Chapter Three

THE QUESTION OF THE CONTRADICTION

MANY years ago, long before the above-mentioned prize essays on the compatibility of an equal average rate of profit with the Marxian law of value had appeared, the present writer had expressed his opinion on this subject in the following words: "Either products do actually exchange in the long run in proportion to the labor attaching to them—in which case an equalization of the gains of capital is impossible; or there is an equalization of the gains of capital—in which case it is impossible that products should continue to exchange in proportion to the labor attaching to them." [1]

From the Marxian camp the actual incompatibility of these two propositions was first acknowledged a few years ago by Conrad Schmidt.[2] Now we have the authoritative confirmation of the master himself. He has stated concisely and precisely that an equal rate of profit is only possible when the conditions of sale are such that some commodities are sold above their value, and others under their value, and thus are not exchanged in proportion to the labor embodied in them. And neither has he

[1] *Capital and Interest,* p. 362.

[2] See his work, *Die Durchschnittsprofitrate auf Grundlage des Marxschen Wertgesetzes,* Stuttgart, 1889, especially section 13; and my review of this work in the *Tübinger Zeitschrift für die gesamte Staatswissenschaft,* 1890, pp. 590 ff.

left us in doubt as to which of the two irreconcilable propositions conforms in his opinion to the actual facts. He teaches, with a clearness and directness which merit our gratitude, that it is the equalization of the gains of capital. And he even goes so far as to say, with the same directness and clearness, that the several commodities do not actually exchange with each other in proportion to the labor they contain, but that they exchange in that varying proportion to the labor which is rendered necessary by the equalization of the gains of capital.

In what relation does this doctrine of the third volume stand to the celebrated law of value of the first volume? Does it contain the solution of the seeming contradiction looked for with so much anxiety? Does it prove "how not only without contradicting the law of value, but even by virtue of it, an equal average rate of profit can and must be created"? Does it not rather contain the exact opposite of such a proof, namely, the statement of an actual irreconcilable contradiction, and does it not prove that the equal average rate of profit can only manifest itself if, and because, the alleged law of value does not hold good?

I do not think that any one who examines the matter impartially and soberly can remain long in doubt. In the first volume it was maintained, with the greatest emphasis, that all value is based on labor and labor alone, and that values of commodities were in proportion to the working time necessary for their production. These propositions were deduced and distilled directly and exclusively from the exchange relations of commodities in which they were "immanent." We were directed "to start from the exchange value, and exchange relation of commodities, in order to come upon the track of the value concealed in them" (I, 55). The value was declared to be "the common factor which appears in the exchange relation of commodities" (I, 45). We were told, in the form and with the emphasis of a stringent syllogistic conclusion, allowing of no exception, that to set down two commodities as equivalents in

exchange implied that "a common factor of *the same magnitude*" existed in both, to which each of the two "*must* be reducible" (I, 43). Apart, therefore, from temporary and occasional variations which "appear to be a breach of the law of the exchange of commodities" (I, 177), commodities which embody the same amount of labor *must* on principle, in the long run, exchange for each other. And now in the third volume we are told briefly and dryly that what, according to the teaching of the first volume, *must* be, is not and never can be; that individual commodities do and must exchange with each other in a proportion different from that of the labor incorporated in them, and this not accidentally and temporarily, but of necessity and permanently.

I cannot help myself; I see here no explanation and reconciliation of a contradiction, but the bare contradiction itself. Marx's third volume contradicts the first. The theory of the average rate of profit and of the prices of production cannot be reconciled with the theory of value. This is the impression which must, I believe, be received by every logical thinker. And it seems to have been very generally accepted. Loria, in his lively and picturesque style, states that he feels himself forced to the "harsh but just judgment" that Marx "instead of a solution has presented a mystification." He sees in the publication of the third volume "the Russian campaign" of the Marxian system, its "complete theoretical bankruptcy," a "scientific suicide," the "most explicit surrender of his own teaching" (*l'abdicazione più esplicita alla dottrina stessa*), and the "full and complete adherence to the most orthodox doctrine of the hated economists." [1]

And even a man who is so close to the Marxian system as Werner Sombart says that a "general head shaking" best represents the probable effect produced on most readers by the third volume. "Most of them," he says, "will not be inclined to regard

[1] "L'opera postuma di Carlo Marx," *Nuova Antologia,* February 1895, pp. 20, 22, 23.

'the solution' of 'the puzzle of the average rate of profit' as a 'solution'; they will think that the knot has been cut, and by no means untied. For, when suddenly out of the depths emerges a 'quite ordinary' theory of cost of production, it means that the celebrated doctrine of value has come to grief. For, if I have in the end to explain the profits by the cost of production, wherefore the whole cumbrous apparatus of the theories of value and surplus value?" [1] Sombart certainly reserves to himself another judgment. He attempts to save the theory in a way of his own, in which, however, so much of it is thrown overboard that it seems to me very doubtful if his efforts have earned the gratitude of any person concerned in the matter. I shall later examine more closely this attempt, which is in any case interesting and instructive. But, before the posthumous apologist, we must give the master himself the careful and attentive hearing which so important a subject deserves.

Marx himself must, of course, have foreseen that his solution would incur the reproach of being no solution at all, but a surrender of his law of value. To this prevision is evidently due an anticipatory self-defense which, if not in form yet in point of fact, is found in the Marxian system; for Marx does not omit to interpolate in numerous places the express declaration that, in spite of exchange relations being directly governed by prices of production, which differ from the values, all is nevertheless moving within the lines of the law of value and this law, "in the last resort" at least, governs prices. He tries to make this view plausible by several inconsequent observations and explanations. On this subject he does not use his customary method of a formal close line of reasoning, but gives only a series of running, incidental remarks which contain different arguments, or turns of expression which may be interpreted as such. In this case it is impossible to judge on which of these

[1] "Zur Kritik des Ökonomischen Systems von Karl Marx," *Archiv für soziale Gesetzgebung,* Vol. VII (1895), pp. 571 ff. Subsequently referred to as "Zur Kritik."

arguments Marx himself intended to place the greatest weight, or what was his conception of the reciprocal relations of these dissimilar arguments. However that may be, we must, in justice to the master as well as to our own critical problem, give each of these arguments the closest attention and impartial consideration.

The running remarks appear to me to contain the following four arguments in favor of a partly or wholly permanent validity of the law of value.

First argument: even if the *separate* commodities are being sold either above or below their values, these reciprocal fluctuations cancel each other, and in the community itself—taking into account all the branches of production—the *total of the prices of production* of the commodities produced still remains *equal to the sum of their values* (III, 188).

Second argument: the law of value governs the *movement of prices,* since the diminution or increase of the requisite working time makes the prices of production rise or fall (III, 208, 211).

Third argument: the law of value, Marx affirms, governs with undiminished authority the exchange of commodities in *certain "primary" stages,* in which the change of values into prices of production has not yet been accomplished.

Fourth argument: in a complicated economic system the law of value regulates the prices of production at least *indirectly and in the last resort,* since the total value of the commodities, determined by the law of value, determines the total surplus value. The latter, however, regulates the amount of the average profit, and therefore the general rate of profit (III, 212).

Let us test these arguments, each one on its own merits.

FIRST ARGUMENT

IT IS admitted by Marx that separate commodities exchange with each other either over or under their value according as

the share of constant capital employed in their production is above or below the average. Stress is, however, laid on the fact that these individual deviations which take place in opposite directions compensate or cancel each other, so that the sum total of all prices paid corresponds exactly with the sum of all values. "In the same proportion in which one part of the commodities is sold above its value another part will be sold under its value" (III, 185). "The aggregate price of the commodities I to V [in the table given by Marx as an example] would therefore be equal to their aggregate values, and would therefore be, in fact, a money expression of the aggregate amount of labor, both past and recent, contained in the commodities I to V. And in this way in the community itself—when we regard the total of all the branches of production—the sum of the prices of production of the commodities manufactured is equal to the sum of their values" (III, 188). From this, finally, the argument is more or less clearly deduced that at any rate for the sum of all commodities, or for the community as a whole, the law of value maintains its validity. "Meanwhile it resolves itself into this—that by as much as there is too much surplus value in one commodity there is too little in another, and therefore the *deviations from value* which lurk in the prices of production *reciprocally cancel each other.* In capitalist production as a whole *'the general law maintains itself as the governing tendency,'* only in a very complex and approximate manner, as the constantly changing average of perpetual fluctuations" (III, 190).

This argument is not new in Marxian literature. In similar circumstances it was maintained, a few years ago, by Conrad Schmidt, with great emphasis, and perhaps with even greater clearness of principle than now by Marx himself. In his attempt to solve the riddle of the average rate of profit Schmidt also, while he employed a different line of argument from Marx, arrived at the conclusion that separate commodities *cannot* exchange with each other in proportion to the labor attaching

to them. He too was obliged to ask the question whether, in face of this fact, the validity of Marx's law of value could any longer be maintained, and he supported his affirmative opinion on the very argument that has just been given.[1]

I hold the argument to be absolutely untenable. I maintained this at the time against Conrad Schmidt, and I have no occasion today in relation to Marx himself to make any alteration in the reasoning on which I founded my opinion then. I may content myself now with simply repeating it word for word. In opposing Conrad Schmidt, I asked how much or how little of the celebrated law of value remained after so much had practically been given up, and then continued: "That not much remains will be best shown by the efforts which the author makes to prove that, in spite of everything, the law of value maintains its validity. After he has admitted that the actual prices of commodities differ from their values, he remarks that this divergence only relates to those prices obtained by *separate commodities,* and that it disappears as soon as one considers the *sum* of all separate commodities, the yearly national produce, and that the total price which is paid for the whole national produce taken together does certainly coincide entirely with the amount of value actually embodied in it (p. 51). I do not know whether I shall be able to show sufficiently the bearings of this statement, but I shall at least attempt to indicate them.

"What then, we ask, is the chief object of the 'law of value'? It is nothing else than the elucidation of the exchange relations of commodities as they actually appear to us. We wish to know, for instance, why a coat should be worth as much in exchange as twenty yards of linen, and ten pounds of tea as much as half a ton of iron, etc. It is plain that Marx himself so conceives the explanatory object of the law of value. There can clearly only be a question of an exchange *relation* between different separate commodities *among each other.* As soon, however, as

[1] See his work quoted above, especially section 13.

one looks at all commodities *as a whole* and sums up the prices, one must studiously and of necessity avoid looking at the relations existing inside of this whole. The internal relative differences of price do compensate each other in the sum total. For instance, what the tea is worth more than the iron the iron is worth less than the tea and vice versa. In any case, when we ask for information regarding the exchange of commodities in political economy it is no answer to our question to be told the total price which they bring when taken altogether, any more than if, on asking by how many fewer minutes the winner in a prize race had covered the course than his competitor, we were to be told that all the competitors together had taken twenty-five minutes and thirteen seconds.

"The state of the case is this: to the question of the problem of value the followers of Marx reply first with their law of value, that commodities exchange in proportion to the working time incorporated in them. Then they—covertly or openly—revoke this answer in its relation to the domain of the exchange of separate commodities, the one domain in which the problem has any meaning, and maintain it in full force only for the whole aggregate national produce, for a domain therefore in which the problem, being without object, could not have been put at all. As an answer to the strict question of the problem of value the law of value is avowedly contradicted by the facts, and in the only application in which it is not contradicted by them it is no longer an answer to the question which demanded a solution, but could at best only be an answer to some other question.

"It is, however, not even an answer to another question; it is no answer at all; it is simple tautology. For, as every economist knows, commodities do eventually exchange with commodities—when one penetrates the disguises due to the use of money. Every commodity which comes into exchange is at one and the same time a commodity and the price of what is given in exchange for it. The aggregate of commodities therefore is

identical with the aggregate of the prices paid for them; or, the price of the whole national produce is nothing else than the national produce itself. Under these circumstances, therefore, it is quite true that the total price paid for the entire national produce coincides exactly with the total amount of value or labor incorporated in it. But this tautological declaration denotes no increase of true knowledge, neither does it serve as a special test of the correctness of the alleged law that commodities exchange in proportion to the labor embodied in them. For in this manner one might as well, or rather as unjustly, verify any other law one pleased—the law, for instance, that commodities exchange according to the measure of their specific gravity. For if certainly as a 'separate ware' one pound of gold does not exchange with one pound of iron, but with 40,000 pounds of iron; still, the *total price* paid for one pound of gold and 40,000 pounds of iron *taken together* is nothing more and nothing less than 40,000 pounds of iron and one pound of gold. The total weight, therefore, of the total price—40,001 pounds—corresponds exactly to the like total weight of 40,001 pounds incorporated in the whole of the commodities. Is weight consequently the true standard by which the exchange relation of commodities is determined?"

I have nothing to omit and nothing to add to this judgment in applying it now to Marx himself, except perhaps that in advancing the argument which has just been under criticism Marx is guilty of an additional error which cannot be charged against Schmidt. For, in the passage just quoted from page 190 of the third volume, Marx seeks, by a general dictum concerning the way in which the law of value operates, to gain approval for the idea that a certain real authority may still be ascribed to it, even if it does not rule in separate cases. After saying that the "deviations" from value, which are found in the prices of production, cancel each other, he adds the remark that "in capitalist production as a whole the general law maintains itself as the governing tendency, for the most part only in a very

complex and approximate manner as the constantly changing *average of perpetual fluctuations*."

Here Marx confounds two very different things: an *average of fluctuations,* and an *average between permanently and fundamentally unequal quantities.* He is so far quite right, that many a general law holds good solely because an average resulting from constant fluctuations coincides with the rule declared by the law. Every economist knows such laws. Take, for example, the law that prices equal costs of production—that apart from special reasons for inequality there is a tendency for wages in different branches of industry, and for profits of capital in different branches of production, to come to a level, and every economist is inclined to acknowledge these laws as "laws," although perhaps there may be no absolutely exact agreement with them in any single case; and therefore even the power to refer to a mode of action operating on the whole, and on the average, has a strongly captivating influence.

But the case in favor of which Marx uses this captivating reference is of quite a different kind. In the case of prices of production which deviate from the "values," it is not a question of fluctuations, but of necessary and permanent divergences.

Two commodities, A and B, which contain the same amount of labor, but have been produced by capitals of different organic composition, do not fluctuate round the same average point, say, for example, the average of fifty shillings; but each of them assumes permanently a different level of price: for instance, the commodity A, in the production of which little constant capital, demanding but little interest, has been employed, the price level of forty shillings; and the commodity B, which has much constant capital to pay interest on, the price level of sixty shillings, allowance being made for fluctuation round each of these deviating levels. If we had only to deal with fluctuations round one and the same level, so that the commodity A might stand at one moment at forty-eight shillings and the commodity B at fifty-two shillings, and at another moment the case were reversed,

and the commodity A stood at fifty-two shillings and the commodity B only reached forty-eight, then we might indeed say that in the average the price of both of these commodities was the same, and in such a state of things, if it were seen to obtain universally, one might find, in spite of the fluctuations, a verification of the "law" that commodities embodying the same amount of labor exchange on an equal footing.

When, however, of two commodities in which the same amount of labor is incorporated, one permanently and regularly maintains a price of forty shillings and the other as permanently and regularly the price of sixty shillings, a mathematician may indeed strike an average of fifty shillings between the two; but such an average has an entirely different meaning, or, to be more accurate, has no meaning at all with regard to our law. A mathematical average may always be struck between the most unequal quantities, and when it has once been struck the deviations from it on either side always "mutually cancel each other" according to their amount; by the same amount exactly by which the one exceeds the average the other must of necessity fall short. But it is evident that necessary and permanent differences of prices in commodities of the same cost in labor, but of unequal composition as regards capital, cannot by such playing with "average" and "deviations that cancel each other" be turned into a confirmation of the alleged law of value instead of a refutation. We might just as well try in this way to prove the proposition that animals of all kinds, elephants and May flies included, have the same length of life; for while it is true that elephants live on an average one hundred years and May flies only a single day, yet between these two quantities we can strike an average of fifty years. By as much time as the elephants live longer than the flies, the flies live shorter than the elephants. The deviations from this average "mutually cancel each other," and consequently on the whole and on the average the law that all kinds of animals have the same length of life is established!

Let us proceed.

SECOND ARGUMENT

IN VARIOUS PARTS of the third volume Marx claims for the law of value that it "governs the movement of prices," and he considers that this is proved by the fact that where the working time necessary for the production of the commodities decreases, there also prices fall; and that where it increases prices also rise, other circumstances remaining equal.[1]

This conclusion also rests on an error of logic so obvious that one wonders Marx did not perceive it himself. That in the case of "other circumstances remaining equal" prices rise and fall according to the amount of labor expended proves clearly neither more nor less than that labor is one factor in determining prices. It proves, therefore, a fact upon which all the world is agreed, an opinion not peculiar to Marx, but one acknowledged and taught by the classical and "vulgar economists." But by his law of value Marx had asserted much more. He had asserted that, barring occasional and momentary fluctuations of demand and supply, the labor expended was the sole factor which governed the exchange relations of commodities. Evidently it could only be maintained that *this* law governs the movement of prices if a permanent alteration in prices could not be produced or promoted by any other cause than the alteration in the amount of working time. This, however, Marx does not and cannot maintain; for it is among the results of his own teaching that an alteration in prices must occur when, for instance, the expenditure of labor remains the same, but when, owing to such circumstances as the shortening of the processes of production, the organic composition of the capital is changed. By the side of this proposition of Marx we might with equal justification place the other proposition, that prices rise or fall when, other conditions remaining equal, the length of time during which the capital is

[1] Vol. III, p. 208, and quite similarly in the passage already quoted, Vol. III, p. 211.

invested increases or decreases. If it is impossible to prove by the latter proposition that the length of time during which the capital is invested is the sole factor that governs exchange relations, it is equally impossible to regard the fact that alterations in the amounts of the labor expended affect the movements of prices as a confirmation of the alleged law that labor alone governs the exchange relations.

THIRD ARGUMENT

THIS ARGUMENT has not been developed with precision and clearness by Marx, but the substance of it has been woven into those processes of reasoning, the object of which was the elucidation of the "truly difficult question": "how the adjustment of the profits to the general rate of profit takes place" (III, 205 ff.).

The kernel of the argument is most easily extracted in the following way: Marx affirms, and must affirm, that "the rates of profits are originally very different" (III, 186), and that their adjustment to a general rate of profits is primarily "a result, and cannot be a starting point" (III, 205). This thesis further contains the claim that there exist certain "primitive" conditions in which the change of values into prices of production which leads to the adjustment of the rates of profit has not yet taken place, and which therefore are still under the complete and literal dominion of the law of value. A certain region is consequently claimed for this law in which its authority is perfectly absolute.

Let us inquire more closely what this region is, and see what arguments Marx adduces to prove that the exchange relations in it are actually determined by the labor incorporated in the commodities.

According to Marx the adjustment of the rate of profit is dependent on two assumptions: first, on a capitalist system of production being in operation (III, 206); and secondly, on the

leveling influence of *competition* being in *effective action* (III, 187, 204, 212, 230, 231). We must, therefore, logically look for the "primitive conditions" under which the pure regime of the law of value prevails where one or other of these assumed conditions does not exist (or, of course, where both are absent).

On the first of these cases Marx has himself spoken very fully. By a very detailed account of the processes which obtain in a condition of society where capitalist production does not yet prevail, but "where the means of production belong to the worker," he shows the prices of commodities in this stage to be exclusively determined by their values. In order to enable the reader to judge impartially how far this account is really convincing, I must give the full text of it:

"The salient point will be best shown in the following way: Suppose the workers themselves to possess each his own means of production, and to exchange their commodities with each other. These commodities would not then be the product of capital. The value of the tools and raw material employed in the different branches of labor would be different according to the special nature of the work; and also, apart from inequality of value in the means of production employed, different amounts of these means would be required for given amounts of labor, according as one commodity could be finished in an hour and another only in a day, etc. Let us suppose, further, that these laborers work the same time, on an average, allowing for the adjustments which result from differences of intensity, etc., in work. Of any two workers, then, both would, first, in the commodities which represent the produce of their day's labor, have replaced their outlays, that is, the cost prices of the consumed means of production. These would differ according to the technical nature of their branches of industry. Secondly, both would have created the same amount of new value, that is, the value of the day's labor added to the means of production. This would contain their wages plus the surplus value, the surplus work above their necessary wants, of which the result,

however, would belong to themselves. *If we express ourselves in capitalistic terms, both receive the same wages plus the same profit,* but also the value, represented, for instance, by the produce of a working day of ten hours. But in the first place the values of their commodities would be different. In commodity I, for example, there would be a larger share of value for the expended means of production than in commodity II. The rates of profit also would be very different for I and II, if we here consider as rates of profit the proportion of the surplus value to the total value of the employed means of production. The means of subsistence which I and II consume daily during the process of production, and which represent the wages of labor, form here that part of the advanced means of production which we usually call variable capital. But the *surplus value would be, for the same working time,* the same for I and II; or, to go more closely into the matter, as I and II, each, receive the value of the produce of one day's work, they receive, after deducting the value of the advanced 'constant' elements, equal values, one part of which may be looked upon as compensation for the means of subsistence consumed during the production, and the other as surplus value—value over and above this. If I has had more outlay it is made up to him by the greater value of his commodity, which replaces this 'constant' part, and he has consequently a larger part of the total value to exchange back into the material elements of this constant part; while if II obtains less he has, on the other hand, the less to exchange back. *Differences in rates of profit would therefore, under this assumption, be a matter of indifference,* just as it is today a matter of indifference to the wage earner by what rate of profit the amount of surplus value squeezed out of him is represented, and just as in international commerce the difference in the rates of profit in the different nations is a matter of indifference for the exchange of their commodities" (III, 206 ff.).

And now Marx passes at once from the hypothetical style of "supposition" with its subjunctive moods to a series of quite

positive conclusions. "The exchange of commodities at their values, or approximately at their values, demands, *therefore,* a much lower stage of development than the exchange into prices of production," and "it is, therefore, altogether in keeping with fact to regard the values as not only theoretically but *historically* prior to the prices of production. It holds good for circumstances where the means of production belong to the worker, and these circumstances are found both *in the old and in the modern world,* in the cases of peasants who own land and work it themselves, and in the case of artisans" (III, 208, 209).

What are we to think of this reasoning? I beg the reader above everything to notice carefully that the hypothetical part describes very consistently how exchange would present itself in those primitive conditions of society *if* everything took place according to the Marxian law of value; but that this description contains no shadow of proof, or even of an attempt at proof, *that* under the given assumptions things must so take place. Marx relates, "supposes," asserts, but he gives no word of proof. He consequently makes a bold, not to say naïve jump, when he proclaims as an ascertained result (as though he had successfully worked out a line of argument) that it is, *therefore,* quite consistent with facts to regard values, historically also, as prior to prices of production. As a matter of fact it is beyond question that Marx has not proved by his "supposition" the historical existence of such a condition. He has only hypothetically deduced it from his theory; and as to the credibility of that hypothesis we must, of course, be free to form our own judgment.

As a fact, whether we regard it from within or from without, the gravest doubts arise as to its credibility. It is inherently improbable, and so far as there can be a question here of proof by experience, even experience is against it.

It is inherently altogether improbable. For it requires that it should be a matter of complete indifference to the producers at what time they receive the reward of their activity, and that is economically and psychologically impossible. Let us make this

clear to ourselves by considering Marx's own example point by point. Marx compares two workers—I and II. Laborer I represents a branch of production which requires technically a relatively large and valuable means of production resulting from previous labor, raw material, tools, and auxiliary material. Let us suppose, in order to illustrate the example by figures, that the production of the previous material required five years' labor, while the working of it up into finished products was effected in a sixth year. Let us further suppose—what is certainly not contrary to the spirit of the Marxian hypothesis, which is meant to describe very primitive conditions—that laborer I carries on both works, that he both creates the previous material and also works it up into finished products. In these circumstances he will obviously recompense himself for the previous labor of the first years out of the sale of the finished products, which cannot take place till the end of the sixth year. Or, in other words, he will have to wait five years for the payment for the first year's work. For the payment for the second year he will have to wait four years; for the third year, three years, and so on. Or, taking the average of the six years' work, he will have to wait nearly three years after the work has been accomplished for the payment for his labor. The second worker, on the other hand, who represents a branch of production which needs a relatively small means of production resulting from previous labor, will perhaps turn out the completed product, taking it through all its stages, in the course of a month, and will therefore receive his compensation from the yield of his product almost immediately after the accomplishment of his work.

Now Marx's hypothesis assumes that the prices of the commodities I and II are determined exactly in proportion to the amounts of labor expended in their production, so that the product of six years' work in commodity I only brings as much as the total produce of six years' work in commodity II. And further, it follows from this that the laborer in commodity I should be satisfied to receive for every year's work, with an

average of three years' *delay* of payment, the *same* return that the laborer in commodity II receives *without any delay;* that therefore delay in the receipt of payment is a circumstance which has no part to play in the Marxian hypothesis, and more especially has no influence on competition, on the crowding or understocking of the trade in the different branches of production, having regard to the longer or shorter periods of waiting to which they are subjected.

I leave the reader to judge whether this is probable. In other respects Marx acknowledges that the special accompanying circumstances peculiar to the work of a particular branch of production, the special intensity, strain, or unpleasantness of a work, force a compensation for themselves in the rise of wages through the action of competition. Should not a year's postponement of the remuneration of labor be a circumstance demanding compensation? And further, granting that all producers *would* as soon wait three years for the reward of their labor, as not at all, *could* they really all wait? Marx certainly assumes that "the laborers should possess their respective means of production"; but he does not and cannot venture to assume that each laborer possesses the amount of means of production which are necessary to carry on that branch of industry which for technical reasons requires the command of the greatest quantity of means of production. The different branches of production are therefore certainly not equally accessible to all producers. Those branches of production which demand the least advance of means of production are the most generally accessible, and the branches which demand larger capital are possible only for an increasingly smaller minority. Has this nothing to do with the circumstance that, in the latter branches, a certain restriction in supply takes place, which eventually forces the price of their products above the proportionate level of those branches in the carrying on of which the odious accompaniment of waiting does not enter and which are therefore accessible to a much wider circle of competitors?

Marx himself seems to have been aware that his case contains a certain improbability. He notes first of all, as I have done, though in another form, that the fixing of prices solely in proportion to the amount of labor in the commodities leads in another direction to a disproportion. He asserts this in the form (which is also correct) that the "surplus value" which the laborers in both branches of production obtain over and above their necessary maintenance, calculated on the means of production advanced, shows *unequal rates of profit.* The question naturally obtrudes itself: why should not this inequality be made to disappear by competition just as in "capitalist" society? Marx feels the necessity of giving an answer to this, and here only does something of the nature of an attempt to give proofs instead of mere assertions come in. Now what is his answer?

The essential point (he says) is that both laborers should receive the same surplus value for the same working time; or, to be more exact, that for the *same working time* "they should receive the *same values* after deducting the value of the advanced constant element," and on this assumption the difference in the rates of profit would be a "matter of indifference, just as it is a matter of indifference to the wage earner by what rate of profit the quantity of surplus value squeezed out of him is represented."

Is this a happy simile? If I do not get a thing, then it may certainly be a matter of indifference to me whether that thing, which I do not get, estimated on the capital of another person, represents a higher or lower percentage. But when I get a thing as a settled right, as the worker, on the non-capitalistic hypothesis, is supposed to get the surplus value as profit, then it certainly is not a matter of indifference to me by what scale that profit is to be measured or distributed. It may, perhaps, be an open question whether this profit should be measured and distributed according to the expenditure of labor or to the amount of the advanced means of production, but the question itself can certainly not be a merely indifferent matter to the persons inter-

ested in it. And when, therefore, the somewhat improbable fact is affirmed that unequal rates of profit can exist permanently side by side without being equalized by competition, the reason for this certainly cannot be found in the assumption that the height of the rate of profit is a matter of no importance whatever to the persons interested in it.

But are the laborers on the Marxian hypothesis treated alike even as laborers? They obtain for the same working time the same value and surplus value as wages, but they get it at different times. One obtains it immediately after the completion of the work; the other may have to wait years for the remuneration of his labor. Is this really equal treatment? Or does not the condition under which the remuneration is obtained constitute an inequality which cannot be a matter of indifference to the laborers, but which, on the contrary, as experience truly shows, they feel very keenly? To what worker today would it be a matter of indifference whether he received his weekly wages on Saturday evening, or a year, or three years hence? And such marked inequalities would not be smoothed away by competition. That is an improbability for the explanation of which Marx still remains in our debt.

His hypothesis, however, is not only inherently improbable, but it is also contrary to all the facts of experience. It is true that as regards the assumed case, in its full typical purity, we have, after all, no direct experience; for a condition of things in which paid labor is absent and every producer is the independent possessor of his own means of production can now no longer anywhere be seen in its full purity. Still, however, conditions and relationships are found in the "modern world" which correspond at least approximately to those assumed in the Marxian hypothesis. They are found, as Marx himself especially indicates (III, 209), in the case of the peasant proprietor, who himself cultivates his own land, and in the case of the artisan. According to the Marxian hypothesis, it ought to be a matter of observation that the incomes of these persons do not in the least de-

pend on the amounts of capital they employed in production. They should each receive the same amount of wages and surplus value, whether the capital representing their means of production was 10 shillings or 10,000 shillings. I think, however, that my readers will all allow that though indeed in the cases just mentioned there is no such exact bookkeeping as to make it possible to determine proportions with mathematical exactitude, yet the prevailing impression does not confirm Marx's hypothesis, but tends, on the contrary, to the view that in general and as a whole an ampler income is yielded by those branches of industry in which work is carried on with a considerable capital, than by those which have at their disposal only the hands of the producers.

And finally this result of the appeal to fact, which is unfavorable to the Marxian hypothesis, receives not a little indirect confirmation from the fact that in the second case which he instances (a case much easier to test), in which, according to the Marxian theory, the law of value ought to be seen to be completely dominant, no trace of the process alleged by Marx is to be found.

Marx tells us, as we know, that even in a fully developed economy the equalization of the originally different rates of profit can be brought about only through the action of competition. "If the commodities are sold according to their values," he writes in the most explicit of the passages concerning this matter,[1] "very different rates of profit, as has been explained, occur in the different spheres of production, according to the different organic compositions of the amounts of capital invested in them. But capital withdraws itself from a sphere having a lower rate of profit, and throws itself into another which yields a higher profit. By this constant shifting from one sphere to another—in short, by its distribution among the different spheres according as the rate of profit rises in one and sinks in another—it brings

[1] Vol. III, pp. 230 ff. Compare also the shorter statements, Vol. III, pp. 186, 204, 212, and frequently.

about such a proportion between supply and demand that the average profit in the different spheres of production becomes the same."

We should therefore logically expect, wherever this competition of capital was absent, or was at any rate not yet in full activity, that the original mode of forming prices and profits affirmed by Marx would be met with in its full, or nearly its full, purity. In other words, there must be traces of the actual fact that *before* the equalization of the rates of profit the branches of production with the relatively greater amounts of constant capital have won and do win the smallest rates of profit, while those branches with the smaller amounts of constant capital win the largest rates of profit. As a matter of fact, however, there are no traces of this to be found anywhere, either in the historical past or in the present. This has been recently so convincingly demonstrated by a learned professor who is in other respects extremely favorable to Marx, that I cannot do better than simply quote the words of Werner Sombart:

"Development never has and never does take place in the way alleged. If it did it would certainly be seen in operation in the case of at least every new branch of business. If this idea were true, in considering historically the advance of capitalism, one would have to think of it as first occupying those spheres in which living labor preponderated and where, therefore, the composition of capital was under the average (little constant and much variable), and then as passing slowly into other spheres, according to the degree in which prices had fallen in those first spheres in consequence of overproduction. In a sphere having a preponderance of [material] means of production over living labor, capitalism would naturally in the beginning have realized so small a profit, being limited to the surplus value created by the individual, that it would have had no inducement to enter into that sphere. But capitalist production at the beginning of its historical development occurs even to some extent in branches of production of the latter kind, mining, etc. Capital

would have had no reason to go out of the sphere of circulation in which it was prospering, into the sphere of production, without a prospect of a 'customary profit' which, be it observed, existed in commercial profit previous to any capitalist production. But we can also show the error of the assumption from the other side. If extremely high profits were obtained in the beginning of capitalist production, in the spheres having a preponderance of living labor, it would imply that all at once capital had made use of the class of producers concerned (who had up to that time been independent), as wage earners, that is, at half the amount of gain they had hitherto procured, and had put the difference in the prices of the commodities, corresponding directly to the values, in its own pocket; and further it supposes, what is an altogether visionary idea, that capitalist production began with declassed individuals in branches of production, some of which were quite new creations, and therefore was able to fix prices according to its own standard.

"But if the assumption of an empirical connection between rates of profit and rates of surplus value is false historically, that is, false as regards the beginning of capitalism, it is even more so as regards conditions in which the capitalist system of production is fully developed. Whether the composition of a capital by means of which a trade is carried on today is ever so high or ever so low, the prices of its products and the calculation (and realization) of the profits are based solely on the outlay of capital.

"If in all times, earlier as well as later, capitals did, as a matter of fact, pass continually from one sphere of production to another, the principal cause of this would certainly lie in the inequality of profits. But this inequality most surely proceeds not from the organic composition of the capital, but from some cause connected with competition. Those branches of production which today flourish more than any others are just those with capitals of very high composition, such as mining, chemical factories, breweries, steam mills, etc. Are these the spheres from

which capital has withdrawn and migrated until production has been proportionately limited and prices have risen?" [1]

These statements will provide matter for many inferences against the Marxian theory. For the present I draw only one which bears immediately on the argument, which is the subject of our inquiry: the law of value, which, it is conceded, must give up its alleged control over prices of production in an economy where competition is in full force, has never exercised and could never exercise a real sway even in primitive conditions.

We have now seen, wrecked in succession, three contentions which affirmed the existence of certain reserved areas under the immediate control of the law of value. The application of the law of value to the sum total of all commodities and prices of commodities instead of to their several exchange relations (first argument) has been proved to be pure nonsense. The movement of prices (second argument) does not really obey the alleged law of value, and just as little does it exercise a real influence in "primitive conditions" (third argument). There is only one possibility left. Does the law of value, which has no real immediate power anywhere, have perhaps an indirect control, a sort of suzerainty? Marx does not omit to assert this also. It is the subject of the fourth argument, to which we now proceed.

FOURTH ARGUMENT

THIS ARGUMENT has been often hinted at by Marx, but so far as I can see he has explained it with any approach to fullness in one place only. The essence of it is this: that the "prices of production," which govern the actual formation of prices, are for their

[1] "Zur Kritik," pp. 584-586. I am bound, however, to make it clear that in the passage quoted Sombart intended to combat Marx only on the assumption that Marx's doctrines did actually have the meaning attributed to them in the text. He himself ascribes to them, in his "attempt at rescue," already referred to by me, another, and, as I think, a somewhat exotic meaning, which I shall discuss in detail later on.

part in their turn under the influence of the law of value, which therefore, through the prices of production, governs the actual exchange relations. The values are "behind the prices of production and determine them in the last resort" (III, 244). The prices of production are, as Marx often expresses it, only "changed values" or "changed forms of value" (III, 193, 199, 204 and often). The nature and degree of the influence which the law of value exercises on the prices of production are more clearly explained, however, in a passage on pages 211 and 212. "*The average rate of profit which determines the price of production must,* however, always be approximately equal to the amount of *surplus value* which falls to a given capital as an aliquot part of the total social capital. . . . Now, as the total value of the commodities governs the total surplus value, and this again determines the amount of the average profit and consequently the general rate of profit—as a general law or a law governing fluctuation—the *law of value regulates the prices of production.*"

Let us examine this line of argument point by point.

Marx says at the outset that the average rate of profit determines the prices of production. In Marx's sense this is correct but not complete. Let us make the connection quite clear.

The price of production of a commodity is first of all composed of the "cost price" to the employer of the means of production and of the average profit on the capital employed. The cost price of the means of production consists again of two component parts: the outlay of variable capital, that is, the money immediately paid in wages, and the outlay for consumed or used-up constant capital—raw material, machines, and the like. As Marx rightly explains, on pages 188 ff., 194, and 242, in a society in which the values have already been changed into prices of production, the purchase or cost price of these means of production does not correspond with their value but with the total amount which has been expended by the producers of these means of production in wages and material appliances,

plus the average profit on this expenditure. If we continue this analysis we come at last—as does Adam Smith in his *natural price,* with which, indeed, Marx expressly identifies his price of production (III, 233)—to resolve the price of production into two components or determinants: (1) the sum total of the wages paid during the different stages of production, which taken altogether represent the actual cost price of the commodities; [1] and (2) the sum total of the *profits* on all these wage outlays calculated *pro rata temporis,* and according to the average rate of profit.

Undoubtedly, therefore, *one* determinant of the price of production of a commodity is the average profit incidental to its production. Of the other determinant, the total of wages paid, Marx speaks no further in this passage. In another place, however, to which we have alluded, he says in a very general way that "the values stand behind the prices of production," and "that the law of value determines these latter in the last resort." In order to avoid a hiatus, therefore, we must subject this second factor also to our scrutiny and judge accordingly whether it can rightly be said to be determined by the law of value, and, if so, in what degree.

It is evident that the total expenditure in wages is a product of the quantity of labor employed multiplied by the average rate of the wages. Now as, according to the (Marxian) law of value, the exchange relations must be determined solely by the quantity of labor employed, and Marx repeatedly and most emphatically denies that the rate of wages has any influence on the value of the commodities,[2] it is also evident that, of the two components of the factor expenditure in wages, only the amount of labor employed is in harmony with the law of value, while in the second component, rate of wages, a determinant alien to the

[1] "The cost price of a commodity refers only to the amount of *paid* labor contained in it" (Vol. III, p. 195).

[2] For instance Vol. III, p. 243, where Marx affirms that "in no circumstances can the rise or fall of wages ever affect the value of the commodities."

law of value enters among the determinants of the prices of production.

The nature and degree of the operation of this determinant may be illustrated, in order to avoid all misunderstanding, by one other example.

Let us take three commodities—A, B, and C—which, to begin with, have the same production price of 100 shillings, but which are of different types of composition as regards the elements of their cost. Let us further suppose that the wages for a day amount at first to five shillings, and the rate of surplus value, or the degree of exploitation, to 100 percent, so that from the total value of the commodities of 300 shillings, 150 falls to wages and another 150 to surplus value; and that the total capital (invested in different proportions in the three commodities) amounts to 1,500 shillings. The average rate of profit would therefore be 10 percent.

The following table illustrates this assumption:

Commodity	*Expended Time*	*Expended Wages*	*Capital employed*	*Average profit accruing*	*Production price*
A	10	50s.	500s.	50s.	100s.
B	6	30s.	700s.	70s.	100s.
C	14	70s.	300s.	30s.	100s.
Total	30	150s.	1,500s.	150s.	300s.

Now let us assume a rise in the wages from five to six shillings. According to Marx this can only take place at the expense of the surplus value, other conditions remaining the same.[1] Therefore of the total product of 300 shillings, which remains unaltered, there will fall (owing to a diminution in the degree of exploitation) 180 to wages and only 120 to surplus value, and consequently the average rate of profit on the capital employed falls to 8 percent. The following table shows the changes which take

[1] Compare Vol. III, p. 234 ff.

place, in consequence, in the compositions of the elements of capital and in the prices of production:

Commodity	Expended Time	Wages	Capital employed	Average profit accruing	Production price
A	10	60s.	500s.	40s.	100s.
B	6	36s.	700s.	56s.	92s.
C	14	84s.	300s.	24s.	108s.
Total	30	180s.	1,500s.	120s.	300s.

It appears from this that a rise in wages, when the amount of labor remains the same, brings with it a material alteration in the originally equal prices of production and relations of exchange. The alteration can be partly, but obviously not altogether, traced to the contemporaneous necessary change produced in the average rate of profit by the alteration in the wages. I say "obviously not altogether," because the price of production of commodity C, for example, has really *risen* in spite of the fall in the amount of profit contained in it, therefore this change of price cannot be brought about by the change of profit *only*. I raise this really obvious point merely in order to show that in the rate of wages we have, indisputably, a price determinant which does not exhaust its force in its influence on the rate of profit, but also exerts a special and direct influence; and that therefore we have reason to submit this particular price determinant—which is passed over by Marx in the passage cited above—to a separate consideration. The summary of the results of this consideration I reserve for a later stage, and in the meantime we will examine step by step Marx's assertion concerning the way in which the second determinant of the price of production, the average profit, is regulated by the law of value.

The connection is anything but a direct one. It is effected by the following links in his line of reasoning, some of which are indicated only elliptically by Marx, but which undoubtedly

enter into his argument: the *law of value* determines the *aggregate value* of the whole of the commodities produced in the society; [1] the *aggregate value* of the commodities determines the *aggregate surplus value* contained in them; the latter distributed over the total social capital determines the *average rate of profit:* this rate applied to the capital employed in the production of a single commodity gives the *concrete average profit,* which finally enters as an element into the price of production of the commodity in question. In this way the first link in this sequence, the *law of value,* regulates the last link, the *price of production.*

Now for our running commentary on this series of arguments.

(1) We are struck by the fact, which must be kept in mind, that Marx after all does not affirm that there is a connection between the average profit entering into the price of production of the commodities and the values incorporated in single commodities by reason of the law of value. On the contrary, he says emphatically in numerous places that the amount of surplus value which enters into the price of production of a commodity is independent of and indeed fundamentally different from "the surplus value actually created in the sphere in which the separate commodity is produced" (III, 198; similarly III, 195 and often). He therefore does not after all connect the influence ascribed to the law of value with the characteristic function of the law of value, in virtue of which this law determines the exchange relations of the *separate commodities,* but only with another assumed function (concerning the highly problematical nature of which we have already passed an opinion), namely, the determination of the aggregate value *of all commodities taken together.* In this application, as we have convinced ourselves, the law of value has no meaning whatever. If the idea and the law of value are to be brought to bear—and Marx cer-

[1] This link is not expressly inserted by Marx in the passage quoted. Its insertion is nevertheless self-evident.

tainly means that they should—on the exchange relations of goods,[1] then there is no sense in applying the idea and law to an aggregate which as such cannot be subject to those relations. As no exchange of this aggregate takes place, there is naturally neither a measure nor a determinant for its exchange, and therefore it cannot give material for a "law of value." If, however, the law of value has no real influence at all on a chimerical "aggregate value of all commodities taken together," there can be no further application of its influence to other relations, and the whole logical series which Marx endeavored to work out with such seeming cogency hangs therefore in the air.

(2) But let us turn away altogether from this first fundamental defect, and let us independently of it test the strength of the other arguments in the series. Let us assume, therefore, that the aggregate value of the commodities is a real quantity, and actually determined by the law of value. The second argument affirms that this aggregate value of commodities determines the aggregate surplus value. Is this true?

The surplus value, unquestionably, represents no fixed or unalterable quota of the total national product, but is the difference between the "aggregate value" of the national product and the amount of the wages paid to the workers. That aggregate value, therefore, does not in any case rule the amount of the total surplus value by itself alone. It can at the most supply only *one* determinant of its amount, by the side of which stands a second, alien determinant, the rate of wages. But, it may be asked, does not this also, perhaps, obey the Marxian law of value?

In the first volume Marx had still unconditionally affirmed this. "The value of labor," he writes on page 189, "is determined, like that of every other commodity, by the working time necessary to the production, and therefore also reproduction, of this specific article." And on the next page he proceeds to define this

[1] As I have already mentioned, I shall take special notice later of the different view of W. Sombart.

proposition more fully: "For his maintenance the living individual needs a certain amount of means of subsistence. The working time necessary to the production of the labor power resolves itself, therefore, into the working time necessary to the production of these means of subsistence, or, the value of the labor power is the value of the means of subsistence necessary to the maintenance of its possessor." In the third volume Marx, however, is forced considerably to modify this statement. Thus, on page 242 of that volume, he rightly draws attention to the fact that it is possible that the necessary means of subsistence of the laborer also can be sold at prices of production which deviate from that of the necessary working time. In such a case, Marx says, the variable part of the capital (the wages paid) may also deviate from its value. In other words, the wages (apart from purely temporary oscillations) may permanently deviate from the rate which should correspond to the quantity of work incorporated in the necessary means of subsistence, or to the strict requirements of the law of value. Therefore at least *one* determinant alien to the law of value is already a factor in determining the total surplus value.

(3) The factor, aggregate surplus value, thus determined, "regulates," according to Marx, the average rate of profit, but obviously only in so far as the aggregate surplus value furnishes *one* determinant, while another—the amount of capital existing in a given society—acts as a second determinant, entirely independent of the first and of the law of value. If, as in the above table, the total surplus value is 150 shillings, the surplus value being 100 percent, then, if and because the total capital expended in all its branches of production amounts to 1,500 shillings, the rate of profit amounts to 10 percent. If the total surplus value remained exactly the same, but the total capital participating in it amounted to 3,000 shillings, the rate of profit would obviously amount only to 5 percent; and it would be fully 20 percent if the total capital amounted only to 750 shillings. It

is obvious, therefore, that again a determinant enters into the chain of influence which is entirely alien to the law of value.

(4) We must, therefore, further conclude that the average rate of profit regulates the amount of the concrete average profit which accrues from the production of a special commodity. But this, again, is only true with the same restrictions as in the former arguments of the series. That is to say, the total amount of the average profit which accrues from the production of a separate commodity is the product of two factors: the quantity of invested capital multiplied by the average rate of profit. The quantity of the capital to be invested in the different stages is again determined by two factors, namely, by the quantity of the work to be remunerated (a factor which is of course not out of harmony with Marx's law of value), and also by the rate of wages to be paid; and with this latter factor, as we have just convinced ourselves, a factor alien to the law of value comes into play.

(5) In the next argument of the series we go back again to the beginning: the average profit (defined in the fourth argument) must regulate the price of production of the commodity. This is true with the correction that the average profit is only *one* factor determining prices side by side with the expended wages in which, as we have repeatedly stated, there is an element, which is foreign to Marx's law of value, and which co-operates in determining prices.

Let us sum up. What is the proposition which Marx undertook to prove? It ran thus: "The law of value regulates the prices of production," or as otherwise stated, "the values determine in the last resort the prices of production," or if we formulate the meaning which Marx himself attached to value and law of value in the first volume the statement is: prices of production are governed "in the last resort" by the principle that the quantity of labor is the only condition which determines the exchange relations of commodities.

And what do we find on examining the separate links of the argument? We find that the price of production is, first of all, made up of two components. One, the expended wages, is the product of two factors, of which the first—the quantity of work—is in harmony with the substance of the Marxian "value," and the other—the rate of wages—is not. Marx himself could only affirm of the second component—the total amount of accruing average profit—that it was connected with the law of value by means of a violent perversion of this law, alleging its operation in a domain in which no exchange relations exist at all. But apart from this, the factor "aggregate value of commodities" which Marx wishes to deduce from the law of value must, in any case, co-operate in determining the next link, the aggregate surplus value, along with a factor, "rate of wages," which is no longer homogeneous with the law of value. The "aggregate surplus value" would have to co-operate with a completely foreign element, the mass of social capital, in determining the average rate of profit; and, finally, the latter would have to co-operate with a partially foreign element, expended wages, in determining the accruing total profit.

The factor "aggregate value of all commodities," dubiously regarded as a contribution of the Marxian law of value, consequently co-operates after a triple homeopathic dilution of its influence (and naturally, therefore, with a share of influence diminished in proportion to this dilution) in determining the average profit, and also the prices of production. The following would, therefore, be a sober statement of the facts of the case: The quantity of labor which, according to the Marxian law of value, must entirely and exclusively govern the exchange relations of commodities proves itself as a matter of fact to be only *one* determinant of the prices of production side by side with other determinants. It has a strong, a tolerably direct influence on the one component of prices of production which consists of expended wages; a much more remote, weak, and, for

the most part,[1] even problematical influence upon the second component, the average profit.

Now, I ask, do we find in this condition of things a confirmation or a contradiction of the claim that, in the last resort, the law of value determines the prices of production? I do not think that there can be a moment's doubt as to the answer. The law of value maintains that quantity of labor alone determines the exchange relations; facts show that it is *not* only the quantity of labor, or the factors in harmony with it, which determine the exchange relations. These two propositions bear the same relation to each other as Yes to No—as affirmation to contradiction. Whoever accepts the second proposition—and Marx's theory of the prices of production involves this acceptance—contradicts *de facto* the first. And if Marx really could have thought that he did not contradict himself and his first proposition, he allowed himself to be deluded by some strange mistake. He could not have seen that it is very different for one factor involved in a law to have some sort and degree of influence and for the law itself to be in full force.

The most trivial example will perhaps serve best in so obvious a matter. Suppose a discussion on the effect of cannon balls on iron-clad vessels, and someone says that the degree of destructive power in the balls is due solely to the amount of powder with which the cannon is charged. When this statement is questioned and tested by actual experience it is seen that the effect of the shot is due not only to the amount of gunpowder in the charge, but also to the strength of the powder; and, further, to the construction, length, etc., of the barrel of the gun, the form and hardness of the balls, the distance of the object, and last, but

[1] In so far, namely, as it is supposed to be brought about by the factor "aggregate value," which, in my opinion, has nothing to do with the embodied amount of labor. As, however, the factor "expended wages" (in determining which the amount of work to be remunerated certainly co-operates as an element) also appears in the following links, the amount of work always finds a place among the indirect determinants of average profit.

not least, to the thickness and firmness of the plates on the vessel.

And now after all this has been conceded, could it still be said that nevertheless the first statement was true, because it had been proved that the alleged factor, the amount of gunpowder, does exert an important influence on the discharge, and that this was proved by the fact that, other circumstances being equal, the effect of the shot would be greater or less in proportion to the amount of gunpowder used in the charge?

This is what Marx does. He declares most emphatically that nothing can be at the root of exchange relations but quantity of labor alone; he argues strenuously with the economists who acknowledge other determinants of value and price besides the quantity of labor—the influence of which on the exchange value of goods freely reproduced no one denies. From the exclusive position of quantity of labor as the sole determinant of exchange relations he deduces in two volumes the most weighty and practical conclusions—his theory of surplus value and his denunciation of the capitalist organization of society—in order, in the third volume, to develop a theory of prices of production which substantially recognizes the influence of other determinants as well. But instead of thoroughly analyzing these other determinants, he always lays his finger triumphantly on the points where his idol, quantity of labor, either actually, or in his opinion, exerts an influence: on such points as the change in prices when the amount of labor changes, the influence of "aggregate value" on average rate of profit, etc. He is silent about the co-ordinate influence of foreign determinants as well as about the influence of the amount of social capital on the rate of profit, and about the alteration of prices through a change in the organic composition of the capital, or in the rate of wages. Passages in which he recognizes these influences are not wanting in his book. The influence of the rate of wages on prices is, for instance, aptly treated of in pages 234 ff., then in page 242; the influence of the amount of social capital on the

height of the average rate of profit in pages 197, 240, 247 ff., 254 ff., 260, and often; the influence of the organic composition of capital on the prices of production in pages 192 ff. It is characteristic that in the passages devoted to the justification of his law of value Marx passes silently over these other influences, and only mentions in a one-sided way the part played by quantity of labor, in order to deduce from the first and undisputed premise, that quantity of labor co-operates at many points to determine the prices of production, the utterly unjustifiable conclusion that, in the "last resort," the law of value, which proclaims the sole dominion of labor, determines the prices of production. This is to evade the admission of the contradiction; it is not to escape from the contradiction itself.