries. There seems to be some plausible

*Principles of Social Economics, P 204.
bility in this idea. Certainly, no one denies the great influence which the conventional events in fixing prices, but it is doubtful if the standard of comfort is the one condition, an explanation of which would finish a wage theory. Will a laborer work for less than his standard of comfort demands? If he will, then the cost of living is not the only force in fixing wages. Will he work for more than his cost of living demands? If he will, then this must be taken into consideration in a theory of wages. In answer to the first question, it must be admitted that laborers often do, and for a long time together, work for less than is sufficient to keep up their customary standard of comfort. If labor is a commodity as Gunton maintains, then it must be subject to the law of demand and supply, but Gunton denies the validity of the law of demand and supply in fixing prices. According to his reasoning, "If it were true that wages fall when the supply of labor is in excess of the demand, enforced idleness or able-bodied pauperism would be impossible. In that case, as soon as unemployed laborers appeared, wages would fall and the fall would continue until all the laborers were employed at some price, that being the only point at which demand and supply could be equalized. Such a phenomenon is an economic impossibility. Every fall of wages tends to lessen the general consumption of wealth, and thereby to diminish rather than to increase the employment of labor. As a matter of fact wages do not fall; anything like a general fall of real wages is practically an unknown phenomenon. It is very doubt-

*Principles of Social Economics. P. 105.
ful if it can be shown that a single step in the rise of wages from twelve cents to two dollars a day has taken place in accordance with the doctrine of demand and supply. If the cost of production be diminished, price will be equally diminished though the demand should be increased to any conceivable extent. If the cost of production be increased, though the demand should sink to the lowest possible limit." This is the unqualified acceptance of the cost theory of price.

If, as the Austrians believe, the cost theory of price regards commodities as freely reproducible, while in fact the great bulk of them are scarcity goods, then Mr. Gunton's position is not well taken. Certain it is that in the case of labor, far more than in the case of any other commodity, can it be said that the commodity is a scarcity article. Labor is a good which can reproduced only through a considerable period of time; while wages with which we are concerned are a present price. Experience proves, and proved to Mr. Gunton, that it was possible for wages to fall. Take for instance, the so-called industrial revolution in England. The unusual spectacle was seen of thousands suffering, who had been comfortable, although production was increasing at a rapid rate. Since he wrote his book, his own country has passed through an industrial crisis which caused an excess of labor through a lessening in demand for it, and wages fell until many were glad to get work at wages which would provide mere sustenance, to say nothing of maintaining the usual or customary standard of comfort. Workmen must live, the commodity which they
have to sell is one which perishes with the day, and if the demand decreases or if the supply increases without a corresponding increase in demand, price must fall. The real condition is much more like what Gunton himself describes, apparently without seeing the force of his remarks: "Demand really creates the price, and then price induces the supply."

In all probability, in every industry, the rate of wages will coincide with the cost of living of the family having the largest standard of living, but this is not saying that the cost of living fixed the wages in that industry. If a manufacturer is in need of labor and offers a rate of $2.00 where he previously offered but $1.75 this will enable men with higher costs of living to enter into the industry. It is the same when an increased demand comes for agricultural products. Competition raises the price of these products; this enables lands which were until now unprofitable to be put into crops. Was it the lands which fixed the price of agricultural products, or rather was it not that the price of agricultural products determined the point at which these lands should be taken under cultivation? It is thus in the case of labor. The condition of both demand and supply must be taken into consideration.

In regard to the second question, "Will not the workman labor when he is receiving more than is necessary to maintain his present standard of comfort?" Gunton maintains that he will not. He says that wages will fall to the amount necessary to supply the customary wants in one of two ways. If the standard of living remains the same. Principles of Social Economics. P. 112.
either the rate of wages per day will fall, or the laborer will work fewer days in the week or fewer weeks in the year. Let us see if this is true. Gunton's theory of wages involves the idea that the wages in an industry are equal to the cost of maintaining the highest standard of comfort. This statement involves the proposition that in an industry there are various standards of comfort. Yet all laborers of equal efficiency in the same industry get equal wages. This means that the great majority of the laborers are receiving more than is necessary to maintain their standard of comfort. If the great majority of them are doing this, laying up money, spending less than their income, why may it not be possible for all to do so? Gunton's conclusion is based on the premise that men will work only enough to maintain their present standard of comfort and yet in his theory there is the implication that men receiving the same wages have varying standards of comfort. He is wrong in his premise. Not only will men work when they are receiving less than is necessary to maintain their standard of comfort, but they will also work when they are receiving more than is necessary for this purpose. Examples of the first have been quoted, examples of the second are so numerous that one needs only to look about to see them. In fact Gunton found them out himself. The immigrant population in America are very willing to receive more than is necessary to maintain their standard of comfort. Thus it has been shown that there is no law which necessarily fixes wages at the cost of living of the most
Mr. Gunton fails entirely in his theory to take into account the maximum wages which labor can receive. The return to labor can never exceed the total production. In most industries, it cannot begin to take all, for the other agents of production must receive a reward. A part of the product is due to their aid in production, and they must receive a return or their cooperation cannot be secured. But Gunton apparently did not conceive of this, at least, he never mentioned it. According to his theory, wages may constantly be forced higher and higher if the wants of the laborers only expand enough. However, there is a limit to wages which soon is reached, the limit of gross productivity. A theory of wages is faulty which does not recognize this upper limit.

This brings us to an interesting phase of Gunton's study. He seems to be more interested in the work of finding how wages may be raised, than in a search after the manner in which wages are determined.

In taking up the criticism of Gunton's theory of rising wages, an error must be pointed out in the reasoning upon which his argument is based. In order to see this clearly, his own words must be given; "Economists have fully recognized the economic advantage of improved machinery and extensive markets, but they have failed to recognize the necessity of high wages as a means to that end. Adam Smith saw clearly that the division of labor and the use of machinery are limited by the extent of the market, but neither he nor any of the able writers who followed him appear to have perceived the more important double fact, viz.; 1. that the extent of

*Wealth and Progress, P. 30.
the market is mainly determined by the consumption of the laboring class, who it is estimated consume about 80% of the machine-made products of the world. This partial view is largely due to the mistake of constantly regarding the labor as only a factor in production and ignoring him as an element in consumption, and consequently, viewing wages as an expenditure which should be reduced, instead of regarding them as an element of demand and a purchasing force in the market which should be steadily increased. Gunton's reasoning can best be seen from a chain of reasoning which he employs in another place."

"Labor saving machinery can only become cheaper than hand labor when it can produce in larger quantities.

The possibility of producing on a large scale depends entirely upon the market being extended more rapidly than laborers increase in numbers.

That such an extension of the market can only result from an increase in the social wants of the masses, that is, a rise in the general rate of wages".

Gunton's reasoning may be reduced to the following statement. In order to get a market for goods, the wages of labor must be increased. This statement resembles the ideas of a foreign economist who said, "The trader and manufacturer of today find it necessary to their prosperity to secure a market not merely among the wealthy few, but also among the great masses of people, that is, the wage earners. It follows then that the radical cure for industrial depression is to raise the wages of the masses and thus furnish a market". Now merely to raise wages without any corre-

*Principles of Social Economics.
sponding increase in production, so as to furnish a market for goods is an absurdity. Suppose that employers for a whole year consent to give to their laborers as wages all their income and profits. This will not stimulate demand, for although the masses would have more to spend and a greater demand would ensue for the kind of goods which they consume, demand on the whole would not be increased. For see what is happening to the employing class in the meantime. Its income is taken away, hence its demands for goods would be diminished. The market for some kinds of goods would be widened, for other kinds it would be diminished. The direction of demand would be changed, the character of goods manufactured would be different, but the market for all kinds of goods would not be increased. Thus, the idea of increasing wages for the sake of getting a market is false, and the reluctance of employers to increase wages on this ground, a fact which Gunton greatly laments, is based on sound economic reasoning.

What is it that causes an increase in wages? Gunton thinks that it is an increase in the standard of comfort, that is, an increase in the number of customary wants. In his own words we find, ""The true remedy for low wages is to be sought solely in the conditions for extending the social opportunities of the laborer". This is his later statement, the earlier one, much like it, was that wants should be increased, that is, the cost of living should be increased. If the law is true that wages are fixed by the highest cost of living, can wages rise? If this so-called marginal man is using his whole income to satisfy his present cost of living, how can his standard of comfort raise? An increasing

*Principles of Social Economics, P. 217.*
number of comforts demands a larger income, but this income, according to the theory which we are studying, is the result of increasing wants. The result cannot precede the cause, hence an increasing number of wants cannot be a cause of increasing wages. It may be perfectly true, in many cases, with increasing wages will go an increasing standard of comfort, but as was shown earlier in this thesis, such a result does not necessarily follow. Marshall says, "The only direct effect of an increase in wants is to make men more miserable than before. And if you put aside its probable indirect effect in increasing activities, and otherwise, raising the standard of life, it can raise wages only by another indirect effect, viz., by diminishing the supply of labor". More wants mean increased expenditure, therefore, wages must rise before wants can be increased. Hence, we may justly conclude that a rising standard of comfort, instead of being the cause of higher wages, is the result of increased wages. Gunton's plan of increasing wages is as unsatisfactory as his theory of wages.

Gunton uses standard of comfort, cost of living, and standard of living as interchangeable. The standard of comfort means the conventional necessaries. Cost of living is the cost of these necessaries. The standard of life means the standard of wants and activities, and a rise in the standard of life implies an increase of intelligence, energy, and self-respect; leading to more care and judgment in expenditure, and to an avoidance of food and drink that gratify the appetite but afford no strength, and of ways of living that are unwholesome physically and morally. A rise in the standard of life for any one trade or grade will raise its

#Principles of Economics, P. 778.
# Ibid, P. 777.
efficiency and its own real wages".

It has been shown that the standard of comfort theory of wages is not comprehensive enough, but Gunton, especially in his later work, writes as if he meant standard of living instead of comfort. If this is true, we must ask whether he offers from this new point of view a sufficient explanation of the phenomena of wages? Undoubtedly, there is much more ground for believing that he does, for no longer are wages to be raised simply by increasing wants, but along with these wants, there is to be an increasing activity on the part of the laborer. But if wages depend alone upon the standard of living adopted by a people, why do not the people on the continent of Europe raise their standard of living, and thus raise wages? That there is a great desire on their part to do so is shown by the fact that millions of European laborers have sought the shores of America during the past decade. It is to be believed that, in most cases, these wage-earning emigrants are the most intelligent of the class of people in the regions from whence they come, that these emigrants are men wishing a higher standard of wants and activities. Take the Chinese as another instance. Witness the vast numbers which swarmed to our country before restrictive measures were passed. The Chinaman is willing and on the alert for work, but in his native land, capital is so scarce and population so abundant that wages are soon limited by output. Yet the intelligent European and the Chinese, although desiring a higher standard of living, must go where conditions are different. Thus it is seen that the desire for a higher standard of living does not explain the phenomena of wages.

The activities of men may be so engaged in getting bare subsist-
once that even though urgent new wants may come to them, no new efforts to satisfy these new wants can be put forth. Brassy tells of Hungary. *"In those countries the struggle for life is so severe that every child, the moment it can add the smallest fraction to the earnings of the family is sent into the fields. The sacrifice of these earnings, however scanty, for a few years, for the purpose of acquiring a knowledge of a skilled trade is impossible with the peasantry so destitute". Having seen that the desire for a higher standard of living cannot affect wages under many circumstances, what is the result if capital is brought in, introducing a new demand for labor? Along the railways of India, wages have increased nearly 100%. Thus we see that when conditions were introduced, creating a demand for labor, the price of it rose.

Hobson in his "Problems of Poverty" in discussing whether the standard of living was the cause of higher wages said, #"No radical improvement in industrial organization, no work of social reconstruction can be of real avail unless it is preceded by such moral and intellectual improvement in the condition of the mass of workers as shall render the new machinery effective; unless the change in human nature comes first, a change in the external conditions will be useless. On the other hand, it is evident that no moral or intellectual education can be brought effectively to bear upon the mass of human beings whose whole energies are necessarily absorbed to secure the means of bare physical support. Thus, industrial and moral progress must each precede the other, a thing which is impossible". He then gives what he considers to be the

*Brassy, Work and Wages, P. 105.
#Hobson, Problems of Poverty, P. 182.
...the material growth precedes the moral. Each step in the industrial advancement of the poor should and must, if the gain is to be permanent, be followed closely and secured by a corresponding advance in moral and intellectual character and habits". This is far from saying that a rising standard of living is the cause of higher wages. If a rising standard of living follows higher wages, it is not the cause but the result. What a theory of wages must explain is how these higher wages are paid. Gunton's theory fails to do this wholly, if he means to take into consideration the cost of living, or the standard of comfort. I trust that it has been shown that it fails also after he has changed to standard of living.

It may be concluded that Gunton has failed in his attempt to give a satisfactory theory of wages to the economic world. A theory of wages will probably never be complete without taking into consideration the conditions of supply and demand. It is a fact of common observation that when labor is in excess of demand, then the price of labor must fall, and when the effective demand becomes greater than the supply, then competition of employers will cause the price of labor to rise. Brassy says, "The fluctuations in the rate of wages between the high limit, so high as to deprive capital of its fair return, and the lower limit, the amount necessary to support the laborer and his family, depend entirely upon the varying demand for labor".

However, if Gunton has failed to give a satisfactory theory of wages, he has laid emphasis upon a phase of our economic life which should be emphasized. He has pointed out that the wants of the

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#Hobson, Problems of Poverty, P. 182.
#Brassy, Work and Wages, P. 47.
masses must be increased. Any one who has worked among laborers knows how essential it is to the improvement of the individual that he should be thoroughly animated with a purpose to satisfy some of the higher desires. As Weimer Von Siemens has said, "The man without wants is an enemy to every development in civilization. It is only when wants have been awakened in him, and he has become accustomed to labor for their satisfaction that efforts to civilize him have any prospect of success". Hobson, though he sees that the crowded condition of East London is the cause of the frightfully low wages in that region, is led to say, "Our poor are poor because they have not desires enough to urge them forward to demanding better estates". And speaking of the standard of comfort of the working classes, he supports Gunton, "It ought to be clearly recognized that the industrial force which operates directly to raise the wages of the workers is not technical skill or increased efficiency of labor, but the elevated standard of comfort required by the working classes. If it were possible to induce all laborers to demand such increase of wages as suffice to enable them to lay by savings, it is difficult to say whether they could press their claims successfully. But if at the same time, their efficiency as laborers grew, it will be evident that they both can and would raise their standard of living". The importance of raising the standard of living of laborers cannot be over emphasized. The indirect effect of such action upon wages would be striking. A high standard of living would mean late marriages, small families, the supply of labor would be diminished, its intelligence would be in
creased, mobility and concerted action would be possible to a greater extent, and wages would inevitably rise, if capital is increased as well. "A higher standard of living means economically a restriction in the number of persons willing to undertake work for a lower rate of wages than will support this standard. Hence, it may be said that moral remedies can be effectual only as they limit the supply of low-skilled, low-paid labor".

The outlook for wages need not necessarily be dark. Although Gunton's plea for high wages in order to secure a wide market for machine made goods cannot be accepted, yet machinery can be used. As William Smart remarks, "when machinery is introduced, cost is reduced, and as cost is reduced, prices are reduced, and with reduction of price goes inevitably increase of demand for goods. With increased demand goes further multiplication of machinery; with this goes increased demand for the men who are to run the machinery. The field from which these men can be secured is the natural increase of population. But population does not increase so fast as wealth does. Therefore, as wealth pours into the world, the demand for men becomes more and more urgent, they are indispensable. Capital is clamoring to be employed by man, and it is capital not man which is in over-supply". If through a constantly rising standard of comfort, it is possible to keep the supply of labor short, labor may confidently expect a larger reward. Capital is increasing fast, and if the ratio between the increase in capital and the increase in labor grows larger, capital will most actively compete for labor, and wages will inevitably rise.


#Smart, Distribution of Income, P. 236.
John B. Clark in the preface to his work "Distribution of Wealth" says, "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". From this it may be inferred that he is going to make a theoretical investigation of the laws of distribution. He is carrying out his previous demand that a true exposition of the law of wages must be remorselessly theoretical. His study is constructive and not controversial. The difference between his purpose and Gunton's is clearly seen. Gunton was working upon a law of wages in order to find how wages may be raised, Clark purposes to show how wages are determined. Of course, having learned this, it might enable the laborer to seek more intelligently a higher rate of wages. At least, if laborers learn that wages tend to be fixed not by the arbitrary will of employers, but that a higher law, forever in operation, which employers to a degree only can impede in its working, tends to fix wages, they may not be satisfied, but certainly more so than if they did not know this fact. Whether Clark has shown conclusively the existence of such a law will be the object of the investigation in the remainder of this paper.

Clark assumes for the purposes of his work a state of society which never existed, that is, he assumes an ideally static society. He has not conceived a state in which everything is fixed, frozen, and left congealed to allow study of it, but it is a society in "Distribution of Wealth", Preface, P. 1.
which all the operations, production, exchange, distribution, and consumption are going on, but always in the same way. Population and capital do not increase nor diminish, methods of production are not improving, the forms of industrial establishments are unchanged, and the wants of consumers are constant and unvaried. That he has the right to assume such a condition of society no one will deny, but having assumed it and having arrived at certain conclusions, he must be careful in applying these conclusions to a world very different from his static world. Clark has been cautious in this respect, stating that the laws which he found good in his ideal world show only tendencies in our real world.

In the static world which he conceived, competition is to be perfect, all friction is considered as nil. One employer is to be as efficient as any other, all laborers are of equal ability. In order to recall better his law of wages and the reasoning by which he deduced it, a rather extended quotation from the table of contents is necessary. "Competition is the force that makes prices natural. Prices would conform to natural standards, if either the forces of growth were eliminated, or the friction which keeps labor and capital from being perfectly mobile were removed. In the former case, permanent static standards would gradually be reached; in the latter, prices would conform perfectly to perpetually changing standards. In a dynamic society there is a normal variation from static standards. In like manner, there is a theoretical standard to which wages at any given moment tend to conform. This standard is the specific productivity of labor. There is a field in modern industry in which it is possible to distinguish the product of

#Distribution of Wealth, Table of Contents, P. XVI.
labor. No-rent land is a part of this field. What labor can earn when employed on waste land measures the standard of wages and helps, though in an infinitesimal degree, to fix the standard. No-rent instruments constitute another part of this field. A still greater part consists of the no-rent uses of good land and instruments. There is a still greater field (increasing the productivity of capital by reorganizing the industry) in which wages are ultimately regulated. What a unit of labor gets in this field, all other units must take. This is the marginal field, and the labor in it is called marginal labor. Marginal labor creates a product that is distinct from other incomes. There is an extensive margin of utilization of all productive appliances, and there is an intensive one; and the product of labor on either one of them is its natural wages. The two margins constitute a zone of indifference, since an employer has no positive inducement to take new men into this field, or to discharge any that are already there. The product of labor on this zone may be measured; and the result of the measurement tells what is the effective product of all labor, which is naturally the standard of wages for labor. Products on the zones of indifference in various groups tend toward equality. This zone is, however, only a part of the marginal field of employment. A given social capital affords an indefinitely elastic field of employment for labor, provided that the capital can change its forms with entire freedom. It is the productivity of labor on this field that sets the ultimate standard of wages.

From this rather extended quotation, Clark's theory may be gathered. He assumes a little dynamics in his static world and applies increment after increment of labor to an industry. The
first laborer gets the whole produce. Another increment of labor is taken on, he gets all the increase in the amount of product over what was produced by the first unit, working alone with capital. The first increment must be content to accept the amount as wages which the last increment produces, for as Clark maintains, "By a common mercantile rule, all men of a given degree of ability must take what the marginal men of the same ability get. Marginal men get what they produce, hence they fix wages." While capital, according to Clark, helped to produce nothing when there was only one laborer working, it becomes productive when the second unit of labor is applied. And so Clark would apply unit after unit of labor, the total product constantly increasing, the unit productivity of labor steadily decreasing, the return to capital and its productivity constantly increasing. I desire to call attention, first, in a criticism of Clark's theory to his conception of the zone of indifference, and its importance in his theory as the regulative field in wages. Wages he maintains equal the product of marginal labor; and that part of the working force which occupies the zone of indifference is marginal. We thus see that Clark considers such a zone as indispensable to his theory. In fact, he says in the last pages of his book, "Our whole study requires that there shall be a comprehensive zone of indifference extending through the whole industrial field.

What is this zone of indifference? Clark's meaning may be seen from this quotation: "If, in each of the general groups into which society is organized for the purpose of production, as many men as one for every hundred can be added to the working force or taken
#Distribution of Wealth, P. 101.
from it, without necessitating any change in the outfit of tools, machines, materials, etc., that they use, this fact is sufficient to furnish a theoretical basis for a law of wages. Any one in a force of a hundred may, then leave his own employer; and if he offers his services to another and demands, as pay, what he will produce for him, he will neither benefit nor injure this second master. There is, it thus appears, what we may call a zone of indifference in the field of employment that each entrepreneur controls. Within this field, men may go or come without affecting the employers' pockets". I wish to show that there is not and cannot be any zone of indifference, if Clark's reasoning holds in other respects.

Clark thinks that there is this zone because the labor takes all and no more than he creates, hence, the employer is indifferent as to the laborer's action. Suppose that the laborer does take all that he creates, what is happening to the rest of the employees? The marginal productivity of labor has been decreased, therefore, the wages of all the other laborers are decreased, for all must take what the marginal man creates. The productivity of other units combined with capital remains the same, for as Clark himself said, this last increment of labor is to be applied without necessitating any change in the outfit of tools, machines, materials, etc., that are used. The wages of all the other laborers have decreased, the return to capital has been increased. To say that the employer is indifferent to this is an error. Let us examine Clark's diagram to see if this cannot be graphically shown.
Clark says that the increment of labor $A^2$ through the competition of employers will get all that it produces. It constitutes the zone of indifference. His wage theory is based upon the reality of this zone, and his theory is that all labor must take what $A^2$ produces. The diagram shows that when labor only to the amount of $OA^1$ was employed, the surplus going to capital was $YY^1B^1$, and when another increment was applied, the return to labor is greater by $Y^1B^1B^2Y^2$, although the capitalist was paying everything to the marginal laborer that he created. In view of this increase to the return to capital, a great increase, if the productivity curve is rapidly decreasing, small, if it is slowly decreasing, is it a matter of indifference to the employer whether this last increment $A^2$ works for him? Suppose another increment, $A^3$ appears seeking work. Does the employer set him to work through philanthropic impulses, or for the sake of employing more men? It is true that $A^3$ may want all
that he produces, but see the large slice which the employer gains. The addition, $Y^2 B^2 B^3 Y^3$, to the return to capital does not seem to indicate that it is a matter of indifference to the employer whether this last increment was set to work. This criticism, it must be borne in mind, regards for the purposes of the moment that what the marginal man gets, all must receive, which perhaps is true, if we do not consider that Clark meant by marginal labor, the last man to be employed, but that he meant the man which is employed at no-rent tools, no matter at what time he was employed, and providing further, that this rearrangement did not cause some man to leave the industry because the returns were insufficient to induce him to labor.

Here is a serious error in Clark's theory. It cannot be said that there is any zone of indifference whatever in the industrial world, and upon its reality was his theory largely built. In fact, it can be shown that without this zone, his theory fails. Since with every workman who appears in an industry, the return to capital increases, why may not the employer give more to the marginal man than he creates, and why may he be forced, through competition, to give more? Whether or not he does so will depend upon the bargain he can make with the laborer. He can afford to give him any amount greater than he produces, just so that the portion of the rectangle, $O^1 B^2 Y^2$, which lies outside the productivity curve will
not be greater than the portion of the surface, \( Y^1B^1B^2Y^2 \), which lies above the dotted line, \( C^1C \). How much more than this he will give to the laborer will depend upon the relative strength of the two competitive classes, the employer and the employee.

Thus, since Clark's zone of indifference does not exist, and since the tendency is not to give the marginal man exactly what he produces, but that the tendency must be to give him more than this, we may conclude that Clark's study fails in a very vital way to give us a theory of wages which will stand the test.

It seems further that Clark's theory in some respects rests too much on mere statements. The economic world has had a great many theories of interest given to it, in which the authors have attempted to show that interest is paid because capital is productive. It is commonly believed that capital is productive, but why and how it reproduces itself, as well as something more, are facts which must be explained. Statements of facts do not explain those facts. For instance, Clark attempts to prove that the rent of land is something attributable to land alone. He gives another diagram

![Diagram](image)
in which \( AD \) represents the number of laborers employed in a certain industry. \( AB, A^1B^1, A^2B^2, \) etc., represent the product of successive increments of labor. These unit of labor are to be applied to a given piece of land.
Clark says, ""The last unit of labor creates an amount of product that is expressed by DC; and, accordingly, each unit of labor is worth just that much to the employing farmer, and each unit gets that much as its wages. EBC measures the entire rent of land. --

This surplus is the fruit of the aid that the land affords and is attributable to the land only. Land makes its own addition to the product of each unit of labor except the last one. The difference between AB and A'B' measures the surplus a man can produce when he has the whole field to aid him and what he can create unaided. ABCD is what labor creates as it is aided by the land, and EBC is the amount that the land contributes to the product of the combination. This measures the difference between ten units of aided labor and ten units of unaided labor".

This is Clark's theory of rent which he applies to capital and to labor to explain interest and wages. In the first place, has he explained anything or has he merely drawn a diagram of what seems to be the state of affairs? It is common experience that some land bears a high rent, other increments bear a less rent, and some yield only wages and interest, and Clark, without explaining why this is true, transfers the whole operation to the field of capital and labor, two instruments of production wholly unlike that of land. As one of our leading economists recently pointed out in speaking of ground rent and interest, ""The supply of land is not produced by man and does not need to be renewed by constant expenditure of human labor. Rent is income from natural agents, superior to the poorest which are actually forced into use in order to meet the demand of the market". Because of the vast differences Distribution of Wealth, P. 195.
in the character of land, capital, and labor, I do not believe that one theory can satisfactorily explain the return to all. But more concerning this later on. Clark in the illustration given above says that the land contributes nothing to the product of the last man. How does he know? If one would ask the laborer if the product was his sole unaided creation, he would undoubtedly say no, without the land he could have produced nothing, and he would have been right. The factors must all cooperate together to produce anything except the most meager returns, and who can say that a certain addition to product is the sole unaided contribution of one factor? Clark himself says again and again that capital and labor can produce nothing without working together, and yet in the above illustration, he says EBC measures the difference between the product of ten units of aided and ten units of unaided labor. Yet the product of ten units of unaided labor is absolutely nothing.

Clark's first statement of the law of wages was that wages are fixed by the man working at no-rent instruments. Later, when certain objections were raised, he thought it would be necessary to complete the theory by making an addition. He says, "If the number of units of labor that are employed with a fixed amount of capital is increased, then each of the earlier units must surrender a part of the capital by which it has been aided. At a given time, all units are equally productive, and there is no exploitation involved in giving to each what a final unit produces". Let us examine the law as he first stated it to see what specific objections can be raised. This law involved the idea that as new increments of labor appeared, they would be set at work with no-rent instruments.

Distribution of Wealth, Table of Contents, P. XXIV.
If a natural law determines that all labor must take what this final unit produces, then there is exploitation of labor by a natural law. When a man is taken into an industry and set to work at instruments, or land, or as Clark calls it, no-rent capital, there is no change whatever in the relation between the earlier increments of labor and the capital with which they are working. Each of these earlier units continues to work with as much capital as before; this capital is in the same shape of capital goods. Under such conditions, it cannot be said that the productivity of these laborers is decreased. Hence, if competition forces them to take what the marginal man produces, then these earlier increments of labor are exploited, that is they do not get what they produce. If Clark's contention be true that each laborer gets what he produces, then he must abandon that large part of his study which insists that new increments of labor are set to work at no-rent instruments.

But Clark modified the final statement of his theory. He insisted that when a laborer appears, seeking work, that there must be a reorganization of the industry, the earlier increments must surrender a part of the capital with which they are working. The first thing to be noticed, if this new conception is to be accepted, is that the earlier productivity curve which Clark used so much, no longer represents the specific productivity of each increment of labor. If each laborer is of equal efficiency, if each one has the same amount of capital with which to work, then, the area representing the productivity of labor, working with a certain amount of capital, will be a rectangle rather than a surface with a curved boundary. The curve diagram will only represent the addi-
tions which are made to the product of each increment of labor in the industry, and not the specific productivity of that laborer, as Clark first explained that the curve did show. This would not be a serious objection, but it is an objection which must be borne in mind when considering the theory as it is changed. Again, Clarke says when the last increment of labor is employed all increase in the product is due to the addition of this labor. That this is true when the increment is set to work at no-rent instruments is open to some doubt, but when there is a reorganization of the industry upon the addition of new labor, a rearranging of the capital, it is a question not at all settled whether all the additional product is due to the last increment of labor. In the first place, a further division of labor is made, itself, an aid to increase production. It is true that the assumption is that there is to be no increase in the amount of capital, but it is to be in different forms. If twelve laborers are to be employed by a fixed amount of capital, then the capital goods must necessarily be of a cruder nature than when eight or ten men are employed with the same amount of capital. How can it be considered as a truth, needing no further verification, that under such conditions all increase in the product is due to this last increment of labor. Professor Carver said in speaking of Clark's theory, evidently to defend this phase of it,*"It is obvious that the method of difference is the only method adequate to the task of distinguishing between the products of labor and of capital. Under any rational theory of causation, the variation in the product must then be attributed to the variation in the factor". Professor Carver must have forgotten

that the canon of the method of difference as expressed by Mill is, "If an instance in which the phenomenon under investigation occurs, and an instance in which it does not occur have every circumstance in common, save one, that one occurring only in the former; the circumstance in which alone the two instances differ is the effect, or the cause, or an indispensable part of the cause, of the phenomenon". The method of difference demands that every circumstance, save one, shall be common. But in the problem under discussion, there are two important changes in the instances, the addition of more labor, and the reorganization of the industry, the rearrangement of the capital. Can it be logically claimed then that all change in the product is due to the last increment of labor? It seems not, and Clark's later statement of his theory of wages is as unsatisfactory as the first.

One of the demands of a satisfactory theory of wages is that it shall be universally true. Professor Clark's theory fails in this respect in that it does not recognize at all the law of increasing returns. The field of increasing returns is as real as the field of diminishing returns. It is claimed that throughout most of the agricultural history of our country, it is the former force, not the latter, which we have seen in action. That there is a stage of increasing returns most economists believe. How would Clark's theory of wages, based upon final productivity, as he defines it, that is, the addition that is made to the product by increasing the labor, work in this field? Examine a suppostitious case. Several men are engaged in working a mine. Two men, working together, can get out four tons of coal a day. Both work down in the mine for

*Mill's System of Logic, P. 225.*
some time, then one comes to the surface and hauls the coal up. This arrangement is not conducive to the highest productivity because much time is lost by one man having to leave the digging in order to bring the coal to the surface. A third man appears on the scene, the employer says that he will give him what he produces, that is, what he adds to the already existing daily product of the two men. He is employed, and now two men can be kept constantly down in the shaft, digging and loading the coal, while the third man stays above, superintending the lifting of the coal. Under this arrangement, instead of a daily product of four tons previously produced, or six tons, or something between four and six tons, six and one-half tons may be produced. The product due to the marginal man, according to Clark, in this case is two and one-half tons. If Clark's law were true, the marginal man would get this amount as wages. The wages of the other two men are fixed by the amount which the marginal man produces, therefore, their wages must be two and one-half tons of coal a piece. But the total product is only six and one-half tons, and total wages at this rate would be seven and one-half tons. Of course, such wages will not be paid. Wages can never exceed gross product unless it comes out of capital. The mine, in this case, most people would say is more valuable when it is producing six and one-half tons instead of four, but instead of the rent of the mine increasing, or the return to capital increasing, if such wages were paid, the capital itself would be diminished. The simple explanation is that such wages will not be paid. The wages of each of the three will be fixed somewhere between something less than two tons and something less than two and one-sixth tons, instead of at two and one-half tons. Thus, it is
seen that Clark's law fails to explain a large field of phenomena, the field of increasing returns, and hence, is lacking a vital necessity, universality.

Closely allied to Professor Clark's theory of wages, in fact, a part of it, is the conception that wages are the rent of labor, interest the rent of capital. His is only one of many attempts to extend the idea of rent, not only retaining its use in regard to land, but applying it also to the returns to labor and capital. Many who have written along this line have applied the idea of rent only to those returns to capital and labor which exceed the normal returns to such labor and capital, but Clark attempts to show that all return to labor is a rent and all return to capital is also rent. Since he regards land as only a form of capital, he has all distribution determined by a law of rent. Whether all returns to productive forces can be regarded as rents seems to me a grave question. It has appeared that the validity of the residual process in the original case of land rent depended on the truth of the assumption that wages and interest were fixed quantities. If these are variable, and Clark seems to consider that they are, can we regard land rent as residual? Clark asserts very strongly that the rent of which he is speaking is not a residual rent, but a surplus. What the difference is in the case of land is hard to imagine. He seems to avoid the idea of a residual claimant because there could be only one such. But does not the idea of a surplus involve the same contradiction? Rent of land is a surplus. Surplus over what? Over cost of production; in this case there is no cost of production. Interest on capital is surplus, and wages a surplus, all returns a surplus over cost of production? What are the costs
of production except wages and interest? Wages and interest are to
determine cost of production, and the surplus over this cost is to
determine wages and interest. There is a logical inconsistency in-
volved in this reasoning. A causes B, the difference between B and
C causes A, which is the point from which we started. Clark says
that in order to get at what wages really are, the laborer must be
regarded as working on no-rent land and on no-rent instruments of
capital. What is it that determines no-rent capital? No-rent capi-
tal is that which only produces wages. Wages determine no-rent cap-
itel, and no-rent capital determines wages. It seems that the error
involved in this reasoning is patent. All returns to the various
agents of production cannot be surpluses. The very nature of a
surplus demands that something is fixed. Above this fixed sum,
there is a remainder called a surplus. Only one return then can
logically be deemed a surplus, hence, all distribution cannot be
determined by a law of rent.

It is difficult to decide what is Clark's great contribution
to economic science. That he has failed to give a conclusive theory
of distribution is perhaps true. But notwithstanding this, he has
done much. His conception of labor as a permanent force in the
world, a continuous flow, is original. Likewise, his distinction
between the permanent fund of capital and the capital-goods in
which that capital is located. He created a static world for his
purposes, but he was careful to point out that the laws which he
found illustrated there, would, in the world of reality, be gen-
eral tendencies only. He made a deep, theoretical study into the
nature of wealth and the influence which he has exerted and con-
tinues to exert on economic thought is tremendous. His study won
for him the enviable reputation of America's greatest theorist.

It has been said that Clark's and Gunton's theories, reduced to plain truth would resemble each other. Such cannot be the case. Both are based upon laws of price, but upon two laws which differ vitally. Gunton's theory is based upon the cost theory of price, while the essence of Clark's theory is the marginal utility theory of value. These two conceptions of price are very far apart, and that far apart are the two theories of wages which we have been studying. Gunton expressly denies the validity of the condition of supply and demand as affecting wages, yet the great truth which his theory expresses is based upon the fact that the standard of living which laborers maintain will ultimately influence the supply of labor. If wages are not high enough to maintain that standard of living, then in time to come, the supply of labor will be diminished, and other things remaining the same, the wages of labor will rise. Thus, Gunton saw a force operating in the world and thought that the explanation of some of the phenomena connected with it was sufficient to explain all the phenomena connected with wages. Clark, as we have seen, based his theory upon the marginal productivity of labor, and he recognized the relation of the supply of labor to the return which it secured. As the supply of labor diminishes, other conditions remaining the same, the product per man increases, but as we have seen, how much of this can be attributed to man and how much to the passive instrument, capital, is not the simple thing to discover which Clark considered it. That he did not even discover a tendency in the field of wages may be concluded from our previous study. Clark's work has created more discussion than has Gunton's, because of the boldness of its creations and its
originality. It is thoroughly scholarly and is inspiring to study. Gunton's work should occupy a higher position than on the whole it does. Why it does not is perhaps due to the lack of some of the virtues which Clark's work preeminently possesses, and to the fact that the effect of the cost of living and the standard of living upon the wage-earner had been discussed very largely before his work appeared.

Thus, though both writers have failed to give a satisfactory theory of wages, they have stimulated thought upon this subject greatly. When a satisfactory theory of wages is evolved, it perhaps will be seen that Gunton's work has helped much, and the debt which the author of such a theory will owe to Clark will be immeasurable.

Finis