From Simple Commodities to Capital-Commodities: The Transformation of Values into Prices of Production

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The point is not to interpret Marx's texts in different ways but to follow his advance upon the concrete determinations

From the very beginning of his research, Marx pointed out that "the reproduction of the concrete through the path of thought" revolutionarily overcomes the scope of interpretations of reality. By following that procedure, he discovered commodities as the simplest specific form that the general social relation takes in present-day society. Then he advanced by following commodities as they determine one of them as money. He went on following money as it realizes its necessity by transforming itself into capital. And he followed capital through its own development until discovering capital's main historical potency, that is, the necessity of capital to annihilate itself as the concrete form of the general social relation into the community of the freely, - i.e. consciously - associated individuals. On doing so, he got to develop the simplest concrete form in which commodities negate themselves as the simple product of labor, to affirm themselves as the products of labor alienated as a potency of capital. In other words, he got to develop the simplest form in which commodities really determine themselves as capital-commodities and, therefore, the simplest form in which the surplus-value materialized in them develops its concrete form of average profit, thus making their value take its concrete form of price of production. Still, having reached this point, Marx committed what some people regard as a big mistake: he died, so he could not carry his research beyond those simplest forms.

Since then, political economists, mainly Marxist political economists, have focused on these transformations. So the point has taken its well-known form of the "debate about the transformation problem." Did Marx fall into a mathematical mistake when he represented the transformation? Can this mistake be solved without showing the rest of Marx's construction to be invalid? Is it coherent with Marx vision the use of a system of simultaneous equations? Was Marx considering technical relations along with social ones? Was he only trying to achieve a clear representation of exploitation? Was he attempting to provide a proper approximation to the process of price formation? Did he construct a redundant value-system? Did he conceive money in a way that can be considered obsolete today?

Still, the point is not to interpret reality by interpreting Marx in different ways. The point is to change reality. Therefore, the true question at stake concerning the transformation of commodities into capital-commodities is: what is to be done to consciously act upon this transformation, which specifically determines capital as a directly social potency, that is, as total social capital? It is about the concrete form of our conscious action.

The material production that produces the general social relation: commodities as the fetishistic products of social labor

All individual actions are concrete realizations of the process of social metabolism. Therefore, the regulation of this collective process realizes itself as the organic unity of the individual actions. In other words, the regulation of the social metabolism process is the social relation among its members. Under its simplest form, this regulation takes shape as the cognition by each individual (as a moment of his/her own individual metabolism process) of the stage at which the metabolism processes of the other individuals that interact with her/him are, so as to integrate the unfolding of the corresponding part of his/her own metabolism process with them. Human life acquires its own generic being, thus overcoming itself as a specific form of animal life, through the development of its power to transform the environment into a means for itself, to produce its own means of living. As soon as, in this development, the human social metabolism process overcomes the mere coincidence of the undifferentiated individual metabolism processes, that is, as soon as the social division of labor arises, its regulation needs to determine the concrete material form that process is going to take in each of its circuits. Social regulation thus needs to start by allocating the total available capacity for performing productive labor (and, accordingly, for performing consumptive labor) among the different concrete forms this labor needs to take to realize each circuit of the social metabolism process.

The regulation of the human social metabolism process, the general social relation among human beings, has the purely animal immediate cognition as its historical origin. At least according to its length, most of human history up to now has been the history of the transformation of this animal relation into the regulation of social metabolism by means of thought through direct personal relations. In this regulation, the allocation of society's total labor-power into its different concrete forms does not go beyond the control upon them directly as such. Thus, this control is able to develop human material productive forces beyond its own reach as the general form of social regulation. Nevertheless, at the same time, it is unable to develop human cognition so as to make social regulation a collective power of the individuals that cognize, each of them, his/her own determination as a concrete subject of the social metabolism process; that is, a collective power of the freely associated individuals.

The absence of a general coordination through cognition in the allocation and development of social labor determines individuals as private independent producers. Insofar as purely such, they have no way to get into relation by themselves to incarnate the social metabolism process. To begin with, these producers do not retain any social relation other than being individual personifications of society's total power to perform productive labor. This total labor-power is, as such, the capacity for performing human labor in general. The realization of this capacity under the mass of its different concrete forms is, thus, the development of the general social relation among the private independent producers. The materialization of that mass of concrete labors into the mass of its products materializes at the same time the general social relation it carries in itself.

Since the general social relation itself, that is, the social regulation of production, is realized through the process of material production, a specific determination to this relation arises. Nothing prevents the labor-power with which society opens the circuit of its metabolism process, from being realized under some concrete forms whose products are unfitted to close that circuit. Therefore, the products of social labor are materializations of total society's labor-power in act, and materializations of socially useful labor (that is, of labor that is necessary for the realization of the social metabolism process), only as a possibility. Still, this possibility has reached by now a concrete form fitted for an immediate realization. It is realized through the exchange of the product of a concrete labor, unsuited for closing the individual metabolism process of its producer, for another one that is suited, being both equivalent as materializations of the same amount of human labor in general. As soon as the product of a private independent producer is useless to satisfy a social necessity, to close the circuit of the social metabolism process, it will show itself as incapable of attracting other use-values to be exchanged with. Despite being the materialization of a part of the total society's productive labor-power as much as any other, it ends up excluded from social labor. The human abstract labor materialized in these products - naturally inherent in all human products - thus develops the specific social determination - only inherent in the absence of a direct regulation of the social metabolism process - of being represented, insofar as it is socially necessary, as the capacity of these products for relating among themselves in exchange and, through this relation, to socially relate their producers. As it is thus represented, the socially necessary abstract labor materialized in its products becomes the value of these products. The natural forms of these products, their use-value, acquire the social form of commodities, their value form. The social metabolism process is thus autonomously regulated by determining the material production, at the same time, to become the production of the general social relation. Productive labor becomes therefore specified by this twofold determination.

The private producers lack any direct general social relationship among themselves. They must act, and consequently see themselves, as being mutually independent. They come to face their general social interdependency only through the mediation of their material products. Therefore, this relation appears to them as an attribute inherent in the material form itself of these products, as a fetishistic social relation.

When it acts as living labor, that is, as it changes its own material form as such into a newly produced use-value appropriate for the development of the social metabolism process, productive socially necessary labor creates value. Obviously, by acting, living labor transforms the use-value of the means of production it consumes into that newly produced use-value. The labor materialized in these means of production (therefore, dead labor by now) has once been confirmed as being socially necessary through the realization of their value at the time they were purchased. Still, after they are productively consumed by living labor, society has yet to confirm that it is determined to allocate the labor originally performed to produce them into the new concrete material form they have acquired. Therefore, the abstract labor originally materialized in them reappears in the value of the use-values produced by using them, as it is confirmed again as being socially necessary. In other words, living labor maintains the value of the means of production it consumes (that is, the socially necessary abstract labor materialized in them that has been represented as the capacity of these means of production for relating in exchange as commodities) as the corresponding part of the value of the new commodity it produces.

Value has no way of expressing itself directly through its substance, the socially necessary abstract labor materialized in a commodity. To do it, this labor should manifest itself as being socially necessary at the very moment the concrete labor that produces each commodity is performed. In other words, such expression presupposes that the concrete labors are performed as a directly social one, and therefore, presupposes the direct regulation of the social metabolism process. Still, if the products of labor take the social form of commodities, it is precisely because the concrete labor that produces them is the very negation of directly social labor, i.e., private labor. Only after its has been materialized, and indirectly as abstract labor, this private concrete labor can be confirmed as a part of the social labor or not. Since it is the socially necessary materialized abstract labor represented as the capacity of commodities for relating among themselves in exchange, value lacks any way for manifesting itself other than in exchange itself. Therefore, the value of a commodity necessarily expresses itself only in the use-value, in the body, of the commodity that is exchanged for the commodity in question as its equivalent. With its quantity determined by the amount of time of socially necessary abstract labor materialized in a commodity, value takes its concrete form of exchange-value; that is, of the quantity of a commodity's value that expresses itself as a certain quantity of another commodity's use-value.

Commodities are the simplest specific form of present-day general social relation. Still, until the very moment they are realized in exchange, commodities are this relation only potentially. Commodities solve this contradiction they are in themselves by determining a particular commodity as the substantive general equivalent of their community, in which all the rest of them express their value. This special commodity, money, ceases to have its exchangeability, the realization of its value, determined as a possibility; it is the direct incarnation itself of exchangeability. It thus develops a specific use-value, that of being the substantive incarnation of value, a pure materialization of the general social relation. The product of a concrete private labor becomes the direct incarnation of abstract social labor. As this materialization, money develops its functions up to reaching the ones of means of payment, hoard, and world-money. On fulfilling money these functions, the circuit of the circulation of commodities does not take the simple shape $C - M - C$ any longer, but formally ends with the step $C - M$. In the corresponding part, commodity production ceases to be a production of use-values regulated by their condition of values. It becomes specifically determined as such production, having the universal form of value itself, the general social relation in its concrete materialization, as its direct object.

The materialized general social relation that becomes the subject itself of social production and consumption: commodities as the product of social labor alienated as a capital's potency, that is, capital-commodities

Productive labor-power is not by itself a means for human life and, therefore, it is not an use-value by itself, but a moment of the human social metabolism process itself. Nevertheless, as substantive value itself becomes a direct object of social production, the power to produce value (that is, the capacity for laboring as a producer of commodities) develops the possibility of becoming an use-value. It is about the possibility of producing more value than required by its own production. Consequently, this new use-value does not concern as such the natural possessors of the labor-power at stake. It only concerns someone different from them, that gets to possess the use-value of that labor-power by purchasing it for its value as a commodity. What directly concerns those natural possessors is the fact that the separation between private labor and social labor necessary develops through a specific possibility: insofar as individuals are private independent possessors of their own productive labor-power, they may become separated from the material conditions needed to put this power into action. Once the private independent producers are separated from the means to produce their lives, the realization of their own productive labor-power faces them as a condition that is externally determined with respect to that process. Thus, this power appears to them as a non-use-value for themselves, that they posses. At this stage, they are left with no general social relation to produce their lives other than the possibility to sell this power as a commodity itself.

Since labor-power thus becomes a commodity, money negates itself as a specific direct object of social production to affirm itself as the subject that opens each circuit of social production to close it once it has valorized itself, $M - C - M'$. The general social relation takes its concrete shape as money that engenders money, substantive value that valorizes itself. Money thus transcends itself into capital. From the specific viewpoint of commodity production, it did not suffice to transform nature into a means for human life for a labor to be a part of society's productive labor. To be such, a labor needed to produce value. Now, this production does not suffice either. In capitalist production, productive labor is only that which produces surplus-value. Only when capital has realized itself as such, the human labor from which its valorization nurtures itself has produced the general social relation and, therefore, unfolded the potencies inherent in this historical form the social metabolism process takes. Capitalist production is not a production of use-values regulated by the condition of these as values. It is not even a production of use-values which is only a means for the production of substantive value. It is a production of value in itself that yields as its result the production of use-values and, hence, of human beings; it produces human beings specifically determined as capitalists and proletarians. Capital, materialized labor and, as such, a means of human social metabolism process, has taken possession of the generic potentialities of this process. Capital thus presents itself as the alienated incarnation of the generic human being. The product of social labor, a material product that is at the same time the materialized form of the general social relation, has transformed itself into the concrete social subject. From being a formally fetishistic material form, this product thus faces its own producers as the one which produces them, as a real fetish, so to speak.

The laborers realize the use-value of the means of subsistence that they indirectly get in exchange for their labor-power, through individual consumption. In part, this consumption is mediated by another material production process. The purchased means of subsistence are individually consumed by other members of the households of the wage-laborers. Thus, those means of subsistence are transformed into the labor-power of these members, which goes into action and produces new means of subsistence that finally enter the individual consumption of the wage-laborers. This production process thus involves a new allocation of social labor-power into its concrete forms. Nevertheless, considered in itself, this allocation is regulated through direct personal relations. However the use-values thus produced are materializations of socially necessary abstract labor, this labor does not need to be (and has no way of being) represented as their value-form to be determined as such social labor. The social product has apparently lost its commodity-form while it goes on flowing and being transformed inside the household. Still, this is only a specific ambit through which the general social relation realizes itself. From the point of view of the general regulation of the social metabolism process, the labor-power thus allocated, and hence, the labor-power that has provided the means of subsistence that made this production possible, follow the fate of the marketable labor-power in which they become materialized.

If this were just a production of commodities, individual consumption would bring to a complete end the general social relationship materialized in those means of subsistence. But now social production has transcended into a production of more value by means of value, and human life itself has negated itself as immediately such to affirm itself as a mere moment in the life of capital. The process of individual consumption by those who sell their labor-power is, in itself, the process in which they produce the use-value in which their general social relation is materialized and, therefore, the process in which they produce their general social relation itself. Then their general social relation is not exhausted with their individual consumption, but it reappears as the value of their labor-power. Only if this labor-power finds a buyer, the socially necessary abstract labor previously materialized in the means of subsistence needed to produce it, will be reconfirmed as such under this new material form it has taken. From capitalist society's specific point of view, the final consumption will only occur when this labor-power becomes productively consumed, which here means, consumed to produce surplus-value. In that moment, the value materialized in the labor-power will actually disappear, and the new value created by the performed living labor will be materialized in its product. If the labor-power does not find a buyer, the socially necessary abstract labor materialized in the means of subsistence will show not to be such any longer under the new material form in which it has been allocated. Therefore, it will show it has been spent under a socially useless concrete form, and consequently, an useless form for its own producers, who thus become deprived from their general social relation and, finally, from their own natural lives.

As the personifications of capital they are, the capitalists appropriate the surplus-value (that is, the surplus of socially necessary abstract labor that exceeds that of the labor-power consumed in the production process - surplus-labor - materialized in the corresponding surplus-product that represents itself as the capacity of this product for relating in exchange with other commodities) for free. Nevertheless, this appropriation is based upon the exchange of all commodities for their value. That is, the exchange of all commodities as equivalents of a common immediate social substance, the socially necessary abstract labor materialized in them. The exploitation of the direct laborers by the capitalists thus takes concrete form through the apparent equality of these two social classes as commodity producers.

The very existence of any exchange presupposes the existence of an immediate common substance materialized in its objects that makes them commensurable. However, commodities are no longer the simple product of labor. They are now the product of labor insofar as this is alienated as a potency of capital. Therefore, they are no longer simple materializations of socially necessary abstract labor that represents itself as the capacity of commodities for exchange, but this materialization only under its concrete form of materializations of valorized value, of capital. In brief, they are not simple commodities but the product of capital, capital-commodities. And they relate as such in exchange. Can socially necessary abstract labor still be the immediate common substance that enables capital-commodities to be compared as equivalents in exchange?

Since money is empty of other use-value than being substantive value, the production of money by money itself cannot embody any qualitative general determination other than the realization of a difference that is a purely quantitative one in itself. The social metabolism process has now as its general regulation the production of this quantitative difference. *The immediate common social substance of capital-commodities, that enables them to relate as equivalents in exchange, is consequently determined by the equalization of the capacity of the capitals materialized in them for realizing that quantitative difference.* The *products of labor* now have their value form determined under the concrete form of *materializations of socially necessary abstract labor that is represented as the capacity of these products for relating among themselves in exchange insofar as materializations of equally valorized values*. As soon as the process of capital's self-valorization is reproduced (obviously, regardless if in a simple or an expanded scale), this value is determined as *an equally valorized value itself that is equally valorized*.

Under its simplest form - the materialization of value that valorizes itself by metamorphosing itself into labor-power and realizing this one's specific use-value - capital is a purely variable magnitude. The production of a given quality and quantity of labor-power requires, in the average of the individual workers, the same amount of social labor. That given quality and quantity of labor-power tends to be realized with the same intensity during the same period of time, also as an average. Therefore, all its units are able to produce the same amount of value. Since all labor is reduced to simple-labor in the production of value, all capitals tend to emerge from each of their metamorphosis circuits valorized in an equal proportion. That is, the rate of surplus-value, s/v, tends to be a general one. Therefore, the equivalence of capital-commodities as equally valorized values immediately expresses itself in their simple equivalence as values. Thus far, the value embodied in each commodity reappears as being quantitatively identical to itself in the concrete form it takes as the value of capital-commodities.

Nevertheless, it does not suffice with buying labor-power to put it into action. It must be supplied with the means - instruments and objects - of production upon which it can unfold itself. The disbursement of money to buy these means of production has no immediate necessity other than the valorization of that money itself . Therefore, due to its form, this is a disbursement of capital as much as any other. Still, the use-values in which it is materialized lack any capacity for producing value by themselves. All its value could do is to reappear in the value of the commodities produced by the living labor that uses them. Since it essentially is a variable magnitude of money, capital thus negates itself as simply such to affirm itself as constant capital. But, in turn, constant capital negates itself as the abstract negation of the power to valorize itself, by imposing itself as a condition for the valorization of variable capital. Capital thus determines itself as the producer of surplus-value in its organic unity of labor-power and means of production in which variable and constant capital are respectively materialized, productive capital. In general, to a greater amount of constant capital materialized in the instruments of production, a greater productive power of the labor that productively consumes them corresponds; in turn, this greater productive power results in the productive consumption of a greater mass of constant capital materialized in the objects of production. In general again, to a greater productive power of labor, a greater power of capital to valorize itself corresponds. Hence, insofar as it is determined by the technical composition of capital, the relation between constant capital and variable capital properly shows the composition of capital as the organ that produces surplus-value, the organic composition of productive capital: c/v. Abstractly considered in its simplest determination, to a higher organic composition of capital a higher rate of surplus-value corresponds. Nevertheless, given the general conditions of valorization that correspond to a certain stage in the development of capitalism and, therefore, once determined the corresponding general rate of surplus-value, the organic composition of capital differs from one special sphere of social production to the next according to the specific material conditions that prevail in each of them. Thus concretely determined, a higher organic composition results in a lower power to valorize itself of the total productive capital placed into action.

Capitals that are identically determined as pure self-valorizing value come to differ from each other due to the specific material conditions under which each of them exercises its capacity for valorizing itself insofar as a capital disbursed in labor-power and means of production. These material conditions, that are nothing but the concrete forms through which capital realizes its qualitative determination as the production of a purely quantitative difference, thus stand up as the negation of this very realization. Since all qualitative determinations are reduced to the realization of a purely quantitative difference in capital's turnover circuit as a process of self-valorization, an equally purely quantitative base necessary imposes itself to homogenize this differentiation. Time becomes this purely quantitative necessary base, with the year as its (initially natural and thereafter historical) concrete unit.

Now then, the annual base itself embodies a further determination to the capacity for valorizing themselves of specific industrial capitals. Each portion of variable capital needs a different period of time to complete its turnover, according to the material conditions it must face in its specific sphere. These material conditions determine the length of the working-time, but also push production-time beyond working-time and determine the length of, in the strict sense, circulation-time. Therefore, a given amount of variable capital can complete a greater or lesser quantity of turnovers in a given time, depending on the special sphere this disbursement takes place. Since it emerges from each of these turnovers valorized at the general rate of surplus-value, a given amount of money advanced as variable capital renders a greater or lesser amount of surplus-value in a given period of time. And this difference in the valorization capacity of an advanced variable capital formally extends itself to the constant capital that must be advanced to put labor-power in action. Therefore, from here on we will indicate this determination directly by its concrete form, i.e. the different turnover rates of capitals. Only those capitals with a unitary annual turnover rate have the same capacity for valorizing themselves whether this capacity is considered on the basis of each turnover or the year.

This double self-negation of capital as a value that valorizes itself proportionally to its own magnitude takes shape in the value of the capital-commodities insofar as this value is determined by the organic unity of each individual productive capital in each of its turnovers. However much these commodities may be mutually equivalent as the simple products of labor, or better stated, because they are such, they are not yet determined to be equivalents as the products of capital. The equalization of the rate of surplus-value in each circuit of variable capital is thus unfitted to express the equivalence between capitals as simple values that valorize themselves. Capital can no longer express its capacity for self-valorizing in the organicity of that rate. The expression of this capacity develops its first concrete form as the formal (therefore, external) relation between the surplus-value produced in each turnover circuit and the total capital advanced to achieve this production. Capital thus determines its profit rate inside each of its turnover circuits: $s/(c+v)$. Next, this formal expression overcomes the differences that emerge from the specific turnover rate of each variable capital. It does so by becoming determined as the relation between the total surplus-value produced on a yearly basis and the total capital advanced for this production in each special sphere. The capacity of productive capital for valorizing itself thus takes its concrete form as the annual rate of profit of each individual capital.

Insofar as the annual rate of profit is immediately determined by the individual valorization of each capital, it cannot go beyond being the crystallized expression of the general nonequivalence of commodities that embody the same amount of abstract labor, as the products of capital. Since capital is the concrete form of the general social relation among the independent private producers, it lacks any unity as society's total capital other than being the collection of all individual capitals. Nevertheless, it is in this external unity that the fracture of capital-commodities as the materialization of socially necessary abstract labor and of equally valorized value becomes canceled. Under its concrete form of society's total capital, capital reestablishes the unity between its organic and its formal power to valorize itself. It is now this unity that realizes its necessity by determining the individual capitals as the concrete forms of the total social capital. Productive capital has to reach its complete externality to be determined as total social capital. Consequently, individual capitals are determined as social capital's concrete forms without involving any determination other than the purely quantitative one of being, each of the former, an aliquot part of the latter. That is, individual capitals become the concrete forms of total social capital without keeping any specific difference among themselves other than their relative amount during a given time. Each individual capital realizes its necessity as a concrete form of total social capital by contributing to total surplus-value in accordance with its specific conditions of valorization and taking from this total surplus-value the pro rata part that corresponds to it. The formal power to valorize themselves of the individual capitals is thus determined as the general annual rate of profit. Given the form itself it is determined, this general rate realizes itself as such by taking the concrete form of an average, namely, the average annual rate of profit.

Once it is determined as materialized socially necessary abstract labor that represents itself as the capacity of commodities for relating among themselves in exchange - and thus to socially relate their producers - in their concrete equivalence as materializations of that same labor proportionally multiplied as such, the value of commodities takes its concrete form of price of production. The development of commodities into capital-commodities is in itself the transformation of surplus-value into average profit and, therefore, the transformation of values into prices of production. The realization of the general rate of profit is the concrete form through which the total productive labor-power of society is allocated under its concrete forms in capitalist society.

At this stage, the means of subsistence consumed by the productive-laborers to produce their labor-power with the concrete attributes that correspond to the prevailing productivity and intensity of labor and the length of the working day, circulate at their prices of production. These prices are now the concrete form of value that reappears as the value of labor-power. The value of labor-power itself thus develops its concrete form of price of production. Now, even in circulation, the natural possessors of labor-power show they have became the incarnation of valorized value, the alienated product of the fetishistic general social relation that autonomously regulates human life, of capital. And they show, even in circulation, that they are such product as the product of total social capital, therefore, not individually but, as *a* *class*, as *the proletariat*. Nevertheless, from the inverted point of view of capital's apologists, the exchange of equivalent capital-commodities in circulation, that is in itself the appropriation of the surplus-product of the wage-laborers by the capitalists beyond any equivalence, has reached the perfect ideological form: it is about everybody seeking the valorization of their capital, most of them their "human capital," the absolute minority, their "material capital," for the harmonious equilibrium of social life to be achieved.

Capital-commodities as equally valorized values

With the development of surplus-value into average profit, society's total capital shows to be the alienated concrete subject of the social metabolism process in capitalist society. The annual circuit of this capital gives its unity to the development of exchange-value into prices of production. The annual circuit in question manifests itself as that of commodity-capital; $C' \ldots C'$, in its simplest form. Since this development involves the production of surplus-value itself, we need to reflect in the circuit of commodity-capital the movement of productive capital inside each special sphere of production. The circuit of social capital thus appears as the aggregate of the circuits of valorization developed during the year, $c + v + s = C'$, in each sphere. Let us consider that this circuit is fragmented in *n* special spheres as we represent the determinations at stake in general, and in five spheres, when we consider their concrete quantum. In the latter case, we will isolate each of the basic determinations by producing two separated representations. The general case and the first concrete one, correspond to all portions of social capital having a unitary annual turnover rate, $(v + c)/C$, with their specificity reduced to their different organic compositions. In the second concrete case, all capitals have the same organic composition but differ in their turnover rates. Let us also consider that there is only circulating capital, with a single turnover rate both for its variable and constant parts inside each sphere. Let us finally assume that the value of all commodities is indistinctly expressed in ('... of) units of the money-commodity (ounces of gold) or in ('... of) units of any of the signs that take the place of this commodity in circulation ($, £, etc.).

As long as each individual capital valorizes itself in immediate accordance with the specific material conditions prevailing in its sphere, so the value of capital-commodities immediately appears under its simplest form in circulation, the annual circuit of social capital results:

$$c_1 + v_1 + s_1 = C'_1$$

...

$$c_n + v_n + s_n = C'_n$$

where

$$\frac{s_1}{v_1} = \ldots = \frac{s_n}{v_n}$$

but

$$\frac{c_1}{v_1} \neq \ldots \neq \frac{c_n}{v_n}$$ or (only to indicate the possibility) $$\frac{v_1 + c_1}{C_1} \neq \ldots \neq \frac{v_n + c_n}{C_n}$$

so

$$\frac{s_1}{c_1 + v_1} \neq \ldots \neq \frac{s_n}{c_n + v_n}$$

In the concrete cases,

- capitals with different organic compositions and the same turnover rate

	c	*v*	*s*	*C'*	*C*	*c/v*	*(v+c)/C*	*s/v*	*s/C %*	*Q*	*C'/Q*
I	10	10	10	30	20	1	1	100	50.0	10	3
II	20	10	10	40	30	2	1	100	33.3	10	4
III	30	10	10	50	40	3	1	100	25.0	10	5
IV	40	10	10	60	50	4	1	100	20.0	10	6
V	50	10	10	70	60	5	1	100	16.7	10	7
Total	150	50	50	250	200	3	1	100	25.0		

- capitals with different turnover rates and the same organic composition

	c	*v*	*s*	*C'*	*C*	*c/v*	*(v+c)/C*	*s/v*	*s/C %*	*Q*	*C'/Q*
I	10	10	10	30	5	1	4.00	100	200.0	10	3
II	10	10	10	30	10	1	2.00	100	100.0	10	3
III	10	10	10	30	15	1	1.33	100	66.7	10	3
IV	10	10	10	30	20	1	1.00	100	50.0	10	3
V	10	10	10	30	25	1	0.67	100	40.0	10	3
Total	50	50	50	150	75	1	1.33	100	66.7		

Under its simplest form, the transformation of surplus-value into average profit takes shape in the transformation of values into prices of production as a result of the annual process of capital valorization. That is, it takes shape in the transformation of commodities, from being the simple product of labor, into their concrete form of the products of capital as materializations of equally valorized values. Taken in itself as it is directly determined by the formation of the general rate of profit (*p*), we represent this transformation as the development of the value of the product of each sphere (C'_i), into its concrete form of price of production ($C'_i t_i$), by representing the external unity of total capital as the necessity inherent in a system of simultaneous equations. That is:

$$(c_1 + v_1)(1 + p) = C'_1 t_1$$

...

$$(c_n + v_n)(1 + p) = C'_n t_n$$

$$\frac{\sum_{i=1}^{n} s_i}{\sum_{i=1}^{n} c_i + \sum_{i=1}^{n} v_i} = p$$

In the concrete cases,

- capitals with different organic compositions and the same turnover rate

	c	*v*	*s*	*C'*	*C*	*c/v*	*(v+c)/C*	*s/v*	*s/C %*	*Q*	*C'/Q*
I	10	10	5.0	25.0	20	1	1	50	25	10	2.5
II	20	10	7.5	37.5	30	2	1	75	25	10	3.8
III	30	10	10.0	50.0	40	3	1	100	25	10	5.0
IV	40	10	12.5	62.5	50	4	1	125	25	10	6.3
V	50	10	15.0	75.0	60	5	1	150	25	10	7.5
Total	150	50	50.0	250.0	200	3	1	100	25		

- capitals with different turnover rates and the same organic composition

	c	*v*	*s*	*C'*	*C*	*c/v*	*(v+c)/C*	*s/v*	*s/C %*	*Q*	*C'/Q*
I	10	10	3.3	23	5	1	4	33.3	66.7	10	2.33
II	10	10	6.7	27	10	1	2	66.7	66.7	10	2.67
III	10	10	10.0	30	15	1	1	100.0	66.7	10	3.00
IV	10	10	13.3	33	20	1	1	133.3	66.7	10	3.33
V	10	10	16.7	37	25	1	1	166.7	66.7	10	3.67
Total	50	50	50.0	150	75	1	1	100.0	66.7		

Since we are now representing the quantitative concrete forms taken by the transformation, all the determinations involved (that is, the affirming of value by means of its own negation as the general social relation in present-day society) appear here as being developed through a set of external relations - rupture and unity - between the magnitude of these determination's concrete forms. In the simplest form we are considering, the development of surplus-value into average profit is immediately reflected by the quantitative relations that correspond to the transit from the organic determinations of capital's valorization to the formal relations in which this valorization takes concrete form. Thus, the general negation of materialized socially necessary abstract labor by its own expression as the concrete equivalence in exchange of capital-commodities, immediately manifests itself: individual prices of production differ from their simplest determination as values. Nevertheless, at the same time, value shows it is affirming itself through this self-negation by appearing quantitatively unchanged in its concrete form of price of production in what concerns the product of total social capital. And it does the same, concerning the specific capital that formally expresses by itself the determination of individual capitals as aliquot parts of total capital, namely, the specific capital whose organic composition and turnover rate correspond to the social average.

In this simple transformation of surplus-value into average profit, surplus-value's content of materialized surplus-labor manifests itself in a similar way. For individual capitals in general, self-valorization appears as a matter of mere proportionality. Nevertheless, the surplus-value and the ratios that correspond to the organic and formal relations of valorization of total social capital (directly as such or as it is represented by the specific average capital) immediately show the essence of the determination at stake. They thus show that it is about the share in the total surplus-value, extracted from the labor-power by each specific capital in accordance with the conditions prevailing in its sphere of production, among these capitals as aliquot parts of the total social capital. Therefore, the exploitation of wage-labor by capital as a necessarily collective process is immediately shown, even as a purely quantitative relation. And the same happens with the fact that this transformation itself leaves the capacity of the total social capital for valorizing itself untouched.

Any change in the conditions that directly or indirectly affect a specific valorization process develops, above all, into a change in the price of production of the corresponding commodity. Nevertheless, certain changes in the circuit of productive capital do not affect the value of commodities and, consequently, neither the valorization process nor its expression in the rate of surplus-value. This happens when the change takes place in the length of the production process beyond the labor process or directly in the length of the, in the strict sense, circulating process. In these cases, the value of the respective commodity remains unchanged, but its concrete form of price of production develops a determination of its own that makes it change. Furthermore, whichever the special sphere where it happens, any change in the circuit of a productive capital necessarily affects the determination of prices of production beyond that specific sphere. It necessarily comes into the determination of the average rate of profit and, consequently, of the prices of production in general, in three ways. In the first place, it changes the amount of society's total advanced capital keeping the total amount of surplus value unchanged, it changes the latter keeping the former unchanged, or it results in a combination of both effects. In the second place, if the amount of the capital advanced in the specific sphere changes, its proportion as an aliquot part of total capital does the same. In the third place, if the capital released (tied-up) in the directly affected sphere of production does not proportionally come from (go to) all of the spheres, a second change in the general distribution of total capital among the different spheres takes place. From all this, a change in the average organic composition of capital takes place. And this change, that is completely alien to what happens with the productivity of labor, changes in turn the amount of surplus-value that total social capital renders in a year, even though its own amount remains unchanged. Let us assume in our example that the time of circulation of capital *V* changes, doubling its turnover rate, and that the corresponding released capital becomes again tied-up to this sphere, making its production to double. We thus have:

- change in values

	c	*v*	*s*	*C'*	*C*	*c/v*	*(v+c)/C*	*s/v*	*s/C* %	*Q*	*C'/Q*
I	10	10	10	30	20	1	1.0	100	50	10	3
II	20	10	10	40	30	2	1.0	100	33	10	4
III	30	10	10	50	40	3	1.0	100	25	10	5
IV	40	10	10	60	50	4	1.0	100	20	10	6
V	100	20	20	140	60	5	2.0	100	33	20	7
Total	200	60	60	320	200	3	1.3	100	30		

- change in prices of production

	c	*v*	*s*	*C'*	*C*	*c/v*	*(v+c)/C*	*s/v*	*s/C %*	*Q*	*C'/Q*
I	10	10	6	26	20	1	1	60	30	10	2.6
II	20	10	9	39	30	2	1	95	30	10	3.9
III	30	10	12	52	40	3	1	120	30	10	5.2
IV	40	10	15	65	50	4	1	150	30	10	6.5
V	100	20	18	138	60	5	2	90	30	20	6.9
T	200	60	60	320	200	3	1.3	100	30		

The general rate of surplus-value can only change if the length of the working-day (and therefore, the absolute surplus-value) changes, or if the value of labor-power (and therefore, the relative surplus-value) changes. A change in absolute surplus-value directly concerns social capital as such, with the capitals of each sphere acting as the mere specific vehicle of the generic necessity. On the contrary, a change in relative surplus-value emerges from the change of the productive power of labor in each specific sphere. But it emerges only from such change in the spheres that, directly or indirectly, produce the means of subsistence for the productive wage-laborers. The corresponding change in the spheres that directly or indirectly provide for the individual consumption of the capitalists lacks any power to change the general rate of surplus-value. Nevertheless, as soon as a change in the productivity of labor affects the allocation of the advanced capital between the different special spheres in a non-proportional way, it affects all the prices of production, whichever the sphere the change takes place. Moreover, the transformation of values into prices of production comes into the determination of the general rate of surplus-value itself, as it determines the magnitude of each social necessity and, therefore, the proportion of total capital advanced in each special sphere (nevertheless, we are going to focus on this determination later).

Abstractly considered in itself, a change in the value of labor-power (remaining the rest of its determinations untouched) does not affect the labor-time needed to produce the commodities in general, and therefore, their values. It only implies an increase or decrease in the productivity of labor and, therefore, in the organic composition of capital, in some of the specific spheres that produce the labor-power. Since this change affects the general rate of surplus-value and, consequently, the average rate of profit, it affects the price of production of all commodities. Still, at the same time, it manifests itself as a change in the value composition of the capitals of all spheres. This latter change does not arise from a change in the technical composition of the capitals where it takes place and, therefore, it is not a change in the organic composition of these capitals. Nevertheless, with the mediation of the difference in the organic composition of the individual capitals, this change in their value composition changes the proportion that each of them represents as an aliquot part of the total social capital in a specific way. Those with an organic composition beneath the average get their share changed in a direct relation with the change in the value of labor-power; those with an organic composition above the average, get their share changed in an inverse relation. Only those with the average organic composition keep their share unchanged. Thus, the prices of production of those commodities produced by capitals with an organic composition beneath the average will rise (fall) as a rise (fall) in wages relatively rises (lowers) the value of these capitals. Conversely, the prices of production of those commodities produced by capitals with an organic composition above the average will fall (rise) as a rise (fall) in wages relatively lowers (rises) the value of these capitals. And the prices of production of those commodities produced by capitals with the average organic composition will remain unchanged in either case. A 50% rise in wages in our example will result in:

- change in values

	c	*v*	*s*	*C'*	*C*	*c/v*	*(v+c)/C*	*s/v*	*s/C %*	*Q*	*C'/Q*
I	10	15	5	30	25	1	1	33.3	20.0	10	3
II	20	15	5	40	35	2	1	33.3	14.3	10	4
III	30	15	5	50	45	3	1	33.3	11.1	10	5
IV	40	15	5	60	55	4	1	33.3	9.1	10	6
V	50	15	5	70	65	5	1	33.3	7.7	10	7
Total	150	75	25	250	225	3	1	33.3	11.1		

- change in prices of production

	c	*v*	*s*	*C'*	*C*	*c/v*	*(v+c)/C*	*s/v*	*s/C %*	*Q*	*C'/Q*
I	10	15	3	28	25	1	1.0	50	11.1	10	2.78
II	20	15	4	39	35	2	1.0	75	11.1	10	3.89
III	30	15	5	50	45	3	1.0	100	11.1	10	5.00
IV	40	15	6	61	55	4	1.0	125	11.1	10	6.11
V	50	15	7	72	65	5	1.0	150	11.1	10	7.22
Total	150	75	25	250	225	3	1.0	100	11.1		

Thus far, we have followed the process in which surplus-value negates itself as simply such to affirm itself under its concrete form of average profit - and, therefore, the process in which the value of commodities develops its corresponding metamorphosis into price of production - as capital determines itself as an amount of value that proportionally valorizes itself on an annual basis. This is only just the first step in the transformation of commodities from being the immediate product of labor, to become the specific product of capital. Nevertheless, it suffices to make the concrete forms that value and surplus-value take for each specific capital appear as their absolute and, therefore, abstract negations, as soon as these concrete forms are immediately - therefore, externally - faced through their relations of measure. Even so, at this stage, profit and prices of production immediately show they are the concrete forms of surplus-value and value as they appear in the relations of measure that concern total social capital as such, or as this capital is represented by average specific capital.

Capital-commodities as equally valorized values that equally valorize themselves

With the reproduction of the circuit of capital valorization, capital transcends its determination as an amount of value that proportionally valorizes itself to become proportionally valorized value that proportionally valorizes itself. It is no longer just about unfolding the concrete forms that the transformation of values into prices of production takes as capital emerges from its circuit of valorization at them. It is about this unfolding when the value of capital has already undergone such transformation as a premise of its circuit of valorization.

In the first place, we must face the specific determinations of prices of production that emerge from the reappearance, in these prices, of the price of production of the constant capital productively consumed. The transformation of the value of the means of production into their price of production does not add to this reappearance any specificity other than the quantitative difference between those values and prices itself. At the same time, the difference between the value and the price of production of constant capital affects the amount of capital that must be advanced to perform the annual process of valorization. Therefore, it affects the proportion that the capital advanced in each specific sphere represents as an aliquot part of the total social capital.

At first sight it could appear that a certain net difference in the price of production of the means of production should result in differences in the cost price of production and in the advanced capital - and consequently in the price of production - of the commodities produced, having the same sign. Nevertheless, the general relation between the capital annually consumed and the capital advanced for this consumption - that is, the turnover rate of the former - mediates here. Only when the advanced capital completes a single turnover circuit during the year (and, therefore, has an unitary turnover rate) the difference between its value and its price of production appears identical to itself in the cost price of production. A turnover rate above the unit implies that the divergence in the advanced capital will appear multiplied in the cost price of production; thus, until a vanishing divergence in the former becomes infinitely multiplied in the latter, when capital instantaneously completes its circuit. Conversely, a turnover rate beneath the unit makes the divergence in the advanced capital appear as a diminished one in the cost price of production; thus, until the latter divergence vanishes away as the turnover rate approximates zero. The net differences in the advanced capital and in the cost price of production result from the algebraic summing up of the differences produced by each portion of constant capital. From which, net differences in the same direction but of divergent magnitude, or diverging both in direction and magnitude, between the value and the price of production of the advanced and consumed capital may result. Let us assume the following constant capital:

	advanced capital		turnover rate	consumed capital	
means of production	value	price of production		value	price of production
a	100	140	0.1	10	14
b	100	85	1.0	100	85
total	200	225		110	99

While the price of production of the advanced capital increases a 12.5% above its value, the cost price of production of the commodity produced by consuming it falls a 10% beneath its cost value.

As far as variable capital is concerned, the difference between the value and the price of production of the means of subsistence for the productive wage-laborers affects the amount of capital that must be advanced in wages to perform the annual process of valorization. Consequently, this difference affects the proportion that the capital advanced in each specific sphere represents as an aliquot part of the total social capital. Whether advanced capital indirectly takes the material form of those means of subsistence or directly the material form of means of production, it behaves exactly in the same way concerning the share of each specific capital in total capital. Therefore, we will consider it in this unity to develop the concrete forms that this determination takes.

If in a specific sphere the price of production of the advanced capital is higher (lower) than its value, this capital increases (diminishes) its share as an aliquot part of social capital. Still, this simple determination undergoes a specific mediation. Those positive or negative differences are proportional to the relation between the organic composition of each capital that has produced the commodities that are going to come into action now as means of production, and the average organic composition in the circuit these commodities were produced. The proportionality in question only applies with respect to the total product of that circuit. Therefore, the proportion in which the price of production of a commodity differs from its value will immediately reappear as the proportion in which the new capital materialized in it sees its own share as an aliquot part of the total capital increased or decreased, only if the total product of the previous circuit becomes capital in the new one. Given the consumption of the capitalists, this is not the case. The proportion in which a price of production represents a higher (lower) part of the total valorized value normally differs from the proportion in which this same price represents a higher (lower) part of the value of the total capital that opens the following circuit. The latter proportion is mediated by the relation between the organic composition of the specific capital that has produced each commodity that is going to become new productive capital and the average organic composition of the capitals that have produced the rest of the commodities that are to follow this same course. Thus, a price of production above (bellow) the respective value, as it results from a capital with a higher (lower) organic composition than the corresponding social average, can finally result in a reduced (increased) share in the total social capital for the next circuit. An average organic composition of the capitals that produced this new total capital high (low) enough with respect to the organic composition of the specific capital in question so as to overcome the original divergence, is all this inversion requires. For instance, let us assume a capital that, according to its value, represents the 10% of the total capital, and whose price of production is 5% higher than its value. Let us also assume that the price of production of this total capital is 20% higher than its value and that this value has represented the 60% of the total product in the circuit it was produced. Let us finally assume that the remaining 40% of that total product corresponds to the surplus-value individually consumed by the capitalists, whose price of production is 30% lower than its value. Under these conditions, the specific capital in question will not have a 10% increased share in total capital, but a 12.5% diminished one.

At first, prices of production simply diverge from values because the organic composition of the capital in each special sphere diverges from the social average. Now, this original divergence may result increased, diminished or even inverted in its direction, as soon as the same determination projects itself from one turnover of capital to the next. For instance, a *ceteris paribus* rise (fall) in wages may end up manifesting itself as a fall (rise) in the price of production of a commodity produced by a capital with an organic composition beneath (above) the average, as the direct effect can be indirectly counteracted. It does not suffice any longer with an organic composition equal to the average for a special capital to produce a commodity whose value appears as a magnitude identical to itself under its concrete form of price of production. This primary condition extends to the whole of the capitals that indirectly (that is, by producing in previous circuits the material elements that now act as capital, and so on backwards) participate in the production of the commodity in question. Yet, this condition thus not suffice by itself to keep a value unchanged through its transformation. The capitals that produce the material forms that are going to act as capital in the next circuit must have, as an average, the average organic composition. The necessary simultaneous fulfilling all these conditions, means the practical impossibility - excluding an accidental compensation - of a commodity whose value would appear as an untouched magnitude when transformed into a price of production, as soon as capital opens its circuit already as valorized value.

We have thus followed the determinations of the prices of production that emerge from the circulation of capital-commodities at these prices as a premise for the circuit of capital's valorization. Let us focus now on the new value created in this circuit. The first part of this value corresponds to the labor needed by the productive-laborers to reproduce their labor-power, so as to make it available for the next circuit. Let us abstract here from any change in the magnitude of each social necessity due to the change in prices itself, that will come in only when we face the concrete form that the transformation takes through competition. Under this condition, the productivity and intensity of labor and the length of the working day are, in themselves, alien to the circulation of commodities directly at their value or at the concrete form this value takes as price of production. Therefore, from a purely material point of view, the amount of labor needed to reproduce each unit and the social totality of labor-power remains intact. The same happens with the specific social form this labor takes in commodity production, as the socially necessary abstract labor materialized in its product that is represented as the capacity of this product for relating with the rest of the commodities as equivalents in exchange. Still, it happens now that this product has its concrete social equivalence determined as the product of an equally valorized value. The price of production of the means of subsistence needed to reproduce the labor-power consumed in each special sphere determines the concrete form that the corresponding part of the value of the commodities produced in that sphere takes as their price of production. When, *ceteris paribus*, the productivity of the labor that directly or indirectly produces the means of subsistence for the labor-power rises (falls), the value of these means falls (rises), with its corresponding manifestation in their price of production. With that change in productivity, a smaller (bigger) portion of the living labor performed in each sphere is needed to reproduce the labor-power consumed in it. The remaining (additional) part of the value created by this labor will change the form in which it is transformed into a price of production, as it ceases to be (becomes) a materialization of necessary-labor to become (cease to be) a materialization of surplus-labor.

The second part of the new value created in each circuit corresponds to the product of the surplus-labor rendered by the productive-laborers, that the capitalists appropriate for free as surplus-value. We have already seen how the surplus-value materialized in capital-commodities develops its concrete form of average profit when these commodities are determined as equivalent materializations of proportionally valorized values. At that stage of its development, the average profit materialized in the product of each specific capital was determined as this capital's share in the mass of the social total surplus-value - to which it contributes according to its organic composition and turnover rate of its variable part - as corresponds to it as an aliquot part of total capital. Therefore, the average profit was determined as an immediate mass of value itself. Nevertheless, as soon as we have advanced into capital's concrete form of equally valorized value that equally valorizes itself, not a single portion of value can immediately appear as such, but under its concrete form of price of production. Not even the organic composition of capital, or its turnover rate, go on directly appearing here as the immediate determinants that make capitals differ in their capacity for valorizing themselves. Therefore, this average profit must reach its concrete form now through prices of production themselves. Nevertheless (as what directly happens with the values of simple commodities) these prices of production and, thus, their part determined as average profit, have already reached their complete determination for the individual capital-commodities when these commodities come into circulation. Externally seen, as they are the representations of the common social substance that actually enables capital-commodities to relate as equivalents in exchange, their full determination precedes exchange itself, thus being a condition for circulation and never its result. Circulation only turns this determination socially visible.

Individual capitals lack the capacity for directly determining themselves by themselves as concrete forms of social capital. They cannot realize the general rate of profit, that is their true determinant as aliquot parts of total capital, directly as such. On the contrary, this rate can only manifest itself once it has been realized through the prices of production it determines. It thus necessarily appears inverted as a purely formal relation between the average profit appropriated by each capital and this one's advanced amount. Individual capitals can only realize their determination as concrete forms of social capital when they relate with each other - and therefore, socially relate the capitalists that personify them as the holders of the proportional part of the social product in which the surplus-labor has been materialized - by exchanging their products, that is, through competition. And only in this way they can realize total social capital's necessity as the concrete subject of the social metabolism process; that is, its necessity to reproduce itself, to reproduce its circuit of valorization.

When all individual capitals get together in competition, surplus-labor presents itself in a twofold materialization, from total social capital's point of view. It is materialized in the corresponding part of the commodities produced by each individual capital. But, at the same time, it is materialized in the whole product of the capitals that produce the commodities for the individual consumption of the capitalists and their cohort of parasites, plus the whole product of the capitals that produce the material forms that will enter the next circuit as additional capital. Always from total capital's point of view, surplus-value completes its realization starting from the former materialization, $C' < \begin{matrix} M \\ m \end{matrix}$, in the same act that it does so starting from the latter one, $m - C_{(m)}$. Only when all the capital-commodities that attempt to come into circulation are exchanged there at their prices of production as equivalent materializations of equally valorized value that has been equally valorized, these two portions of total social product can come together with their social form determined as average profit. As long as this does not happen, the part of the total social labor whose product is sold under its price of production, or that cannot be sold at all, will show it has been allocated into its concrete forms in a socially useless way. On the contrary, those capital-commodities sold at market-prices above their prices of production will make evident that society needs to allocate a higher part of its total labor-power into the respective concrete forms. Therefore (and as it is proper of any concrete form of the autonomous system through which the social metabolism process regulates itself), average profit necessarily appears in its realization as a process of equilibrium that has the perpetual lack of equilibrium as its necessary concrete form. From a purely formal point of view, surplus-value will appear under its fully developed concrete form of average profit, as the sum of the prices of production of the commodities produced by the specific capitals that close their circuits through $m - C_{(m)}$.

We have reached again the price of production of capital as a result of its process of self-valorization. A certain social capital - which is itself the materialization of the social labor consumed to produce it - is able to place into action in a year a certain amount of labor-power able to work with a certain productivity and intensity over a working day of a certain length. The living labor thus performed renders a certain value product, while it preserves the value of the means of production it consumes in the working process. The total value of the product that comes into circulation becomes thus determined. Neither more nor less social labor can fit in exchange than the materialized in the commodities that are thrown into circulation together. Therefore, when a commodity is exchanged at its price of production as the concrete equivalent of other that embodies more social labor than it does, the latter is exchanged as the concrete equivalent of less materialized social labor in the same proportion. The quantitative differences between the values and the prices of production tend to mutually eliminate themselves inside the total social capital that emerges from the annual process of valorization. This simple quantitative determination immediately shows as such when capital-commodities are determined as equally valorized values. Nevertheless, by now, it has gone through the development of capital-commodities into their concrete from of equally valorized values that have been equally valorized. The simple determination remains immediately effective as far as the new value created itself is concerned. In turn, the differences that emerge from the proportion that each specific capital represents with respect to the total social capital advanced for the annual production necessarily balance one another, given their own relative nature. This is not the case with the projection of the divergence between the value and its concrete form of price of production for the capital materialized in the means of production that turnovers as fixed capital. The immediate counterpart of this divergence concerns the complete amount of a fixed capital, that is, its amount as advanced capital, but not the partial reappearance of this capital in the value of its product, as it is gradually consumed each year. Nevertheless, the magnitude and the direction the differences in question may present keep no specific relationship whatsoever with the turnover rate of fixed capital in each sphere. Consequently, these differences tend to balance each other inside society's total fixed capital. Circulating constant capital has no role to play here, as the value of its elements completely reappears in each of its turnover circuits, thus entering the general compensation in an immediate way. In brief, the value of the total social product goes on appearing as an unchanged magnitude under its developed concrete form of the price of production of the social capital that annually emerges from its process of valorization.

None of the necessary compensations in question inheres in the specific portions of total social capital determined as constant capital, variable capital and average profit. Therefore, their prices of production appear as magnitudes that differ from their value content. Each of these specific parts will have its magnitude relatively changed according to the respective organic composition and turnover rate of the capitals that directly and indirectly produce it, as these determinants impose themselves through the more developed mediations we have already seen. Of course, these organic compositions and turnover rates differ in their relative magnitudes for every time and place according to the prevailing concrete material conditions of production and circulation. Still, a general relation makes its way through these circumstantial conditions. Let us briefly face it here.

However inverted as an alienated potency, capitalist production is a historically determined specific social form through which humanity produces its life. And human life is a social process that has no concrete form of realizing its necessity other than individual life. By following a more or less convoluted path where their material forms suffer successive changes, all capitals reach individual consumption. In other words, all the capitals that produce means of production indirectly take part in the production of the means of subsistence for the wage-laborers or of the commodities that the capitalists individually consume. In fact, the social division of labor acquires its capitalist specificity as the chains of successive material production processes are cut off by the circuits of different individual capitals. What basically matters here, is the relative course followed by the organic composition and turnover rate of capital when the production processes in general enter what the fragmentation of individual capitals determines as their last step (that is, when the commodity produced ceases to be a means for a subsequent material production to become a means for individual consumption). Do they develop any necessary specificity with respect to their magnitudes in the average of the capitals that have preceded this step?

The capitals that directly produce the means of subsistence for the wage-laborers include both extremes in the scale of the organic composition. It includes automated productions in the greatest massive scale, but also productions that can only be performed in the very moment and place where individual consumption occurs. Depending on the degree of capital's fragmentation and of the material complexity required to transform the same means of production into a means of individual consumption, the capitals that produce the latter can include or exclude some with a specifically low turnover rate. This typically concerns agricultural production, where production-time extends far beyond working-time, due to the submission of productivity to natural conditions beyond the control of normal capitals. All in all, there is no determination that forces a specific bias into the price of production of variable capital with respect to its simple determination as value, vis-à-vis what happens concerning the constant capital that directly or indirectly takes part in the production of the labor-power.

Let us consider now the capitals that directly and indirectly produce the means for the individual consumption of the capitalists. In general, as this production advances through its successive steps, its material form tends to become increasingly differentiated from that which corresponds to the production of the means of subsistence for the wage-laborers. The scale in which those steps are performed experiments a progressive fall compared with the scale that the former production takes. At the same time, the social nature itself of the necessities these use-values satisfy determines a high relative use of living labor in their production, which also increases as the production process advances. Both determinations reach their peak in the last step of this process, which directly produces the means of individual consumption for the capitalists. And both of them result in a relatively low organic composition of the capitals involved in this production. Since some of the capitals that produce means of production are thus determined, the price of production of constant capital is affected in the corresponding proportion. Still, this relatively low organic composition only turns into a specific determination of the price of production of the specific portions of total social capital as it determines the prices of production of the articles of luxury that the capitalists individually consume. It relatively lowers the magnitude with which the surplus-value appears as average profit, and consequently pushes up the prices of production of constant and variable capital. Nevertheless, not all the surplus-value follows the ignoble destiny of becoming an article of luxury for the capitalists and their confederates to consume. Since the process of valorization only realizes its essential necessity as a process of accumulation, a part of the surplus-value has its material forms determined as the new means of production and means of subsistence needed to reproduce itself in an expanded scale. The production of these material forms does not differ in any meaningful specific way from the production of the means of production and means of subsistence for the productive-laborers already in action, in what concerns here. Therefore, the same happens with respect to the organic composition and turnover rate of the variable part of the capitals that produce them. The same general determinations mediate in the prices of production of the constant and variable capitals and in the part at stake of the surplus-value as average profit. The specific determination initially developed becomes smoothed.

As soon as the value contained in each specific part of the total social capital takes its concrete form of price of production as a different magnitude of equally valorized value that has been equally valorized, the quantitative relations among them will no longer reflect in an unequivocal way the organic determinations of capital's valorization. Moreover, although there is nothing at stake here apart from the development of these organic determinations into formal ones, the quantitative relations in question will not even reflect in an unequivocal way the simplest forms of these formal determinations. At best, the organic relation between variable capital and constant capital could be properly reflected by its average in time. But any relation that places together the simple forms of capital and surplus-value unavoidably becomes distorted when it is expressed through their concrete forms. The real power of capital to valorize itself, and therefore, the power to exploit the productive wage-laborers by making them render surplus-labor, appears underestimated. This happens with the rate of surplus-value, but also with the general rate of profit. Nevertheless, this is not just a distortion in the manifestation of the simple relation. The general rate of profit itself, (p), has reached here a more developed concrete form as the formal expression of capital's power to valorize itself when it opens its circuit already determined as an equally valorized value. Under this concrete form, (p^c), the general rate of profit does not appear as the determinant that rules the formal equalization of capitals any longer. It appears with this simplest determination inverted, that is, as the expression of the realized necessity of this equalization. And as such it goes on appearing as it develops its even more concrete form when the surplus-value materialized in the expenses of circulation becomes formally determined as advanced capital (but this development falls beyond the determination of the prices of production themselves). From which, the agents of capital who personify that realization see the general rate of profit as having no content other than its emergence itself.

Only if all the surplus-value produced in a turnover circuit becomes new capital in the next - which presupposes the annihilation of individual capitalists - the concrete general rate of profit can immediately tend to quantitatively coincide with its simple expression. In this case, both the price of production of the social capital and of the surplus-value are determined through the mediation of capitals with the same average organic composition and the same turnover rate. Let us consider a final relevant point concerning the distorted manifestation of the simple relations of valorization through their apparent concrete forms as relations between the completely developed prices of production. As capital accumulation develops, an increasing part of total surplus-value is transformed into new capital at the expense of the part individually consumed by the capitalists. *Ceteris paribus*, the organic composition of social capital rises. Since this rise does not proceed from an increased productivity of labor, it tends to produce a fall in the rate of surplus-value. Nevertheless, this rate could appear as following the opposite direction when it is improperly computed on the basis of the completely developed prices of production. This happens as soon as its real fall is apparently overturned by the relative increase in the price of production of average profit and the opposite movement concerning variable capital, as the organic compositions of the capitals that produce each of them tend to converge. The same inverted appearance will emerge under these circumstances respecting the general rate of profit. This is not one of those causes that genuinely counteract the tendency of the rate of profit to fall with the development of capital accumulation. It is just a purely apparent effect on the power of capital to valorize itself, as it becomes expressed in the concrete form the annual rate of profit takes.

As we have already seen, although the general rate of profit actually determines the complete development of values into prices of production through its formation, its correspondingly developed concrete form has its magnitude determined as a result emerging from that transformation itself. Therefore, it cannot be placed at this stage in the model we use to represent the quantitative determinations at stake, as the direct determinant of the external unity of total social capital. It only fits there as being itself quantitatively determined by the very realization of this unity. The external unity of total capital can only manifest itself now through the necessary quantitative identity that the value of the total annual product maintains all along its development into price of production. Besides, capital becomes now an incarnation of equal valorization not only as a result, but also as a premise of its circuits. The transformation of its value into price of production does not only take place inside each annual turnover circuit but projects itself from one circuit to the next in the reproduction of the valorization process. Therefore, we need to identify the spheres according to the type of use-value they produce. Let us consider that, in the general case, the spheres $1, ..., l$ produce means of production, the spheres $(l+1), ..., m$, means of subsistence for the productive wage-laborers and the spheres $(m+1),...,n$, commodities for the individual consumption of the capitalists.

Obviously, any change in values inside a circuit or from one circuit to the next is out of the question concerning their development itself into prices of production. Consequently, we will only indicate the circuit *k* that corresponds in each case, provided this identification is meaningful in itself. As we have already seen, prices of production are alien to the scale in which capital's reproduction takes place, provided this reproduction preserves the proportion each specific capital represents in the total. Since this simplest determination corresponds at this stage of our representation, we can either consider simple or expanded reproduction. Still, the reproduction of capital's valorization only fits into a single-year model on the basis of its simple form (as it happens whichever question related with this reproduction one faces). Under these conditions, the annual circuit of social capital as a simple process of production of value appears as:

$$c_{11} + \cdots + c_{1l} + v_{1(l+1)} + \cdots + v_{1m} + s_1 = C'_1$$

...

$$c_{l1} + \cdots + c_{ll} + v_{l(l+1)} + \cdots + v_{lm} + s_l = C'_l$$

$$c_{(l+1)1} + \cdots + c_{(l+1)l} + v_{(l+1)(l+1)} + \cdots + v_{(l+1)m} + s_{(l+1)} = C'_{(l+1)}$$

...

$$c_{m1} + \cdots + c_{ml} + v_{m(l+1)} + \cdots + v_{mm} + s_m = C'_m$$

$$c_{(m+1)1} + \cdots + c_{(m+1)l} + v_{(m+1)(l+1)} + \cdots + v_{(m+1)m} + s_{(m+1)} = C'_{(m+1)}$$

...

$$c_{n1} + \cdots + c_{nl} + v_{n(l+1)} + \cdots + v_{nm} + s_n = C'_n$$

where,

$$\sum_{i=1}^{n} c_{ij} = C'_j \quad \text{for } j = 1, \ldots, l\,; \quad \sum_{i=1}^{n} v_{ij} = C'_j \quad \text{for } j = (l+1), \ldots, m\,; \quad \sum_{i=1}^{n} s_i = \sum_{i=(m+1)}^{n} C'_i$$

and

$$\frac{s_1}{\sum_{i=(l+1)}^{m} v_{1i}} = \ldots = \frac{s_n}{\sum_{i=(l+1)}^{m} v_{ni}}$$

but

$$\frac{\sum_{i=1}^{l} c_{1i}}{\sum_{i=(l+1)}^{m} v_{1i}} \neq \ldots \neq \frac{\sum_{i=1}^{l} c_{ni}}{\sum_{i=(l+1)}^{m} v_{ni}}$$ or (only to indicate the possibility)

$$\frac{\sum_{i=1}^{l} c_{1i} + \sum_{i=(l+1)}^{m} v_{1i}}{C_1} \neq \ldots \neq \frac{\sum_{i=1}^{l} c_{ni} + \sum_{i=(l+1)}^{m} v_{ni}}{C_n}$$

so

$$\frac{s_1}{\sum_{i=1}^{l} c_{1i} + \sum_{i=(l+1)}^{m} v_{1i}} \neq \ldots \neq \frac{s_n}{\sum_{i=1}^{l} c_{ni} + \sum_{i=(l+1)}^{m} v_{ni}}$$

When capital realizes its necessity as equally valorized value that equally valorizes itself, these values develop their simplest concrete form of prices of production, $c_{ij}\, t_j^c, v_{ij}\, t_j^c, C'_i\, t_i^c$, as:

$$\left(c_{11}\, t_1^c + \cdots + c_{1l}\, t_l^c + v_{1(l+1)}\, t_{(l+1)}^c + \cdots + v_{1m}\, t_m^c\right)\left(1+ p^c\right) = C'_1\, t_1^c$$

$$\ldots$$

$$\left(c_{l1}\, t_1^c + \cdots + c_{ll}\, t_l^c + v_{l(l+1)}\, t_{(l+1)}^c + \cdots + v_{lm}\, t_m^c\right)\left(1+ p^c\right) = C'_l\, t_l^c$$

$$\left(c_{(l+1)1}\, t_1^c + \cdots + c_{(l+1)l}\, t_l^c + v_{(l+1)(l+1)}\, t_{(l+1)}^c + \cdots + v_{(l+1)m}\, t_m^c\right)\left(1+ p^c\right) = C'_{(l+1)}\, t_{(l+1)}^c$$

$$\ldots$$

$$\left(c_{m1}\, t_1^c + \cdots + c_{ml}\, t_l^c + v_{m(l+1)}\, t_{(l+1)}^c + \cdots + v_{mm}\, t_m^c\right)\left(1+ p^c\right) = C'_m\, t_m^c$$

$$\left(c_{(m+1)1}\, t_1^c + \cdots + c_{(m+1)l}\, t_l^c + v_{(m+1)(l+1)}\, t_{(l+1)}^c + \cdots + v_{(m+1)m}\, t_m^c\right)\left(1+ p^c\right) = C'_{(m+1)}\, t_{(m+1)}^c$$

$$\ldots$$

$$\left(c_{n1}\, t_1^c + \cdots + c_{nl}\, t_l^c + v_{n(l+1)}\, t_{(l+1)}^c + \cdots + v_{nm}\, t_m^c\right)\left(1+ p^c\right) = C'_n\, t_n^c$$

$$\sum_{i=1}^{n} C'_i = \sum_{i=1}^{n} \left(C'_i\, t_i^c\right)$$

At first sight, it may appear that not only the complete realization of the transformation, but the quantitative progress itself through which this transformation tends to be realized, could be represented by giving the model a multiyear basis. This is not the case. In such sort of model, each portion of capital would appear as immediately determining the prices of production in circuit *k* according to the price of production with which it emerges from $(k-1)$ (i.e. $c_{ij}\, t_{j(k-1)}^c$ or $v_{ij}\, t_{j(k-1)}^c$) though its price of production changes inside *k* (i.e. $c_{ij}\, t_{j(k)}^c \neq c_{ij}\, t_{j(k-1)}^c$ and $v_{ij}\, t_{j(k)}^c \neq v_{ij}\, t_{j(k-1)}^c$). Nevertheless, none of the specific portions of capital actually determines the price of production of the product in the way assumed here. The price of production of the means of production consumed during each circuit reappears in the price of production of the product through a specific meditation. As soon as the replacement of a means of production occurs at a modified price of production, this new price tends to replace the original one in the cost price of the production in course. Since the movements in the prices of production that take place inside each circuit fall beyond the reach of the representation we are dealing with, this tendency enters the representation as being directly realized. That is, $C'_i \, t^c_{i(k)}$ is determined by $\sum_{j=1}^{l} c_{ij} \, t^c_{j(k)}$ and not by $\sum_{j=1}^{l} c_{ij} \, t^c_{j(k-1)}$. In turn, the price of production that corresponds to the new value created during the necessary labor-time is determined by the price of production at which the means of subsistence the productive-laborers need to reproduce their labor-power emerge from that same circuit. There is no conservation of an existing value here, but the production of a completely new one. That is, $C'_i \, t^c_{i(k)}$ is determined by $\sum_{j=l+1}^{m} v_{ij} \, t^c_{j(k)}$, while $\sum_{j=l+1}^{m} v_{ij} \, t^c_{j(k-1)}$ plays no role whatsoever in its determination. Not even concerning advanced capital can the original price of production claim for a place if it changes during a circuit. The capital tied-up or released as this change takes place enters or leaves the determination of the annual rate of profit in that same circuit. Therefore, $C'_i \, t^c_{i(k)}$ is determined by $\left(\sum_{j=1}^{l} c_{ij} \, t^c_{j(k)} + \sum_{j=l+1}^{m} v_{ij} \, t^c_{j(k)}\right) p^c_{(k)}$ but not by $\left(\sum_{j=1}^{l} c_{ij} \, t^c_{j(k-1)} + \sum_{j=l+1}^{m} v_{ij} \, t^c_{j(k-1)}\right) p^c_{(k)}$.

Of course, such a meaningless model can always be constructed. And it would obviously render a set of dependent variables, as it is a determined system of simultaneous equations. Still, it will even show its emptiness in the self-incoherence of its results. Let us see why. The first step that value gives into its concrete form of price of production can be represented abstracted even from capital's necessity to reproduce its self-valorization since it involves a qualitative change that defines the object itself of this representation. Capital opens here its circuit as an accumulation of simple commodities, and therefore, of values, but emerges from it determined as a social totality fragmented into aliquot parts. Therefore, capital closes its circuit with commodities not only formally, but specifically, determined as their product, capital-commodities that enter circulation at their prices of production. On the contrary, we are now facing a stage in this transformation that does not introduce any qualitative difference other than the effect of the reproduction of the valorization process itself. Even the transformation of capital-commodities from materializations of equally valorized values to materializations of equally valorized values that have equally valorized themselves does not go beyond this reach. It is all about the progress towards the complete realization of the equalization of the rates of profit along the reproduction of capital's circuits. Consequently, the proper representation of this equalization presupposes now that the relations that correspond to the reproduction of capital's circuits are strictly fulfilled in the transit from one circuit to the next. The inclusion of any variable in the model according to its determination in a previous circuit when it has quantitatively changed in the current one will not impede capitals to appear with their valorization completely realized at the common rate of profit. But, at the same time, the total price of production of the two separated materialization under which profit enters circulation will disagree in their amount. The complete realization of all commodities at their prices of production will be in the same act the very negation of this realization. It is self-contradictory to assume that the equalization of profits has been completely achieved in one circuit, just to go on assuming that, *ceteris paribus*, the prices of production will change during the next one. Even though these "prices of production" produced by the model may asymptotically converge, thus appearing the opening one equal to the closing one, the model always fails its specific aim. It happens that the quantitative progress itself through which the transformation of values into prices of production tends to realize itself cannot be represented abstracted from the concrete forms it takes through competition. Hence, at the stage of its development we are considering here, the determination of prices of production can only be represented on a multiyear basis as the formal repetition of the single-year model. The only difference that can be introduced this way is the expanded reproduction of capital's valorization. And this expansion is completely alien to the determination itself of prices of production, provided it does not change the proportion that corresponds to each specific capital in total capital (which is a condition that any model that attempts to represent the determination of prices of production isolated from the concrete forms it takes in competition must satisfy). Let us return to our true subject.

Contrary to what happens when the transformation of values into prices of production is considered under its simplest form, none of the determinations that entered that transformation are immediately visible through the quantitative relations between their concrete forms. Therefore, no numerical example would add clarity to the point, beyond the cognition of the numerical results themselves. This cognition exceeds our specific necessity here.

The transformation of money into a product of capital

Since the price of production of a commodity is the concrete form of its value, it can only express itself as a certain amount of another commodity's use-value. Still, capital-commodities do not need to start by detaching one of them to turn it into their general equivalent, and therefore, into the immediately social product. On the contrary, capital-commodities presuppose money, as capital itself is but its necessary development. Still, the commodity determined as money, gold, can no longer act as the general equivalent of capital-commodities as the simple substantive form of social labor. It can act as this equivalent only insofar as it is itself the product of a capital that enters the formation of the general rate of profit as any other aliquot part of social capital. Gold becomes the incarnation of the immediate exchangeability as the substantive capacity of capital for valorizing itself on an equal basis. Thus, the antithetical determinations of the general equivalent - that make an use-value the expression of value and the concrete private labor that produces it the expression of abstract social labor - develop their concrete capitalist form. In it, the material product of a private concrete capital becomes the necessary expression of capital's valorization as a directly general social process.

Prices are in themselves the expression of exchange-value in money. Nevertheless, thus far we have abstracted from the mediation of the transformation of money-commodity itself into a product of capital in the quantitative determination of the prices of production. A "price of production" of the money-commodity is a contradiction in terms. Nevertheless, albeit gold is unable to express its value under the form of a price of production, its concrete capacity to express the value of the rest of commodities by functioning as their general equivalent is affected by its concrete determination as the product of capital. Depending on the relative organic composition and turnover rate the capitals that directly or indirectly produce the money-commodity have, and through the mediations that from here follow, its value could develop into a higher or lower exchangeability. Insofar as gold is used in some concrete production processes just as another means of production, this divergence will be reflected in the development of prices of production as any other. Still, this is not what really matters concerning the divergence in question. All capital-commodities express their prices of production in quantities of gold. Of course, an ounce of gold remains an ounce of gold whether commodities simply express in it their value or express this value under its concrete form of price of production. The same happens concerning a mass of gold produced during the year by a given quantity of living labor using a given quantity of dead labor. However, the divergence of the organic composition and turnover rate of the capitals that produce gold from the social averages suffices by itself to make all the relative manifestations of exchangeability in the same amount of gold to change. The simple divergence of the prices of production of all the ordinary capital-commodities from their values, and therefore these prices of production themselves, develop their concrete determination through the mediation of the aforementioned divergence concerning gold. The former divergences now manifest themselves insofar as their sources diverge with respect to the latter.

When the organic composition and turnover rate of the capitals that produce a certain commodity differ from the respective attributes of the capitals that produce in an opposite direction, they will add to each other in the direction that the simple specific difference has. Still, if those difference have the same direction, they will tend to cancel each other. Consequently, the price of production of a commodity produced by capitals with an organic composition and turnover rate higher (lower) than the social average can take concrete form as a magnitude bellow (above) the value it contents. This can happen as soon as the organic composition and turnover rate of the capital that produces gold are even higher (lower) than the social average. When the net effect of all the determinations involved accidentally makes the simple prices of production of a specific commodity to move in the same direction and degree the exchangeability of gold as a product of capital does, the value of that commodity will take its completely developed concrete form of price of production as a magnitude identical to itself. And this will occur however much the capital that produces that commodity differs from the social average in its organic power to valorize itself.

This concrete determination of the prices of production manifests itself concerning the total social capital. It does so through the relation between the average organic composition and turnover rate of total social capital with respect to the same attributes in the case of gold. Disregarding an accidental coincidence, the value of the total social product ceases to appear as an unchanged magnitude of gold as soon as it reaches the present point in the development of its concrete form as the price of production of the total social capital that annually emerges from its process of valorization.

Let us assume that the commodity that directly or through its signs acts as money, has no other use-value than this. Let us also assume that this use-value becomes completely exhausted during the year in which it goes into circulation. On these basis, we can consider now that the special sphere n does not produce articles for the individual consumption of the capitalists but the money-commodity. To keep at sight the whole development of the transformation, we will still use the expression $c_{ij}\, t^c_j$, etc. for the previously considered form of the prices of production, although the coefficients t^c_j enter here with their own determination already realized. Values quantitatively take now their concrete form of prices of production as:

$$\left(c_{11}\,t^c_1/t^c_n + \dots + c_{1l}/t^c_n + v_{1(l+1)}\,t^c_{(l+1)}/t^c_n + \dots + v_{1m}\,t^c_m/t^c_n\right)(1+p^c) = C'_1\,t^c_1/t^c_n$$

...

$$\left(c_{l1}\,t^c_1/t^c_n + \dots + c_{ll}\,t^c_l/t^c_n + v_{l(l+1)}\,t^c_{(l+1)}/t^c_n + \dots + v_{lm}\,t^c_m/t^c_n\right)(1+p^c) = C'_l\,t^c_l/t^c_n$$

$$\left(c_{(l+1)1}\,t^c_1/t^c_n + \dots + c_{(l+1)l}\,t^c_l/t^c_n + v_{(l+1)(l+1)}\,t^c_{(l+1)}/t^c_n + \dots + v_{(l+1)m}\,t^c_m/t^c_n\right)(1+p^c) = C'_{(l+1)}\,t^c_{(l+1)}/t^c_n$$

...

$$\left(c_{m1}\,t^c_1/t^c_n + \dots + c_{ml}\,t^c_l/t^c_n + v_{m(l+1)}\,t^c_{(l+1)}/t^c_n + \dots + v_{mm}\,t^c_m/t^c_n\right)(1+p^c) = C'_m\,t^c_m/t^c_n$$

$$\left(c_{(m+1)1}\,t^c_1/t^c_n + \dots + c_{(m+1)l}\,t^c_l/t^c_n + v_{(m+1)(l+1)}\,t^c_{(l+1)}/t^c_n + \dots + v_{(m+1)m}\,t^c_m/t^c_n\right)(1+p^c) = C'_{(m+1)}\,t^c_{(m+1)}/t^c_n$$

...

$$\left(c_{n1}\,t^c_1/t^c_n + \dots + c_{nl}\,t^c_l/t^c_n + v_{n(l+1)}\,t^c_{(l+1)}/t^c_n + \dots + v_{nm}\,t^c_m/t^c_n\right)(1+p^c) = C'_n$$

$$\sum_{i=1}^{n} C'_i = \sum_{i=1}^{n}\left(C'_i\,t^c_i\right)/t^c_n$$

Given the velocity of the currency of money, a different quantity of it will be needed to make the product of the same amount of materialized social labor circulate when the value of this product develops into a mass of price of production that differs from it in its magnitude. If this change in the quantity of money is satisfied through a change in the quantity of gold that enters circulation, it will therefore affect the scale of gold production. In turn, this change will imply a reallocation of social capital into its concrete specific forms, therefore leading to a general movement in the prices of production. Nevertheless, at this stage of our development of the determinations of these prices we can assume that the change in the quantity of money takes place through the amount of money-signs placed in circulation. On doing so, we can leave the question of the effect of a material change risen by the transformation itself upon these very transformation out, until we face it where it belongs in general, competition.

The realization of capital-commodities in competition

In its developed concrete form, the general rate of profit is the synthetic form the capitalist regulation of the social metabolism process takes. Through its formation, capitalist society allocates its total labor-power and, therefore, its total capacity for consuming into their concrete material forms. Still, capitalism arises as the most developed historical negation of the direct regulation of human life. It is an autonomously regulated system. Therefore, the general rate of profit can only realize its determination by negating itself as the immediate form of the general social regulation to affirm itself through the action of the individual capitals, that is, in an indirect way.

In commodity-producing society, material production produces at the same time the general social relation. Consequently, this social relation necessarily reaches its complete realization through the exchange of the material products as equivalent materializations of the same social content. In the proportion that the abstract labor materialized in a commodity is not determined as socially necessary, this commodity will enter exchange lacking the power to attract other commodities as its equivalents. Conversely, when a concrete labor has been performed short of the corresponding social necessity for its product, the abstract labor materialized in this product enters exchange determined as the equivalent of a greater amount of social labor. Although commodities are completely determined as materializations of a certain amount of socially necessary abstract labor in the very moment they are produced, their condition as such only becomes visible when they are actually exchanged. Only then their producers can recognize the concrete labor they have performed as exceeding or falling short of the respective social necessity, as they lose or gain in their power to exercise their general social relation, and therefore, to produce their own lives. And, only through this recognition, the specific social determination of their products as values can take its concrete shape in the movement of social labor from one concrete form to another.

In any social metabolism process, the magnitude of each social necessity includes, among its determinants, the magnitude of the social labor-power that has to be allocated into the corresponding concrete form to satisfy it. In general, this is an inverse relation. But, in this autonomously regulated social system, it is not an immediate relation. As any determination that concerns the allocation of concrete labor in commodity-producing society, it is mediated by the form itself in which the abstract labor materialized in each commodity is represented as socially necessary in the general social relation.

The socially necessary abstract labor embodied in capital-commodities completes its determination as such by making these commodities circulate as equivalent materializations of equally valorized capitals. Given the differences in the organic composition and in the turnover rate of the variable part of the capitals that valorize themselves in each special sphere of social production, capital-commodities do not realize their determination as materializations of socially necessary abstract labor if they go into circulation at their values. In this case, the capitals with the highest organic composition and the slowest turnover find their power to exercise their general social relation and, therefore, to produce their own "lives" as the alienated concrete subjects of the social metabolism process, diminished. Those capitals with the opposite attributes find these capacities increased. In pursuit of realizing their necessity as values that valorize themselves in an equal proportion, capitals move away from the spheres where they have the highest organic composition and the slowest turnover to get into the spheres that allow the opposite attributes. The circulation of commodities has thus acquired its first specific determination as the competition among capitals.

Following the movement of capitals from one sphere to another, social production changes in each corresponding proportion. Still, if commodities were circulating up to that moment at their values, the social necessity for each of them was accordingly determined. And, in commodity-production, social necessity means effective demand. Hence, now, it is exceeded in those spheres where capital has been attracted and insufficiently covered in those spheres from where capital has been expelled. The necessity of capitals to equally valorize themselves takes shape at this point in the fall of the magnitude in which the abstract labor materialized in the commodities with expanded production is represented as socially necessary in exchange. The opposite movement takes place in the market-prices of the commodities with a diminished production. The capitals that undergo the downward movement can no longer appropriate the whole surplus-value they directly extract from their wage-laborers. Those that experience the upward movement start to appropriate a larger amount of surplus-value than that they directly extract. All the surplus-value that the former capitals can lose is that which the latter capitals have to win, and vice versa. Beyond this point, the movements in question cease to be the concrete form through which capitals determine themselves as aliquot parts of total social capital to become the negation of this determination. Therefore, the transformation of values into prices of production necessarily takes shape through a change in the magnitude of the social necessity for each use-value. From which, that transformation takes shape through a change in the material forms of the social production, which means, a different allocation of the social labor-power into its concrete forms.

It is only through this material change that the transformation of values into prices of production affects total social capital as such. According to its general determination, this transformation takes shape by expanding the production of the spheres with a lower organic composition and faster turnover of capital, while it contracts the production of the capitals with the highest organic composition and lowest turnover rate. Nevertheless, this general determination may present some specific movements that are opposed to it. Some commodities may get their production expanded beyond the general proportion as they substitute other commodities with an alternative use-value, once an unfavorable proportion between their values becomes inverted at their prices of production. This sort of inversion can even make way for commodities excluded from production at their values, as well as it can completely exclude others from production. Besides, some commodities may get their production increased even though their prices of production are higher than their values. For example, this can happen when the price of production of an alternative use-value grows in an even greater degree above its value, causing its substitution; or when the fall in the price of production of another commodity that is associated with them in consumption outdoes their higher price.

All these changes do not involve a change in the productivity of labor that the social capital can put into action. This productivity emerges from the material conditions in which each production is performed in a given moment. And these conditions have remained untouched. So, thus far, it is only about changes in the average organic composition that result from changes in the weight with which capitals with different organic compositions enter that average. Nevertheless, if the scale in which a specific commodity is produced changes, a change in the technical conditions of its production may result. An increased (diminished) scale can create by itself the conditions for a higher (lower) productivity, provided the consequent increase (decrease) in the specific organic composition does not offset the initial increase (decrease) in the scale. Still, the transformation of surplus-value into average profit determines the productivity of labor beyond this change in scales. Let us consider a productive technique excluded from production since it requires more labor to produce the same use-value than the technique in use. Nevertheless, the lower organic composition that corresponds to it may result in a price of production lower than the one that corresponds to the technique in use up to that moment. As soon as commodities circulate at their prices of production, these techniques are shifted, causing the productivity of labor to move backwards. This is a specific obstacle capitalist regulation of social life rises against its own general trend towards the increase of productivity of labor, as this increase is the source of relative surplus-value. Since techniques that involve a lower productivity are put into action, a lower general rate of surplus-value but a higher general rate of profit result.

Given the magnitude of society's total capital, the general expansion of the capitals with the lower organic compositions and the contraction of those with the higher ones puts a greater amount of labor-power into action, while the rate of surplus value remains unchanged. From which, the total amount of surplus-value increases. Concerning the eventual specific introduction of techniques with a lower productivity of labor, the expanded base upon which surplus-value is produced tends to counteract the fall in its rate. Consequently, in general, total social capital appropriates an increased amount of surplus-value just because this surplus-value develops its concrete form of average profit. Always considering a given amount of total social capital, this increased surplus-value results in an increased general rate of profit.

We have finally completed the development of values into their concrete form of prices of production. To represent the annual valorization of social capital including the determinations that emerge from its realization through competition we must start by accounting for all the concrete forms that configure competition itself. Obviously, this specification only fits here in its most abstract form; that is, as a mere enunciation of the possible relations involved concerning the transformation of values into prices of production itself, that even excludes the eventual substitution of a technique by another. Following from the stage we reached before we specifically considered the mediation of money, and calling q_i the factor that reflects the material changes that occur in each element - so the original values appear now developed into their concrete forms of prices of production of a mass of each use-value *i* that differs from the original one as $c_{ij}\, t_j^{cc}\, q_{ij}, v_{ij}\, t_j^{cc}\, q_{ij}, C'_i\, t_i^{cc}\, q_i$ - and p^{cc} the completely developed concrete form that the average rate of profit takes, we have:

$$\left(c_{11}\,t_1^{cc}\,q_{11}+\dots+c_{1l}\,t_l^{cc}\,q_{1l}+v_{1(l+1)}\,t_{(l+1)}^{cc}\,q_{1(l+1)}+\dots+v_{1m}\,t_m^{cc}\,q_{1m}\right)\left(1+p^{cc}\right)=\sum_{i=1}^{n}\left(c_{i1}\,t_1^{cc}\,q_{i1}\right)$$

...

$$\left(c_{l1}\,t_1^{cc}\,q_{l1}+\dots+c_{ll}\,t_l^{cc}\,q_{ll}+v_{l(l+1)}\,t_{(l+1)}^{cc}\,q_{l(l+1)}+\dots+v_{lm}\,t_m^{cc}\,q_{lm}\right)\left(1+p^{cc}\right)=\sum_{i=1}^{n}\left(c_{il}\,t_l^{cc}\,q_{il}\right)$$

$$\left(c_{(l+1)1}\,t_1^{cc}\,q_{(l+1)1}+\dots+c_{(l+1)l}\,t_l^{cc}\,q_{(l+1)l}+v_{(l+1)(l+1)}\,t_{(l+1)}^{cc}\,q_{(l+1)(l+1)}+\dots+\right.$$

$$\left.+\,v_{(l+1)m}\,t_m^{cc}\,q_{(l+1)m}\right)\left(1+p^{cc}\right)=\sum_{i=1}^{n}\left(v_{i(l+1)}\,t_{(l+1)}^{cc}\,q_{i(l+1)}\right)$$

...

$$\left(c_{m1}\,t_1^{cc}\,q_{m1}+\dots+c_{ml}\,t_l^{cc}\,q_{ml}+v_{m(l+1)}\,t_{(l+1)}^{cc}\,q_{m(l+1)}+\dots+v_{mm}\,t_m^{cc}\,q_{mm}\right)\left(1+p^{cc}\right)=\sum_{i=1}^{n}\left(v_{im}\,t_m^{cc}\,q_{im}\right)$$

$$\left(c_{(m+1)1}\,t_1^{cc}\,q_{(m+1)1}+\dots+c_{(m+1)l}\,t_l^{cc}\,q_{(m+1)l}+v_{(m+1)(l+1)}\,t_{(l+1)}^{cc}\,q_{(m+1)(l+1)}+\dots+\right.$$

$$\left.+\,v_{(m+1)m}\,t_m^{cc}\,q_{(m+1)m}\right)\left(1+p^{cc}\right)=C'_{(m+1)}\,t_{(m+1)}^{cc}\,q_{(m+1)}$$

...

$$\left(c_{n1}\,t_1^{cc}\,q_{n1}+\dots+c_{nl}\,t_l^{cc}\,q_{nl}+v_{n(l+1)}\,t_{(l+1)}^{cc}\,q_{n(l+1)}+\dots+v_{nm}\,t_m^{cc}\,q_{nm}\right)\left(1+p^{cc}\right)=C'_n\,t_n^{cc}\,q_n$$

$$\sum_{i=1}^{n}C'_i\,q_i=\sum_{j=1}^{l}\sum_{i=1}^{n}\left(c_{ij}\,t_j^{cc}\,q_{ij}\right)+\sum_{j=(l+1)}^{m}\sum_{i=1}^{n}\left(v_{ij}\,t_j^{cc}\,q_{ij}\right)+\sum_{i=(m+1)}^{n}\left(C'_i\,t_i^{cc}\,q_i\right)$$

$$q_{11}=f\left(t_1^{cc},\dots,t_n^{cc}\right)$$

...

$$q_{nm}=f\left(t_1^{cc},\dots,t_n^{cc}\right)$$

$$q_{(m+1)}=f\left(t_1^{cc},\dots,t_n^{cc}\right)$$

...

$$q_n=f\left(t_1^{cc},\dots,t_n^{cc}\right)$$

No specificity arises from the transformation of the commodity that acts as money into a capital-commodity concerning its realization through competition. There is no need then to represent its quantitative determinations here.

Total social capital and conscious revolutionary action

We have followed commodities through their development into their specific form of capital-commodities. We have seen how commodities - the products of socially necessary abstract labor represented as the capacity of these products for relating among themselves in exchange thus socially relating their producers - have transformed themselves into the real products of capital. Through this transformation, the materialized fetishistic general social relation becomes the immediate concrete subject of social life itself, producing human beings as its personifications and alienating all human potencies as its potencies. The social metabolism process now regulates itself through the accumulation of capital. As such constant reproduction of the self-valorization of substantive value, the general regulation of social life lacks any qualitative determination other than the equal valorization of the capitals advanced to perform social production. Surplus-value takes concrete form of average profit. Commodities are no longer exchangeable as equivalent materializations of socially necessary abstract labor, but as materialization of this labor which is represented as the capacity of capital-commodities for being exchanged as equivalent materializations of equally valorized values. With the reproduction of the valorization process, capital-commodities become determined as equivalent materializations of equally valorized values that have equally valorized themselves. The value of commodities thus has completely metamorphosed itself into the price of production of capital-commodities.

On reaching this point, not a single quantitative trace of the values of capital-commodities remains immediately recognizable in these values' concrete forms of prices of production. This happens whether a singular commodity, a singular capital, the specific parts of total social capital or this capital itself, and whether prices of production as such or their changes, are considered. From an equally external point of view, average profit and its rate appear to be alien to any organic determination, and even to any simple formal determination, of capital's valorization by its capacity for producing surplus-value. Nevertheless, these appearances will not fool us when the moment comes to take action on them. We have already appropriated in thought the complete necessity of the prices of production by following it step by step along its development. We have thus discovered that the apparent self-determination of this prices is not such but the necessary concrete form through which the socially necessary abstract labor materialized in capital-commodities is represented as the capacity of these commodities to act as the general social relation. At the same time, we have discovered how capital's capacity for appropriating surplus-value necessarily appears with its magnitude distorted and its laws inverted under its concrete form of the general rate of profit.

Now we can extend Marx's conclusions to the complete development of surplus-value into average profit as follows: "What competition does *not* show, however, is the determination of value, which dominates the movement of production; and the values that lie beneath the prices of production and that determine them in the last instance. Competition, on the other hand, shows: 1) the average profits, which are independent of the organic composition of capital in the different spheres of production, and therefore also of the mass of living labour appropriated by any given capital in any given sphere of exploitation" - and we add, whose rate differs from the relation between total surplus-value and total capital; "2) the rise and fall of prices of production caused by changes in the level of wages, a phenomenon which at first glance completely contradicts the value relations of commodities" - and we add, that appear to be free from any necessary determination; "3) the fluctuations of market-prices, which reduce the average market-price of commodities in a given period of time, not to the market-*value*, but to a very different market-price of production, which diverges considerably from this market-value" - and we add, whose total amounts also diverge for the social product, constant capital, variable capital and surplus-value; 4) the organic relation between the total constant capital and the total variable capital annually consumed and between the total annual profit and the total variable capital annually consumed, as completely alien to the capacity of capital for valorizing itself. "All these phenomena *seem* to contradict the determination of value by labour-time as much as the nature of surplus-value consisting of unpaid surplus-labour. *Thus everything appears reversed in competition*. The final pattern of economic relations as seen on the surface, in their real existence and consequently in the conceptions by which the bearers and agents of these relations seek to understand them, is very much different from, and indeed quite the reverse of, their inner but concealed essential pattern and the conception corresponding to it." (Marx, Capital III, pp. 208-9)

Not in vain, capital accumulation autonomously regulates the social metabolism process behind the backs of the individuals. Conscious action rules inside each individual capital, but only as far as it is a necessary concrete form that the general autonomous regulation takes. Such is the field where the appearances of competition belong. Capital accumulation is, in itself, the very negation of the conscious regulation of this process.

Since it is empty of any immediate necessity other than the purely quantitative of increasing its own value, capital cannot find in itself a qualitative limit to the expansion of its valorization process. Hence, the insatiable thirst of human blood and flesh it has. Still, it can only go on with its expansion by making the production of relative surplus-value its main source of valorization. The production of surplus-value can only take concrete form through the unlimited concentration of capital and the control of production and consumption by science as a social potency personified in the collective-laborer (and, therefore, in the proletariat itself as a class). But this twofold concrete form is, in itself, the very negation of private property upon the social means of production and of the unconscious regulation of human life through the proletariat's action alienated as a capital's potency (as any potency of the proletariat is). It is, in itself, the very annihilation of capitalism through its own development, into the conscious regulation of the social metabolism process by the therefore freely associated individuals, into socialism or communism.

It is about the production of the conscious regulation of the social metabolism process as the realization of the proletariat's most genuine historical determination. Therefore, it is about an action of the proletariat that needs to be, in itself, a conscious action. It is about a revolutionary action that regulates itself through the cognition of its own necessity by reproducing it in thought, thus overcoming the alienation of the proletariat's consciousness inherent in any interpretation of the world. And, as this action directly concerns *total social capital*, it is about *the political revolutionary action of the proletariat*.

Total social capital reaches its real determination overcoming any formal aggregation of individual capitals, only as simple commodities are turned into capital-commodities through the transformation of surplus-value into average profit. From this transformation on, our materialized general social relation takes a prices of production-form. To consciously personify the revolutionary potency our general social relation carries in itself, we need to rule our action by appropriating in thought the determinations of these prices of production, as far as our action becomes itself a specific form for those determinations to be realized. Since prices of production inhere in the general form itself that our general social relation takes, there is hardly a concrete form of revolutionary action and, furthermore, of the proletariat's political action in general, that is not, in itself, such realization. Just to point out some obvious examples, these concrete actions range from the struggles through which the value of labor-power takes concrete form as wages, or the question of scientific priorities through which the development of the productivity of labor takes concrete form, to the transformation of capital into a directly collective property and, therefore, a directly collective human alienated potency, inside a national or international ambit of capital accumulation through a social revolution.

In other words, it is not about interpreting Marx's texts on the transformation of values into prices of production, whichever form this interpretation takes. It is about facing capital in reality, as it directly concerns through this transformation our revolutionary conscious action, searching in it for the necessity of this action, to rule it by reproducing this necessity in thought. And it is here where Marx's advances in reproducing through thought the specificity of capitalist society come in: we expand the reach of our own advance through this reproduction as far as it can be developed, not as an original process of cognition but, as a process of recognition from the social point of view, by critically using *Capital* as its support. Which means that this support has to be renewed each time we face a specific real concrete form that concerns our action, as we can only reproduce this form in thought provided we do not isolate it from the complete development of its own necessity, that starts to emerge from its simplest forms.

Therefore, from the point of view of present-day conscious revolutionary action, it is not about "understanding" exploitation or "understanding" the movements in prices. "Understanding" exploitation takes us nowhere concerning this action. It does not follow the necessity inherent in exploitation through its complete development into its concrete forms, up to facing it as a potency which has our political action - and more precisely, our political action determined as an action that has needed to follow all this path to become a conscious action - as its own necessary form of realizing itself into its self-annihilation. And, certainly, in a more direct or indirect way, exploitation always takes concrete form through prices of production. Instead, "understanding" turns this real abstract form that shapes itself in prices of production, the expropriation of surplus-value, capitalist exploitation, into a pure abstraction. Reciprocally, "understanding" the movements in prices isolates these movements from the complete development of their necessity, thus turning these concrete forms that capitalist exploitation takes, into another set of pure abstractions. As such, these abstractions do not go beyond the appearances of competition that really concern the action of those who personify capital's historical necessity as a mere process of expropriation of surplus-value. But the point concerning conscious revolutionary action is to personify capital's historical opposite necessity, that of superseding itself into a free human society.

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(Specific references to each of these texts will be included in the second part of this work.)