THE

POSITIVE THEORY OF CAPITAL

BY

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TRANSLATED WITH A PREFACE AND ANALYSIS

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TRANSLATOR'S PREFACE

In his *Geschichte und Kritik der Kapitalzins-Theorieen* (1884), which I translated in 1890 under the title of *Capital and Interest*, Professor Böhm-Bawerk, after passing in critical review the various opinions, practical and theoretical, held from the earliest times on the subject of interest, ended with the words: "On the foundation thus laid, I shall try to find for the vexed problem a solution which invents nothing and assumes nothing, but simply and truly attempts to deduce the phenomena of the formation of interest from the simplest natural and psychological principles of our science." *The Positive Theory of Capital*, published in Innsbruck in 1888, and here rendered into English, is the fulfilment of that promise.

The criticisms directed against the various theories of Interest in the former work may be briefly summarised as follows.

The Productivity theories—those which, more or less explicitly, attribute the existence of interest to the productive power of capital—are dismissed as confusing quantity of product with value of product, either in the way of tacitly assuming the identity of the two, or of failing to show any necessary connection between them. The problem of capital is a problem of surplus value, and value does not come from the side of production but from the side of consumption. Capital is productive, but interest is not its product.

The Use theories, which are a more or less scientific expansion of the familiar formula, "Interest is the price paid for the use of capital," are shown to base interest, which is notoriously an income obtained from all kinds of capital, on an analogy drawn from one special kind of capital, viz. durable goods. The idea that the *use* of capital is something distinct from the *using-up* of capital, and interest something different from the price of the principal, becomes untenable when the true economic nature of the "good" is understood as the sum of its material uses or services. If consumption is only a single exhaustive use, and use only a prolonged consumption, the payment for "use" of Capital must be included in the price of capital.

In the Abstinence theory, which makes interest a compensation made to the owner of capital, for his renunciation of immediate consumption, Böhm-Bawerk sees a confusion of the origin and accumulation of capital with the source and cause of interest. Abstinence will account for the owner having a sum to lend, but it will not account for that sum growing 3% larger in a year's time.

Lastly, the Socialist or Exploitation theory, which makes interest simply a gain from exploited labour, is shown to be a theory which could only arise on the negative basis of the unsatisfactory accounts hitherto given, and on the positive basis of a mistaken value theory. When an income obtained without work and without risk was claimed as the reward of abstinence, and when all value was ascribed to the action of material labourers, it was inevitable that there should rise a reactionary theory proving that interest was robbery. Thus the board was swept clean for the *Positive Theory*.

A translator who does his duty must pass the work he renders through his own mind. The necessity this imposes on him of understanding his author, and getting at his point of view, should make him peculiarly sensitive to certain difficulties which are not removed by simple translation. Modes of thought, arrangement, manner of working, may remain foreign. A translator's preface, then, is not without justification if it anticipates some of the questions that are sure to arise in the minds of readers more accustomed, perhaps, to English economics. Now as the main difficulty of the present work is that alluded to by Professor Böhm-Bawerk in his own Preface, that the strikingly simple outlines of his theory are obscured by the very elaboration and completeness with which it is worked out, perhaps the best service I can do is to give a short direct summary of the main argument, expanding on one or two points which seem to me to require commentary.

Economic science being based on an analysis of the industrial life, the first question in a theory of capital is one of terminology: What does the practical world mean, and what has it hitherto meant, by the word Capital? Here we find in common acceptance not one but two conceptions, both based more or less on Adam Smith's old distinction between National Capital and Individual Capital. It is quite necessary for scientific progress that the exact distinction between these two conceptions should be fully recognised, but it would be useless to refuse the name to either of them: the practical world would not follow us. On looking closer at the two, however, we can see that one of the conceptions really includes the other, and that the difficulty may be avoided by adding an appropriate predicate to each. Taking as basis the old root idea of "an interest-bearing sum of money," we may define capital in its widest sense (or Acquisitive Capital), as the complex of products destined to the Acquisition of goods. Under this, as narrower category, we put the conception that came later in time, but perhaps better deserves the name without predicate, that of Social or Productive Capital, comprising all products destined for the production of fresh wealth; briefly, the complex of Intermediate Products. Thus we happily preserve in both conceptions the popular idea of "income bearing": society as a whole can only obtain an income by "producing" new wealth, while the individual may "acquire" it as well by the transfer of old wealth.

By these definitions Land and Labour are excluded from capital. They have certain analogies, even close analogies, with it, but scientific accuracy is not gained by making definitions so wide as to conceal really discrepant elements. The definition of Social Capital also excludes the Maintenance of Labourers; for, obviously, to include the direct and most obvious means of living would be to take away all possibility of distinguishing between capital and consumption wealth.

The subject, then, naturally divides itself into two parts:—Capital in the narrower, but more widely important, meaning of the Instrument of Production, and Capital as the Source of Income.

First, of the Instrument of Production. In the economical world man finds himself a being of infinite want, confronted with a universe full of potential wealth but with no tools except hands and brains to give him possession of it. Incapable of creating anything, he yet finds himself endowed with a power of moving things, which, as he masters the secrets of nature's working, gradually enables him to imprison, impress, or suspend the action of her powers, and so make her his servant. In various concrete ways he adapts or rearranges nature—never, of course, changing her laws or acting contrary to them, but varying the causal connection of natural processes in such a way that, to a large extent, he remakes the natural world to suit his purposes. Thus, between man and his natural environment there gradually grows up a third term, a machinery for the fuller satisfaction of man's life, and to this, in general terms, we give the name Capital. But, however the growth of wealth and industry disguise the fact, in all production of wealth there are only two original forces at work, nature's powers and man's powers. Human powers, as always limited, and as always put forth "at the cost of" brain or tissue, are all "economic"; but in the great treasury of natural forces there are some powers so universal in their scope and working that they do not enter into calculations of cost. As we say, using two phrases whose full significance we do not always realise, we do not "economise" the free gifts of nature—they "cost" us nothing; although they enter into the operations of all production, they do not enter into "economic" consideration. The original factors of production, then, are man and nature: the strictly economic factors of production are labour and those natural forces (called by metonymy Land) which are limited and capable of being monopolised. But Capital, however much credit it gets and deserves for its work in present-day production, is no independent factor alongside of these. In one aspect it may be called "stored-up labour," in another—and more truly—"natural force stored up by labour"; but in capital itself, alike in its origin and in its working, there is nothing that is not accounted for by the other two factors.

We say, in its origin and its working, and it is advisable to emphasise that these are distinct things. The origin of capital is due to two factors, Industry and Saving, both being indispensable. It should be noted, however, that what is saved is not capital but productive power. The primitive labourer works overtime, produces a surplus subsistence, and spends it in making tools: his saving is saving of strength to make tools. The modern worker produces a surplus over his subsistence: gives that over to banks and other agencies to be spent in building factories, erecting machinery, etc.: what is saved is the natural forces thus put in position to turn out consumption goods. But when we know the origin of capital, we have still to ask: What is the nature and character of the production carried on by means of capital? The answer may be put in the following way. The aim of production is essentially the making or procuring of a living. The animal finds a certain provision spontaneously offered it in nature; goes straight toward that provision; and never gets beyond it. Man, on the other hand, even in the simplest state, takes an indirect course. He allies natural with his own (still natural) forces; and he gets behind these natural forces, setting them against each other, or co-operating with each other in carrying out his instructions. He steals fire from heaven, and turns it against the gods. The end is always the consumption good—the good which exhausts itself in ministering to man's life in its higher and lower forms; the factors are always labour and nature; but the way in which the end is reached is here indirect, lengthy, and roundabout. From the rude spade, which the savage first uses as a medium between his bare hands and the fruits or roots he lives on, down to the many years' production process stretching between the sinking of the shaft for coal or iron and the flying shuttles turning out the cloth which finds its goal in covering bare backs, is simply an evolution of the roundabout method. The course of economic progress puts increasing intervals between preparatory and finishing labour, decreasing the stock by increasing the tools; and at every new stage labour embodies itself in further intermediate products or capital. The characteristic result is twofold. As we should expect from the accumulation and concentration of natural forces, this capitalist method is immensely productive as compared with direct or unassisted labour.

On the other side, however, is to be put the sacrifice of Time necessarily involved in the indirect process. The relation of these two sides must be carefully noted. As time plays a greater part in production—as the average period is extended—the absolute productiveness of the capitalist process increases, but the relative productiveness decreases. That is to say: when the process has reached a certain point, it becomes subject to a law of diminishing returns.

The function, then, of capital in production may be said to be that of allowing labour and natural powers to work out their economic effects in processes that take time, or the utilisation of natural forces in roundabout methods. Or, if we adopt the peculiarly modern view that man is the economic *Zielpunkt*, we may say that capital gives time to labour to avail itself of those powers of nature which become available only at a considerable sacrifice of time.

So much for the function of capital, and one is apt to jump to the conclusion that, having shown how capitalist industry produces a great quantity of *products* as compared with unassisted labour, the sole and sufficient origin of *interest* has been indicated. A little consideration will show that we are yet on the threshold of that inquiry. The concrete result—the *raison d'être*—of a factory is the mass of products it sends to market. These are the transformed shapes of raw and auxiliary materials, machinery generally, and labour; and the price realised for them repays the outlay on materials, keeps up the machinery, and pays the wages—including all the wages of intellect. But beyond the repaying of all these costs it is a familiar fact that, in normal production, the prices realised leave a surplus. This surplus is not accounted for by profits, although often confused with them. Profit is either employer's wage (and is thus already included), or it is the chance of a happy conjuncture that allows a higher price to be obtained than is normal—which chance is continually being levelled down by competition. But this surplus is recognised as something due to the owner of capital without claim of personal work from him, and it is a surplus of value which competition cannot wipe out. In Böhm-Bawerk's former book, *Capital and Interest*, it was exhaustively proved that no theory had yet shown what capital does, or forbears from doing, that it should get this surplus under the name of interest. It is not a payment for the labour embodied in concrete capital, for that labour is presumably fully paid for—say, by the machine maker to his men and to himself—and does not warrant a further continuous payment. It is not a payment for the working of natural forces embodied in the machine, for the value of the machine consists in nothing else than in the working of these forces, and in the price is already paid all the forces that the machine will put forth and mediate. And it is not wear and tear, nor is it insurance against risk, for in all normal undertakings these are provided for by separate replacement and insurance funds. For proof of these statements I must refer the reader to that book, or the brief summary of it in the preface. What must be emphasised here is that the explanation of capital as the Instrument of Production is exhausted when it is shown that it allows nature and labour to work out their effects in lengthy processes. The source of interest will not be found simply within the sphere of production, for the reason that interest is a problem of surplus value, and value takes us into the sphere of distribution. Thus we come to the next division of the present work, Capital as it appears in the sphere of Distribution, or Capital as the source of the income called Interest.

If we begin, as usual, by asking what business people understand by interest, we shall be told practically that a sum of money paid down now—say £100—will buy a greater sum—say £103 or £105—this day twelve months. Or if I owe £100 now for goods received, and do not pay the debt for a year, I have to add a certain amount under the title of interest.

The most obvious fact here is that the payment of interest has some very definite connection with the time when payment is made. This suggests the general question: What is the place and influence of time on the value of goods. And the answer is: It is an empirical fact of undoubted universality that present goods are valued more highly than future goods of like kind and amount.

For this three causes may be given. First, is the difference between the circumstances of want and the provision for want in present and in future. In any case, if want is pressing and provision is scarce, value is high. But the pressure of want in the present is always with us, while as regards provision in the future it is generally true *omne ignotum pro mirifico*. Thus present goods obtain a permanent importance from felt present wants, and future goods a permanent unimportance from anticipated future provision. Most men, accordingly,—people in immediate distress and beginners of all sorts being types—are willing to pledge their future for a really inadequate present sum. Second, is the general underestimate of the future, common to humanity, and traceable to want of imagination, defect of will, or feeling of life's uncertainty. Children and savages are typical of the improvidence which is more or less striking in all classes. It may be that this cause is not on the same level with the first, and tends to less importance with social progress. But, in the world as it is, it is certain that the things of the future are of less value to us simply because they are future. And, third, is the technical superiority of present goods. As we have already seen, in the hands of labour wealth increases enormously with the extension in time of the production process.

Goods available now have accordingly the promise and potency of being greatly multiplied in the future, while goods coming into our disposal only in the future must undergo another period of production before the same abundance is reaped. Of these three causes the first two are cumulative, the second alternative. The first group alone would account for a difference in value between present and future goods: the appearance of the latter makes the difference not only apparent but measurable.

If, then, from so many sides and classes—from the young who expect to be better off, from the rich and improvident who wish to enjoy the present, from the industrious who wish to add to their wealth; that is to say, from probably the majority of mankind—there comes an underestimate of the future compared with the present, it is easily explained why, as a rule, present goods have a greater value than future goods of like kind and amount.

In this empirical and psychological fact, for the full treatment of which the reader is referred to Book V., our author finds the source of interest in its three principal forms.

The simplest case of interest is that in which it appears in the loan for consumption. Here we have a real and true *exchange* of a smaller amount of present money, or present goods, for a larger amount of future money or goods. The sum returned, "principal" plus interest, is the market valuation and *equivalent* of the "principal" lent. The apparent difference in value is simply due to our forgetting that £100 in our hands now is not the same thing as £100 a year hence. This Agio on present goods is interest. In other words, interest is a complementary part of the price; a part equivalent of the "principal" lent.

In this simple case interest is more evidently the result of the first two causes just mentioned. Apart altogether from an organised system of production this agio would emerge, and has emerged, as something claimed by the saving from the unthrifty. But so long as there was no organic production, the circumstances of borrowers and lenders were too diverse and arbitrary to allow of a measured rate of interest. But when the third factor comes into play, time becomes a condition of surplus product, and interest becomes measurable in terms of time.

The second and principal form assumed, then, by interest is that in which it appears as part of the so-called "profit of undertaking." A capitalist employer hires land, buys raw and auxiliary materials, machinery, power, and labour. He sets these to co-operate in the making of a product. The product is the new shape taken on by all these productive goods, and we should naturally expect that the price obtained for it would exactly cover and reimburse the value of all the goods consumed in making it. But, as we know, after all ordinary stances shows a surplus of value. The explanation of the surplus is that productive goods, while materially and physically present, are, to economical consideration, future goods: that is to say, they are products *in the making*. The wants to which they minister, and from which alone they get their value, are future wants. On the admitted ground of equivalence between costs and products, then, the value of the means of production must be the same as the value of the goods into which they pass. But these goods being in the meantime future goods, and suffering from the discount which, as we have seen, is made on all future goods, the value of means of production must suffer the same discount. The undertaker intentionally turns his wealth into productive goods: that is to say, he exchanges his money for raw materials, workshops, machinery, labour. In the production process these ripen into present goods, with the full value of present goods. The price he receives for these recoups all his expenditure plus interest. Interest thus proves itself, as before, the difference between the formerly future and now present goods.

There is a third case of interest which has some features so puzzling as to demand separate consideration: this is the case of income obtained from Durable Goods, usually called Hire or Lease, and, in one case, Rent. The distinction between a perishable and a durable good is that, while both are the sums of their respective uses or services, the durable good is a sum extending over a period of time. But on our theory the later services of such a good must have a less value than the proximate services, and the total value of the good will be a sum of diminishing amounts. The "capital value" of such a good, then, will be to all appearance much less than the sum of the values really obtained during its lifetime. Here, as in the former cases, the services originally undervalued ripen to full present value in the hands of the owner, and the difference between the past and the present values, after providing for replacement of the good, is Interest. Thus if the owner of capital throws his parent wealth into the form of stone and lime, he possesses, in the durable shape of a house, a sum of future uses discounted according to their futurity. As each year passes one annual service is realised, and its value is thrown off, while each service still to be realised is one year nearer the present, and is thus one year more valuable. The house, as now containing one rent less, is less valuable, and this loss falls to be deducted from the gross return as wear and tear. But what is lost, be it noted, is not one annual service estimated at present value; it is the *last* future service of which the good is still capable, —for if all the services have moved up one step in value it is the value of the last service that drops off. The difference between the present service realised (gross rent) and the last service now deducted (economic wear and tear) is the net return of interest. Thus, again, we find that interest is the difference between the formerly future and now present goods. This somewhat difficult point is made clear from the concrete figures on pp. 342-345.

It will be seen that in this we have a theory, not only of durable consumption goods such as houses, and of durable productive goods such as machinery, factories, and fixed capital generally, but a theory which carries us beyond our formal definition of Capital into the sphere of Land. In land we have a durable good whose services will be rendered to generations unborn: the "last" service is, therefore, to the calculations of the present, nil: there is no economic wear and tear—no need of any fund for replacement—and the gross return suffers no deduction but is all interest. To put it concretely. A man buys land as he buys fixed capital;—to get an interest from it. He buys its annual services or rents for a sum which represents the future services diminished in perspective. In other words the "capitalised value" is not an infinite number of years' rents but so many years' purchase. In his hands the future uses ripen into present: he gets the present value of what he bought as future value: as there is no wear and tear, nothing of this need be set aside for replacement: the whole gross rent is net interest. Ricardo, in pointing to the "original and indestructible powers of the soil" as the cause of rent, was right so far as his explanation indicated why the gross return was also the net, but wrong so far as it indicated that rent was due to the productiveness of this peculiar kind of durable good. The interest on a mine and the rent from land are essentially the same, although the one should wear out in thirty years while the other is "indestructible."

These are the simple outlines of the *Positive Theory*. By it all three kinds of interest are traced to the one identical source, the increasing value of what are, either naturally or economically, future goods, as they ripen into present goods. But when dealing with the principal form of interest, that in which it appears as part of the profit of undertaking, Dr. Böhm-Bawerk makes a long excursus into the relation of wealth to labour, which is not the least suggestive and valuable part of the work. As it suffers somewhat, however, from its position in the text, I shall take the liberty of putting it in my own way.

There are three markets in which the particular kind of "future goods" known as means of production are exchanged against finished present goods—practically against money: these are the Labour market, the Land market, and the market for Concrete Capital. Taking the Labour market as the most typical and the most difficult, its prominent features are these. On the one side are the Capitalist Undertakers. These are men presumably possessed of a surplus of wealth which they cannot advantageously use in their own consumption; to them personally, therefore, the not do more justice to its author in my critical notice of the historical development of the conception of capital. Unfortunately by the time it appeared the first part of my book,—that which deals with the conception and nature of capital, and touches most closely on this work of Menger,—was already printed off.

For the same reason I could not notice the important work of Wieser on *Natural Value*, which only came to my hands during the printing of my last chapter.

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Chapter III. The Profit of Capitalist Undertaking. Complications. (1) Our estimate of future goods is graduated according to the intervening time: corresponding with this the value of productive goods rises steadily as the process goes on, and the increased value is transferred from branch to branch of production. (2) Durable productive goods contribute different parts of their contents to products maturing at various points of time, and so unite the characteristics of durable and of productive goods—of which later. (3) Productive goods admit of various employments turning out different products at different periods; how then can they be valued in present goods?—In the marginal utility of such goods the future as well as the present uses have already been taken into consideration, the possible future uses being reduced to present value. It remains for us now to confirm these theoretical conclusions by appeal to the actual markets where means of production are exchanged for present goods pp. 304—312

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Chapter V. The Profit of Capitalist Undertaking. The General Subsistence Market. A fundamental proposition: The fund available for advances of subsistence consists of the entire wealth of a community exclusive of land. With the exception of the small amount consumed without return or wasted, and that consumed by independent producers, all wealth comes to this great market, and is, directly or indirectly, advanced to labour. It may be objected that wealth in many forms, such as tools, is not subsistence. But all that is required is that wealth should be changed gradually into subsistence as the workers of the successive stages require it. The subsistence fund, then, includes not only finished goods, but goods at all stages of progress, and goods going through all lengths of process. Thus the average production period possible in a country depends on the amount of its wealth. Proof that th[...]

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Chapter VI. The Profit of Capitalist Undertaking. The General Subsistence Market (*continued*). To find the price at which finished present goods exchange against future on the subsistence market, we must examine more carefully the extent and intensity of supply and demand. The demand consists of (1) wage-earners, (2) independent producers wishing to extend their processes, (3) borrowers for consumption. Thus it is easy to see that the demand must always be in excess of the supply: that an agio must appear: and that, as putting the drag on undue extensions of process, this agio is as healthy as it is inevitable. Finally what is true of labour is true of uses of land and of intermediate products. Error of Socialist theory in not seeing that so-called "cheap buying" is true of these as well as of labour . . . . pp. 329—338

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Chapter IX. Results. Owners of capital, then, are merchants in present goods, and such goods being more valuable than the "future goods," Labour, Uses of land, and Capital, the agio or interest included in the price is only reasonable. Circumstances may often produce exploitation and usury, but in the essence of interest there is nothing unjust; as in all human institutions, we have to balance advantages with drawbacks, and the balance swings in favour of interest . . . . pp. 358—364

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BOOK VII

THE RATE OF INTEREST

Chapter I. The Rate in Isolated Exchange. Our present task is to point out the concrete circumstances that influence the valuations on both sides. First, of isolated exchange. In the production loan what determines the subjective valuation of the suitor is the amount he will gain by extending his process. But as, beyond a certain point, the surplus returns decrease as processes extend, a present loan has less value in proportion to the length of process already provided for . . . . pp. 375—380

Chapter II. The Rate in Market Transactions. First assuming that the demand comes from the wage-earners alone, how high will rise the agio? Here we meet a special difficulty. The price of labour is the resultant of subjective valuations of buyer and seller, but what value can the capitalist put upon the labour he wishes to buy when it will bring a different product and value according to the length of process in which it is invested, and when, again, the process he will adopt depends upon the wage he must pay? The "fixed point" is found in the fact that the existing stock of wealth can always buy all the wage labour offered. This gives a certain definiteness to the average length of process, and so the product on which the capitalist bases his valuation. But again it may be a long process at a low wage or a short process at a high wage. The final answer is, that the wage offered must bring subsistence and number of workers to equilibrium in such a way that neither party can disturb it by under-bidding or over-bidding. Or, to put it positively: The rate is determined by the productiveness of the last economic extension of process, in such a way that the amount of capital making the extension possible must bear a less interest than the surplus return obtained by means of it—which is pretty much identical with Thünen's "last dose of capital" pp. 381—394

Chapter III. The Rate in Market Transactions (*continued*). But what are the concrete determinants which decide the degree of productiveness of the last extension? If, *ceteris paribus*, subsistence increases, the same calculations as before show that equilibrium cannot be maintained without an extension of process, an increase of wage, and a fall of interest—the latter accounted for by the fact that men can only keep the increased wealth employed by extensions of process which involve decreased surpluses. If, on the other hand, subsistence falls, equilibrium demands contraction of processes, fall in wage, and rise in interest. If, again, population rise or fall we have the converse results. Lastly, if productiveness increase, *ceteris paribus*, interest will rise along with the surplus now yielded by the last extension. Thus we conclude that there are three decisive factors which affect the rate of interest, and this is confirmed by history and experience . . . pp. 395—402

Chapter IV. The Market for Capital in its Full Development. And now to give the features of actual life to our abstract scheme. It makes no difference to our argument that product and wage vary from employment to employment: the essential matter for interest is the relation between the two. Nor does it matter that in actual life the annual increment due to extensions of process varies from employment to employment: capital follows an isohypse of surplus returns, not of periods of production, but this does not alter the essential circumstances on which our law rests. Again, there are other demands besides that of the wage-earners—(A) that for consumption credit, completely co-ordinate with the other, (B) that of landowners who require subsistence proportioned to the length of their production processes, (C) that of capitalists themselves, although their claim on subsistence is effect and not cause of the agio. Lastly, we may enumerate the seven concrete factors in the interest rate pp. 403—412

Chapter V. The Market for Capital in its Full Development (*continued*). To look now at the struggle between immediate consumption and accumulation. In good economical management present and future will be alike considered, and provision made that the present consumption shall not reduce the level of future enjoyment. Thus parent wealth should be saved, and even some portion of income. The two great deviations from economic conduct are due (1) to the perspective undervaluation of the future and (2) to the neglect of exact calculation of the future's claims. Differences between our theory and that of the Wage Fund. Finally, the actual market for capital is not one great undivided market, but a great number of part markets all communicating and arbitrating each other's prices. Conclusion . . . . pp. 413—424

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INTRODUCTION

In systems of Political Economy the word Capital and the theory of Capital are regularly met with in two distinct spheres; first, under Production, and, second, under Distribution. In the former case capital is represented as a factor or tool of production: as an instrument which men use to extort from nature the various forms of wealth unattainable by simple labour. In the latter case capital appears as a source of income or a rent fund; and we are shown how, in the division among the various members of society of that wealth which has been produced in common, capital acts like a magnet, drawing a portion of the national product to itself, and delivering it over to its owner: it appears, in a word, as the source of Interest.

When we are told that capital assists in the production of wealth, and then again that it assists in the obtaining of wealth for its owner, we are apt to jump to the conclusion that the two phenomena are intimately and essentially connected, and that the one is the immediate result of the other—that capital can bring wealth to its owner because capital assists in the production of wealth. As a fact, Political Economy has taken up this idea only too readily and too completely. Captivated by the deceptive symmetry that exists between the three great factors of production—Nature, Labour, Capital—and the three great branches of income—Rent, Wage, and Interest—the science, from Say's day till the present, has taught that these three branches of income are nothing else than the payment for the three factors of production, and that

Interest in particular is nothing else than the compensation which capital receives for its productive services when the product is divided out among society. Propounded by various interest theories in various forms this idea has found its most concise and, at the same time, its most naïve expression, in the well-known "Productivity theories"—those theories which explain interest directly as the natural fruit of a productive power peculiar to and resident in capital.[1]

In beginning the study of the theory of Capital, it cannot be too emphatically stated that this idea, simple and natural as it may appear, contains a prejudgment calculated to preclude unbiassed consideration of the problems of capital. If there were no other objection, the fact that the word capital is never used exactly in the same sense in the two spheres of phenomena must give us pause. True, all capital which serves as a tool of production is also capable of bearing interest, but the converse is not the case. A dwelling-house, a hired horse, a circulating library bear interest to their respective owners without having anything to do with the production of new wealth. If, in the sphere of distribution, the conception of capital thus embraces objects which are not capital in the sphere of production, this alone is sufficient to show that the bearing of interest cannot by itself be an indication of the productive power of capital. We have not to deal with *one* motive power transmitting itself to two different spheres; not even with two groups of phenomena which have grown up so intimately connected that the explanation of the one is got fully and entirely through the explanation of the other; but with two distinct classes of phenomena. Thus we have two distinct subjects, which give us material for two distinct scientific problems; and finally, we have to seek for the solution of these problems by two distinct and separate roads. It so happens, however, that these really distinct problems are accidentally linked together by one name; they are problems of Capital. It may be that, besides identity of name, we shall find many inner relations between the two series of phenomena and the two problems;—our investigation shall decide that later. But such relations are yet to be discovered; they must not be assumed; and unless we would give up all idea

[1] See my *Capital and Interest*, 1890, p. 111.

of being unprejudiced in our quest and in our conclusions, we must begin the inquiry free from any preconceived opinion of a necessary identity, or even of an exact parallelism, between the productive efficiency of capital and its power of bearing interest.

Our division of the subject will correspond to this real independence of the two problems. In one part of the present work we shall take up the theory of Capital as a Tool of Production, and in another the theory of Interest. But we shall first devote a separate book to the attempt to obtain some insight into what Capital itself is, in conception and nature.

what it wants in numbers. Another powerful ally in the struggle against nature is nature herself. All that we are able to do in production would be wretchedly small were it not that, in the storehouse of nature, we find the means of dividing nature against herself and setting force against force. But here we touch on a subject which is, in itself, too important, particularly as regards our inquiry, to admit of merely a passing mention.

CHAPTER II

THE NATURE OF CAPITAL

THE end and aim of all production is the making of things with which to satisfy our wants; that is to say, the making of goods for immediate consumption, or Consumption Goods.[1] The method of their production we have already looked at in a general way. We combine our own natural powers and natural powers of the external world in such a way that, under natural law, the desired material good must come into existence. But this is a very general description indeed of the matter, and looking at it closer there comes in sight an important distinction which we have not as yet considered. It has reference to the distance which lies between the expenditure of human labour in the combined production and the appearance of the desired good. We either put forth our labour just before the goal is reached, or we, intentionally, take a roundabout way. That is to say, we may put forth our labour in such a way that it at once completes the circle of conditions necessary for the emergence of the desired good, and thus the existence of the good *immediately* follows the expenditure of the labour; or we may associate our labour first with the more remote causes of the good, with the object of obtaining, not the desired good itself, but a proximate cause of the good; which cause, again, must be associated with other suitable

[1] Menger has suggestively called these Goods of the First Rank, classing all goods which go to their production as Goods of Higher Rank. It is unfortunate that we cannot use the literal English equivalent of the "*Genussgüter*," but, as next to it in convenience, I propose to use the expression Consumption Goods for what otherwise we should have to translate as Goods for Immediate Consumption. See Menger's *Grundsätze*, p. 8, and Böhm-Bawerk's *Rechte und Verhältnisse*, p. 101.—W. S.

materials and powers, till, finally,—perhaps through a considerable number of intermediate members,—the finished good, the instrument of human satisfaction, is obtained.

The nature and importance of this distinction will be best seen from a few examples; and, as these will, to a considerable extent, form a demonstration of what is really one of the most fundamental propositions in our theory, I must risk being tedious.

A peasant requires drinking water. The spring is some distance from his house. There are various ways in which he may supply his daily wants. First, he may go to the spring each time he is thirsty, and drink out of his hollowed hand. This is the most direct way; satisfaction follows immediately on exertion. But it is an inconvenient way, for our peasant has to take his way to the well as often as he is thirsty. And it is an insufficient way, for he can never collect and store any great quantity such as he requires for various other purposes. Second, he may take a log of wood, hollow it out into a kind of pail, and carry his day's supply from the spring to his cottage. The advantage is obvious, but it necessitates a roundabout way of considerable length. The man must spend, perhaps, a day in cutting out the pail; before doing so he must have felled a tree in the forest; to do this, again, he must have made an axe, and so on. But there is still a third way; instead of felling one tree he fells a number of trees, splits and hollows them, lays them end for end, and so constructs a runnel or rhone which brings a full head of water to his cottage. Here, obviously, between the expenditure of the labour and the obtaining of the water we have a very roundabout way, but, then, the result is ever so much greater. Our peasant needs no longer take his weary way from house to well with the heavy pail on his shoulder, and yet he has a constant and full supply of the freshest water at his very door.

Another example. I require stone for building a house. There is a rich vein of excellent sandstone in a neighbouring hill. How is it to be got out? First, I may work the loose stones back and forward with my bare fingers, and break off what can be broken off. This is the most direct, but also the least productive way. Second, I may take a piece of iron, make a hammer and chisel out of it, and use them on the hard stone—a roundabout way, which, of course, leads to

a very much better result than the former. Third method—Having a hammer and chisel I use them to drill a hole in the rock; next I turn my attention to procuring charcoal, sulphur, and nitre, and mixing them in a powder, then I pour the powder into the hole, and the explosion that follows splits the stone into convenient pieces—still more of a roundabout way, but one which, as experience shows, is as much superior to the second way in result as the second was to the first.

Yet another example. I am short-sighted, and wish to have a pair of spectacles. For this I require ground and polished glasses, and a steel framework. But all that nature offers towards that end is silicious earth and iron ore. How am I to transform these into spectacles? Work as I may, it is as impossible for me to make spectacles directly out of silicious earth as it would be to make the steel frames out of iron ore. Here there is no immediate or direct method of production. There is nothing for it but to take the roundabout way, and, indeed, a very roundabout way. I must take silicious earth and fuel, and build furnaces for smelting the glass from the silicious earth; the glass thus obtained has to be carefully purified, worked, and cooled by a series of processes; finally, the glass thus prepared—again by means of ingenious instruments carefully constructed beforehand—is ground and polished into the lens fit for short-sighted eyes. Similarly, I must smelt the ore in the blast furnace, change the raw iron into steel, and make the frame therefrom—processes which cannot be carried through without a long series of tools and buildings that, on their part again, require great amounts of previous labour. Thus, by an exceedingly roundabout way, the end is attained.

The lesson to be drawn from all these examples alike is obvious. It is—that a greater result is obtained by producing goods in roundabout ways than by producing them directly. Where a good can be produced in either way, we have the fact that, by the indirect way, a greater product can be got with equal labour, or the same product with less labour. But, beyond this, the superiority of the indirect way manifests itself in being the only way in which certain goods can be obtained; if I might say so, it is so much the better that it is often the only way!

That roundabout methods lead to greater results than direct methods is one of the most important and fundamental propositions in the whole theory of production. It must be emphatically stated that the only basis of this proposition is the experience of practical life. Economic theory does not and cannot show *a priori* that it must be so; but the unanimous experience of all the technique of production says that it is so. And this is sufficient; all the more that the facts of experience which tell us this are commonplace and familiar to everybody. But *why* is it so? The economist might quite well decline to answer this question. For the fact that a greater product is obtained by methods of production that begin far back is essentially a purely technical fact, and to explain questions of technique does not fall within the economist's sphere. For instance, that tropical lands are more fruitful than the polar zone; that the alloy of which coins is made stands more wear and tear than pure metal; that a railroad is better for transport than an ordinary turnpike road;—all these are matters of fact with which the economist reckons, but which his science does not call on him to explain. But this is exactly one of those cases where, in the economist's own interest—the interest he has in limiting and defining his own task—it is exceedingly desirable to go beyond the specific economic sphere. If the sober physical truth is once made clear, political economy cannot indulge in any fancies or fictions about it; and, in such questions, political economy has never been behind in the desire and the attempt to substitute its own imaginings! Although, then, this law is already sufficiently accredited by experience, I attach particular value to explaining its cause, and, after what has been said as to the nature of production, this should not be very difficult.

In the last resort all our productive efforts amount to shiftings and combinations of matter. We must know how to bring together the right forms of matter at the right moment, in order that from those associated forces the desired result, the product wanted, may follow. But, as we saw, the natural forms of matter are often so infinitely large, often so infinitely fine, that human hands are too weak or too coarse to control them. We are as powerless to overcome the cohesion of the wall of rock when we want building stone as we are, from

carbon, nitrogen, hydrogen, oxygen, phosphor, potash, etc., to put together a single grain of wheat. But there are other powers which can easily do what is denied to us, and these are the powers of nature. There are natural powers which far exceed the possibilities of human power in greatness, and there are other natural powers in the microscopic world which can make combinations that put our clumsy fingers to shame. If we can succeed in making those forces our allies in the work of production, the limits of human possibility will be infinitely extended. And this we have done.

The condition of our success is, that we are able to control the materials on which the power that helps us depends, more easily than the materials which are to be transformed into the desired good. Happily this condition can be very often complied with. Our weak yielding hand cannot overcome the cohesion of the rock, but the hard wedge of iron can; the wedge and the hammer to drive it we can happily master with little trouble. We cannot gather the atoms of phosphorus and potash out of the ground, and the atoms of carbon and oxygen out of the atmospheric air, and put them together in the shape of the corn of wheat; but the organic chemical powers of the seed can put this magical process in motion, while we on our part can very easily bury the seed in the place of its secret working, the bosom of the earth. Often, of course, we are not able directly to master the form of matter on which the friendly power depends, but in the same way as we would like it to help us, do we help ourselves against it; we try to secure the alliance of a second natural power which brings the form of matter that bears the first power under our control. We wish to bring the well water into the house. Wooden rhones would force it to obey our will, and take the path we prescribe, but our hands have not the power to make the forest trees into rhones. We have not far to look, however, for an expedient. We ask the help of a second ally in the axe and the gouge; their assistance gives us the rhones; then the rhones bring us the water. And what in this illustration is done through the mediation of two or three members may be done, with equal or greater result, through five, ten, or twenty members. Just as we control and guide the immediate matter of which the good is composed by one friendly power, and that power by a second, so can we control and guide the second by a third, the third by a fourth, this, again, by a fifth, and so on,—always going back to more remote causes of the final result—till in the series we come at last to one cause which we can control conveniently by our own natural powers. This is the true importance which attaches to our entering on roundabout ways of production, and this is the reason of the result associated with them: every roundabout way means the enlisting in our service of a power which is stronger or more cunning than the human hand; every extension of the roundabout way means an addition to the powers which enter into the service of man, and the shifting of some portion of the burden of production from the scarce and costly labour of human beings to the prodigal powers of nature.

And now we may put into words an idea which has long waited for expression, and must certainly have occurred to the reader; the kind of production which works in these wise circuitous methods is nothing else than what economists call Capitalist Production, as opposed to that production which goes directly at its object, as the Germans say, "*mit der nackten Faust.*"[1] And Capital is nothing but the complex of intermediate products which appear on the several stages of the roundabout journey.

It is in this way I interpret the most important fundamental conception in the theory of capital, and I should be very glad to stop here. But, like so many another conception in the theory of capital, this conception of capital itself has become a veritable apple of discord to the theorists. A perfectly amazing number of divergent interpretations here confront each other, and block the approach to the theory of capital with one of the most vexatious controversies in which our science could be involved. This uncertainty as to the conception of capital, bad enough in itself, becomes worse in proportion as Capital gives modern science new questions to consider and discuss. It is certainly very unfortunate when a

[1] The expression Capitalist Production is generally used in one of two senses. It designates either a production which avails itself of the assistance of concrete capital (raw materials, tools, machinery, etc.), or a production carried on for the behoof and under the control of private capitalist undertakers. The one is not by any means coincident with the other. I always use the expression in the former of these two meanings.

science already earnestly, even acrimoniously engaged on the solution of questions which affect society to its depths,—questions which all the world knows, ponders, and discusses as the great "problems of capital,"—is struck, as it were, by a second confusion of tongues, and becomes involved in an endless wrangle as to what kind of thing it is that properly is called Capital! Such a controversy at such a point is more than embarrassing; it is a calamity; and has been found so in the history of Political Economy. Almost every year there appears some new attempt to settle the disputed conception, but, unfortunately, no authoritative result has as yet followed these attempts.[1] On the contrary, many of them have only served to put more combatants in the field and furnish more matter to the dispute.

I confess that, to me, the settlement of the real problems connected with the name of capital seems more important, and certainly is more attractive, than the cataloguing of controversies as to the proper use of the word. All the same the fact remains that the confusion about the name has brought a great amount of confusion into the matter; and, again, it might be open to misconstruction—and not without reason,—if the author of a somewhat comprehensive work on capital were to pass over the discussion of what is certainly the most noisy, if not the most weighty controversy about capital. On these two accounts I feel obliged again to tread the heated path of controversy, in the hope that impartial and sober inquiry into the matter in dispute may succeed in ending it.

[1] Looking back over the last few years only, I can recall, as coming in quick succession, the researches of Knies (*Das Geld*, Berlin, 1873, pp. 1-56); of Cossa (*La Nozione del Capitale*, 1874, published in the *Saggi di Economia Politica*, Milan, 1878); of Ricca-Salerno (*Sulla Teoria del Capitale*, Milan, 1877); of Umpfenbach (*Das Kapital in seiner Kulturbedeutung*, Würzburg, 1879); of Kühnast (*Ueber den rechtlichen Begriff des Kapitales* in *Beiträge zur Erläuterung des Deutschen Rechtes*, 1884); of Supino (*Il Capitale nell' Organismo Economico e nell' Economia Politica*, Milan, 1886). Meanwhile we have the well-known works of Rodbertus and Marx, both bearing the title *Das Capital*, and again the elaborate statements in the more comprehensive systems, particularly those of Wagner (*Grundlegung*, second edition, 1879, p. 36); of Kleinwächter (Schönberg's *Handbuch*, first edition, p. 170; second edition, p. 206); and of Cohn (*Grundlegung der Nationalökonomie*, Stuttgart, 1885, § 145-147).

CHAPTER III

HISTORICAL DEVELOPMENT OF THE CONCEPTION

It will be most convenient to open the discussion by a historical survey of the development of the conception.[1]

Originally the word Capital (*Capitale* from *Caput*) was used to signify the Principal of a money loan (*Capitalis pars debiti*) in opposition to the Interest. This usage, already foreshadowed in the Greek formation κεφάλαιον, became firmly established in mediæval Latin, and appears to have remained the prevailing one for a very long time, even pretty far down in the new era.[2] Here, therefore, Capital meant the same thing as "an interest-bearing sum of money."

In the meantime the disputes which had arisen over the legitimacy or illegitimacy of loan interest brought about an essential deepening and widening of the conception.[3] It had become apparent that the interest-bearing power of "barren" money was at bottom a borrowed one—borrowed from the productive power of things that the money could buy. Money only gave the exchange form—to a certain extent the outward garb—in which the interest-bearing things passed from hand to hand. The true "stock" or parent stem which bore interest was not money but the goods that were got for it. In these circumstances the obvious course was so to change the conception that, besides embracing the representative

[1] See on this subject Knies, *Das Geld*, Berlin, 1873, p. 6 (second edition, p. 24); Ricca-Salerno, *Sulla Teoria del Capitale*, 1877, chap. ii.; and Schönberg's *Handbuch*, second edition, vol. i. p. 206.

[2] The English word "Cattle," as Knies (p. 7) has rightly remarked, has nothing in common derivatively with our conception.

[3] *Capital and Interest*, book i. chaps. ii. and iii.

thing, money, it would embrace the represented thing, goods. And, indeed, popular language seems to have made this change before science did. At least, as early as the year 1678, in a glossary of that year, besides the meaning of a sum of money there appears this further interpretation of the word capital, "*Capitale dicitur bonum omne quod possidetur.*"[1] But science was not long behind in sanctioning the adoption of the conception. We find it substantially in Hume in his essay on Interest, when he shows that the rate of interest altogether depends, not on the amount of money, but on the amount of riches or stocks available; the only thing wanting is that he should have formally called these riches or stocks "real capitals." This formal change was finally made by Turgot: "Whoever," he says in his *Réflexions sur la Formation et la Distribution des Richesses*, "gets possession of more goods in a year than he requires to use, can lay past the surplus and accumulate it. These accumulated goods are what people call Capital. . . . It is absolutely the same whether this sum of goods, or this Capital, consists of a mass of metal, or of other things, since money represents every kind of goods, just as, on the other side, all other kinds of goods represent money." Thus Turgot gave the second reading in historical succession to the conception of capital.

It was very soon superseded by a third. For when Turgot designated all saved goods indiscriminately as Capital, he seemed to have gone too far in broadening the conception. To replace the word "money" in the definition by the word "goods" only reflected, indeed, the more thorough grasp which was now taken of the subject. But to give the name of Capital, without any further discrimination, to stocks of goods, was to give up, without sufficient reason, the second feature in the old conception,—the reference that capital had to a capability of yielding interest, to an acquisition of goods. To that extent Turgot's conception of capital was only in part a development born of the time: in part it was an entirely new reading of the term; a reading which, at the same time, exposed him to the charge that, without due cause, he had neglected the very suggestive

[1] Glossarium of Dufresne du Cange, quoted by Umpfenbach, *Das Kapital in seiner Kulturbedeutung*, Würzburg, 1879, p. 32.

differences there are between goods and goods. It was no less a man than Adam Smith who changed and rectified Turgot's definition. The "saved" stocks, he said, must be distinguished as containing two parts.[1] One portion is destined for immediate consumption, and gives off no kind of income; the other portion is destined to bring in an income to its owner, and this part alone rightly bears the name of Capital.

With this distinction, however, Adam Smith connected another consideration, which was destined to have very serious consequences on the development of the conception. He remarked that his use of the term was applicable as well to the case of individuals as to that of a whole community; only, with this shifting of the standpoint, the group of things embraced by the conception was also somewhat changed. Individuals, that is to say, can make a gain, not only by the production of goods, but also by lending to other individuals for a consideration goods which are destined in themselves to immediate consumption, such as houses, masquerade dresses, furniture, etc. But the community, as a whole, cannot enrich itself otherwise than by the production of new goods. For the community, then, the conception of "means of acquisition" coincides with the otherwise narrower conception of "means of production." In harmony with this the conception of capital, from the point of view of the community, must be limited to a complex of the means of production. It is worth our while to put more exactly before us the bearing of this insignificant remark—which, by the way, in Adam Smith is put more unpretentiously, and much less sharply, than in the abstract which I have given of his meaning.

First of all, this was the beginning of the division of capital into two independent conceptions — the conceptions afterwards distinguished as National Capital and Individual Capital. Or, to indicate the relation still more exactly, the parent conception of capital as a stock of goods yielding income lived on under the designation of "private capital," but, under the name of "national capital," it sent out an offshoot which quickly grew to independent importance; soon, indeed, to greater importance than the parent conception

[1] *Wealth of Nations*, book ii. chap. i.

itself. It was immediately recognised that a very notable importance as regards production attached to that class of goods which people now began to call capital *par excellence*; and this became the occasion of a great many profitable applications of the new conception to the theory of production. Thus we find the national conception in a short time taking its place as one of the chief fundamental conceptions of that theory, and engaged in those very important problems that are now associated with its name. In the triad, Land, Labour, and Capital, we find the new conception giving its name to one of the three great sources of wealth, or, as it was put later, to one of the three factors of production.

But all the time, in virtue of the old parent conception—that known later as Private Capital—the term capital remained connected with the phenomenon of interest, which belonged to the theory of distribution or income. Thus, from that time onward appeared the peculiar phenomenon which was to be the source of so many errors and complications, that two series of fundamentally different phenomena and fundamentally different problems were treated under the same name. Capital, as National Capital, became the central figure of the weightiest problems of Production; as Private Capital, of the fundamentally distinct problem of Interest.

In view of this it becomes of consequence to state clearly that Adam Smith's two varieties of the conception of capital are, properly, two entirely independent conceptions, resting substantially on quite different foundations, and only connected externally by a very loose bond. As chance, however, would have it, it was just this secondary and external relation that caused the name to be given to the younger conception, and brought about the identity of name between the two. The centre of gravity of the conception of private capital, as has been pointed out, lies in the acquisition of interest, in the characteristic of being a source of income: the centre of gravity of the conception of national capital, on the other hand, lies in production, in the characteristic of being a tool of production; and the loose bond that connects them is the accidental circumstance that the goods of which men make use in production are the same goods as are the source of profit and interest to a people considered as a whole, and are therefore capital in the original sense. Now this latter reference to income gave the national conception of capital its name, but it was very far from giving it its living substance. This was found so exclusively in the relation to production that, in a short time, the formal definition of capital was based upon that relation alone. It was defined as a complex of "produced means of production," and such like, and in the end it scarcely caused any misgiving when, on closer consideration, the produced means of production seemed never to be quite identical with those stocks which constitute the income-bearing capital of a people. For there can be no question that communities obtain income from consumption goods loaned to other countries against interest. When this incongruity was expressly noted, and yet, notwithstanding, national capital was quietly defined as a complex of means of production, it amounted to a practical and emphatic recognition of the fact that people were interested in capital solely on account of its relations to production, and not at all on account of its accidental characteristic of being the source of interest to the community. To put it shortly: in National Capital the characteristic of being the national source of interest came to the front only for a moment, but this moment was long enough to attach the name of "capital" to it. Scarcely was this done when the centre of gravity was shifted, and placed in its relation to production, and since then National Capital has been looked on as an independent conception, substantially quite foreign to its namesake, Private Capital.

Clearly as the historian of economic theory may now distinguish between these conceptions as developed, the distinction was not seen at the time, nor for long afterwards. With Adam Smith himself the whole matter lies, I might say, in embryo. His ideas were so far from being fixed that he could occasionally ascribe to them meanings which were quite distinct from and did not at all fit in with the fundamental conception. An instance of this is his extension of the national conception to all sorts of personal properties, talents, skill, etc.,—which seem a little out of place as elements of a "stock," and which, like spirits rashly conjured, banished peace for many a long day from the theory of capital. This, however, is an episode of only secondary importance. The principal point is that the followers of Adam Smith not only failed to get rid of the confusion in which he had left the conception of capital, but, on the contrary, positively put their seal to one of its worst mistakes. They did not notice that, in what Adam Smith and they themselves called "capital," there were two fundamentally distinct conceptions; they considered the capital of which they spoke in the theory of production as identical with the capital which bears interest. As we know, Adam Smith had already noticed that there was a certain difference in the meanings usually given to the word capital, and that, for instance, rented houses, hired furniture, or masquerade dresses were capital in one sense and not in another, and his followers had not failed to loyally transmit the remark. But obviously they attached no importance to it,—what was the use of making a fuss about a distinction which referred only to a few hired fancy dresses and such like?—and held fast by their conception of capital, the factor of production being capital, the source of interest. And now one confusion resulted in another. Before, it was the conceptions that were mixed; now, it was the phenomena and the problems. Capital produces, and it bears interest. What more natural than to say shortly;—it bears interest *because* it produces. And thus, introduced and made possible by the confusion in the conception of capital, originated that naïve and one-sided theory of the Productivity of capital which, from Say's days to our own, has held, and still, in some measure, holds economic science under its baneful influences. The Socialist or semi-socialist writers of our time were the first to face in earnest the confusion of conceptions by distinguishing capital into "pure economic capital," and capital as a "historico-legal category."[1] This distinction, as we shall see, did not indeed hit the nail on the head; but it was at least a distinction which, of necessity, finally distinguished between the object of the production problem and the object of the interest problem, and thus paved the way for an advance in the treatment of the still viciously confused problems. But this is to anticipate the course of development: to resume the methodical narrative we must go back to Adam Smith.

It may be said that Adam Smith's fundamental conception

[1] Rodbertus, *passim*; Wagner, *Grundlegung*, second edition, p. 39.

was never afterwards quite neglected; the relation of capital to acquisition and to production, which in opposition to Turgot he had again imported into the conception, has, in some form or other, been retained by all later writers. On the other hand, it very soon became manifest that, within the common fundamental conception, there was a surprising amount of latitude for different readings of it, and, as it chanced, there were certain circumstances which very much favoured the taking advantage of this latitude. First of all, economists fell heir not only to the fundamental conception, but to the seed of ambiguity which Adam Smith had planted in it. This seed now burst into full life. Almost everybody, entangled in the confusion we have just described, thought that "Capital" must be defined by *one* uniting conception. But the one party, and indeed the majority, thought more about the instruments of production, while the other thought more about the source of income; and thus they attached to capital the characteristics of two different conceptions. This was one fruitful cause of divergent definitions, but there was another still more fruitful. Whether the theoretical conception of capital was made to include productive instruments only, or whether, more liberally, it was made to embrace acquisitive instruments as well, in any case there are many different kinds both of productive and of acquisitive instruments. Now, in proportion as economists discovered more similarities or more contrasts between the various groups of goods which serve for production and for acquisition, they considered it appropriate to group together, under the conception which they called capital, sometimes all acquisitive or all productive instruments without exception, sometimes only a certain circle of the same. And this circle again, according to the tendencies of the writer, might be larger or smaller; sometimes of moderate dimensions, and sometimes, again, very closely limited. It may be said, indeed, that of all combinations and permutations which were logically and mathematically conceivable, economical science in this case was not spared one.

Without attempting either to give a complete tale of these, or to keep to the chronological order, I shall shortly collocate the more important of them.

Numerous writers define capital as a group of "products

that serve towards production," or as groups of "produced means of production." This conception, which is expressly based on the relation of capital to production, excludes, on the one hand, land (as not produced) and, on the other hand, all goods that serve for immediate satisfaction of wants. This conception I have followed in defining capital as a group of Intermediate Products. In so far as it is not so much an alteration as a more distinct formulation of Adam Smith's (national) conception, I do not reckon it an independent variation.

The variation which Hermann, however, has given must be considered an independent one, and is the fourth reading in arithmetical order given to the conception. He goes back to capital as the source of income, and makes this the object of his definition: Capital, he says, is "every durable foundation of a utility (*Nutzung*) which has exchange value."[1] In opposition to the last definition this one includes under the conception of capital all land, and besides embraces such consumption goods as are durable, like furniture, houses, etc., even if they are personally used by the owners.

A fifth variation is given by Menger. He defines capital as such groups of economic goods of higher rank (productive goods) as are now available to us for future periods.[2] This definition is, in one way narrower, in another, wider than Hermann's. It excludes durable consumption-goods ("goods of the first rank"), but it is wide enough to take in the productive services of labour,[3] which Hermann had not reckoned as capital.

A sixth variation comes from Kleinwächter. He finds it a characteristic mark of capital that it *lightens* the toil of acquisition or productive labour. Now this characteristic appears to him not to belong to all means of production, but only to one category of these, the tools of production, while the matter or materials of production are absolutely passive during the whole production process; they are worked up or used up but give no assistance in working. "Logically,"

[1] *Staatswirthschaftliche Untersuchungen*, Munich, 1832, p. 59, and similarly in the second edition of 1874, p. 111. On p. 56 he expressly calls capital "Wealth which brings in income."

[2] *Grundsätze*, Vienna, 1871, p. 130.

[3] See Mataja, *Der Unternehmergewinn*, 1884, p. 180.

therefore, "the conception of capital should be limited to tools of production." [1]

A seventh interpretation has Jevons for its author. It runs parallel to a certain extent with the foregoing. That is to say, Jevons also considers it proved that by capital is to be understood "wealth employed to facilitate production." [2] But he finds this characteristic in quite another group of concrete goods from that of Kleinwächter. "The single and all-important function of capital," he says, "is to enable the labourer to await the result of any long lasting work—to put an interval between the beginning and the end of an enterprise." Capital, then, "consists merely in the aggregate of those commodities which are required for sustaining labourers of any kind or class engaged in work. A stock of food is the main element of capital; but supplies of clothes, furniture, and all the other articles in common daily use are also necessary parts of capital." The true and only capital thus, according to Jevons, is the sustenance of the labourers.[3]

Marx arrived at an eighth reading of the conception. As every one knows he sees in interest a profit got by the capitalist at the expense of the wage-earner. This element of exploitation seems to him so important that he brings it in to the conception of capital as a constitutive feature of it: he conceives of capital as only those productive instruments which, in the hand of the capitalists, serve as "instruments for the exploitation and enslaving of the labourer." The same things in the possession of the labourer, on the other hand, are not capital.[4]

A ninth variation we owe to the distinguished critic of the theory of capital, Karl Knies. It originates in a well-meant attempt to settle the terribly tangled controversy to the satisfaction of everybody. To this end Knies endeavours to construct a conception of capital which will be so wide that the most important of the contending interpretations may find room in it beside each other. The uniting element in the conception he imagines he finds in the devotion of goods to

[1] *Grundlagen und Ziele des sog. wissenschaftlichen Sozialismus*, 1885, p. 184.

[2] *Theory of Political Economy*, second edition, London, 1879, p. 242.

[3] *Ibid.* p. 242, and very emphatically p. 264: "The capital is not the railway, but the food of those who made the railway."

[4] *Das Kapital*, vol. i., second edition, p. 796 (first edition, p. 747). See also Knies, *Das Geld*, first edition, p. 53.

the service of the future. Accordingly he defines the capital of a community as "its available stock of goods (whether for consumption, acquisition, or production) which may be applied to satisfying wants in the future." [1] This definition does, as a fact, afford room both for Turgot's "saved stocks of goods" and for the "produced means of production" of Adam Smith's school, as also for all goods embraced in Hermann's definition as affording the foundation of a durable—and therefore a conspicuously future—utility.

Quite by itself stands the tenth interpretation, that of L. Walras. He divides all economic goods into "capital" and "income" (*revenu*). All kinds of goods, irrespective of their destination, which can be used more than once—that is, all durable goods—he calls capital; while all perishable goods are income. Going into details he mentions the following as capital:—Land (*capitaux fonciers*), persons (*capitaux personnels*), and movable durable goods (*capitaux proprement dits* or *capitaux mobiliers*), while he considers food, the raw materials of industrial production, fuel and the like, as income.[2]

If the interpretations just mentioned are divided in opinion as to the goods which should be designated capital, they are, at any rate, all agreed that it is *goods* that are to bear that name. But, finally, an eleventh reading of the conception calls this in question, and, instead of making capital a real concrete quantity, distils out, as it were, some kind of abstraction as the essence of capital. Thus M'Leod, who sometimes recurs to a favourite metaphor of earlier writers and defines capital as a "stock of accumulated labour," sometimes goes still deeper in abstraction and defines it as "purchasing power" or "circulating power." These phrases are not meant as illustrations, but explanations given in full earnest; he gives us to understand this in the most emphatic way by saying, in one place, that the application of the word capital to goods is a simple metaphor, and on another occasion, in so many words,

[1] *Das Geld*, first edition, p. 47. In the second edition (1885) the same conception is on the whole retained, but often formulated in a less exact manner. Accordingly, where I do not explicitly mention the contrary, I quote from the more distinct formulation of the first edition.

[2] *Éléments d'Économie Politique Pure*, Lausanne, 1874, p. 213. Launhardt (*Mathematische Begründung der Volkswirthschaftslehre*, Leipsic, 1885, § 2) has closely followed Walras.

that capital does not represent goods in any way whatever.[1] Quite recently too we have a strikingly similar conception in the suggestive work of a juristic writer, Kühnast. He also tells us emphatically that capital is of an immaterial nature, and does not consist of material objects at all—of goods themselves, that is to say—but only of their value. "Capital is . . . the value of the productive power contained in material goods . . . or a complex of productive material values."[2]

Numerous as are these various readings of the conception, our list does not by any means exhaust the divisions and subdivisions that might be given. In addition to the above interpretations which differ in form—which are, that is, different definitions—there may be complete unanimity as to the formula of the definition, and yet a good deal of disagreement as to the essence of it. This might happen where a word employed in all the definitions as characteristic and distinctive was not used in all of them in the same sense. Not to speak of less important instances, there are two characteristic terms which, as capable of different readings, involve materially different interpretations of the conception of capital. One of these is the word "good." Of the many economists who were agreed in defining capital as a stock or group of goods, some, taking the word in its narrower sense, thought only of a supply of material goods; some, extending it to immaterial objects, thought of things like the state, peace, law, national honour, virtue;[3] some again, under the same term, included useful personal properties and powers;[4] while others took man himself into the conception.[5] A similar ambiguity has attended the use of the characteristic term "means of production," or simply "production." While some economists, and

[1] "It does not represent commodities in any way whatever, but only the power its owner has of purchasing what he wants" (*Elements of Political Economy*, 1858, pp. 66 and 69).

[2] "Ueber den rechtlichen Begriff des Kapitals," in the *Beiträge zur Erläuterung des Deutschen Rechtes*, 1884, p. 356; and particularly pp. 385-387.

[3] See also Knies, *Das Geld*, p. 17 (second edition, p. 38).

[4] Thus occasionally Adam Smith, J. B. Say, and others.

[5] Thus Canard: "The fundamental wealth of one who pursues an art or a handicraft is his own person"; and later, M'Culloch (*Principles of Political Economy*, 1825, p. 319): "A labourer is himself a part of the national capital." Elsewhere he explains the wage of labour as an interest on capital of the "machine called man."

those the majority, understood by production simply a producing of materials for the satisfaction of human want, others included the producing of what they called "inward goods," the creation of satisfactory conditions for and in the human person. The consequence of this was that the significant term "means of production" lost every possible limitation, and that even goods for immediate enjoyment were received into the conception of capital on the ground of being instrumental in producing the "inward goods" of content, health, culture, etc. The greatest sinner in this respect is Roscher. He first defines capital to be "every product which is dedicated to further production," but then divides this general conception into "Productive capital" and "Use capital," according as these products affect the production of material goods or "the production of personal goods or useful relations."[1] Thus, notwithstanding the difference in definition, his conception of capital practically comes very near to that of Turgot.

[1] *Grundlagen der Nationalökonomie*, § 42.

CHAPTER IV

THE TRUE CONCEPTION OF CAPITAL

POLITICAL economists have not, as a rule, been noted for the unanimity of their definitions. But here the differences in the interpretation of the conception are so excessive as to suggest that there may be something quite peculiar about the object of dispute. I think Knies has quite correctly estimated the peculiar position of the case when he says that "there is something else in it than an ordinary scientific dispute as to whether a particular definition is happy or unfortunate, or, indeed, true or false."[1] It is not the definition that is the matter of dispute, but the thing defined; or, as I should prefer to say, the terminology. The material difference in the definitions is not so much that the one thing to be defined appears to each one in a different light, as that each one is defining an entirely different thing; and thus definitions that are really incompatible come within the same ring-fence, because each one claims the expression Capital for the object he is defining.

It is clear that, while this circumstance may explain the striking divergence of opinions, it makes it, unfortunately, more difficult to decide between them. For in questions of nomenclature there is, strictly speaking, neither right nor wrong. There is, therefore, nothing to compel conviction; there is only an appeal to a greater or less appropriateness; and people may, to a considerable extent, remain of different opinions as to the appropriateness. All the same it is clear that our controversy must be settled. It is impossible that economic science can for all time allow its representatives liberty to call

[1] *Das Geld*, p. 5.

ten or eleven fundamentally different things by the same name. Political Economy requires clear thinking, and for that the prerequisites are clear ideas and clear speech. We must come to an agreement, and it will be come to exactly as men have agreed and continue to agree over the innumerable disputes to which the nomenclature of the descriptive natural sciences, zoology, botany, mineralogy, geography, continually gives rise. The majority unite, and slowly but surely leave the dissentients and pass to the order of the day.

But on which of the numerous readings of our conception of capital can we hope to unite unprejudiced persons? To my mind, if we have once realised the nature of the controversy as pre-eminently one of terminology, we shall not find it so difficult to decide as the amount of confusion up till now might lead one to suppose. Happily there cannot be much doubt as to certain leading principles that have to be observed in questions of terminology; if these are impartially acted upon, the great majority of the competing definitions will be definitely thrown out, and there will not remain more than two or three between which there need be any real hesitation. And, even in this short list, the arguments of appropriateness which must decide are so unequally distributed that, though we may not be able actually to force a universal acceptance of one definite conception—as it is, after all, only appropriateness that must guide us,—yet we may confidently look for the voluntary adhesion of a vast majority.

The leading principles we have to observe seem to me to be as follows. First, and chiefly, it is quite clear that our reading of the conception must be logically unassailable; that is to say, it must not contradict itself, and it must apply to the object which it proposes to define. Then, we must not be spendthrift in our terminology; that is to say, we must not attach the name capital to, and make it synonymous with, a conception that already has a name, while other suggestive conceptions, to which naturally the word would equally well apply, have to do without any name. Thirdly, the conception we adopt must be scientifically important and scientifically useful. Lastly, and not least, unless an alteration be urgently demanded on some grounds of logic or appropriateness, the name of capital must be left to that conception for which it has been longest and most generally used. Or, to put it in a more roundabout way: as things are at present, everybody treats of the most weighty theoretical and social problems under the general name of "problems of capital"; that being so, the word capital, wherever possible, should be so used as to spare us the aggravated difficulties that will attend the great controverted questions of the day if we rebaptize their terms.

In view of these rules I would suggest the following as the most adequate solution of the controversy.

Capital in general we shall call a group of Products which serve as means to the Acquisition of Goods. Under this general conception we shall put that of Social Capital as narrower conception. Social Capital we shall call a group of products, which serve as means to the socio-economical Acquisition of Goods; or, as this acquisition is only possible through production, we shall call it a group of products destined to serve towards further production; or, briefly, a group of Intermediate Products. Synonymous with the wider of the two conceptions, the term Acquisitive Capital may be very suitably used, or, less suitably but more in accordance with usage, the term Private Capital. Social Capital again, the narrower of the two conceptions, may be well and concisely called Productive Capital. The following are my reasons for this classification.

Capital in its wider sense, and capital in its narrower sense, both mark out categories which, economically, are of the highest importance. "Products which serve to acquisitive ends" possess a pre-eminent importance for the theory of income as being the source of interest; while the "intermediate products" possess at least as great an importance for the theory of production. The distinction between production from hand to mouth and production which employs roundabout and fruitful methods, is so fundamental that it is eminently desirable that a special conception should be coined for the latter. This is done—if not, as we shall see, in the only possible way, yet in a way that is not inappropriate—in grouping together, under the conception of capital, the "intermediate products" which come into existence in the course of this roundabout production.

Again, the solution suggested is the most conservative one.

Without laying any particular weight on the fact that the historical origin of the word Capital[1] indicates a relation to an acquisition or a gain, and that our reading remains true to this, it preserves the double relation—the relation to acquisition of interest on the one side, and to production on the other—which was imported into the conception of capital by Adam Smith, and since his time has been adopted in scientific usage. It is no inconsiderable advantage, then, that we do not require to create a majority in its favour by a revolution in terminology; the majority is already with us, and the conception may easily be carried unanimously if we add some new unbiassed members. Here, too, it is worthy of particular attention that those writers who have occupied themselves professedly and most profoundly with the investigation of the conception of capital and its problems, have ended, almost without exception, by adopting exactly the same conception, or at least one which comes very close to it.[2]

Connected with this is the further advantage, that we avoid a puzzling change of name for the two classes of problems which

[1] See above, p. 24.

[2] Cossa (*La Nozione del Capitale*), *Saggi di Ec. Pol.*, p. 157, has the definition: "Capitale è un prodotto impiegato nella produzione." Ricca-Salerno (*Sulla Teoria del Capitale*, 1877, p. 51) says: "Il capitale è ricchezza prodotta applicata alla produzione." Rodbertus, whose opinion I am inclined to put particularly high, because, although not altogether happy in his solution of the problems of capital, he had an insight into its essence such as scarcely any one before him had, explains (*Das Kapital*, p. 234, also *Zur Beleuchtung der soz. Frage*, p. 98) that "Capital (materials and tools) is product which serves for still further production." A. Wagner, also, who has done good service in the theory of capital (*Grundlegung*, second edition, p. 38), calls capital a "Stock of economical goods, which serve as instruments to the making or acquiring of new economical goods." In the most recent Italian monograph on capital, Supino (*Il Capitale nell' Organismo Economico e nell' Economia Politica*, 1886, pp. 9 and 17) defines capital again as "Il prodotto del lavoro passato che serve a produzione successiva," or as "ricchezza impiegata produttivamente allo scopo di ricavarne un profitto." Of other prominent modern writers may be mentioned Pierson (*Leerboek der Staathuishoudkunde*, Haarlem, 1884, p. 157); Schönberg (*Handbuch*, second edition, p. 209), "Capital is a material means of production obtained by human labour, which, employed as such, is destined to give a return to its owner"; E. Sax (*Grundlegung der theoretischen Staatswirthschaft*, pp. 115, 315, 323, etc.) Of recent French writers on the subject Gide (*Principes d'Économie Politique*, Paris, 1884) recognises the two varieties in the conception of capital with a clearness rare even in French literature, and distinguishes them as "capitaux simplement lucratifs" and "capitaux productifs." "Les premiers," he says, "sont ceux que rapportent un revenu à une personne;

are both treated of now under the name of problems of capital. The popular name is retained both for the "factor of production" and for the "source of interest." And finally, it seems to me no small advantage that, notwithstanding the material difference there is between capital the factor of production, and capital the source of interest, it is not necessary in our reading of it to make two conceptions of capital that are entirely foreign to one another, and have nothing more in common than cat has with category. Our two conceptions have just enough in common to allow of their being formally coupled under one common definition, and then distinguished as narrower and wider conceptions. True, their connection is not an intimate one, and in the light of what has been said it cannot be so; it rests simply on the accidental circumstance that, for society as a whole, which cannot acquire except through producing, the goods which constitute the produced means of *acquisition* (capital in the wider sense) coincide with the goods which constitute the produced means of *production* (capital in the narrower sense, or Social Capital). It will be noted that I use the phrase Social Capital, and not the common expression National Capital. I do so for this reason, that, for a limited community, the means of acquisition embrace not only productive goods but consumption goods lent to foreign countries. Those who hold by the conception of National Capital, then, must either take in the above-named consumption goods along with productive goods, thereby arriving at a

les seconds sont ceux qui produisent une richesse nouvelle dans le pays" (p. 148). His only failure is that he would recognise productive capitals alone as "true" capitals.

In English literature our conception of capital (without, of course, any clear distinction being kept between its two varieties) is almost exclusively the prevailing one; this is so well known that I may spare quotations. Generally speaking, it is very significant of the state of "public opinion" in the matter that not long ago Kleinwächter (Schönberg's *Handbuch*, second edition, p. 210) could explain "Common usage in political economy to-day considers it an essential characteristic of capital that it is a material means of production." The only difference of opinion is as to whether land should be reckoned as capital or not. Finally, I think I may venture to express the opinion that even the foremost representative of a rival definition, Knies, is in opposition to us more in form than in matter. It is he at any rate who has, in a masterly manner, developed the idea—the really important one in our statement of the conception—that, in defining capital, we must define that which is the object of those problems that "have appeared on the scene under the name of capital" (*Das Geld*, p. 19).

very uninteresting conception indeed; or if they mean to confine it to productive goods only, they must build their national conception on a quite independent basis, and break off all logical connection with the other conception,—which would at any rate be a doubtful policy. Our "Social Capital" avoids both these difficulties.