

RECONSTRUCTING VALUE-FORM ANALYSIS 2:
THE ANALYSIS OF THE CAPITAL – WAGE-LABOUR
RELATION AND CAPITALIST PRODUCTION

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Introduction

We have heard of complaints about the difficulty of comprehension and charges of irrelevance of the first part of this series. The latter is indeed a serious charge, which should be explicitly answered. It is related to the first complaint, regarding the difficulty of our texts. If one reads through the recent English secondary literature¹ on the Marxian value theory, one notices that a profound controversy is being waged over the value theory, which at one pole, questions its validity *in toto* and at the other, defends it staunchly to the letter. Since the value theory is the conceptual foundation of Marx's *Capital*, there is a great deal at stake in this controversy, namely, the tenability of the Marxian analysis of the capitalist mode of production. The central question is what distinguishes the Marxian value theory from the Ricardian. Most defenders of the value theory point to Marx's theory of the value-form as the distinguishing feature. This distinguishing feature, however, is often paraphrased as Marx's demonstration of the historical specificity of value categories as opposed to their 'eternalisation' by Ricardo and other economists. The opponents of the value theory, in turn, correctly point out that the demonstration of historical specificity remains external to the issues at stake, since the Marxian version of the value theory is internally incoherent. We have taken a middle position in this debate: the value-form is without doubt the essential new feature of the Marxian value theory, as opposed to the Ricardian, but the Marxian presentation of it is defective, which has forced us to a radical reconstruction of the value theory. There are, in fact, two value theories embedded in Marx's texts, and correspondingly, an esoteric and an exoteric or popular Marx. Above all, the work of Backhaus has helped us to this understanding through his minute analysis of Marx's writings.

We have chosen not to publish textual analyses, but rather an attempt at reconstructing the Marxian value theory which disposes of and criticises the Ricardian elements, and at the same time, brings the value-form analytic line of argumentation to the fore. The value theory is thus simultaneously a critique of all pre-monetary (subjective or objective) value theories which implicitly or explicitly lie at the foundation of classical and modern economic

theories. A well-grounded concept of money is *the* litmus test of a successful value theory. Our problem has been how to present a value theory which grounds the necessary connection between abstract associated labour (the value substance), the value-form and money. The structure of the commodity-money relation is in a certain way a circle, which demands a special theoretical procedure to break out of it and begin the analysis. This mode of presentation, which we call dialectical, is necessitated by the peculiar dialectical structure of commodity and money, i.e., by “the peculiar logic of the peculiar object” (Marx). The difficulties of comprehension in following through the presentation arise from the attempt to grasp this perplexing structure in thought – which turns upon fine distinctions, such as between exchange-value, value-form and value-substance – and also from the attempt to block any popular understanding of the value theory along Ricardian lines. Our presentation is not designed to make difficulties for the reader, but to allow access to the extraordinarily paradoxical character of bourgeois social labour. Marx himself warned of the difficulties in the theory of the value-form: “To the uninitiated its analysis seems to consist of aimless nit-picking” (CI 19; K1 12).

The preoccupation with a reconstruction of the value theory does not exhaust itself with a theory of commodities and money. The value theory of money is the kernel of a theory of our present form of society. To substantiate this claim, the presentation must be continued to investigate all the general aspects of society based on the money-form of social labour and show how the present society constitutes a coherent but contradictory totality. We invite the reader to follow through our argumentation and reaffirm our readiness to correspond with readers who wish to follow up specific points in our texts, or to raise other questions.²

In this article we continue the systematic presentation begun in RVfA1³ and presuppose therefore the concepts developed there. On the basis of the analysis of commodities and money it is possible to proceed to a value-form analytic investigation of the wage-labour-capital relation and of the capitalist production process. In Marx’s *Capital*, the corresponding analysis constitutes the heart of the first volume, and has also been that part of *Capital* with the most profound influence within the marxist tradition. For this reason, it is important that we continue the dispute with Marx’s presentation in this second part, in order to demonstrate that a consistent value-form analytic approach demands a rethinking of central Marxian categories such as surplus-value and absolute and relative surplus-value production. From considerations of limitation of space, we have not commented on the bounteous literature to the analysis of wage-labour and production in *Capital*. Only in connection with our proposal to relocate the analysis of rent within the production-analysis do we refer to an author other than Marx, viz. Bahro (cf. §21Ab).

timber. The labourers receive from the capitalist payment in return for the employment of their labour-power over a definite period of time. If, for the sake of simplicity, we assume that this period is the time taken for the production and sale of the commodities under consideration, then the capitalist pays out a part of the proceeds of sale as wages. Money as wage, in distinction from its function as *means of purchase* in normal sale relations, functions as *means of payment* in a transaction extending over time. These two determinations of money are a further consequence of money as means of circulation and absolute value, respectively (§9). The hiring of the labourer by the capitalist, who sets the former's labour-power into motion in a *labour process* for the production of new commodities, is the first type of loan relation to be systematically developed in the analysis. Wage-labour is the first determination of *capitalist commodity production* as a labour process mediated by the *capital-relation* between the wage-labourer and the capitalist. By virtue of this money-mediated relation, the figure of the 'producer' of the industrial commodities analysed in RVfA1 splits into the capitalist and the labourer. The many capitalist initiators of concrete dissociated labour processes together constitute the *capitalist class*. The labourers hired and employed by capitalists in diverse labour processes constitute the *working class*. The capital-relation thus inaugurates a *class relation*.

(a) Marx, in contrast to us, introduces the *advance* of money-capital to articulate the relation between capitalist and labourer (for Marx, an exchange-relation not a loan relation cfRVfA p. 44). In Marx's presentation labour-power is paid with advanced money (later "variable capital" CI 202; KI 224) and the capitalist is the "money possessor" whereas the wage labourer is the "commodity possessor":

In order to draw value out of the use of a commodity, our money possessor must be so lucky as to discover a commodity within the sphere of circulation, on the market, whose use-value itself possesses the peculiar quality of being a source of value, whose actual consumption therefore were itself objectification of labour and therefore creation of value. And the money possessor finds on the market such a specific commodity – labour-capacity or labour power. (CI 164; KI 181)

This formulation follows in Marx's presentation on the basis of an incorporation of everyday knowledge ("happens daily before our eyes" CI 145; KI 161 "we find . . . the form M–C–M . . . , buying in order to sell" CI 164; KI 162) and on the basis of a "characteristic" (CI 154ff; KI 170ff) of the form of circulation of capital ("general formula"). In our presentation, by contrast, on this level there is no money whatever that functions as capital (cf. §18). Rather, the wage is conceived as part of the proceeds of sale of produced commodities. This assumption of presentation allows for a unified and uninterrupted treatment of the capital-relation in its essential form (cf. esp. the revenue-form analysis in RVfA3). First with the circulation analysis (RVfA4) does the relative autonomy of movements of money-capital from the underlying valorization of capital in production, and in particular, the fact that money-capital is advanced as wages, become a theme.

The Capital-Wage-Labour Relation

§ 10

An understanding of the capital-relation on the background of the analysis of the commodity and money forms of value is initiated by the question as to how the industrial commodities which were analysed in the first part of the presentation (RVfA1) are produced. In § 3f the double character of the commodity products of labour was revealed. With the development of the money-form of value, the abstract associating of concrete dissociated labours is achieved through the sale of the commodity. A presupposition for this value character of the commodity accomplished through sale of the product of labour is the performance of concrete dissociated labour. The 'producer' who stands behind the commodities and who is now to be more fully investigated, must therefore be determined in a way corresponding to the double character of the labour which produces industrial commodities. This is achieved in that our investigation begins with the question as to how money mediates the concrete dissociated production of commodities.

§ 11

From everyday life we know that a *wage* is paid to the *wage-labourer* for the performance of labour (which can now be referred to as *wage-labour*) under the command of the *capitalist*. Since the wage is a sum of money, it can be conceived, on the basis of the previous conceptual development, as a form of value, namely, the *wage-form of value*. The wage is thus coagulated social labour (§ 4Ab) which lubricates the performance of concrete dissociated labour (§ 3). The wage-form of value can be understood as a derived money-form of value not to be conflated with the commodity form of value. The latter is a concept restricted to industrial commodities (§ 3f). As absolute value (§ 9), money has the power to free itself from its being as value-form of industrial commodities and to encompass within its orb other objects – of significance here is the wage-labourer – which are not values. Money possesses this power, moreover, in the form of a qualitatively new kind of relation to the wage-labourer which we can call – in distinction from the sale/purchase relation – the *loan relation*. The wage is the *hiring price* of the labourer in his/her capacity as a bearer and expender of labour-power. That the bearer of labour-power, the labourer, expends this potential by performing labour over a definite period of time is an integral part of the loan relation between the capitalist and the labourer. In this relation, the labourer is an *element of production* whose potential to labour is exploited in the production of industrial commodities. 'Exploitation' is to be understood here in the sense of 'use of the hired object', in the same way as a forest can be exploited to gain

(b) For Marx, the difference between “labour” and “labour-power” is essential to his critique of classical political economy, which “borrows the category ‘price of labour’ from everyday life without further critique” (CI 503; KI 559). Marx mentions firstly the suppression of the qualitative question ‘What is wage for labour?’ by the quantitative question ‘How is the level of wages determined?’.

Preoccupied with the difference between the market prices of labour and its so-called value with the relation of this value to the profit-rate, to the commodity-values produced by labour etc., it never became clear that the course of the analysis had not only led from the market-prices of labour to its ostensible value, but had, in turn, to dissolve this value of labour itself
...
(CI 504; KI 561)

Marx then continued, in our opinion, too compromisingly: “into the value of labour-power” (ibid). We depart from Marx when he claims that labour-power, “like all other commodities” has a value (CI 167; KI 184). In § 12Aa we criticise the conception of the relation between capitalist and labourer as the purchase/sale of a commodity (cf. also RVfA p. 44). That labour-power does not have a value of its own is hinted at by Marx when he writes that the “value of labour-power” is “dissolved” in the “value of necessary means of life” (CI 167; KI 185).⁴ In the Marxian formulation “value of labour-power”, the role of the value-form is not taken account of. The subsequent dissolution of the value of labour-power into the value of the industrial commodities which the labourer *buys* with his/her wage (§ 12) demands a consideration of the wage-form of value. For us, the wage represents the loan price of the labourer in his/her capacity as a bearer of labour-power. By insisting that the wage is the price of labour-power rather than of labour, Marx sought to expose classical political economy’s uncritical acceptance of the category ‘price of labour’ which mystifies class exploitation. The distinction between ‘price of labour’ and ‘value of labour-power’, however, does not of itself enlighten. Rather, that a part of the abstractly associated labour in the commodity-product is unpaid and appears opposite the wage as surplus-value (§ 13), is a result of the systematic analysis of social reality.

(c) The distinction between wage and wage-form introduced by Marx has a different significance for us. The wage hires the labourer as a mere object with the potential to labour rather than as a subject who performs labour as an act of his/her own will. On the level of competition, the wage-form is introduced as expression of the fact that the labourer *concurs* through an act of will to labour for the capitalist (CCF&S Part III). On this level, however, to perform wage-labour “under the command of the capitalist” means to labour under the direction of the figure who sets the production process into gear by employing labourers. All loan relations are characterised by the hirer’s use for a definite period of time of specific capacities inhering in the object hired. To the hirer, the latter is an object of exploitation even when, as in the case of the labourer, this object is, at the same time, a subject. At this stage of the analysis the labourer’s subjectivity is not taken into consideration, for it is only the capitalist producer who appears as a subject (cf. § 13Ab) who brings the labour process into being.

(d) The determination of the class-relation via the capital-wage-labour relation has two essential moments: i) the wage-labourer receives from the capitalist a wage for labour performed and ii) the labourer labours under the capitalist’s *command*. The class relation is thus defined form-analytically via the wage-form of value, and is not yet endowed with the moment of struggle between opposed subjects (cf § 13Ab). In the conceptualisation of other classes, on the level of the revenue-form analysis, the value-forms play the principal role and the moment of command will be seen to be a special characteristic of the class relation between capitalist and labourer. The orthodox

historical materialist definition (e.g. Althusser) of classes in terms of ownership/non-ownership of the means of production (§ 18) is hereby rejected firstly, because it lacks form-determinancy and secondly, because concepts of property have first to be *arrived* at on the basis of value-form categories (CCF&S Part II). The kernel of truth in the general historical materialist formulation is that the capitalist is indeed the personification of the means of production (cf. § § 18-20).

(e) If one traces the social labour (§ 4) which is constituted in the sale of industrial commodities back to the production process, one arrives at the various concrete dissociated wage-labours which the sale abstractly associates. The concept of ‘wage-labour’, however, does not suffice as a full description of the money-mediated production process and is only its first determination. The wage-labourer is only one element of production, among others. The concept of capitalist production will be further developed in incorporating the other elements of production in following paragraphs.

§ 12

With their wage, the labourers buy (from the capitalist commodity producer) industrial commodities – and therewith a portion of abstractly associated labour – which they then *consume*. These commodities are the labourer’s *articles of (individual) consumption*. The use of the wage as means of purchase (§ 11) is a consequence of it being a money-form of value.

(a) The argumentation developed in § § 11 and 12 demonstrates that the already produced systematic connection between commodity and money presented in RVfA1 is further determined with the wage. The capitalist executes the form of circulation: Commodity-Money (C_1-M_1) and the labourer executes the form of circulation: Money – Commodity (M_2-C_2), where M_2 is a part of M_1 . The mediated connection between the hiring price of the labourer (\bar{M}_2) (whose labour-power has no value) and the industrial commodities (C_2) (which are forms of value) purchased by the labourer, does not allow us to conclude that, through its price, labour-power (or, for that matter, the labourer or living labour) thereby attains the commodity form, even though in other cases “things which in and for themselves are not commodities . . . can, through their price, obtain the commodity form” (CI 105; KI 117). (“Commodity in and for itself” refers to commodities which are values.) Marx is not always careful to distinguish between loan and sale relations (cf, however e.g. TM3 109), that is: to distinguish between two qualitatively different ways in which money stands in relation to things. The wage is not the price of a commodity which the labourer sells once and for all to the capitalist but rather a loan price. The problem which we tackle in conceiving the wage as a derived money-form of value, rather than treating labour-power as a commodity “like any other”, is better expressed in the Marxian formulation:

A thing can have a price formally without having a value. The price expression becomes here imaginary . . . On the other hand, the imaginary price-form . . . can conceal a real value-relation or a relation derived therefrom. (CI 105; KI 117)

In contrast to us, Marx treats three-stage forms of circulation in the transition to capital in Chapter 4 of the first volume, “The Transformation of Money into Capital” and distinguishes $C - M - C$ as “simple commodity circulation” from $M - C - M$ as “circulation of money as capital” (CI 147; KI 163). We diverge from the Marxian assumption

that wages are advanced (§11Aa), and we do not treat labour-power simply as a commodity. In not treating wages as an advance, a further difference from Marx and Engels is made apparent with respect to the notion of “simple commodity production” so eagerly employed, at least for purposes of illustration (CIII 899, KIII 909). Such passages, which fall outside the systematic presentation of capitalism, are frequently encountered in the fetishism section, (cf. e.g. “For a *society of commodity producers*, whose universal social relation of production consists in handling their products as commodities, that is, as values and in relating their private labours to one another in this thing-like form as equal human labour . . .”), in the chapter “The Exchange Process” and in the section “The Metamorphosis of Commodities” of the third chapter (cf. e.g. CI 107; KI 119f on “our old friend the linen weaver”). If, however, one consistently understands the commodity possessor as “capitalist commodity producer” (instead of as artisan, as the illustrations suggest), then a passage like the following one can make clear the extent to which the second Part of *Capital* goes beyond the level of analysis of the first.

To this point (in Part I EHKR) we know of no economic relation of humans apart from that of commodity possessors, in relation to which they only appropriate an alien product of labour” – caution: here simple commodity production comes into play – “in that they alienate their own. The one commodity possessor can therefore only confront the other as money possessor . . . because his own commodity has already changed its skin.

(b) The treatment of wage levels as distinct from the analysis of the wage as value-form is a topic reserved for the critique of competitive freedom.

(c) The treatment of the social form in which labour-power is maintained and reproduced is postponed until the analysis of the private sphere.

§ 13

Mediated through the wage-form of value, wage-labour is the living labour through which the capitalist commodity producer produces commodities. The extent to which the hired labourers’ performance of fluid labour gains social recognition in the form of coagulated, value-creating labour determines whether the capitalist is able to extract a portion of abstract associated labour. This social recognition takes place not through the wage but rather through the price gained in the sale of the produced commodities. If the wager has succeeded, there remains from the proceeds of sale a *surplus-value* over and above the wage. As personified capital, the capitalist views the labourers as creators of surplus-value. The concept of exploitation (§ 11) is thus refined to ‘use of the labourers for the production of surplus-value’. That surplus-value constitutes that part of the produced value which falls to the hirer and exploiter of labour-power (cf. however §§ 18ff) is a further determination of the capital-relation. The relation between the labourer and the capitalist gains a reified expression in the dissection of the product-value into wage and surplus-value. The two figures who together make up the commodity producer are the *character-masks* of the capital-relation and consequently of the

two value components. The relation between capital and labour is a *contradiction* which forms the basis of the objective *class antagonism* between the working and the capitalist class (cf. Add.b).

(a) The analysis of the capitalist production process is in no way completed with the distinction between wages and surplus-value. Further elements of production will be successively incorporated. To the extent that this systematic order shows itself to be enlightening, the fundamental significance of determining capitalist production as the employment and exploitation of wage-labour will be demonstrated. We start the analysis of capitalist production with living labour because the central concept of abstract associated labour in the analysis of commodities necessarily refers to the expenditure of labour in the production process. In this procedure, labour is determined initially simply as wage-labour. The lack of further determination at this stage, however, does not imply that we work with a 'model' of labour independently of its objective conditions. Rather, these conditions are at first blended out in order to concentrate on the process of value creation. The objective conditions will be later incorporated in a *form-determinate* manner in the investigation of relative surplus-value production (§ § 18ff). Marx proceeds in a similar manner when he introduces constant capital for means of production, and then blends it out again in the thematisation of the rate of surplus-value, with the following argument:

Indeed, we already know that surplus-value is simply a consequence of a change in value which proceeds with v , with that part of capital which is transformed into labour-power, i.e. that $v + s = v + \Delta v$. . . But the real change in value and the relation within which value changes are veiled by the fact that, as a consequence of the growth of its variable component, the total advanced capital also grows. . . . The pure analysis of the process requires therefore that the part of the product-value in which the constant capital-value merely reappears be abstracted from, that is, that the constant capital be set equal to zero . . . (CI 206; KI 228) (on old-value cf. § § 18, 18Ab)

(b) The wage-labour relation is a class-relation (§ 11). Insofar as the product of the value-creation process (mediated by the wage-labour relation) is split into wages and surplus-value, this class-relation constitutes the fundamental *contradiction between capital and labour*. This contradiction can be further explicated: At the one pole is the capitalist (the character-mask of surplus-value), who makes possible concrete labour as wage-labour. The capitalist is the 'prime mover' of the capitalist production process. As subject of this process, the capitalist excludes its negative moment, wage-labour, from itself. At the same time, however, this form-determinate wage-labour reveals itself to be the foundation of capital. Capital and wage-labour are thus dialectically⁵ interrelated. The process of surplus-value production, which presupposes the performance of concrete, dissociated labour, is simultaneously process of capital formation in two senses: i) as the formation of the capital-relation surplus-value: wage, which enables the wage to be paid and ii) as the formation of surplus-value, which is the foundation of all capital (as sum of value). Labour as wage-labour thus creates the foundation of its own exploitation: wage, surplus-value, capital. The capitalist can only act as subject of the production process for as long as wage-labour creates value. Since however wage-labour can only create value mediated by the abstract social acknowledgement on the market, and since this acknowledgement is in turn mediated by capital (capital confronts living concrete dissociated labour as representative of abstract associated labour), the contradiction between capital and labour is overlaid with the domination of capital over labour, which in the last instance, is due to the subordination of concrete labour to the abstract universal-

ity of the market, of value. Both figures, labourer and capitalist alike, are subject to the quasi-natural alien power of the market. The domination of capital over labour enables the reproduction of the contradiction. The contradiction between capital and labour is in this way made latent and grounds the (likewise latent) objective class contradiction, between capitalists and labourers. The dominance of capital becomes apparent in the capital-analysis in that the capitalist as character-mask of capital and representative of the capitalist class bears traits of subjectivity, whereas the labourer is conceived as mere object of the capitalist. This object-being of the labourer is objectively given through the wage-labour relation, independently of any external normative standpoint. First with the systematic development of subjectivity, starting with the category of subject of competition (CCF&S Part II), can the conditions of the open manifestation of the fundamental contradiction between capital and labour be investigated. So much however can be already anticipated: the revolutionary class struggle (the making visible of the objective class contradiction) certainly draws on experiences from the bourgeois class struggle, i.e. from the competition struggle between entrepreneurs and labourers, which, for the labourers (and also for the entrepreneurs), means a juxtaposition of being as subject (contract) and being as object (under the command of the entrepreneur), in the struggle over quantities of income. The revolutionary struggle however goes further to qualitatively overcome the struggle of competition, thus sharpening the fundamental contradiction between capital and labour into an open antagonism which drives towards the final dissolution of the contradiction. In revolutionary class struggle, the subjectivity of the labourers makes a claim on *all* aspects of production. This dominance of concrete labour must lead to its own revolutionising: it must incorporate the aspect of universality into itself in order to dissolve the contradiction between capital and labour along with its foundation, abstractly universal labour.

Capitalist Commodity Production § 14

With the treatment of the fundamental division of the produced value into wage and surplus-value, capitalist commodity production is conceptualised as a *surplus-value producing process*. The existence of surplus-value depends upon the produced value being greater than the wage which is paid to the labourers, a condition whose fulfilment is determinable first *post facto* with the sale of the produced commodities. The component of the value⁶ of the product corresponding to the wage is thus the *necessary value* which must be created before any surplus-value (§ 13) can remain as residue. The commodity-value falls into two parts : necessary value (equal in magnitude to the wage) and surplus-value. The product itself can be divided into components according to the ratio of necessary value to surplus-value. The first component is a mass of commodities sold for an amount equal to the wage (*necessary product*); the second is a mass of commodities sold for an amount equal to surplus-value (*surplus product*). The two value components, necessary and surplus-value, can be further projected back onto the production process itself by dividing the performed labour-time of the labourers into two components: *necessary* and *surplus labour-time*. The quantitative relation of surplus-value to necessary value can be designated as the *rate of surplus-value*. The

rate of surplus-value can also be represented as a ratio of surplus to necessary product, or surplus to necessary labour-time. Just as the particular (§4) expenditure of labour, which is not social in its expenditure, expresses itself universally (§4) in the value of the commodity product, so the capital-relation expresses itself universally in the division of the commodity value into surplus- and necessary value. The rate of surplus-value, when expressed as the ratio of surplus to necessary labour-time, also gives the *rate of exploitation of labour-power* by capital. The difference between the rate of surplus-value and the rate of exploitation is not quantitative but qualitative. The former brings into relation portions of abstractly associated labour, whereas the latter brings into relation parts of the performed labour process. With the latter, the appropriation of surplus-value by the capitalist is related to the performance of surplus-labour by the labourers.

Just as we differentiate the rate of surplus-value from the rate of exploitation, so Marx makes a similar distinction:

Surplus-value relates itself to variable capital just as does surplus-labour to necessary labour . . . Both proportions express in different form the same relation, at one time in the form of objectified, the other in the form of liquid labour. (CI 210; KI 231f).

A departure from Marx however is to be noted in that the division of the working day into necessary and surplus labour-time can proceed only mediated through the value-form, by projecting the relevant value sums back onto the labour process. The determination of the labour process as process of extraction of surplus-value and thereby surplus labour is a concept of *objective* exploitation formulated in value-form categories – which claim validity as a conceptualisation of given social relations – and therefore not in terms of the lived experience of labourers under the domination of the capitalist. The subjective expressions of exploitation and the accompanying contradiction in forms of consciousness first become a theme in the competition-analysis and later parts of the systematic presentation. With Marx, an interpretation of surplus-value exploitation as subjectively experienced is suggested for two reasons: i) Marx introduces massive amounts of historical and contemporary empirical material to illustrate how the “thirst of capital for surplus-labour” sucks the life blood of the working population. That exploitation must take on a visibly gruesome form we regard as not a well-founded result of capital-analysis as an epochally valid analysis. Furthermore, we do not posit a werewolf hunger of capital for surplus labour out of which phenomena such as immiseration and physical exhaustion of the working class would be derivable. Rather, consideration of a drive to increase surplus-value exploitation as far as external value-form conditions will allow is first to be treated as a result of the strivings of entrepreneurial subjects who win victories over their labourers in the competition-struggle. This struggle can have as result debilitating conditions of labour, which however, can again be reversed in a new phase of struggle. ii) In Marx’s treatment, the exploitation of labour-power is separated from the wage-form, thereby suggesting that an immediately experientiable exploitation is subsequently disguised by the wage-form, first treated by Marx in Part VI of the first volume. In our presentation, by contrast, the wage-form, in the sense of a loan relation facilitating the capitalist’s employment of labour-power, is taken account of from the start (§ 11).

The capital relation can manifest itself in differing rates of surplus-value and thereby in differing rates of exploitation of labour-power. We consider the limitations to surplus-value production lying in the production process itself, that is, in the employment of living labour, and investigate the adequate means for ameliorating these limitations. Consider a capital operating under sets of conditions which are identical insofar as the wages to be paid and the value of a unit of produced commodity, but where the amount of surplus-value produced in the second set of conditions exceeds that produced in the first set, i.e., since wages paid are equal, this is equivalent to saying that the rate of surplus-value in 2 (s_2) exceeds rate of surplus value in 1 (s_1). We want to discover what these differing conditions are. Since surplus-value in 2 exceeds the surplus-value in 1, so does the surplus product in 2 exceed the surplus product in 1, i.e. the labourers in the second set of conditions have produced more product, and more surplus product, than those in the first set of conditions, and moreover, they have produced this greater surplus for the same wage. Now, if the method of production is also the same for both sets of conditions, then the greater surplus can only be accounted for by the fact that the labourers in 2 have performed more labour, i.e. have laboured longer and/or more intensively for the same wage (which includes the possibility that in 2 more labourers could be hired for the same total wage). We say in this case that the capital concerned produces *absolute surplus-value* in conditions 2 relative to conditions 1. It is *absolute* in the sense that the labourers in 2 have performed absolutely more labour. If the methods of production in 1 and 2 differ, then the extra surplus-value can result from the *superior productivity* of the production process in 2 as opposed to 1 and we say that *relative surplus-value* is produced in conditions 2 relative to conditions 1. The labour performed in 2 is *relatively* more productive than that in 1. The difference in conditions of production leading to absolute and relative surplus-value are thus, respectively, greater expenditure of labour-power and higher productivity of labour.

(a) The concepts of relative and absolute surplus-value here developed make a connection between surplus-value production and the production process under a *ceteris paribus* condition. They are not to be regarded as concepts arising from the comparison of two capitals in competition with one another.⁷ The schema is rather one of a single capital operating under varying conditions in the immediate production process. All value-form relations are assumed to be unvarying in the sense explained in the §. In particular, the unit price of the product, which determines the acknowledgement of the performed labour as value-creating, is assumed to be constant. The connection between absolute and relative surplus-value production and the conscious strivings of the functioning capitalist is a theme relegated to the analysis of competitive freedom (cf. CCF&S Part III). In competitive life, the increase in surplus-value production does not appear in its kernel form as value creation but as the striving to maximise profit of enterprise by the entrepreneur, who, by virtue of subjective striving, including the selection of appropriate means, is able to assert himself successfully in the competition.

The immediate conditions of production appear there as one among several factors influencing the magnitude of the profit of enterprise. The connection of this form of appearance to the process of value-creation is first brought to light through the course of the systematic argumentation.

(b) When relative surplus-value production is considered, whereby differing methods of production become significant, the comparison of intensities of labour is no longer possible. Whereas comparative duration of labour-times is in principle measurable with an absolute measure, namely time, intensity of labour possesses no absolute measure, but rather a *comparative* measure, where two intensities are compared. Where the methods of production are different, comparison of intensity would only be possible via a reduction of work operations (physical and mental) to a common denominator, e.g. expenditure of physical energy or physically measurable tension in the body. Even when the methods of production do not differ, comparison of intensity remains based on more or less precise, more or less intuitive assessments of the tempo of labour, and first becomes clear when the *results* of an hour's labour are compared.

(c) On the basis of the labour theory of value, Marx is able to treat relative and absolute surplus-value production through a consideration of relevant labour-times. In this way he comes of course to different results (cf. CI Chaps. XI, XII, XVI, XVII). This procedure is excluded for a value-form analytic approach. As a consequence, relative surplus-value production is not conceived as resulting from productivity increases in the production of the labourers' means of individual consumption and their consequent cheapening, because this presumes not only a form-independent measure of value in labour-time, but also the category 'value of labour-power' (cf. § 11Ab).

§ 16

Increases in productivity which give rise (other conditions remaining the same) to the production of relative surplus-value (§ 15) can be due to:

- i) improved co-operation, that is, more efficient organisation of the *collective labourer* (§ 17)
- ii) technical superiority of the (produced) means of production (§§ 18 - 20)
- iii) natural advantages of pieces of land utilised in the production process (§ 21)
- iv) superior cultivation of land used in production (§ 22).

(a) Strictly speaking, there are only the 'productive powers' of *labour*. The talk of productive powers which can be attributed to single elements of production is derived from the comparison of labours of different productivity. The productive powers are realisable only in the production process; they do not exist independently of it. This is easily forgotten, especially when it comes to a consideration of nature, since the analogy between wild growth and agriculture suggests itself. It is well known that with the physiocratic political economists only agriculture was regarded as productive; the productive power of labour is still presented according to the picture of nature. However,

it is precisely this which shows that the productivity of nature is pertinent in connection with the productivity of labour. The analysis of relative surplus-value production shows the conditions under which the productive power of labourers when working in co-operation and with the means of production is simultaneously the productive power – or, in other words, the surplus-value producing power – of capital. The systematic analysis thereby uncovers the mystery of the expressions ‘productive power of nature’ and ‘productive power of capital’.

(b) The entire investigation of the “production methods of relative surplus-value” (CI 304; KI 340) is carried out by Marx in a way combining “historical and conceptual” (CI 305; KI 341) elements of analysis. The historicisation of the systematically relevant categories offers itself to Marx as a way of ordering historical material on the development of capitalism in Britain. This periodisation of development into formal subsumption, manufacture and machine industry, is misleading insofar as the epochal validity of the systematic categories is lost. Co-operation, e.g., is not restricted to a particular phase of capitalist development. In this vein, Marx attempts a logical/historical transition from absolute to relative surplus-value production through consideration of the struggle for a shorter working day:

... from this moment therefore, when increased production of surplus-value through extension of the working day was cut off once and for all, capital threw itself with full force and clear consciousness into the production of relative surplus-value through accelerated development of the machine system. (CI 386; KI 432)

He also points out however (CI Ch. XVII) that absolute and relative surplus-value production do not exclude one another. In a reading of *Capital* itself, it takes “quite an effort to discern between the systematic argument and historically restricted illustrations of that argument”.⁸

§ 17

The everyday knowledge that capitalist production is production with several or many labourers is on this level taken account of by the presentation. Several labourers labouring together already possess a certain *organisational labouring structure*, no matter how simple this may be. Co-operative labour of the collective labourer brings forth a productive power of labour *sui generis* which can be further improved by new organisation. In its simplest determination, co-operation depends on the *size* of the collective labourer. A larger collective labourer allows more flexibility in the work-organisation. Conversely, a large collective labourer can become cumbersome and call forth special efforts of the capitalist to solve organisational problems. A particular aspect of co-operation is (internal) *division of labour* within the production process, whereby individual labourers or groups of labourers are assigned definite restricted tasks. The total labour process is thereby decomposed into specialised tasks through which the object of labour must pass on its way to becoming a finished product. How the labour process is to be optimally decomposed, the number of labourers required for each task, the avoidance of bottlenecks and slack periods in the labour process, all pose special problems

to be solved by the capitalist in organising the production process. The organisational structure of the collective labourer is a plan imposed on the collective labourer by the capitalist, and is thus a further determination of capital as an alien power (§ 13Ab) vis-a-vis the labourers. Each labourer has a specific place in the organisational structure and can be moved around according to the capitalist's striving to improve the co-operative power of labour. In deciding on an organisational structure of the collective labourer, the capitalist can employ specialised knowledge or *organisational science*. The latter has as its object the collective labourer, or the *subjective factor* of the production process. The capitalist can set up his own research department within the labour process, or can draw on knowledge developed outside.

(a) In the twentieth century, organisational or managerial science has developed into autonomous, specialised branches of empirical scientific investigation. The subjective factor of the production process is treated as an object of study whose functioning influences the efficiency of the production process. The most famous historical example of organisational science is Taylorism, which concentrated on an analysis of movements of the labourer's body in order to establish how the labourer best functions in co-ordination with machines (§ 18). Complementary to these 'time and motion' studies are the more sophisticated investigations of psychological motivation. Insofar as effectivity of the labourer is of prime concern, behaviourism, which concentrates on stimulus-response relationships, is an appropriate psychological theory in that it treats the subject precisely as an object. Other psychological theories and therapies in which the human is viewed as subject become systematically relevant in connection with the private sphere, where the subject may suffer from being an inadequate competition subject (ego weakness) or from identity crisis (in shaping its life).

(b) The scientists who work on problems of organisation (or natural science, cf. § 18) have a different status from normal wage-labourers. As part of the research division of a production process, the scientist belongs to the collective labourer in a way corresponding to the separation of intellectual from manual labour, a separation which becomes possible because co-operation is a plan imposed by the capitalist. Insofar as the scientists work outside the production process in autonomous research institutes, they are no longer a theme of the capital-analysis, but belong rather to the analysis of the outer state and the life of the universal (technocracy and the ideology of progress of humankind through science).

(c) In the chapter on co-operation, Marx treats "the command of capital over labour" (CI 313; KI 350) in its form as "direction" (ibid) together with the theme of the labourers' "resistance" (ibid) and the resulting necessity of "supervising" (CI 314; KI 351) the labourers. In our presentation, these latter phenomena are reserved to the competition-analysis. That the will of the capitalist is realised in the production process via a hierarchy (no matter how much or how little room is given to the labourer's own initiative), and that this will meets with the resistance of labourers, who must be watched over, presuppose for their conceptualisation a concept of labourer's subjectivity, which is not yet available to us. Only a subject can be allowed a degree of initiative or offer resistance to an alien will. This development of the labourer as object of capital to a subject of competition proceeds in the beginning stages of the competition-analysis (cf. CCF&S Part II). The concept of hierarchy will also introduce that of the manager, who acts as delegated functionary of the functioning capitalist in the production process. On this later level, therefore, the question of the class position of the managers will also be raised (CCF&S Part III).

The productivity of the production process can be improved also through the employment of better *means of production*. The means of production comprise commodity products of labour bought by the capitalist before their insertion in the production process and fall into the two categories of *raw materials*, which form the *object of labour* and are physically transformed by the production process, and *means of labour*, which are interposed between the labourer and the object of labour and enable the latter's manipulation by the former, or form the framework of the production process. The paradigm for means of labour is *machinery* consisting in general of the three components: prime mover or source of power, transmission mechanism and the working tool, which comes directly into contact with and shapes the object of labour. With the incorporation of means of production into the analysis, the concept of the capitalist production process is further determined: The capitalist buys the means of production with an *advance of money-capital* (as opposed to the assumption of presentation concerning wages, which are paid from the proceeds of sale (cf. §11)). A component of the product value created in the production process covers the advance of capital for means of production. The product-value thus now falls into three parts (and not two as in §13): necessary value (§14), *old-value* and *residual surplus-value* (or surplus-value₂, to distinguish it from the first concept of surplus-value, surplus-value₁, introduced in §13). We assume that the entire means of production are consumed during the production process. The value creation in the production process has now to be further investigated. The means of production, in being purchased by the capitalist, were acknowledged as abstractly associated labour in a definite sum of money-capital. The capitalist purchased the means of production in order to direct their *consumption* in his production process in producing new commodities. This *productive consumption* of the means of production realises their *use-value* in the production of commodities which, in turn, are subjected to the process of acknowledgement as portion of the social labour on the market, i.e. the realisation of the use-value of the means of production results in the creation of value. The sale price of the produced commodities thus acknowledges not simply the labour immediately performed in the production process under consideration, but acknowledges that this labour was performed with definite means of production which, in turn, were the product of past labour. The labour embodied in the means of production is thus acknowledged through the value-form as abstractly associated labour twice: firstly, in their purchase by the capitalist and secondly, indirectly, in that past labour was the precondition for production of the new commodity product which is finally sold. The *new-value* which arises in the production process over and above the old-value, which represents merely a reproduction of pre-existing value, consists of the necessary-value (paid out as wages) plus the residual surplus-value.

(a) Marx divides the category of raw materials here introduced into raw materials which physically reappear transformed in the product of those which merely aid the production process and disappear without trace in it (subsidiary materials; *Hilfstoffe* CI 177, 196f; KI 196, 217). In our view this finer differentiation is unnecessary and in any case is extremely fluid. Marx himself points out that in the chemical industry the distinction vanishes (CI 177; KI 196). The distinction between raw materials and means of labour will be seen in the circulation-analysis (RVfA4) to be the material basis of the distinction between circulating and fixed capital.

(b) The concept of old-value introduced here differs appreciably from Marx's. Like Marx, we assume on this level of analysis that the entire means of production are consumed in the production process or, what is the same thing, that old-value covers only the (original) price of the means of production actually consumed in the production process under consideration. For us, old-value does not represent a reacknowledgement in the product's sale price of the *labour* objectified in the means of production.⁹ Rather, the sale price is acknowledgement of newly performed labour and acknowledgement that this labour was performed with products of past labour, at one and the same time; the two moments cannot be quantitatively differentiated as old-value and new-value. Marx claims that the old-value is quantitatively determined by the labour objectified in means of production and is "transferred" (CI 193; KI 214) to the product by virtue of a "gift of nature of active labour-power . . . to maintain value in that it adds value" (CI 200; KI 221). Accordingly, "the maximum loss of value which they (the means of production EHKR) can suffer in the labour process is obviously restricted by the original magnitude of value . . . or by the labour-time required for their production" (CI 199; KI 220). The original magnitude of value and the labour-time required for their production, however, turn out to be different entities. The formulation has to be modified on the basis of the ad hoc definition of magnitude of value (cf. §8A) introduced by Marx in the first pages of the first chapter of *Capital*, according to which only the amount of labour objectified in a commodity produced under *average* conditions counts as value-creating labour (CI 47; KI 53). With relative surplus-value production, this determination again becomes relevant, for here it is a matter of changing productivity, i.e. of changing the average amount of labour objectified in a commodity of a given type. Marx can therefore speak, in terms of the labour theory of value, of a "change in value" of means of production employed in a production process which "arises outside the production process" (CI 203; KI 225), *independently* of the value-form. These changes in socially average labour content, however, are also supposed to be reflected on the level of the value-form as price changes (cf. CI 202; KI 224). In order to make this connection, however, Marx has to introduce considerations of competition. Thus in his treatment of "so to speak moral depreciation" (CI 381; KI 416), (an important theme for us in the competition-analysis), he speaks of "better machines competingly stepping beside" (ibid) old machines. The thought here is that more productive methods of production force a cheapening of the product and thus a "devalorisation" (CI 203; KI 225) of the old means of production via a competition between capitals. For value-form analytic thinking, neither the determination of magnitude of value through socially average labour-time nor the introduction of competition arguments in the capital-analysis is admissible. Our strategy is rather the following: old-value is conceived initially simply as that value component of the product covering the advance for means of production. In the circulation-analysis (RVfA4), the difference between the original purchase price and the re-purchase price of means of production must be taken into account in connection with the repeated circuits of capital as well as with the replacement of fixed capital. In the competition-analysis, the connection between the introduction of more productive means of production, cost minimisation and decreases in the unit price of the produced commodity brought about by competition between firms on the market will be investigated. The concept of old-value will be thereby modified to take into account the effect which competition

between capitals has on value-creation by living labour. An exponent is thereby attributed to the value-creation of living labour according to the means of production employed and their productivity relative to other capitals.

(c) The concept of use-value enters the presentation here for the first time in a substantial way. (In § 12 it was merely remarked that the labourers consume articles of individual consumption. The realm of this individual consumption, the private sphere, is not yet the object of analysis.) The properties of the means of production in their consumption, i.e. their use-value, are now of significance for the analysis of value-creation. Further consideration of grounds for introducing use-value at a later stage of the analysis than Marx does, is contained in RVfA pp. 46f.

(d) Although Marx makes the distinction between prime mover, transmission mechanism and the working tool on the basis of the historically restricted paradigm of the steam engine as prime mover (CI353; KI 393), its validity holds even today, where the source of power is an electricity generating station. Indeed, the modern power plant is generally a colossal steam engine; the transmission mechanism no longer consists of rods, cogs and belts, but of power lines.

§ 19

The quality and quantity of new commodities produced depends on the quality and type of means of production employed. The productivity of labour, and thus surplus-value production, can be furthered through the employment of improved raw materials or means of labour. The structure of the means of labour offers an opportunity for the capitalist to enforce a particular organisation of the collective labourer (§ 17). Improvements in the means of labour and in co-operation thus go hand in hand, e.g. in economising in the use of raw materials. The labourers come to be mere appendages of the means of labour. Furthermore, the new co-operative structure determined by a new structure of the means of labour can enable the *intensity* of labour to be raised gradually by increasing the tempo of the machinery. Relative surplus-value production through improved means of labour can thus also lead to relative surplus-value through better co-operation and also absolute surplus-value through intensification of labour. Since the choice of means of production and their employment in the production process are decisions of personified capital, improvements in the means of production are also undertaken independently of the collective labourer, and presented to it as ready result. The development of new kinds of means of production depends on developments in the knowledge of natural objects, i.e. in the *natural sciences*, and their successful application to problems of production (capitalist *technology*).¹⁰ The *objective factor* of the production process (cf. also § 22) becomes the object of scientific and technological research. The development of natural sciences and technology is a kind of labour entirely different from commodity-producing labour. A result of natural science or technology, once won, can be employed endlessly without having to be re-produced (although, of course, the *acquisition* of this knowledge through education poses a special

theme which does not belong to this level of analysis); knowledge has a *cumulative* aspect and scientific labour therefore possesses a *universal* aspect which allows the results of scientific and technology research to be applied in all suitable production processes.

(a) Marx formulates the substitution of the capitalist's direct command by the 'command' of a system of machines as follows:

The co-operative character of the labour process becomes now a technical necessity dictated by the nature of the means of labour. (CI 365; KI 407)

(b) Marx makes the distinction between "universal labour" (*allgemeine Arbeit*) and "communal labour" (*gemeinschaftliche Arbeit*) (CIII 104; KIII 113):

Universal labour is all scientific labour, all discovery, all invention. It is conditioned partly by co-operation with living persons, partly by the utilisation of the labours of predecessors. Communal labour presupposes the immediate co-operation of individuals. (ibid)

§20

The concepts of absolute and relative surplus-value production developed in §15 have to be modified in the light of the new concept of surplus-value, residual surplus-value (§18). Residual surplus-value is determined through the deduction of both necessary-value and old-value from the product value. The necessary value is paid out as wages, and the old-value merely replaces a sum of value originally advanced by the capitalist. To *absolute residual surplus-value production*: An increase in duration or intensity of labour requires also extra raw materials to soak up the additional performed labour and may accelerate the depreciation of machinery employed. Every increase in value of the total commodity product is accomplished by an increase in the advanced capital, and thus also in the old-value component of the product value. The increase in surplus-value brought about by more performed labour is also an increase in residual surplus-value so long as the total proceeds from the additional commodity product exceed the total additional advance for means of production. This will always be the case if the unit price of both the commodity product and the means of production remain the same (since the ratio of old-value to product value does not increase). To *relative residual surplus-value production*: Improved means of production normally require the outlay of additional capital, thereby increasing the old-value component of the product value. (Insofar as improved co-operation requires an outlay for organisational knowledge or reorganisation, it can be treated analogously to an advance for means of production.) The additional product produced with the new means of production (we hold onto the assumption that the total wage bill does not change cf. §15) can only represent a portion of additional

residual surplus-value if the additional old-value is less than the value of the additional product.

Marx expresses the distinction between relative surplus-value production and relative residual surplus-value production by referring to the “narrower limit” (CI 370; KI 414) imposed on capital for the employment of machinery. This limit can be expressed either under the assumption that the total mass of product does not change (replacement of labourers by machinery which must “save costs” (§23)),¹¹ or under the assumption that the total wage bill does not change.

§21

A third source of improved productivity lies in the *land*, or more generally, in the piece of the earth’s surface (which may be covered with water), employed in the production process. Land can enter the production process as object of labour (e.g. mining), means of labour (e.g. agriculture) or simply as *locus standi*. The everyday knowledge that the use of land commands a leasing price or *rent* is at this stage incorporated into the analysis. We assume for convenience that the rent, like the wages, is paid after the use of the land out of the proceeds of sale of the produced commodities. Rent represents a further deduction from the total value of the product which must be paid out by the capitalist, in this case, to the *landholder*, the personification of land. The product value thus now splits into four components: old-value, necessary value, rent and a residue, which can be called *profit*. Relative residual surplus-value production, *ceteris paribus*, always results from the employment of better land which enables a higher productivity of labour. Whether the profit is greater depends on whether the value of the additional product is cancelled out by an increased rent. With rent there arises a qualitatively new value-form; money as absolute value now subsumes in its sphere of influence pieces of nature, in addition to industrial commodities and labourers. Conversely, the landholder, through the rent-form, gains access to a portion of the abstractly associated labour. The many individual landholder personifications of land taken together constitute the *landholding class*.

(a) At this point of the analysis we are concerned with rent as a value-form and not with more definite statements as to its magnitude. The latter topic will be taken up on the level of competition-analysis in the investigation of differential, absolute and monopoly rent (CCF&S Part III).

(b) *Rudolf Bahro* is a marxist who pleads for a “consistent and coherent revision of our entire theoretical foundation”.¹² One could sensibly understand this as a theoretical program “to rewrite the political economy of capitalism and socialism which has been handed down, ecologically” (ibid p. 64f), if it were not for the fact that Bahro’s writings contain not a hint of a thoroughly thought out reconstruction of the Marxian theory. Bahro places the ecological question in the foreground in no way as a partial aspect of a theory but rather as a political demand which he claims will “force the departure from capitalism” (ibid p. 76). For us, by contrast, Bahro’s challenge means the

necessity of rethinking the economic position of nature in a total critique of the bourgeois form of society. Bahro claims:

Precisely for the young Marx, the abolition of private property in the means of production should have also brought the reconciliation of culture and nature. . . . Later this point of view was pushed more to the edge of Marx's thinking, because he concentrated strictly(?) on the analysis of the capital relation in the narrow sense, that is, on the problems which at that time(?) most(?) stood in the way of the working people (ibid p. 95f).

That the treatment of the relationship between humans and nature is pushed in the late works of Marx "more to the edge" is an opinion which could only be formed on the basis of a reading of *Capital* which has neglected the third volume. Bahro does not mention the 200 page long Part IV of the third volume: "Transformation of Surplus-profit into Ground-Rent" or indeed capitalist rent at all, "the specifically economic expression of landed property" (CIII 622; KIII 635).

In the third volume Marx treats the "contradiction between property and a rational agronomy. . . . the entire spirit of capitalist production, which is directed towards immediate short-term gain, contradicts agriculture which has to economise with the entire continuous conditions of life of the chain of human generations" (CIII 617; KIII 630f, n. 27). (Such a contradiction is not restricted to the employment of land in agriculture.)

Our thematisation of rent much earlier in the analysis than in *Capital* has the advantages that the three sources of differing productivity of labour are presented together (§ § 16-23), that the entire set of elements of production and their corresponding value-forms are taken account of in the analysis of capitalist production and that land is presented from the start as subjected to exploitation by capital. Nevertheless, the contradiction referred to by Marx will be dealt with in the competition-analysis, where property and the pursuit of monetary gain by subjects of competition appear. In the third volume, Marx also hints at how the contradiction between self-interest and a utilisation of the earth which is "sometimes to a certain extent appropriate to the common interest" (CIII 617; KIII 631 n 27) can be resolved within the bourgeois forms, namely by "subjecting the land to state administration" (ibid). Marx's example in this passage is restricted to the direct state-administered cultivation of land. In a wider sense, however, this can be understood as a restriction by the outer state of the egoistic behaviour with the earth in the competition in favour of a universal well-being laid down by the state. It is striking that, in the book quoted, Bahro *nowhere* attempts an analysis of state intervention in the competition. The attempts of states to act internationally to ameliorate or stop ecological destruction are also not discussed by Bahro. According to him, a proof of the "objectively anti-capitalist orientation" (Bahro op. cit. p. 65) of the ecological question lies in "our detailed explanation of the connection between capitalist expanded reproduction . . . and anarchistic industrial growth, alien and hostile technology" (ibid p. 88). Herein lies a new variant of the discredited theory of collapse of capitalism which is said to force the transition to socialism. It remains a major theoretical and practical question, the extent to which the problems of the destruction of nature can be at least partially solved or held in check *within* the bourgeois forms, e.g. through state-imposed controls. Bahro offers no analysis which would decide these questions one way or the other, but rather his political conviction. It is a presupposition of Green politics that the 'ecological question' can be solved by forcing the state to take certain restrictive measures against capitalist industry?

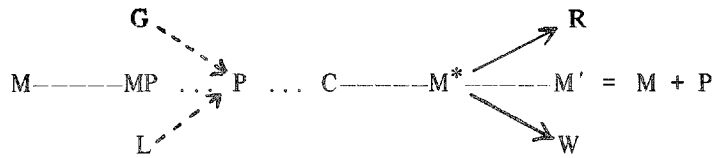
(c) Classes will be considered in more detail in RVfA3.

Not only natural differences in land can be a source of additional productivity, but also differences brought about by the incorporation of improvements in the land. Land in this case is no longer only a 'product' of nature, but also a product of labour and *insofar* has to be treated conceptually as a produced means of production (§18). Since we assume that the means of production are bought by the capitalist before they enter the production process, the appropriate assumption here is that the improvements to the land are bought by way of paying another capital to improve the land. Furthermore, since we assume that the entire advanced capital converted into means of production is consumed in the production process (§18), we assume likewise in the case of improvements to the land, that all improvements *requiring renewal* are consumed during the course of the production process under consideration. Improvements to the land not requiring renewal through additional advances are a peculiarity arising from land's character as a piece of nature; so long as the land is employed in suitable production or not left idle for too long a period, it maintains its improved state automatically through natural processes. The advance for the original improvement of the land in this case is a one-time-only advance, and all future users of the land will reap the benefit without having to outlay a further sum. Moreover, the landholder then disposes of a piece of land of better quality, independently of any further advance, i.e. the improvements have become 'second nature'. Improvements to the land, e.g. cultivation of the soil, building a mine, levelling a block of land, are executed on the basis of knowledge of the object handled, the land. The natural sciences thus have a special realm of application in relation to nature, e.g. geology, biology, agronomy, ecology. Likewise, the technology employed to improve land is also of a special character, e.g. chemical substances to improve the soil, shaft-drilling machines, bulldozers which are produced with the aid of specialised (chemical, mechanical, civil etc.) engineering.

The relaxation of the assumption of presentation that the capitalist buys the entire improvements to the land requires the interest-form (RVfA3). When these improvements are merely hired for a time, it is equivalent to a leasing of means of production, which in turn is equivalent to borrowing a capital equal in value to the leased means of production incorporated in the land. The *rent* paid for the use of the improved land includes a component of *interest* and *repayment* for a (fictitious) borrowed capital.

The interest for the capital embodied in the earth and the improvements which it obtains as instrument of production, can form a part of the rent which is paid by the tenant to the landowner, but it does not constitute ground-rent proper, which is paid for the use of land as such, whether in a state of nature or cultivated. (CIII 619; KIII 632)

The capitalist production process can, on this level of the presentation, be depicted as:



where M is the money-capital advanced to purchase (—) means of production (MP); ground (G) and labourers (L) enter the production process (P) under loan relations (---) for the use of land and labour-power, respectively. The commodity product (C) is sold for M^* , out of which rent (R) and wages (W) are paid, leaving a residue M' composed of old-value and profit (p). The whole process can now be understood as a movement from money (M) to more money (M'), as *valorization of advanced capital*. In this circular movement, the result of the whole movement (p) is related to the original money-capital (M) (as *rate of profit* $p' = p / M$) and is insofar viewed as a *self-valorization* of capital, wherein the value connections to the constitutive elements of production are extinguished in external price relations; in this external form, the production process appears as a moment in the self-movement of advanced capital, instead of as the exploitation of labour-power for the production of surplus-value (§13). This external movement expresses the viewpoint of personified capital. The entire deductions from the product value are collected together under the heading of *costs* ($k = R + W + M$) and, in this undifferentiated form as sum of money, are counterposed to the final residue falling to the capitalist, the profit.

(a) On the basis of the labour theory of value, Marx discusses a contradiction inherent in **employing more expensive means of production, although more productive:**

In the employment of machinery for the production of surplus-value there lies an immanent contradiction in that in this employment, of the two factors of surplus-value which a capital of given size provides, the one factor, the rate of surplus-value only increases through the diminishment of the other factor, the number of labourers. (CI 383 mod.; KI 429)

This contradiction is the basis on which Marx derives the famous tendency of the rate of profit to fall (cf. CIII Part III). Marx's argumentation is flawed by the false conception – based on the labour theory of value – that from a given number of labourers with a working day of given duration and intensity, only a limited amount of new-value can be gained. This conception is linked with Marx's assumption, introduced in the first chapter of *Capital* (CI 51; KI 59), that all labour is simple labour. Labours performed with differ-

ent methods of production and, in particular, with different kinds of means of production, however, are qualitatively different, more or less complex labours with different value-creating potencies (*potenzierte Arbeit* KI 59). The role of the means of production in value-creation is not to transfer a pre-existing value to the product (cf. § 18Ab), but rather, in influencing the method of labour, to attribute an exponent to the value-creation of living labour. We give a simple example as illustration. Since land is a neutral factor for this discussion, we set rent equal to zero. Assume we have a capital which introduces a new, more expensive method of production requiring a greater advance for means of production ($M + \delta M$), pays however the same wage bill (W) and draws greater proceeds from sale of the product ($M^* + \delta M^*$). Otherwise circumstances remain unaltered. Then the difference in profit-rate is

$$\begin{aligned} \delta p' &= \frac{M^* + \delta M^* - W - (M + \delta M)}{M + \delta M} - \frac{M^* - W - M}{M} \\ &= \frac{M \cdot \delta M^* - \delta M(M^* - W)}{(M + \delta M)M} > 0 \end{aligned}$$

if and only if $\delta M^* / \delta M > 1 + p'$. Expressed in words: the rate of profit rises with the introduction of the more expensive means of production if and only if the rate of increase of the proceeds from sale with respect to the increased advance for means of production exceeds the profit-rate plus one. (The reader can check that the same result holds for the case where the wages too are advanced instead of paid in arrears.) This means that not only must the extra costs be covered by an extra return (which is the condition for the profit mass to rise), but that in addition, the rate of increase must exceed the profit-rate. The lower the profit-rate, the more the situation becomes one where an increase in profit mass is simultaneously an increase in profit-rate. We see therefore that, in value-form analytic terms, whether the profit-rate rises with the introduction of more expensive means of production depends on their labour productivity, and on the price at which the product is sold. If, with increased production, the unit price falls, then it is all the more likely that the profit-rate will fall, unless compensated for by an even greater increase in the product mass. The rate of surplus-value in the present example increases if and only if the additional advance for means of production is more than covered by an increase in proceeds, i.e.

$$\delta s' > 0 \text{ if and only if } \delta M^* > \delta M.$$

(b) The movement of capital as valorizing money-capital enables the processing money to gain a form of movement dissociated from the process of value-creation in production itself. Capital appears thereby as self-movement of value, as self-valorizing value, which of itself draws more value to itself, independently of any connection with the value substance, abstract associated labour. This externalisation of the movement of capital forms the *transition* to the *interest-form* of value, which will occupy us in the next part (RVfA3), together with the revenue-form analysis.

NOTES

1. The debate appears in the British journal *Capital & Class*, and the collections of essays *Value : The Representation of Labour in Capitalism* (Ed. Elson) and *The Value Controversy* (NLB 1981). The participants include C. Arthur, I. Steedman, Wright, Itoh, Uno, Banaji, Cohen, Lippi, de Vroey, Cartelier, Krause, Himmelweit, Mohun, Yaffe, Bullock and others.
2. We can be contacted through either of the following addresses: c/- Roth, Philosophie, Universitaet Konstanz, D-775 Konstanz, West Germany or c/- Eldred/Hanlon, Dept. of General Philosophy, Sydney University, 2006, Australia.
3. Abbreviations employed are the same as those used in 'Reconstructing Value-form Analysis 1' in *Thesis Eleven* No. 4, 1982. The English translation of *Capital* is modified in quotations without notice.
4. Cf. the appendix 'Family in *Capital*' in Eldred/Roth, *Guide to Marx's Capital*, London 1978.
5. Dialectics can be initially understood as a definite dialogical procedure in the presentation of capitalist society (cf. Eldred, *Thesis Eleven* No. 2 1981). The dialectical-dialogical procedure was first formulated by a student of Lorenzen in Erlangen, Ivan Glaser, as a dialogue between systematic thinking and epochal everyday consciousness. In this formulation, he was able to draw on passages from Hegel's *Phenomenology*: "... what is understood is that which is already known and that which is common to science and non-scientific consciousness, through which the latter can immediately enter into the former (science in the sense of systematic thinking EHKR)" (Preface). Once the dialogue-partner, starting from everyday consciousness has entered into systematic thinking, the relation can be described as follows:
 - (i) "Speculative thinking nowhere makes the claim on natural consciousness to surrender itself. Rather, it builds on the latter in a characteristic way and leads it into something which is still itself and is simultaneously no longer itself."
 - (ii) Natural consciousness may "insist on its entire experiences – under the condition that it subjects the introduction of its experiences to the claim of speculative thinking, to prescribe the systematic place at which it argues with its experiences . . . It must be prepared to hold back objections until the procedure of systematic theory has reached the place at which they can be discussed."
 - (iii) "The articulation of its objections at the beginning of the systematic procedure is left fully open. The categorial progress which occurs with the systematisation of experiences narrows down the categorial space within which natural consciousness can express its experiences. The systematisation of natural consciousness goes hand in hand with the categorial permeation of its possibilities of expression."
 - (iv) "The analysis ends where natural consciousness has recognised the origin of the categories dominating it in the relations uncovered by the systematic analysis . . . Natural consciousness has thus dissolved itself in systematic speculative thinking without ever having had to surrender its experiences" (I. Glaser, 'Dialektisches Denken und Natuerliches Bewusstsein', *Lorenzen Festschrift*, W. Berlin 1978).

In his paper, 'Zum Zugriff auf das Wesen in der Dialektik von Karl Marx', (Philosophisches Seminar, Universitaet Hamburg 1977), Glaser adds a commentary

which refers to the dialectics of labour and capital. Instead of being a theoretical procedure, dialectics becomes a matter of a dialectical movement of the object, which Glaser describes as the "infinite process of capital which negates and affirms itself" (in referring to the "cleansing crises"). For us, the dialectic resulting from the theoretical unearthing of the contradiction between labour and capital is simultaneously a dialectic of theory and of the object. The subsequent stages of the analysis can be regarded as an unfolding of the contradiction between capital and labour in its multifarious forms of appearance, which enables an inner connection of the bourgeois form of society to be construed, whose kernel lies in the abstract universality of bourgeois labour and the contradiction between capital and labour resting upon it. As dialectic of the object, the presentation shows that the phenomena of bourgeois society (e.g. the development of productive forces, the action of competition subjects and the state, the expressive and communicative action of public and private life) have significance and play themselves out within a framework staked out by the mutual, contradictory dependency of capital and labour.

6. Here, and in the following paragraphs, value is spoken of quantitatively, i.e. strictly speaking, we should employ the term 'magnitude of value'. The abbreviation does no harm if it is borne in mind that value is no purely quantitative concept.
7. In RVfA the comparison was made between two capitals, which may have suggested aspects of competition.
8. Eldred/Roth, op. cit., p. 31.
9. In RVfA p. 49, this point is treated differently.
10. Cf. the appendix 'Science in *Capital*', in Eldred/Roth, op. cit.
11. Mike Rot, *Kernstruktur unserer kapitalistischen Gesellschaft*, Frankfurt 1972, p. 48.
12. Rudolf Bahro, *Elemente einer neuen Politik : Zum Verhaeltnis von Oekologie und Sozialismus*, Berlin 1980, p. 118.

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