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THE POSITIVE THEORY OF CAPITAL AND
ITS CRITICS.

II.

GENERAL WALKER AGAINST CAPITAL AND INTEREST.

I HAVE not the honor to have gained for my opinions on capital and interest the approval of General Walker. That eminent scholar has expressed his sharp dissent from my views in an article, no less sharp in its criticisms of them, published some years ago in the pages of this scholarly journal.* His authority, great as it is and well merited, gives such weight to attacks made by him that I may not venture to leave my tenets undefended. General Walker concentrated his attacks upon four chief points. I shall endeavor to devote to each of these, taking them up in the order in which he presented them, a few words by way of defence and refutation.

I. General Walker disapproves the spirit in which I have sustained my criticism of the older theories of in-

* See vol. vi., No. 4 (July, 1892), p. 399, *seq.*, "Dr. Böhm-Bawerk's Theory of Interest."

terest. Instead of "seeking to set forth tolerantly and sympathetically what they really meant and tried to say," I have sought only "to catch them up on their deficiencies of statement or blunders of expression." In a word, General Walker reproaches me that I have not criticised my predecessors with sufficient generosity.

A serious charge, indeed! I should feel exceedingly sorry, were I forced to think I had deserved it. Fortunately General Walker has enumerated somewhat specifically the points upon which he bases his charge; and I believe these points are not of such a nature that I have cause to fear the reader's judgment. Baldly stated, General Walker is an assured adherent of the theory of interest which I have termed the "Indirect" or "Reasoned Productivity" theory. Hence, very naturally, he inclines to give to theories of this sort a preference over all other theories,—for example, over the Abstinence theory, the Use theory, or the "Naïve" Productivity theories. He is, however, so thoroughly convinced of the superiority of the "Indirect" Productivity theory that he cannot at all imagine how any man of intelligence or understanding should adhere to any other. Accordingly, when I have assigned various authors to one of the other aforesaid theories, he has held this to be, first, a disparagement of those authors, and, second, a misrepresentation of their real meaning; for only an ungenerous interpretation of some faulty expression has made it possible, he thinks, to ascribe to them that other theory,—really without doubt their meaning, too, is quite consistent with the Productivist theory.

General Walker is explicit concerning the Use theory. He is convinced "that no economist of rank, who had given more than a passing thought to interest, ever held any of the ingenious Use theories stated by Dr. Böhm-Bawerk in any other sense than that the use of capital is productive, as the Productivists employ that term."

And the celebrated and widespread Abstinence theory is likewise but an invention of my critical fancy. It does not exist as a theory in literature. The real theoretical implication of authors who base interest on abstinence is likewise consistent with the Productivity theory. The reference to abstinence was intended to afford merely a moral justification, not a scientific explanation of interest. "They thus reached a social justification of interest, which no one of them probably ever mistook for a scientific ascertainment of the cause of interest."

Must one not exclaim at this, "The Lord defend us from our friends!" What would Senior, the subtle, fine, through and through theoretician who laid bare with such critical acumen the theoretical errors of his predecessors, and perfected his system by placing "abstinence" in the centre of a well developed theory of prices and interest,—what would this master of theory say to the assertion that it had not once entered his head to seek a scientific explanation of interest which should be his own? Or what would Menger, who was first to declare and to lay stress upon the thesis that the means of production derive their value from the product, and do not regulate the value of the product,—what would Menger say to the statement that he, too, had explained the value of products solely by reference to a productive power inherent in the instrument of production, "capital." I beg General Walker's pardon, but I believe that these excellent theorists and many others stand in much greater need of defence against their defenders than of defence against me; and I believe, furthermore, that my critical history of the theory of interest would have been not only very monotonous, but also essentially incorrect, had I undertaken to extract from all the old and new theories nothing but Productivist opinions.

But General Walker expressly selects a special case for an illustration of my reprehensible method of histori-

cal criticism. For this purpose he selects the case of Lord Lauderdale. With considerable animation and at some length he accuses me of having classed Lord Lauderdale with the "Naïve Productivists" solely because Lord Lauderdale had failed to state in so many words a perfectly self-evident proposition, and accuses me further of refusing Lord Lauderdale the honor of association with the "Indirect Productivists," "to whom the critic assigns a higher place, and to whom he accords a far more respectful treatment." I must confess that I read this charge with the greatest surprise; for I thought I remembered with certainty that I had classified Lord Lauderdale not as a Naïve, but as an Indirect Productivist. Therefore, I referred to my own book, and found, as any reader may find on page 143 of the English edition of *Capital and Interest*, that I had classed Lord Lauderdale with the Indirect Productivists, using words which absolutely cannot be misunderstood,—indeed, that I had as I believe in rather a distinguishing manner placed Lord Lauderdale conspicuously at the head of the Indirect Productivists. To me the contrary assumption made by General Walker is explicable only upon the further assumption that this excellent scholar, while doing me the honor of writing about my book, has done me the honor of reading it with a much less flattering degree of thoroughness. I will not embarrass my honored opponent by indulging here in the declamatory queries so often directed against me: "Is this good criticism? Is it good history?" I will make but one other observation and so finally dispose of the matter.

General Walker believes that I blame Lauderdale for not expressly asserting *as a fact* a fact which is perfectly self-evident; namely, that any instrument of production—for example, a machine—turns out more than it costs. That, too, is a misunderstanding. I blame Lauderdale rather because he has failed to make the slightest attempt

at the *explanation* of that fact, and so has failed to come at the real kernel of the problem of interest. That Lord Lauderdale should not even once have made express mention of the very fact which really needed to be explained is to my mind only a secondary matter, although an omission consistent with his exposition — consistent because evidently no such omission could have been made, had Lord Lauderdale attempted any real explanation of interest.

II. General Walker brings, as a further accusation, the charge that I have not placed capital on the same footing with land and labor, that I have recognized only the two latter factors as truly original elements in production, and have in contrast denoted capital as an agent purely derivative and secondary in its nature. He has a double ground for objecting to these propositions.

In the first place he reproves me for bringing up the question at all. For it is irrelevant and foreign to an inquiry after the origin of interest. "I confess I do not see the importance of this. Whether capital, as an element of production, be derivative and secondary, or original and independent, does not affect the inquiry how interest on capital is generated, out of what fund it is paid, from what source it springs." "And for none of the purposes of that partition (between land, labor, and capital) does it matter a pin whether one of these powers was, in its source, different from the others. It is the origin of interest, not the origin of capital, with which we are concerned."

Very excellent! Still, General Walker overlooks two things. First, that my *Positive Theory* is not a mere theory of *Interest*, but a general *Positive Theory of Capital*, and that as such it had to raise and answer the question of the origin of capital, independent of the bearing of that question upon the inquiry into the origin of interest.

He overlooks, furthermore, that it is not I who unduly connect these two perfectly independent problems; that, on the contrary, I have endeavored merely to prevent others from confusing one with the other. Confusion seems to me to characterize the expositions of those Productivists who assert, as an axiom, that capital represents an elementary productive power fully co-ordinate with land and labor, and then base their explanation of interest upon that very productive power which they assume to exist.

General Walker, however, censures me not only for raising the question, but also for answering it as I have done. To be sure, he cannot directly deny that capital, as the "product of man working upon nature," really is only a derivative factor of production; but, if I understand his argument correctly, he charges me with inconsequence. In the question at issue he places horses, mules, and oxen on a level with men. The laboring powers of cattle and horses are derived from nature. But are not the powers of man similarly derived? "What is man's bone and muscle but vegetable and animal matter wrought upon by nature's wonderful alchemy? There is not the faintest shadow of a reason for referring the laboring powers of brutes to nature, and not referring those of man also."

Very excellent again — on the assumption that General Walker and I are writing only a treatise on physics. On page 12 of my *Positive Theory* I have described the purely physical basis of production. There I make an assertion entirely consistent with General Walker's position; for I assert that man is "himself a part of the natural world," and that therefore, "notwithstanding the interference of man, the origin of goods remains purely a natural process." I believe, however, that it is not our intention to write physical treatises exclusively, but also, and indeed mainly, to develop economic theory; and, if this be our purpose, it is not a matter of indifference to us that the mass of

natural muscle and bone called man happens to be the hero and centre of all economic activity, that he happens to be the one who directs this activity as well as the one for whom it is carried on. This fact, I think, gives some justification for separating man from the world of nature of which he is physically a part, and placing him in opposition to the impersonal world of nature as a factor to be considered by himself. Man, surely, is not a chemical or physical force; but he is surely an economic force, and is still more certainly a productive power. We cannot conceive "production" unless we specially postulate man and his activity: it is the addition of man's activity as a powerful directing agency that distinguishes the intentional, purposeful production of goods from the purely natural growth of wild berries, trees, and animals of the forest.

Since I do not believe that these reasons for a separate treatment apply to horses, mules, and oxen, I do not deem it inconsistent to count man for purposes of economics, and in distinction from oxen, a separate element alongside of impersonal nature. When General Walker supports the argument that "man's powers are derivative and secondary in an even higher degree than the powers of the ox and the ass" with the statement that, according to both the Bible and Darwin, the wild animals were in the world before man, I am not perfectly sure that this argument is to be taken seriously. Should General Walker, however, in full earnest defend it, I should like to answer no less earnestly that the argument seems to me to owe its plausibility to its ambiguity,—to the fact, namely, that no clear distinction is made between the *races* man, horse, etc., as such, and the *concrete representatives* of those races which come into consideration in the question of capital. For it is perfectly true that, as a race, the horse or the ass may be older than man. Therefore, it is furthermore true that at some time there existed

horses and asses which did not owe their existence to the directing activity of man. But that is not the question which now concerns us. In dealing with the question of capital, we are concerned with the horses and asses which existed before the creation of man just as little as we are concerned with those which even to-day may be roaming about in some primeval forest, uninfluenced and unseen by man. We are concerned here with these horses and asses which are a part of our capital. And in this connection it is evident, I think, that we are not stating an untruth when we say that the domestic animals which we have bred derive their existence in part from the intervention of man.

III. Our chief interest, however, attaches of course to those passages in which General Walker criticises my interest theory proper, and places over against it his own theory. He introduces this part of his criticism with the remark that he is not sure whether "he does clearly comprehend the author's meaning." Indeed, he gives an exposition of my theory which by no means agrees with my real meaning. I will not discuss the question whether the fault lies in a lack of clearness on my part or in an insufficient attention on his.

General Walker (p. 409) expounds my meaning as follows: "In a word, the reason why a man who loans \$100 is to receive back \$106 at the end of the year *is not* because the capital loaned will produce \$6 worth, or more, during the year, besides keeping itself up, but *solely* because men think as much of \$100 now as of \$106 available a year hence."* This exposition is made still more pointed by some further remarks of an explanatory and controversial nature, in which clearly the opinion is ascribed to me that the sole "main cause" of interest is a certain "tendency in human nature to undervalue the

* The Italics are mine.

future in comparison with the present," and that this tendency in turn has its final origin in a "moral and intellectual weakness."*

That is a misunderstanding which probably is due to the fact that General Walker has confounded two things which sound alike but have altogether different meanings; and I believe that I have avoided the least confusion here,—confusion arising from a failure to distinguish between the (objective) "lower valuation" of future goods and the (defective) *undervaluation* of the future. The main cause of interest I state to be the fact that, as a rule, future goods have less value for us, or, to use the other form of expression, are valued lower than present goods. However, this is not an ultimate fact, but itself requires an explanation. This explanation I give at great length in my theory. I trace the "lower valuation" to three causes which are independent of each other, but happen to operate in the same direction. The first of these is the fact that with many people the present under certain circumstances is more poorly provided for than the future will be. Under such conditions the pressing need of the present moment gives present goods a greater value. I remark that this reason for valuing future goods lower has nothing to do with a moral or intellectual weakness or an *undervaluing* of the future, but that, on the contrary, it presupposes an objective and correct balancing of the relation between demand and supply in the present and in the future. The second cause (discussed in my *Theory* as the third cause) is the greater productiveness of the methods of production upon which we can enter only if we have at our disposal a sufficiently large quantity of present goods. This reason for valuing future goods higher (not *overvaluing* them), by the way, coincides with what General Walker calls the productivity

*General Walker in similar terms ascribes the same opinion to me on p. 412.

of capital. It likewise has no connection whatever with moral or intellectual weakness. Finally, the third cause is a genuine undervaluation of our future wants and goods. This undervaluation rests mainly, but not exclusively,* upon a defect of judgment or will.

General Walker evidently has confounded this third reason for my proposition with the proposition itself. In this way he has come to state as the "sole" and "main cause" of my theory of interest a fact which is only one of several causes, and not by any means the most important at that. For, as I have repeatedly and expressly stated, I deem the greater productiveness of present goods by far the more important factor.† Therefore, it is an error when General Walker attributes to me the opinion that the productiveness of capital has *no* influence upon the origin of interest ("the reason . . . is *not* because the capital loaned will produce \$6 worth or more during the year"). He should rather have attributed to me only the opinion which he much more correctly attributes to me in a passage on page 411; namely, that I do not recognize the "productiveness of capital" as being of itself a "sufficient cause" of interest.

Why not a "sufficient" cause? That is the point upon which the controversy turns. Let us examine it somewhat more closely. The problem, for the explanation of which General Walker has used, as I have myself, a good old example of Lord Lauderdale, is as follows:—

A machine, which costs fifty dollars to make and lasts

* See *The Positive Theory of Capital* (English ed.), pp. 254 and 255.

† *Positive Theory*, foot-note on p. 278. Here I expressly find fault with my fellow-countryman, Sax, for the very view which General Walker holds to be mine. I say, "It is a sensible omission that the difference between the values of present and future goods is traced [by Mr. Sax] exclusively to this factor [the undervaluation of future wants], and that the much more important factor which co-operates with it—that of the greater productiveness—does not get even the scanty consideration it gets from Jevons." This and similar passages in my book evidently have entirely escaped the attention of General Walker.

but one year, in the course of this year yields a gross use of the value of fifty-three dollars, and therefore a net interest of three dollars after paying for itself. The theory of interest is to *explain* this fact. Therefore, it must ask, *Why* does a machine, in the course of its life, regularly bear a value greater than its cost? The Productivists are inclined to answer, "Because the machine produces this value by means of its productive power." Can this answer really exhaustively explain the phenomenon? Let us look again. I leave out of consideration the question discussed under the second sub-heading,—the question, namely, whether there can be ascribed to capital a productive power of its own. I will assume, without further ado, that such power really exists. But wherein can this power show itself? In the first place only in that capital, or the machine which we take as the representative of capital, helps to produce many and very excellent products. But why must these many and excellent products be worth more than the machine which is worn out in producing them? This question by no means answers itself upon a mere appeal to the productive power of capital. On the contrary there are certain difficulties which assuredly cannot be overcome without an express explanation.

For all theories of value agree in this: that there exists between the value of the product and the value of the means of production a certain causal connection, by virtue of which one of these values tends to regulate the other and bring it to its own level. It is well known that opinions differ as to which of these two values is the determining one and which the determined; but that question does not in any way concern the one which interests us here. Many writers, among them the Austrian economists, with whom in this matter, except for a single reservation, General Walker is in complete accord,* are

* Page 413, note.

of the opinion that the value of the product potentially extractable from any given materials determines the value of those materials. One holds a field, a vineyard, a house, and so also a machine, at a value commensurate with that which each produces. And now the question rises, Why does not one consider a machine which yields a product worth \$53 to be itself worth not \$50 merely, but the full \$53? Should one do this, however, there would be nothing left over as pure interest after replacing the worn-out machine.

General Walker answers (p. 413), in a tone of triumphant refutation, that the explanation of this is the simplest thing in the world. The machine cost only \$50, and at that price can be multiplied at will. Very well! (I may say here that General Walker was not the first to raise this objection: I myself had already suggested it.)* But the pure productivist explanation of interest is here steered away from Scylla only to get into Charybdis. For if the machine, and, through the machine, its products, can be multiplied at will, why, then, is not the value of the product measured by the cost of producing it? Why does not competition force the value down from \$53 to \$50,—in which case, again, nothing would be left over as interest? The question is the more pertinent because the originator of the Productivity theory, Lord Lauderdale, has himself quite correctly observed that the earnings of a machine in the long run do not conform to the degree of its productivity, but depend upon the working of competition. Machines often increase the productivity of labor fifty or one hundred per cent.; but, unless they remain the object of a monopoly, the products of such machines are rapidly so cheapened by competition that in the end they yield no higher rate of profit than

*The reader of *Capital and Interest* will find on reference to p. 147, *seq.*, that in my criticism of Lord Lauderdale I have anticipated this objection, and have considered it at some length.

the ordinary rate of four or five per cent. But why does competition stop here? Why under the working of competition is not the "law of cost," that law according to which the value of commodities which can be produced in increasing quantities at pleasure tends in the long run to adjust itself to cost of production,—why is not this law realized so completely that the value of the products of our machine shall drop to \$50, the value of the effective cost of the machine itself?

That is a question which, as I believe, must be answered by him who wishes really and fully to explain the phenomenon of interest,—a question, as I furthermore believe, which does not find its exhaustive answer in a simple reference to the productivity of the machine. The productivity of the machine is surely a necessary condition always to be assumed as the source of the profit which the machine yields. Should the machine be constructed so poorly or unskillfully as to lessen the product of industry instead of increasing it, then, of course, there could be no thought of any profit. This does not, however, explain the rate of profit. It does not explain why a portion of the product is left finally in the hands of the owners of the machine, why that portion is not dissipated by competition and distributed among consumers in the form of cheaper products,—a dissipation so common in economic life. This supplementary explanation, which seems to me necessary, I have endeavored to give in my theory of interest, wherein among other things I refer to the difference in value between present and future goods, also to the fact that the means of production may be regarded as in a sense equivalent to future goods, also to the existence of an unlimited demand for present goods of which the supply is limited, and to various like matters.

General Walker, however, takes a different view. He reproaches me for thinking it necessary to make so lengthy an exposition, and thinks he can dispose of the

whole difficulty much more simply by reference to the postulates of the Productivity theory. Let us see how he does this. First, he raises the question which we have just proposed,—“Why should not the multiplication of machines bring down the value of the gross uses of each machine from \$53 to \$50?”—and now follows the answer: “Because, I answer, *men will not buy these machines beyond the point* where they can get back the \$50 which represents their cost, and also the \$3 which represents the production of that \$50 for one year, which, in other words, is the proper interest on the capital cost of the machine for the term during which it is to be used.”*

If General Walker considers these to be words of real explanation, then I must confess that our respective views concerning the nature and purpose of an explanation differ very considerably. These words seem to me to contain no vestige of an explanation, but to be a palpable begging of the question. It is asked why these productive machines are not multiplied and brought into use beyond the point where they will yield a profit of \$3 as interest. The answer is, “People will not produce them beyond the point at which they will yield over the cost of production \$3 as interest on this cost.” This appears to me to be no answer at all, but only a repetition of the question, with an affirmative instead of an interrogative inflection. But does not, perchance, the further remark that these \$3 “represent the productive power of that \$50 for one year” contain an element of real explanation? Just as little! The very question is why this productive power is not dissipated in the form of cheaper products to the advantage of consumers; and the reasons why this does not take place are not made any clearer through a simple affirmation that the non-dissipated part of the product represents “the productive power for one year.”

It is not impossible—I deem it even probable—that

* The Italics are mine.

General Walker did not regard the words just cited as constituting a real explanation, although he has introduced them with a significant "because." It is possible that he intended to offer his explanation in a subsequent passage.

For he says, in answer to the question why there is not produced and employed so large a quantity of any given form of capital,—of capital, for example, in the form of a machine,—that the product will just replace the capital, and nothing more, that such an expansion of production could take place only for "any particular form of capital," and indeed only "by misadventure and miscalculation." "But, in regard to capital in general, this can never happen, because the supply of capital, owing to the urgency of human wants for immediate subsistence, can only be slowly and painfully increased; while the demand for it for industrial employment, owing to its productiveness, will always be such as to render it necessary to make provision for a payment to the owner, in the nature of interest, for its use."

These words seem to imply that General Walker is now explaining interest chiefly by reference to the relative scarcity of capital. The productivity of capital does not figure here as the immediate and sole cause of interest, but only as an indirect explanation of the fact that the industrial demand for capital at all times exceeds the relatively limited supply. I may say that I fully assent to this conception, since it is included within my own conception of the matter. The readers of my *Positive Theory* will find therein a long chapter intended to set forth clearly why it is that the greater productivity of capitalistic methods of production creates a demand for the means of subsistence or for capital which must always exceed the supply, and how under these conditions of necessity arises interest. But there is this difference in our respective expositions: I endeavor to show why and

in what way the phenomenon of interest follows from these causes, whereas General Walker remains our debtor for the most difficult—yes, the only difficult—part of the explanation.

No economist ever doubted that interest has something to do with a scarcity of capital, and with the greater productivity of the capitalistic methods of production. Therefore, nothing is easier than to designate these two characteristics as, in general, the cause of interest. The whole difficulty of the problem lies beyond. It lies in making clear the intermediate processes through which these general causes work out this concrete result. May I be permitted to make a comparison? The difficulties are analogous to those which present themselves to one who would explain the appearance of a rainbow. Nothing is easier than to set forth the general causes of the rainbow,—that the sun must shine at a certain angle upon a cloud. Evidently, the really difficult and interesting undertaking is that which lays bare the intermediate metamorphoses which bring about the final effect, so that we see in the cloud more than a simple reflection of the sun as we are accustomed to see it in the heavens, or as a common mirror would reflect it to us,—a bow shining resplendent, not in white light, but in all its seven colors. Only he who explains in logical sequence all intermediate deflections and intricacies may pretend to the solution of the optical problem which the rainbow offers; and we know from the history of optics that this very problem has given science a good deal of trouble, and that many different explanations have been given; although the beginning and the end—the sun shining upon the cloud and the rainbow—have been identical in all these explanations, it is easily comprehensible that the intermediate course of thought pursued by the adherents of the so-called emission theory of light should have been quite different from that taken by adherents of the undulatory theory.

And it is exactly so with the explanation of interest. That the more general causes of interest are scarcity of capital, and fruitfulness of capitalistic methods of production, not only General Walker and I agree, but even the socialists and General Walker. The recognition of these general causes, however, does not by any means constitute a complete explanation of interest. They form, as it were, the frame in which the real explanation must be set. Each competing theory displays a new canvas within this common frame. Socialists would present to us the greater productivity of capitalistic methods of industry as the condition which makes the realization of interest possible; of this gain capitalists are able to possess themselves, because capitalists have monopolized the source of interest for their own advantage. The adherents of the Abstinence theory make "abstinence" the characteristic feature of their figure, abstinence being an element of cost demanding special compensation. Likewise the adherents of the Use theory would make "use" — which they consider to be something of value, scarce and separate from capital itself — their chief feature. I myself have drawn attention to the difference in value between present and future goods, or goods ready for consumption and raw materials.

And General Walker? General Walker seems to me to display nothing; he asks us to accept the empty frame as his completed picture. He says simply, Capital is always scarce, whereas "the demand for it, . . . owing to its productiveness, will always be such as to render it necessary to make provision for a payment to the owner, in the nature of interest, for its use." No word of explanation why the effect of the causes assigned must be just "in the nature of interest" rather than in the nature of anything else. The common effect upon the price of any commodity of a scarcity while demand remains strong is a rise in the price of the commodity itself. Why now in the special case of capital goods, under like conditions of de-

mand and supply, does not the rise in the price of the goods themselves appear,—why, to revert to our example, does not the price of our machine rise from \$50 to \$53, when there would be *no* interest left over,—and why do capital goods, remaining themselves low in value, throw off an interest?

A more minute explanation was necessary, because this particular argument of General Walker's seems to contradict an argument of which he has made use on a previous page, on page 413. In answer to the question why a machine which produces fifty-three dollars' worth of goods is not itself worth \$53, he there referred to the fact that the machine cost only \$50, and at that price *could be multiplied at pleasure*. Now, we are told that, on the contrary, capital goods, excepting in the event of a "misadventure and miscalculation," *cannot* be multiplied at pleasure, but that here demand always surpasses the limited supply. These are, however, conditions under which, ordinarily, goods obtain a scarcity value, not conditions under which that value is brought down to the bare cost price! In short General Walker has on page 413 steered us into Charybdis to get away from Scylla; and now on page 414 he steers us back upon Scylla to escape Charybdis!

Under these circumstances I consider it no defect in my exposition, but, on the contrary, an excellence, that in it I have not been content with a vague reference to the scarcity and the productivity of capital,—the sun and the cloud,—but have sought at length after those special factors which become effective within the general premises, and have attempted to show the precise way in which the phenomenon of interest is brought about. I myself believe, as I have already said, that the essential matter lies in the difference in value between present commodities ready for consumption and raw materials or future commodities. It is significant that General Walker, in

the one sentence in which he thinks he has exhausted the explanation of interest, refers, though only remotely, to this matter, where he traces the growth of capital to the "urgency of human wants for immediate subsistence." If you will, my theory is nothing more than a logical and systematic development of the catch-phrase thus introduced into his exposition.

Finally, it appears to General Walker himself that there really is no very great difference between his theory and mine. "I confess," he says at the end of his long polemic, "that it begins to appear to me as if the whole difference were one of phrases only." The whole difference in our opinions may, he thinks, be summed up in this,—that he has ascribed the origin of interest "to production in time," whereas I ascribe it "to time for production." And that seems to him to come to the same thing about: only he believes he ought, nevertheless, to prefer the former mode of expression which he has himself adopted, "inasmuch as the production is the essential thing, and the passage of time merely a condition."

I understand perfectly how General Walker can see the matter in this light from his point of view. From my point of view, to be sure, it all has a different aspect. I cannot accept his position for two reasons. First, there is interest without any production whatever, but never without time. I refer, for example, to interest on consumption loans and to the returns on durable consumption goods, such as rented houses, pianos, and the like. In this alone is shown, as I believe, in a striking manner the incorrectness of the assumption that of those two factors production is "the essential thing." In the second place, it does not seem to me at all true that that part of our opinions which we have in common, and which, indeed, we share with the adherents of the Abstinence theory, of the Use theory, and even of the Socialistic theory, contains any truth very essential to the solution of the

problem of interest; but those very portions of our theories which are not in accord seem to me to be decisively significant. Between two theories, one of which expressly rejects that which the other as expressly accepts as the fundamental truth upon which its whole exposition turns, there seems to me to be a greater difference than "one of phrases only."

IV. I have taken exception to the theory of interest proposed by the "Naïve" Productivists, because they would explain interest without making the intermediate drift of their argument clear, by means of an immediate "value-creating power of capital." I have objected that there is really no such value-creating power, and that such a power is not conceivable, since value is not created or produced at all. "Value cannot be forged like a hammer or woven like a sheet." "It comes, not out of the workshop where goods come into existence, but out of the wants which these goods will satisfy." *

General Walker objects to these expressions also. He thinks it incumbent upon him to make the rejoinder that value arises neither from the side of production alone nor from the side of consumption alone, but from both sides equally. "Value arises from the relations of demand and supply."

I quite agree. So far I subscribe to every word. Extreme views on either side are false. But who has ever taken so one-sided a view of the matter? General Walker evidently suggests that *I* have done so. I beg his pardon. I have not done so, but have merely opposed the one-sided conception which lies at the bottom of the theory proposed by the Naïve Productivists,—among whom, by the way, I do *not* count General Walker. I have denied that value arises solely from the conditions of production, that goods "bring value with them ready-made, as some

* *Capital and Interest*, p. 134, *seq.*

inherent quality that accompanies production." I have shown, just as General Walker has, that value arises from the combined action of "demand and supply." I, furthermore, have never denied that "supply" is affected by the conditions of production; I have, on the contrary, elaborated that fact at length. To be sure, this exposition is not to be found in the controversial passage which General Walker singles out as a text for his polemic; but even in this passage General Walker would have found the following, had he read one page further: "It is correct that production is *a* cause of value. It is not correct in the sense that production is *the* cause of value; that is to say, it is not correct in the sense that the complex of causes entirely sufficient to account for the existence of value is to be found in the circumstances of production."* And, again, one page further on he would have found the following: "Our productivity friends are wrong because they overestimate their claim to be right. If they had been content to speak of a value-creating power of capital in the sense that capital supplies *one* cause of the emergence of value, there would have been nothing to object to. . . . Instead of that they imagine that they have given *the* cause of the existence of value. They assume that in the words, 'Capital, in virtue of its productive power, creates value or surplus value,' they have given such a conclusive and complete explanation of its existence that no further explanation of any kind is needed, and in this they are grievously mistaken." †

But, of course, the detailed exposition of my own opinions is to be found there where I have undertaken to set forth my positive views; that is, in my *Positive Theory of Capital*, and especially in the two books bearing the titles respectively "Value" and "Price," which together occupy more than one hundred pages. I do not think this the place to enter again into the discussion of

* *Capital and Interest*, p. 136.

† *Ibid.*, p. 137.

this extremely intricate matter. Such a discussion seems especially uncalled for here, because I have, since the publication of my book, expounded my views on this matter to the English reading public in an article on "The Ultimate Standard of Value."* I believe that those readers who have done me the honor to take cognizance of the last-named article will have received from it two impressions: first, that the question of the "side from which value arises" is somewhat too complicated to be disposed of with a few catch phrases; and, second, that the particular catch phrase with which General Walker closes his controversial article does not hit off the situation, for it is not enough to say that, as we can always take consumption and demand for granted, we have the right to lay all the emphasis upon production, and so to assert "that production will create value."

E. BÖHM-BAWERK.

VIENNA.

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