# THE FUNDAMENTAL ERROR OF "KAPITAL UND KAPITALZINS."

THE very learned and interesting treatise of Professor Böhm-Bawerk has called forth a great deal of able adverse criticism, sufficient, as it appears to me, to discredit the results he attains. The book has, however, attracted so much notice, and such favorable comment in other quarters, as to make it evident that more remains to be said before the rebuttal of his theory will be generally accepted as conclusive. Among the adverse comments the book has called forth, so far, at least, as they have fallen under my observation, there has been but little attempt to trace the assumed errors to the misconception which must underlie them if they are errors. If it can be unequivocally demonstrated, as I think it can be, that Professor Böhm-Bawerk has misconceived the nature of the problem he has set himself, that he is really unaware of what interest actually is, a point of view will be gained from which the dispute between him and his critics can be authoritatively determined, and from which, perhaps, some light may incidentally be thrown upon the problem of interest itself.

This misconception appears very early in his work. It is to be found in what he has to say about the industrial function of the undertaker and the nature of his reward. Of what is there said it is only necessary at present to quote the concluding paragraphs:—

"The question whether the so-called undertaker's profit is a profit on capital or not I purposely leave open. *Happily, I can do so without prejudice to our investigation;* for, at the worst, it is just those phenomena which we all recognize as interest that constitute the great majority and contain the characteristic substance of the general



interest problem. Thus we can investigate with certainty into the nature and origin of the phenomena of interest *without requiring to decide beforehand on the exact boundary line between the two profits.*" * (p. 10.†)

Now, it seems to me that the industrial function of the undertaker, the consideration of which is thus unceremoniously brushed aside, must first be understood before the problem of interest can be attacked at all. Everybody recognizes that undertakers are the chief borrowers of wealth, and that their demand for money is the ruling circumstance in the loan market. It would seem, therefore, that the nature of the demand they exert would have a good deal to do with what is paid for the use of capital. But it is not perhaps so well recognized that undertakers are really the only borrowers of wealth. Spendthrifts, indeed, borrow to support expenses in excess of their incomes. But such loans are made by them to avoid the depletion of capital funds of their own, and may be looked upon, therefore, as being borrowed for productive purposes. What the spendthrift really wastes is his own capital, or the capital he is supposed to have, and not the capital of the one who lends to him.

Great divergence of view exists, indeed, as to what the industrial functions of the undertaker are. But, unless it can be shown that the employment of capital in production is not among them, it would surely seem the natural course to pursue, in attacking the problem of interest, to find out why the undertaker is willing to pay interest on the capital intrusted to him, and why, also, he cannot obtain capital without paying interest. Now, the first of these questions cannot be answered at all, and the second only partially, unless we study industrial phenomena from the undertaker's point of view. And we cannot attain this point of view until we have fully analyzed the nature

* The Italics are mine.

† Mr. Smart's translation, from which all my other quotations are taken.

of the income which serves as the inducement to his industrial activity. But this essential knowledge is just what Professor Böhm-Bawerk refuses to avail himself of, for which, to be sure, there is this excuse to be pleaded: that, of all the four forms of income, profit is the least understood. And it must be frankly acknowledged in addition that the idea of profit held by Professor Böhm-Bawerk is also that of a great many other economists.

Although the problem of profit is ostensibly eliminated from *Kapital und Kapitalzins*, enough is said to make it evident that profit is there. looked upon as simply the wages of management,* and the undertaker as no more than the manager of the industry. The fact that he enjoys the sole control of the capital engaged is regarded as a mere incident of the personal efforts he expends in conducting the business. This view of the undertaker necessitates classing him among laborers; and it is natural for one holding it to assume that the undertaker's relation to the problem of interest does not differ radically from that of other individuals of the same general class.

But, while this attitude towards the undertaker probably explains the omission to resolve profit, as a necessary preliminary to the resolution of the interest problem, it does not really excuse it; for the fact remains that, be he merely a higher kind of laborer or be he more than that, it is the undertaker alone who pays interest and uses capital. And, this being so, how can interest and capital be understood, when he and his motives are ignored?

Professor Böhm-Bawerk is perfectly correct in his assumption that the wages of management, although earned by intellectual rather than physical exertion, are yet wages. It is also very rarely the case that the undertaker fails to earn such wages by exercising some personal control over his enterprise. But, on the other hand, we perhaps as seldom come across an undertaker who does not delegate a part of his duties of management to agents paid by a salary. And if the peculiar form of income, usually spoken of as profit, is really only wages of management, it is difficult to see why we may not properly speak of the salaries paid such agents as profit. Yet no one regards them in that light.

* Many who hold similar views speak of insurance also as a constituent of profit; but Professor Böhm-Bawerk correctly omits it on the ground that insurance is an element of cost, and not of gain.



The undertaker is often a landlord, and nearly always a capitalist; and a part of the income he enjoys, as a concrete individual, is usually due to rent and interest. And, if the rest of his income is composed of the wages of management, there is no problem of profit at all. According to this view of profit, it is a composite income; and the solving of its problem, if problem it can be called, consists simply in resolving it into its component parts,—of rent, interest, and wages.

But, if science is to justify the popular conception of profit as fundamentally distinct from other kinds of income, it must do so by pointing to something the undertaker does for pay which is rewarded by neither wages nor interest, nor rent,—something which Professor Böhm-Bawerk has entirely overlooked. Now, just such a peculiar industrial function of the undertaker is found in his being the person who relieves others of risk. He it is who bargains with the laborer for the use of his personal efforts, with the landlord for the use of his land, and with the capitalist for the use of his wealth. To all these classes of economic persons he makes over, or engages to make over, a definite sum of value or power to purchase, and takes the chance of recouping himself out of the proceeds of the product when sold. In doing these things, he evidently renders to each class a service similar to that rendered by an assurance company when it insures us against death, accident, or loss of property. Why should the undertaker do this? What is his inducement? According to the view of his income held by Professor

Böhm-Bawerk, these risks are assumed for nothing. Sometimes he will sell his goods for more and sometimes for less; but, on the average, the undertaker will get back, in our author's opinion, just what he has paid to the laborer, the landlord, and the capitalist, plus his own wages of management. In other words, all he secures for himself is the job of "bossing" the affair. Now, it is always pleasant to feel one's self master; but this salve to vanity would hardly serve as a sufficient inducement to practical men of business. Neither is it true that by working for others they could not obtain wages, or a salary, very nearly, or fully, as large as what their personal efforts are worth in the conduct of their own business. Indeed, it often happens that they think so little of their own personal efficiency as managers, that they hire other men to conduct their business, or part of it, for them. But, even if it be granted that the undertaker can give himself a little better job than he could obtain elsewhere, will any such small advantage afford a sufficient inducement for undertaking the risks of business? The supposition is manifestly absurd. But some such inducement must exist, as the element of risk is inseparable from nearly all industrial activity. Except in the rendering of some personal services, in which production and consumption are simultaneous, and in which the producer and the consumer deal directly with each other, and in which, therefore, no element of profit appears, there cannot be any creation of value from which the element of risk is wholly absent. And in the end, and on the average, the final consumers of the product must pay in enhanced price the remuneration for the risk the producer takes upon himself. Even the special instance of an industrial undertaking, which seems, and is, the most simple (and which on that account economists have usually treated as a homogeneous act), is really composite. I refer, to adopt Professor Böhm-Bawerk's own illustration, to the fisherman catching three fish a day. If he is catching the fish for his own pleasure or his own use, the doing so is indeed not a composite act; but neither is it an economic one, for there is no element of value present. But, if he is intending to sell the fish, he takes upon himself not only the risk of catching sometimes less and sometimes more than three fish in a day, but the risk of what they will sell for when caught. The fisherman working for himself is not simply a laborer, but an undertaker also. The element of risk affects even in this case the price of the product and the remuneration of the producer. Thus, if our fisherman catching on the average three fish a day, and selling them on the average at fifty cents apiece, was offered steady employment at one dollar and a quarter a day, he would probably accept if the proffered occupation was as agreeable to him as fishing.



There is, then, in all industrial undertakings in which capital is engaged, and in some also in which capital is not engaged, an element of risk which the final consumer has to pay for. And the reason is this: that everybody except the gambler — everybody, that is, engaged in industry — prefers a certainty to an uncertainty. To be relieved of a risk, we are all willing to pay more than the risk, calculated on the doctrine of chances, is worth. This is well illustrated by fire insurance. You have a piece of property and are aware that the chance of its being destroyed by fire within a year is not over one in a hundred; but your whole fortune is in the investment, and you could not sleep comfortably with the possibility of losing your all weighing on your mind. You would pay two, three, or perhaps even four per cent. yearly to be relieved of so great an anxiety. You go to an insurance company, who offer to insure you for two per cent. And, if you should ask why they charge you double what the risk is worth, they would be apt to reply, "One per cent. is to cover the risk, half of one per cent. is for our expenses [including wages of management, which Professor Böhm-Bawerk considers profits], and the other half per cent. is for our profit." Now, this last half per cent. is pure profit, — profit, that is, in the sense in which the term should be exclusively employed in economics; namely, to denote the peculiar form of income which differs radically from wages, interest, or rent. Profit, the special reward of the undertaker, is, then, the income that arises from the chance of gain being greater than the chance of loss in risks assumed.

Now, why is it that, while the insured would pay three or four per cent. rather than run the risk himself, the insurer will relieve him of the risk for one and a half per cent., plus expenses? Is it because insurers are less nervous about risk than the insured? Not at all; for it will be found that these same insurers, if they have any buildings of their own, will insure them in other companies, and, like their customers, would pay a premium of three or four per cent. if it were necessary. The reason is found in the well-understood mathematical principle that a number of separate risks assumed by the same person tend to neutralize each other. On this account some very rich people adopt the policy of not insuring at all, and others not quite rich enough to take all the chances insure for only part value. It is for this reason that insurance companies are so careful to keep their risks well distributed. And the principle affords an explanation also of the preference insurers always give to wealthy companies doing an extensive business.

Now, the undertaker does for business in general just what insurance companies do for a special risk, only the process is reversed. The insurance companies accept a definite sum for the assumption of risk, while the undertaker pays a definite sum for a product the value of which is uncertain. But the principle is the same, as the insurer charges more than the risk is worth, while the undertaker pays less than the product will probably sell for. Both relieve others of risks for a consideration which others are glad to give. Both, therefore, render a service worth more to its recipients than the price they have to pay, and yet worth less to themselves than they receive for it. It is, to paraphrase Professor Böhm-Bawerk, a mutually advantageous exchange of "certain goods" for "uncertain goods."



But "certain goods" are always "present goods," and "uncertain goods" are always "future goods." There is an element of time in the one case as in the other. And if this element of time resolves the problem of interest, which is the objective point of Professor Böhm-Bawerk's treatise, it resolves the problem of the undertaker's profit also. But it surely seems absurd to suppose that two such utterly dissimilar things as interest and profit are both fully explained by a single circumstance; and yet, as we shall see later, the "surplus value" which Professor Böhm-Bawerk defines and treats as interest is a composite sum of interest proper and profit proper, and by no means homogeneous, as he assumes it to be. It is true enough, as Professor Böhm-Bawerk claims, that the purchasing power of present goods equals the present purchasing power of future goods. This entitles us, indeed, to claim for the owner and for the risker of capital that they are entitled to divide between themselves the difference between the present and the future value of future goods; but I wholly fail to see how the "principle of discount" solves either the problem of interest or the problem of profit. The question immediately arises, Why should the lapse of time afford in the one case interest to the capitalist and in the other profit to the undertaker? When this question is asked about interest, are we not obliged to seek the answer in some theory of capital similar, at least, to the productive, use, and abstinence theories which Professor Böhm-Bawerk condemns; and are we not bound to found our theory of profit upon the phenomena attendant upon risk?

The best test perhaps of the adequacy of time to explain either interest or profit is to be found in the explanation it affords us of the variations in their rates. Other things remaining unchanged, the rates both of interest and profit do vary with the necessary lapse of time between the production of anything and its sale; but there are variations in both these rates which are far more important, in a scientific sense, than those due alone to time. Does the element of time explain why a bank in the Western and Southern States will be able to lend at eight or ten per cent., while the Bank of England is lending, on no better security, at two or three per cent.? Or does it explain why the average of net profit is higher in a risky than in a safe business? Surely, the problems of interest and profit are not solved until such variations as these are explicable.

If the English reader will examine carefully the distinction drawn between "gross interest" and "net interest" in *Kapital und Kapitalzins*, he will notice that the use of the term "gross interest" is one he is wholly unaccustomed to. No educated American or Englishman would speak of the rent, or hire, of a house, or of the gross gains of a business as interest. But allowing the term, and merely noting, as we pass along, that it could hardly have been selected by any one holding precise views of the nature of interest, we find Professor Böhm-Bawerk defining net interest in two ways: first, as "what can be obtained by a perfectly safe loan of capital"; and, secondly, as "what is usually paid for the loan of capital to be employed by undertakers." Throughout his book he treats these two conceptions of interest as identical. That they really differ very radically is perhaps made sufficiently evident by placing his two definitions in juxtaposition; but the distinction is so important to any analysis of Professor



Böhm-Bawerk's theories that it may be well to enforce it by an illustration. A wealthy man who has funds to spare finds that by buying government bonds he can get 2½ per cent. on his investment. So doing, he loans his money on the best security there is. But he can also lend his money by buying good business paper, and he proceeds to calculate which he had better do. He says to himself: "If I buy paper, I shall have to give a certain amount of attention to credits; and part of the time, while looking around for paper that suits me, my funds will lie idle in the bank. About ½ per cent. will make up for this probable loss of interest and pay me for my personal efforts. Besides this, there is some risk in trusting individuals; and my money may lie idle longer than I anticipate. These risks, as nearly as I can calculate, are not over 1 per cent. per annum for the class of paper I propose to buy. This makes 4 per cent. which I must get to pay me for the use of my capital, and for my personal efforts, and as insurance." Now, will this man buy paper at 4 per cent.? He surely will not do so if he is a good business man. He will demand some compensation, besides the mere insurance, for the risk he is to run.

It is customary for undertakers to charge up to interest account all that they actually pay for the use of money. Consequently, the word "interest" is used in popular parlance to cover all sums so paid over. But, looked at from the scientific point of view, this so-called contract interest is seen to be made up of three distinct parts. Regarded as compensation to the lender, it includes, besides pure interest, a reward for the risking of his capital and a reward for personal effort in investigating credits and placing loans. The final analysis of what is usually called interest, and what Professor Böhm-Bawerk treats as pure interest, shows it to be really a composite income, made up of pure interest, pure profit, and wages of management. But, even if there is an economic problem of interest in the vulgar meaning of the term "interest," it is manifest that it is not the economic problem of pure interest, as Professor Böhm-Bawerk assumes it to be. It is not a simple problem, the solution of which can be based upon a single phenomenon, the lapse of time, but a compound problem, the solution of which must be found in three radically distinct classes of phenomena,— those, namely, which determine the safe employment of capital, those which govern the risks attendant upon the security offered, and those which influence certain kinds of personal exertions.

There is, perhaps, no principle governing economic investigations more imperative than the rule that the classifications and distinctions of the science, to be fruitful, must be founded on function. The moment we begin to select concrete individuals or concrete phenomena, and class them into groups, we are lost. Not an individual can be found who does not engage in more than one way in production. Even the propertyless laborer has one element of risk in his environment,— he can never be sure of steady employment. The possessor of wealth cannot wholly avoid risking it, and must give some personal attention to his affairs. The owner of land takes the chance of its value changing. And the undertaker never confines himself to running risks the management of which is wholly given over to others, and it is but very rarely the case that all the capital engaged in his enterprise is borrowed. It would be perhaps impossible to find anywhere a single individual whose income is absolutely homogeneous. If concrete individuals must be classed for the purposes of science, each one must form a class by himself if our classes are to be clearly demarcated. It is here that the ultra Historical School meet with an insuperable difficulty in the application of their method. But, although he is himself an opponent of the ultra Historical Method, does not Professor Böhm-Bawerk really adopt it



in its most unwieldy form when he classes profits and interest together as constituting the income from capital, merely because one individual is so frequently the recipient of both forms of remuneration?

Professor Böhm-Bawerk's conception of capital can also, I think, be shown to be erroneous, especially in his definition of National Capital. An error here has, of course, considerable influence on the successful determination of the problem of interest; but, as the correction of the error is not absolutely essential to the line of my argument, I will merely enter a *caveat.*

Having examined the premises upon which Professor Böhm-Bawerk founds both his own theory of interest and the criticisms which he passes upon the theories of previous investigators, it remains to point out how the misconceptions to which I have ventured to call attention affect these criticisms and his own conclusions. To properly appreciate his work in these particulars, some further consideration is needed of what is involved in the industrial function of the undertaker.

The undertaker (or, as he would be better named, the enterpriser, as the word "enterprise" connotes risk, which the word "undertake" does not) is primarily, as we have seen, the person who relieves others of risk for a consideration always in excess of the chance of loss supposed to be incurred. We have now to notice what attendant circumstances are necessarily connected with the exercise of this fundamental, or distinguishing, function of the undertaker; and the result will be, I trust, to considerably enhance his importance in our eyes.

In the first place, he owns the earth and nearly everything on it. That is, he has possession of all concrete objects possessed of the power to purchase, including land as well as all "capital goods," and excluding only such wealth as has come into the hands of the final consumer. And a question might be raised as to whether goods no longer held for sale have not lost their power to purchase, and so ceased to be wealth in the strict meaning of the term.

Not only must the possession of the means of production, so far as they are capable of being owned at all, be with the undertaker, but the product of industry remains his, and his only, from its inception to its final sale. It never belonged to any one else. The laborer,—Marx to the contrary, notwithstanding,—the landlord, or the capitalist, never had any sort of claim to it. And the reason is that the risk of what the product will bring in exchange is inseparable from its control. When the product is passed from hand to hand, the function of the undertaker passes along with it, and immediately devolves upon the new possessor, unless he abrogates his industrial privilege by consuming, or determining to consume, the product that he has acquired. Industrial enterprise, as the function of the undertaker or enterpriser is best named, is the twin sister of labor, both being born on the occasion when things were first produced for the purpose of being exchanged.

The undertaker as such has, to be sure, nothing to do with the creation of the other three industrial forces. He neither appropriates land nor saves capital, nor begets laborers. But land as soon as appropriated, capital as soon as accumulated, and human beings as soon as they are ready to labor productively, pass under his control. The only person who escapes him is the consumer, who is indeed his master; for he has to cater to his tastes. Evidently, the undertaker is a person of enough industrial importance for an economist to be on speaking terms with him.

If now we put ourselves in the shoes of the undertaker, or enterpriser, we shall find a certain amount of truth in each of the three classes of theories about interest which Professor Böhm-Bawerk condemns and rejects, and that, taken together, they do afford a full explanation of the phenomena of interest.



In the first place, as to the productive explanations of interest, there is a sense in which capital is productive and there is a sense in which it is not. But in this latter sense the enterpriser is alone entitled to be called a producer. To illustrate: a farmer might say with perfect propriety that he raised a thousand bushels of wheat last year; while the truth might be that he was a gentleman farmer, who had not been within a hundred miles of his farm during the time the wheat was grown. Speaking of this same wheat, the farm hands whom our gentleman farmer employed might say, "We raised a thousand bushels of wheat last year"; but it is evident they would speak in a very different sense. In what does this difference in the meaning of the term consist? Economically speaking, no doubt, the hired laborer is exactly on a par with such landlords and capitalists as the man, who employs the productive powers of all three, has occasion to bargain with. If we are regarding production from a social point of view,—that is, as the community as a whole has to do with it,—there is a sense in which land, labor, capital, and enterprise can be considered as producing jointly. But, when we adopt the individualistic or class point of view, undertakers are alone entitled to be regarded as producers. And this latter alone is the scientific point of view, because the motives to productive activity are individualistic rather than social. Landlords, capitalists, and laborers do nothing but furnish the means by which the enterprisers produce. Capital, therefore, is productive in exactly the same sense that land and labor are; and Professor Böhm-Bawerk would seem to have no ground for contrasting labor with capital in the way he does. Indeed, any one who will carefully go over his criticism of the productive theories of interest cannot, I think, fail to notice that this supposed difference is simply assumed without any attempt to prove it, and that what proof is offered against the productivity of capital is really just as applicable to land and labor, and goes simply to show that capital does not produce in the sense in which the undertaker does.

In calling attention to what he considers the special peculiarity of capital, Böhm-Bawerk says: "Now, experience shows that that quota of the total product which falls to the share of capital — that is, the gross return to capital — is, as a rule, of more value than the capital expended in its attainment. Hence an excess of value,— a 'surplus value,' — which remains in the hands of the owner of the capital and constitutes his natural interest."

"The theorist, then, who professes to explain interest must explain the emergence of Surplus Value" (p. 116).

Now, what is the proper use of this catching but question-begging term, surplus value? Marx uses it to cover all forms of income except wages. Here it is employed to cover all forms of income except wages and rent. To what extent are these uses of the term correct? That, as Professor Böhm-Bawerk himself states, will depend upon what cost of production is considered to be. Looking at economic activity from the purely social point of view, we might say that society has at its disposal a given amount of labor force and a given amount of tillable soil, capable of producing together a given amount of product without any help from organization or capital. Then surplus value would include all that additional production which was realized by means of capital and organization. According to this way of calculating surplus value, it would include a very large share of what is paid in wages. But political economy as a science has here, at least, no business with the term in any such sense. The motives which lead men to produce things for exchange are individualistic. Just in proportion as society supplants the individual in production does industrial activity escape from the influence of economic laws. And just as surely do economists find themselves on the wrong side of the fence when they attempt to widen the field of the science by ignoring the individualistic point of view.



The term "cost of production" has, therefore, but one legitimate scientific meaning. It is the cost to the producer in the sense in which the undertaker is alone entitled to be called a producer. Surplus value, therefore, cannot be used without stultification to include anything which is not pure profit; for, if interest is such a surplus to the capitalist, rent is an exactly similar surplus to the landlord, and wages an exactly similar surplus to laborers. The capital, the land, and the personal energy are each of them returned, at the end of a stipulated period, to the possession and control of their original owners; and in each case they bring with them a surplus which is the price of their use during the stipulated period. The "capital expended" by the undertaker is made up of what he pays for raw materials and for rent, for interest and for wages, including his own as manager. The problem, as stated in the paragraph quoted, is not that of interest, but that of profit. The capital expended in any undertaking is not, as it is there stated, expended by the capitalist, but by the undertaker; and included in such expenditure is always a charge for interest, and the surplus value, when there is any, does not remain in the hands of the owner of the capital, but in those of the man who uses the capital. I have already attempted to show that the distinction between natural and contract interest is a faulty one, but Professor Böhm-Bawerk is perfectly correct in his insistence upon the necessity of explaining the latter by the former. The mistake he makes is in refusing to attempt the very explanation he regards as indispensable. As we have seen, what he calls "natural interest" (a very bad name for it, by the way) is really only part interest, one other part, usually the greater one, being the undertaker's remuneration for his assumption of risk. And it is only that part of natural interest which is not interest at all which is really a surplus value. But the moment we supply this hiatus in the argument it becomes evident that the undertaker pays interest for exactly the same reason that he pays rent and wages, because, that is, *of the ability of capital to serve as a means of production.*

In this connection it may be well to notice another confusion of thought that interferes with Professor Böhm-Bawerk's exposition of interest. He lays great stress on distinguishing between the production of utilities and the production of value, even to the point of affirming that value is created not by the producer, but by the valuer,—the consumer. Perhaps the best way of indicating the relation here between utility and value would be to say that, while special values are relative, aggregate value is positive. Let us suppose a community of three classes of producers,—one raising wheat, one manufacturing cloth, and one rendering personal services. Now, so long as the same amounts of wheat and of cloth are produced, and the same aggregates of services are rendered, it is evident that the total power to purchase is the same, no matter how the power of either product to purchase the others may vary. But let us suppose that, through some invention, the producers of cloth are enabled to double their product. Here is evidently an additional creation of utility, and, if we look further, we also find that the power of wheat and services to purchase cloth has been doubled. The increased production of cloth involved a fresh creation of value just as truly as it involved a fresh creation of utility. And, furthermore, the new value has gone, just where the new utility went, to the producers of wheat and services, who now get twice as much cloth as before, while the makers of the cloth get no more wheat and services.

But it by no means always happens that the creator of additional product is able to retain for himself none of the power to purchase which came into being with it. It is only as the selling price of goods is cheapened that this



benefit is transferred to others. The important thing to notice is that the additional power to purchase retained by the producers is a part, or the whole, as the case may be, of the additional power to purchase involved in the increase of their product. In other words, the capitalist receives, in his interest, a part of the additional value due to the employment of the capital he has contributed. Why, then, may we not attribute interest to the productivity of the capital? That is not, to be sure, to fully explain interest. But is it not one of the elements of any consistent explanation, and perfectly valid and scientific, so far as it goes? Why, indeed, will the undertaker pay interest to the capitalist? Is it because he can produce a greater amount of useful things by the aid of the borrowed capital? Not at all; for it makes no difference to the undertaker how much utility his products possess. *All he cares for is what they will sell for,*—the amount, that is, of value, or power to purchase, they will be endued with. What is it for man to create? He cannot increase matter: all he can do is to change its form. But change of form changes attributes. To create is, therefore, to endow things with new attributes. But not only is value an attribute of the things put into new forms by undertakers, but *it is the only attribute* the undertaker is solicitous about. He may not, indeed, be sure how much he can retain of the power to purchase he may be creating; but can we, for that reason, deny that he creates it? Beauty is a relation of the concrete to the mind of its percipient, just as value is to the mind of the valuer; but we rightly regard the artist rather than the percipient as the creator of beauty. Why, then, should we look upon the valuer, rather than the producer, as the creator of value?

How Professor Böhm-Bawerk confuses interest and profit is curiously shown in his criticism of J.-B. Say, the first promulgator of a productive theory of interest. Say had not, indeed, a very precise conception of the industrial function of the undertaker, and apparently no conception at all of the nature of his income. But his conception of the undertaker's relation to the problem of interest, though inadequate, is far in advance of that of his critic. Say considers, to quote from Professor Böhm-Bawerk himself, that there are three productive factors, or funds,—"nature, capital, and human labor" (p. 121),—and that "the function of distributing is performed by the undertaker, who buys the services necessary to the production, and pays for them according to the state of the market. In this way the productive services receive a value." (p. 122.)

In other words, capital is productive for the same reason that land and labor are; namely, that the undertaker pays for its use as a factor in, or means of, production. But this is to say that interest is not a surplus value. How does Professor Böhm-Bawerk criticise this exposition of the matter? He immediately assumes that Say regarded interest as a surplus value, the very thing that Say denied. He says (p. 123), "When capital has co-operated in the making of a product, why does that product normally possess so much value that after the other co-operating productive services, labor and use of land, are paid for at the market price [what Say claims is that the use of capital also is paid for at its market price], there remains over enough value to pay for the services of capital,—enough, indeed, to pay these services in *direct proportion to the amount and the duration of the employment of capital?*"* Now, where wages and rent are subtracted, is this *definite and predetermined amount* due to capital, for its use in production, all that remains over? Does not the remainder contain, besides this, an indefinite and undetermined amount due to the undertaker for the risk he has assumed? And if this

*The Italics are mine.



question be answered in the negative, which it surely cannot be, how can a sum of interest predetermined, "in direct proportion to the amount and the duration of the employment of capital," be looked upon as a surplus value? The very meaning of this latter term is a sum of value which is the residuum left after all predetermined sums are subtracted.* To put it concisely, Say affirms that interest is not a residuum, or surplus value. Very well, replies Professor Böhm-Bawerk; but the point is, supposing you to be correct, how are we to explain interest as being a residuum, or surplus value?

Succinctly stated, Professor Böhm-Bawerk's criticism of the "use theories of interest" consists in the denial that capital has any use beyond the utilities of the "capital goods" of which it is composed, and that, as these utilities are all included in the value of the product before it is enhanced by the capitalist's share, it cannot be for the utilities contained in the capital goods that interest is paid. But who pays this interest? Is it not the undertaker? By making this payment does he not obtain the opportunity of risking the capital he has borrowed? Is not this opportunity to make a profit, which is afforded by the control of capital, of use or utility to the undertaker? and is it not a use or utility which is not to be found among the material uses of the capital goods themselves? The sole material uses of the "capital good" bread are to appease hunger and sustain life; but does the hotel-keeper buy bread for any such purpose, or because he can supply it to his guests at a profit?

It might, indeed, be thoughtlessly objected that land and labor are as essential as capital to the securing of a profit by the undertaker; and, if he pays for the use of capital, why does he not pay something in excess of rent and interest to his landlord and to his laborers? The

* This is elsewhere acknowledged by Professor Böhm-Bawerk, when he says he does not regard interest as an element of cost.

reply is, of course, that there are no pre-existent utilities which the undertaker buys when he pays for land and labor, and which reappear in the value of the product; and the same thing is true of fixed capital. The cost of the product to the undertaker is made up of four ingredients; namely, the value of the pre-existing utilities (*i.e.*, the material uses of the capital goods themselves) contained in the circulating capital employed, and the value of the utilities freshly created by the use of the whole capital, of the land, and of the labor employed. In other words, the cost to the maker of anything is what he pays for pre-existent utilities and for the use of land, the use of labor, and the use of capital. Capital, then, stands in this respect exactly on a par with the other two "means of production."

It may indeed be claimed by Professor Böhm-Bawerk that the opportunity of securing a profit afforded by the control of capital is among the "material services," or *Nutzleistungen*, or "use renderings," on account of which "capital goods" are valuable. But, even if this be granted, this particular *Nutzleistung* differs from any other in the very circumstance which will decide the case against him.

Now, I do not think that the control over capital goods necessary for the realization of profit is meant by Professor Böhm-Bawerk to be included in his *Nutzleistungen;* but, if it is to be so included, then there is a material use of capital goods which the purchaser, who pays cash for them, does not want, and does not obtain, and does not pay for, and which the undertaker, when he borrows, does want, and does obtain, and does pay for. And it is to be further remarked that it is a use which the capitalist does not part with to a cash customer. By a mere exchange of one lot of capital goods for another lot of equal value the capitalist retains his privilege of using his capital as an undertaker. It is only when he sells "present goods" for "future goods" that this use of his wealth escapes him, and it is then only he charges interest.



The productive theory and the use theory do not, indeed, either simply or together, fully solve the problem of interest. That problem has two parts. Before it is mastered two questions have to be answered, why interest is paid and why interest is exacted. We have to consider the special instance of exchange from the point of view of each of the exchangers. These two theories do, it seems to me furnish a satisfactory answer to the first question; but they afford no direct reply to the second. The powers of nature are useful to the undertaker, but he does not always have to pay for them. The problem of wages is not settled until we know why laborers are able to exact wages for their efforts, nor the problem of rent until we know why landlords are successful in demanding payment for the use of their land. Likewise an important part of the problem of interest is the finding out how it comes to pass that capitalists are able to obtain interest on their capital.

Now, I contend, in opposition, I fear, to many economists, that the cost of labor, in the economic sense of the term, has nothing to do with labor's being an effort. This is manifestly true of rent. Letting his land involves no pain or sacrifice to the landlord further than the sacrifice of what he could have obtained by farming his land himself. Laboring for another does often involve some such pain or sacrifice of ease. But suppose labor was always enjoyable, would wages cease? By no means. Their aggregate would be fully as great as at present, though their distribution might be different. Wages are exacted because laborers can work for themselves if there is no sufficient inducement to work for others. The cost of labor to the laborer is not his toil, but what his toil would bring him if he worked for himself. Economic cost can include nothing that is not an economic quantity. The cost of anything is the purchasing power sacrificed to obtain it, and not the sacrifice of personal comfort involved. The amount of the capitalist's self-denial cannot, therefore, be spoken of as determining the cost of the use of capital. If the hardship of saving, or of refraining from consuming wealth already saved, was ten times as great as it is, the rate of interest would be no higher, provided as much capital, and no greater need of capital, existed. What the hardship of abstinence affects is the amount of wealth that will be accumulated. That wealth is capable of being employed as capital is undoubtedly an additional motive for abstaining from its immediate consumption, but the reward of this abstinence is the possession of the wealth itself. It does not explain interest, because no more interest can be obtained for wealth accumulated with this end in view than when the motive is simply to provide against a rainy day. The capitalist is paid in interest for abstaining from or foregoing the productive employment of his wealth. He makes over to the undertaker a privilege, or opportunity, for which he exacts an equivalent in interest. In other words, the abstinence theory of interest differs from the use and productive theories only in statement. It is the same theory viewed from the point of view of the capitalist instead of from the point of view of the undertaker. But this change in the point of view enables us to answer the second question involved in the problem of interest. It tells us why the capitalist is enabled to exact interest, while the other statements tell us why the undertaker is willing to submit to the exactions of the capitalist.

It thus appears that the views of economists concerning interest have not really differed to anything like the extent which Professor Böhm-Bawerk tries to make us believe. Almost any one of the criticised writers, however carelessly and inadequately he may have expressed himself, had a far sounder and more accurate conception than his critic of the problem of interest, because, though some of them have spoken of interest as profit, and others



as a residuum, or surplus value, not one of them has really considered it as such, as is evident by their, one and all, including interest as among the necessary costs of production. Many of them, in their attempts to explain interest, have addressed themselves to both of the questions involved. They have availed themselves at one time of the productive, or use, theories, and at another of the abstinence theory; but they were by no means inconsistent in this. So far from being irreconcilable, the three statements of the one theory of interest are, as we have seen, really complementary. No doubt these economists are guilty of a certain vagueness and inadequacy. No one of them has said all that could have been said, or has been altogether happy in his choice of terms. But this is all. Their sins are mainly those of omission; and, so far as they are those of commission, the faults have been those of careless expression rather than errors of conception.

Their critic, on the other hand, wholly misapprehends the nature of the problem he has set himself. As we have seen, he goes astray in his very definition of interest, making it include an element which cannot possibly be interest, because it is part of the undertaker's, and not of the capitalist's, remuneration. Then, because this wrongly included element of profit is a surplus value, and not a constituent of cost of production, he naïvely assumes that interest is also a surplus value, and not an element of cost of production. Armed with this peculiar conception of profit and interest being identical (he uses the terms interchangeably throughout his work), he finds it, of course, an easy matter to refute all previous investigators by showing very clearly that their theories of interest fail to explain profit. Then he makes a very elaborate classification of previous theories, founded upon the supposition that they are mutually contradictory and exclusive, and wholly fails to perceive that they are really complementary to each other, and to such an extent that they can be regarded as only different ways of stating a principle common to them all.

Having thus cleared the ground so as to bring his own forces up to the attack, Professor Böhm-Bawerk offers us the following condensation of his own theory of interest. He says (p. 259): —

"The loan is a *real* exchange of present goods against future goods. For reasons that I shall give in detail in my second volume, present goods *invariably* possess a greater value than future goods of the same number and kind; and, therefore, a definite sum of present goods can, as a rule, *only* be purchased by a larger sum of future goods. Present goods possess an agio in future goods. This agio is interest. It is not a separate equivalent for a separate and durable use of the loaned goods, for that is inconceivable: it is a part equivalent of the loaned sum, kept separate for practical reasons. The replacement of the capital and the interest constitute the full equivalent." (The Italics are mine.)

Now, to get rid of the more technical objections first, Is "the loan a *real* exchange of present goods against future goods"? Would it not be more accurate to call it an exchange of present goods for the promise of future goods? This, or some equivalent of this, is the ordinary method of statement among economists. What is gained by the change, except that the fact is disguised, that what the lender parts with is the productive use of his wealth, which its actual possession could have afforded him? When it is said that the lender has accepted a mere claim in place of his wealth, it is seen clearly that in so doing he has made over the productive use of it to another for a certain length of time.

"Present goods possess an agio in future goods. This agio is interest." Do present goods always possess this agio? If so, how are the phenomena of insurance to be explained? In this we have an example of an exchange



of a given amount of present goods for a smaller amount of future goods. On the average, those who insure pay, let us say, $3 worth of present goods for every $2 worth of future goods; and they do it knowingly, as it is well understood that insurance companies pay out much less in losses than they receive in premiums. The agio is the other way. But does it happen on that account that the insured lose the interest on the premiums? By no means; for the money they have paid is earning interest for them all the time. If it was a part of the contract of insurance that this money should lie idle, they would have to pay more than $3 worth of present goods, or premiums, for every $2 worth of future goods, or reimbursements for losses. They get their interest in the shape of lower rates of insurance.

But when, as is generally the case, the agio is on the right side, is it always interest alone? A capitalist makes two loans, one at 3 per cent. and one at 7 per cent. Let us suppose he considers the chance of losing his principal to be nothing in the first case, and 2 per cent. in the second. Then the agio is 3 per cent. in the first case and 5 per cent. in the second. Are both agios simply interest? If so, what causes them to differ? The element of time is the same in both, and the element of risk has been eliminated. But it may be replied, In your examples you have not eliminated the element of the reward of risk. Exactly; but, then, only a part of what Professor Böhm-Bawerk calls surplus value is explainable by time.

The statement is, of course, a perfectly true one,—that "certain present goods" possess an agio in "equally certain future goods." How does this differ, except in form, from the assertion that borrowers, even when they have perfect security to offer, promise to return a greater sum than is loaned to them? Is this phenomenon made one bit clearer by the new form of statement? And was it not equally well understood that the transaction was a fair and honest one, mutually advantageous to the transactors? When the legitimacy of interest has been attacked, the attack has always been from the social, and not from the individualistic, point of view. No one has ever doubted that, under the *régime* of competition, borrowers found it to their advantage to pay interest rather than to forego the use of the borrowed wealth. And this is all Professor Böhm-Bawerk proves when discussing the exploitation theory of interest. Even at this point, the one for which his translator claims the most credit for him, he has really added nothing to what was previously understood and sufficiently well stated.

What a theory of anything has to explain is either the cause or causes to which the thing to be explained owes its being, or the effects produced by the thing, as varied by the environment in which it acts. Telling us, though in somewhat novel language, what we knew well enough before, that interest is the agio which present goods possess in future goods, is at the best nothing more than a dictionary definition of interest. What we really want to understand in this case is why this agio exists. Why will men pay more than they receive if only they are allowed to defer payment for a while? Stating that they will do so does not explain their action. The reason why they do so is what must constitute the theory of interest. It is, here and there in Professor Böhm-Bawerk's treatise, somewhat darkly hinted that this explanation is to be found in the element of time. But time is an element of the problem, not of its explanation. The very question asked is why something will be paid for the privilege of deferring payment. This is the question, and the only question, a theory of interest has to answer. How does Professor Böhm-Bawerk answer it? He says (the Italics are mine), "*For reasons that I shall give in detail in my second volume.*" When stated, these reasons turn out to be nothing but a combination of the use, the productive, and the abstinence theories.



This is indeed admitted, with charming *naïveté* and unconsciousness, in the translator's preface, where it is said: "Not that any one can get the monopoly of time, and not that time itself has any magic power of producing value [what is this but an admission that time is not the cause of interest?], but that the preference by the capitalist of a future good to a present one *enables the worker to realize his labor in undertakings that save labor and increase wealth.*" [What is this but our old reliable friends, the use and productive theories?] "The reward for working falls to the worker, manual and intellectual; *the reward for waiting*, to the capitalist only." [What is waiting but abstinence?]

At the end of his labors our author is found standing on the very ground he has so very carefully dug away from under the feet of others. And, strange to say, it is just here that he first finds any secure footing for himself.

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