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CLASS, SURPLUS, AND THE DIVISION OF LABOUR

A Post-Marxian Exploration

London School of Economics

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ABSTRACT

The thesis attempts to account for an apparently wide array of class-like entities in present-day capitalist formation, while remaining true to the spirit of Marxian theory, in which the relationship of exploitation implies a polarised, two-class society. It is argued that the efforts to solve this puzzle usually involve notions of class based on the division of labour. The fundamental concepts of the original theory, such as reproduction, subsistence, exploitation and class are then reexamined and reconstructed. The idea of profit as based on surplus labour is defended, securing the basis for the Marxian understanding of class. The Transformation Problem of moving from labour values to prices of production is discussed and while the force of the Sraffian critique is admitted, a new interpretation of the problem is suggested, making it possible to see the Sraffian schema as a generalisation of the Marxian one. Labour Theory of Value is analysed as a 'dual theory of exploitation and price' and it is argued that only the latter part is vulnerable to the criticisms advanced. The Sraffian schema is interpreted as a clear explication of the concept of exploitation, throwing into sharp relief the disjunction between exploitation-based and division-of-labourbased views of class. An integration of the two concepts is attempted by proposing a new, generalised notion termed 'complexploitation' (complex exploitation) flowing from what is claimed to be the essential idea behind the concept of exploitation: that one group of agents is more oppressed by the constraints of the so-called 'Sphere of Necessity', just so that another group may enjoy more of the fruits of the 'Sphere of Freedom'. Finally it is suggested that the concept of complexploitation makes possible a more fine-grained class map of society than the original two-class model.

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Chapter I

Introduction The Legacy and the Crisis

There are many ways in which a society can be split into classes. We could divide people into categories on the basis of income and wealth, power and status in a hierarchy, the kind of work they do, their level of education, their cultural characteristics such as tastes and accents, etc.

The classic Marxian conception of classes is often characterised as being based on the relation to the means of production. The relation in question is one of ownership: society is divided into classes depending on who owns which productive resources. However, this is only half of the Marxian story. Although private property looms large in this picture of the world, it should be always borne in mind that it is *not* significant in itself. If ownership as such were all that mattered, the relevant class division would be simply into the rich and the poor. This is clearly not the fundamental Marxian description. Instead, ownership is bound up with exploitation – that is, the production and the appropriation of goods beyond the needs of the direct producers; in short, of the social surplus. The particular property relations in a given society help define the way in which exploitation occurs, and thus delineate the exploiting and the exploited class. Ownership is not an end in itself within the Marxian explanation; it is only the means for describing the process of exploitation. Thus, it is not just that there are rich and poor people; the rich can only remain rich because the poor remain poor.

From this fundamental relationship, other significant features are supposed to follow: the exploiting class is also the ruling class, using a putative expression of the general interest, the State, to cement the exploitative relationship; and it is also the ideologically dominant class, producing ideas to legitimise that relationship in the eyes of the exploited.

The general conception stems from the particular description of capitalism that Marx bequeathed his followers: on the one hand, there was the wealthy, powerful, high-status bourgeoisie, owning the means of production necessary for the production of subsistence goods; on the other hand, there was the poverty-stricken, powerless, low-status proletariat, owning nothing but their labour-power and thus forced to perform surplus labour in order to get access to the means of production.

This two-class description is of course not the only one that is to be found in Marx's writing. It is by now a staple of the Marxist discussions of class that Marx used the word 'class' with a wide variety of meanings, depending on the context.¹ In particular, in the more journalistic pieces, the word seems to be applied to an enormous array of social actors. In the more abstract works, however, the description tends to be restricted to the two classes mentioned above. At the level of abstraction of *Capital*, capitalism is thus seen as polarised between the bourgeoisie and the proletariat.

The usual way in which the abstract model has been linked to reality was in terms laid down by the *Communist Manifesto*, according to which society is "more and more splitting up into two great hostile camps" (Marx and Engels 1967, p. 80). In other words, the claim was that as time progresses, various 'intermediate strata' will gradually disappear. These intermediate strata were more or less explicitly identified with the 'petty bourgeoisie', that is, small producers owning their means of production, with at most a small number of employees aside from the members of their own family.²

¹ Cf. Roberts (1997), Cottrell (1984).

² In passing, let me note that such unproblematic acceptance of the employment of family members without further comment on exploitative relations is quite revealing of the blindness of much of traditional Marxism towards the relations within the household – chiefly but not exclusively in terms of gender.

Two Problems for Marxian Class Analysis

The trouble for this traditional Marxist picture was that reality refused to co-operate. The problem was not that the small business owners did not accept the invitation to completely disappear (although they did). This would be a minor difficulty that could be dealt with, just as long as there was at least a long-term tendency towards decline. Even stagnation would do, provided such petty bourgeoisie did not constitute a significantly large stratum of the society.

What was far more important, and far more difficult to deal with, were two developments that can be summarised under the headings of 'the separation of ownership from control' and 'the embarrassment of the middle classes'. By these phrases I intend two phenomena that constitute a challenge for the Marxian picture from 'the top' and 'the bottom' respectively, as it were. The former refers to the fact that individual agents appeared who seemed to possess pretty much every superficially significant feature of the capitalists save for the actual legal ownership of property. The latter refers to the converse fact that other agents appeared who seemed to be propertyless and selling their labour yet otherwise possessed very few superficially significant features in common with the proletariat.³

Thus, the separation of ownership from control means that the individual protagonist of the early capitalism no longer plays a significant role in today's society. Such an early industrial capitalist magnate can be characterised as the ideal type embodying the financier, the entrepreneur, the manager and the supervisor all at once. These characteristics have come apart, chiefly if not exclusively with the advent of the joint stock company. It has been argued that Marx himself was very well aware of these effects of the coming form of

³ Obviously, the way I have characterised these two categories, there is a possibility of an overlap between them. At these stage, no more precise descriptions are offered, for this is exactly part of the problem: just where does the boundary lie between the two strata that are at least perceptually significantly different?

capitalist property.⁴ To some extent, this is indeed the case; there are interesting insights about such 'abolition of the capitalist mode of production within the capitalist mode of production itself⁵. Nevertheless, the proper theorisation of the implications for the class structure has not been worked out by Marx. The dominant notion of classes in his work remained the one based on the early structure of clearly distinct individual owner-managers and purely subordinate workers, occasional discussions of supervisory labour notwithstanding. To this extent, the proponents of the 'managerial revolution' were quite correct: the development did constitute a problem for Marxism. How are we to theorise the social status and the political interests of actors who, while superficially nonowners, exhibit far too many signs of 'being on the side of capital'? The problem is perhaps not insoluble, but it is nevertheless a challenge that requires a response.

However, this was still more of an anomaly for the Marxist theory rather than an immediate problem for practice. Even absent a proper theorisation, it is not so difficult to amalgamate the capitalist owners and the high-level managers in real-life struggles. Indeed, the revolutionary socialist rhetoric, still in evidence among the political sects, solved the problem by simply talking about 'the workers and the bosses', not bothering with theoretical niceties about the subtle differences in the standing of the various strata of the latter. After all, 'if it walks like a duck, talks like a duck...'

The embarrassment of the middle classes, however, was precisely a problem par excellence for practice, and only consequently also for Marxist theory. The trouble was presented by the appearance of whole swathes of nominal wage-earners who did not identify themselves with the working class, socially or politically (while at the same time not clearly belonging to the category of the 'bosses' either). In terms of practice, the persistence of non-proletarian, non-

⁴ See e. g. Carchedi (1977).

⁵ Marx (1966, p. 438).

capitalist strata inevitably had a major impact upon the strategies of nominally working-class political parties. The seemingly inexorable slide of the initially Marxist Social Democracy towards 'revisionism' was informed by the realisation that an explicitly 'workerist' orientation and programme simply was not going to deliver the electoral success that these parties craved.

Hence also the challenge for the Marxist theorists, as well as for the class-oriented political activists. While Marx was predicting a 'movement of the immense majority, in the interest of the immense majority'⁶, there is not and never has been any such movement. At least a part of the explanation lies in the fact that not all who *prima facie* sell their labour seem to have or to have had sympathies for the socialist project. If a class-based political strategy were ever to avoid the pitfalls of the social-democratic road, how then should the problem of the 'middle classes' to be approached? How to conceptualise their existence? How to appeal to those wage-earners who explicitly or implicitly identify themselves as 'middle class'? How should their alliances with the putative working class be built – indeed, *should* they be built? Etc. etc.

Over the years, there were many attempts to deal with the theoretical problem. Some theorists have claimed that the existence of the middle classes was in effect an ideological illusion, that these strata – at least a portion of them – constitute simply the 'new working class' of capitalism (Mallet 1975, Gorz 1967). On the contrary, Poulantzas (1975a) famously argued that the problematic strata constituted a 'new petty bourgeoisie', forming just one fraction of the single petty bourgeois class. The more radical alternatives proposed that these strata represented a 'new class' or a 'third class'; this claim had a wide spectrum of supporters, each with their own slant on this notion, from the anarchists (Bakunin 1990) through the theorists of 'managerial' or 'bureaucratic' revolutions (Burnham 1942, Rizzi 1985) to the New Left theorists (Ehrenreich and Ehrenreich 1979, Albert and Hahnel 1991a) and beyond (Eyal,

⁶ Marx and Engels (1967, p. 92).

Szelényi and Townsley, 1998). Finally, there is a theory associated with Wright, according to which the problematic groups are indeed 'strata' rather than classes in their own right, representing as they do 'contradictory class locations'.

The Soviet Mode of Production and the Fate of Marxism

A question might be asked at this stage, if not already at the beginning: What exactly is the point of all this? After all, Marxism is dead – 'as any fule kno'.

Before I attempt the answer, let me describe another problem with the Marxist theory, one which came from an unexpected direction. Despite much initial enthusiasm for the Russian Revolution, independent-minded Marxists both inside and outside of the USSR or the Eastern Bloc gradually came to perceive the Soviet system very critically. Whatever else it was, it could hardly be claimed even by its defenders as that which Marx had in mind when he talked about Communism – regardless of whether we mean the 'higher' or the 'lower' stage (commonly identified nowadays with Socialism and 'full' Communism respectively).

Of course, as many people have noticed, it would be hard to expect a historical phenomenon to follow the exact contours of any one person's idea⁷– in fact, it would be downright bizarre. Nevertheless, as is well known, Marx did not actually prescribe any very definite shape for Communism—he is famous for poking fun at 'writing recipes for cookbooks of the future'. His views on Communism are thus few and far between and can be considered as the least conditions that a society would have to fulfil to qualify as Communist in the Marxian sense. We can relax these conditions even further, if need be. All that is necessary is to note that Marx's Communism is a society where 'associated

⁷ This is the argument used by Cockshott & Cottrell (1993) against the view of those left-wing critics who charge that the Soviet system was not socialist. Bahro (1978) similarly disagrees with 'idealist' critics of "actually existing socialism', but derives a different conclusion: this kind of criticism is correct as far as it goes, but is not a helpful guide to any political practice.

producers' *jointly* decide on the future shape of production and life in general. Only a committed apologist for the Soviet system could through some tortuously sophist arguments come to a conclusion that this was true about the Soviet system.

Instead of a society of equality (subject only to differences in natural talents)⁸, true democracy, with every one producer's voice being heard, and a true community where people have each others' interests at heart, the Soviet system was characterized by domination, alienation and hierarchies of of privilege.⁹ The question is, can those characteristics be explained by reference to class? Is such an explanation illuminating in any way? And in particular, does it help to identify any 'contradictions' or 'laws of motion of the Soviet system?

Now, there is no doubt that the collapse of what we now perhaps should call 'historically existing socialism' had an incredibly deep impact on the stature of Marxism — hence the question at the beginning of this section. It can be argued that this is deserved. After all, regardless of the fact that the official Communist interpretation of Marx was by no means the only one, and that there were more than enough Marxist critics of this type of regime — at the end of the day, if the test of a theory is social practice, then the Communist parties had a very strong claim to represent Marxism. For after all, they had achieved and kept power, while the dissident Marxists of all sort were being repeatedly defeated on both sides of the Iron Curtain. It is no use complaining that history did not conform to the wishes of those believing in a less authoritarian type of Marxism.

⁸ This is a reference to the slogan 'to each according to their work', meant to apply to the lower stage of Communism, which implies that the outcomes of the differences in natural endowments are not to be taxed away but kept by the individuals in question.

⁹ This is not an exhaustive description. On the one hand there were enormous crimes committed by the system; on the other hand, pace right-wing critics, there were genuine gains in the Soviet system. To say this is not to become an uncritical advocate. Capitalism brought genuine gains over what was offered in feudalism, as Marx was first to admit. That did not turn him into an advocate of capitalism, nor did it turn capitalism into a classless or a 'good' society.

So perhaps there are good reasons why the defeat should have a deeply depressing effect on Marxists and socialists. However, even if these reasons are good, bad conclusions are often deduced from them. In particular, it is very easy to just dismiss the entire structure wholesale, to completely give up on the transformatory project.

This strikes me as an enormous waste. Granted, the collapse of the political-economic system may have exposed the bankruptcy of the thought system, too; but this in itself tells us nothing about which and how many parts of it were faulty. We do not need to throw away each and every individual nut and bolt. Instead, surely careful work is required to sort the wheat from the chaff.¹⁰

There is a difference between the spirit, the motivation, the general outlook on the one hand, and the particular theoretical structure on the other. The collapse of that structure undoubtedly does have a strong impact also on the spirit, but in the long run, the two can be disentangled. It seems to me that it is necessary to sort through the wreckage, discard what is rotten and broken, but collect the still-usable parts – and move on.

Hence the subtitle of this thesis, a post-Marxian exploration. I want to see how much mileage there still is in the Marxian concepts, to push them as far as they can possibly go — but no further. That is, no loyalty to the overarching theory nor to the particular writings should be expected. Hence the 'post-Marxian' nature of the project (even if the adjective is here used for the last time.) What I do find inspiring and what I am most impressed by is the general theory of reproduction, which seems to me to be the rational kernel of Marxism, and that will be the focus of the investigation.

Of course, re-examining the Marxist theory is a much, much larger project than can be contained in one thesis, or accomplished by one person. However, the question of class seems to me to be a suitable way in, not least because it is

¹⁰ Apologies for the mixing of metaphors.

politically urgent. What is class? Given the dissolution of the socialist working-class movement as it historically existed, is there any way in which class-based politics is still possible? And, although I will not touch upon the question of the nature of the Soviet system directly, I do hope that the result of the investigation might lead also to some clues for understanding its class composition. After all, if the historical obstacles that forced the liberatory energy into a dead end of a bureaucratic dictatorship are to be avoided in the future, such understanding is crucial.

Exploitation and the Labour Theory of Value

Yet another problem for Marx's class theory has come to a head already quite a long time ago. The mature Marx based his understanding of classes in capitalism on the concept of exploitation. To summarise it briefly, the Marxian working class is a class of direct producers that, deprived of the necessary means of production, is forced to sell its labour-power to the capitalists in order to earn a living. The capitalists squeeze as much profit out of the working class as possible by means of paying only subsistence wages — wages which *just allow* the workers to reproduce themselves, i. e. to renew, 'feed' their labour-power so that they are as productive tomorrow as they were today.

The exploitation of the working class results from the fact that while it receives (under conditions of 'equal exchange', i. e. unrestrained competition) the exact equivalent for its labour-power – that is, the exact amount that is needed to reproduce it – it hands over to the capitalists not this labour-power, which is an intangible thing – a productive ability; but rather its *labour*, which happens to be greater than that embodied in the goods received for labour-power.

Now if the problems mentioned above are to be resolved successfully, it had better be the case that this understanding of the fundamental class relationship of capitalism is in fact a solid enough foundation for the purpose.

Yet, this foundation, usually termed 'the Labour Theory of Value', had suffered many an attack over the years – in fact, it was called 'thoroughly overdemolished' already more than thirty years ago (Lerner 1972, p. 50).

This means that before even attempting to deal with the problems newly arisen, it is necessary also in this area to go back and thoroughly examine how much of the Marxian approach can actually be preserved, what needs to go, and what it should be replaced with.

In particular, since many of the critiques of the Labour Theory of Value were based on the development of so-called Sraffian economics, I will try to explore the issues at stake through Sraffian eyes. Aside from anti-Marxist Sraffians, there have actually been also pro-Sraffian Marxists, and it will be my contention that the analysis of the relationship between the two theories yields a less strictly contradictory results than is often thought. Although I cannot claim to have provided a new 'solution' to the so-called Transformation Problem, which was the fundamental starting point of many of the critiques, it turns out that such a solution is far less important than the very *interpretation* of the problem. For my analysis leads to a conclusion that rather than a rejection, the Sraffian system can be understood as a *generalisation* of the Marxian approach to political economy.

Sraffian Foundation

Indeed, I consider the work of Piero Sraffa, and input-output economics more generally, a very good foundation for consideration of many of the questions to which the traditional theory could not provide answers for the simple reason that the questions have not even been posed.

A somewhat technical description of the Sraffian approach will come later on, but since I will be referring to some concepts of this approach almost from the start, I would like to just very briefly describe how the basic schema of this theory works.

The economy is here considered as undergoing cycles of production, during which inputs described on the one side of the schema of production are transformed into outputs on the other side. The crucial assumption made is that the amount of outputs must at least match the amount of inputs – if this were not so, the economy could not reproduce, or in other words repeat the cycle, since it would lack the requisite materials.

A simple example, taken from Piero Sraffa's *Production of Commodities by Means of Commodities* (1960) and involving three sorts of inputs – wheat, iron, and pigs – and three production processes looks like this:

As can be easily verified, this is an example of the so-called subsistence economy, in which the amount of outputs produced exactly matches the required amounts of inputs. The more important sort of economy, however, is one which produces a *surplus* over the needs of production – augmenting the schema above, we might thus perhaps see something like the following:

Here, the economy produces a surplus of 150 qr. of wheat, 15 t. of iron and 20 pigs. In capitalism, such a surplus takes the form of profit. This sort of economy will be described in more detail later; for the moment I would just like to make sure that the reader has an idea of what is meant by the term 'Sraffian schema', which I shall be using in the following chapters.

The Plan and the Goal of the Thesis

I am going to proceed in the following way: the first part will be devoted to the views on the issues of class, division of labour and exploitation that have been advanced in the past. The first chapter will consider the various solutions suggested in the literature to the problem of non-capitalist, non-proletarian strata within capitalism, while the second chapter will critically examine the work of John Roemer on the notion of exploitation. The second part will then consist of a single chapter attempting to provide my own re-examination and reconstruction of the various basic concepts of the Marxian approach to classes.

In the third part, I will turn my attention to the problem of defence of Marxian theory of exploitation. I will try to show that without some sort of concept of surplus labour, there is no good explanation for the existence of profit in the capitalist economy. The rest of this part of the thesis will be devoted to the discussion of the genuine problems within Marxian economics that lead to the abandonment of the Labour Theory of Value in its commonly received form, while at the same time demonstrating that a sufficiently clear concept of exploitation is not threatened by this. Essentially, I will try to show that the Marxian theory consists of an intricate mixture of a theory of exploitation and an independent theory of the prices of production, and that while there are good grounds for abandoning the latter, this does not touch upon the value of the former.

Finally, in the fourth part of the thesis, I will attempt to integrate exploitation and those features of the division of labour that produce class-like effects under a unifying concept, which I call 'complex exploitation' (or 'complexploitation' for short), and which in my view makes it possible to talk about classes within modern capitalist formation in a way rooted in Marxian thinking, while at the same time not falling into the trap of the two-class model.

My aim in the thesis is not to arrive at a precise description of the class composition of a particular mode of production or social formation, not to

mention a particular society. Rather, I am trying to construct a set of conceptual tools which then can be used for such detailed analysis, both theoretical and empirical, which remains true to its Marxian origins and at the same times fits the intuitive idea of class that does, in my opinion, exist in people's minds.

In other words, what I am attempting to do is to provide a certain sort of 'grammar of classes'. Let me explain. One of the basic tenets of linguistics is that when people learn to speak their native tongues, they go on speaking them for the most part without making any mistakes despite the fact that they have been taught no explicit rules of the language, and may never learn even of their existence. It is the task of the grammarian to try to observe the natural speech and then to abstract these rules from it. These rules might then well turn out to be quite surprising for the very native speakers of the language.

Similarly, I believe that people in their everyday lives have quite a good conception of class, in the sense that they tacitly 'know' to which class they belong, as well as which classes other people fall into. However, they would find it quite difficult to explicitly state the rules that govern such categorisation – the attempt would mostly be in terms of observable characteristics, which clearly do function as signifiers of class, but are not identical with the signified notion itself.

My project is to try to uncover the 'hidden' rules that govern these characterisations, such that while these rules themselves may well appear unintuitive and complicated, the categorisation they provide stays as close to the everyday conversation as possible. At the same time, these rules should help with the actual analysis of classes in the same way that explicit grammar rules can be used for analysing actual speech.

Ultimately, of course, I hope to contribute in at least a minor way to that current of history which, despite the failure of one grand attempt, will nevertheless perhaps one day lead to an overcoming of the division into classes, making it possible for the first time to fully appreciate that which despite and

across the class boundaries and barriers we glimpse uncertainly in a myriad ways even today: that great sense of shared belonging, our common humanity.

PART I ALTERNATIVE SOLUTIONS

Chapter II

It's Not What You Have, It's What You Do Return of the Division-of-Labour View of Class

The alternative solutions to the problem of non-capitalist and at the same time non-proletarian class-like actors will be discussed in detail shortly. Before I do this, however, I would like to consider in more abstract terms why the *theoretical* problem arises at all.

Modes of Production, Exploitation, and Polarisation

As I have mentioned, the challenge to the simple two-class, polarised picture of the capitalist society arises because historically additional actors apart from the bourgeoisie and the proletariat seem to be present on the scene. But why was this such a problem for the Marxian theory? After all, an alternative stratification theory would not have nearly such difficult time with adding more social actors as conditions required. What is it about the Marxist picture that caused it such trouble?

The reason, of course, lies in the very different ways in which Marxism and the alternative theories conceptualise class itself. For the Marxists, class is fundamentally a relational phenomenon; groups of people are thought to be systematically tied together and yet at the same time are systematically in conflict. Actually, the relationship is even more specific: it is the relation of exploitation. To spell this out in full, classes arise when in a society, one group of people performs not only necessary labour to secure their own means of subsistence, but also, involuntarily, surplus labour to provide the means of subsistence and luxury to another group.²

¹ See e. g. Poulantzas (1975a), Wright (1985).

² This further specification is necessary, because there can be many types of systematic conflict in society, such as between authority groups. Indeed, Dahrendorf (1959)

The relation of exploitation is intimately tied with the notion of the *mode of production*. A widely shared understanding among various kinds of Marxists is that the mode of production is fundamentally characterised by the way in which the exploiting classes force surplus labour out of the exploited classes. It is also commonly seen as the highest level of abstraction in the Marxist thinking on society (another two levels are the *social formation*, consisting of the various modes of production that may coexist at any one time in the society, and *conjuncture*, corresponding to an actual society at a particular point in history, whose shape is determined aside from the modes of production also by the various concrete historical events).³

Now, if we do accept that the mode of production really is characterised by a particular mode of exploitation, and if we do believe that the mode of production does represent the most fundamental description of the society, then the problem of 'middle classes' comes into a sharp relief. For we can see that Marx's most abstract picture of the capitalist society as polarised between labour and capital is not accidental. If classes are the result of the mutually antagonistic, systematically conflictual relationship based on exploitation, then the society as described by the mode of production will *always* appear polarised. For exploitation is a two-place relation: there are the exploited and the exploiters. These are the two poles. Unless we can specify a way in which three or more classes could somehow be involved in the exploitative relationship, the mode of production level of abstraction will *always* produce such a polarised picture, quite regardless of the type of society we are talking about.

Of course, it may be suggested that there is room for the existence of the third class, aside from the exploiters and the exploited – namely those who neither exploit others nor are themselves exploited. However, if such a group is to constitute a class, that is, if its existence is to be systematic rather than just

explicitly identified such groups with classes. What is specifically Marxist about the Marxist class theory is that it is tied to the materialist conception of history, whereby the fundamental features of the society are determined by the productive relationships.

³ The distinctions as found in Poulantzas (1975a).

contingent, then by definition of the mode of production it must be that it comes from *outside* of the particular mode of production being described. For once we have accepted that the mode of production is characterised precisely by the mode of exploitation, of the expropriation of surplus labour, anybody who does not fall in either the category of the exploiter or the exploited must necessarily fall *outside*. In other words, we are *no longer* on the terrain of the modes-of-production; we have shifted one level down, to the social formation, which is a mix of various modes of production. Indeed, as regards the social formation of capitalism, Marxism does recognise just such a class of neither-exploiters-nor-exploited in the form of petty bourgeoisie, which is the relic of an older, surviving MoP – Simple Commodity Production.⁴

The problem, however, is precisely the existence of *new* 'middle class', which does not correspond to the old petty bourgeoisie. These people do *not* belong to any other mode of production than the capitalist one – this holds at least *prima facie* and at least for a significant proportion of them. Namely, for those members of the middle classes who are not significant owners of property and function on the basis of the wage contract inside the capitalist firms.

This is the real reason why the problem of the 'new middle classes' is such an enormously deep challenge for Marxist theorists. If they are to remain true to their theoretical heritage, they must insist that society is fundamentally characterised by the way in which surplus labour is squeezed out of the exploited class. Hence they must believe that the most fundamental description of the society, in terms of its mode of production, can only contain the two polarised classes, the exploiters and the exploited. Yet, if they are to remain true to the empirical reality, they must recognise that in terms of both self-

⁴ Actually, even this description is not completely consistent, because Simple Commodity Production is not characterised by *any* type of exploitation. If that mode could exist on its own, with everybody owning their own means of production and trading their product in the market, we would have a seriously disturbing situation of a non-exploitative – and hence classless – market society. Well, disturbing from the Marxist point of view; this picture of literally 'everybody being middle class' is probably not far from the basic neoclassical vision of benign market society.

identification and identification by others, there *are* middle classes which are an absolutely integral part of the real-world capitalism.

I am trying to pose this dilemma as sharply as possible, to make clear just what is at stake in trying to account in theoretical terms for the existence of the middle classes. For if we pose the problem in these abstract terms, we see at once that the most obvious solution is at the same time the least satisfactory. If we go the whole hog to defend the theoretical picture, we have to adopt the attitude that if the reality does not correspond to it, so much the worse for reality. This is the 'ideological illusion' approach, which proclaims that the mode-of-production picture of two polarised classes is the actual reality, with the 'middle classes' really being just a confused part of the working class.

Few theorists nowadays would be willing to disregard empirical experience to quite this extent. But if we do not do that, we are willy-nilly driven to tinker with the very basics of the Marxian model of the mode of production, and hence of the basis of the theory of history. The precise details in which this is done may vary. However, let no-one doubt that what is at stake is the very foundation of the Marxian theory.

Essentially, there are two approaches that can be adopted, if we are not willing to accept the dogmatic, 'ideological illusion' solution.

On the one hand, we could say that the existence of additional classes within the real life capitalism is the effect of the presence of other modes of production in the capitalist social formation. The idea is that a social formation is not just a mechanical combination of these various MoPs, simply stuck together like pieces of Lego, but that the confluence of these MoPs is something like a chemical mixture, where the very substance of the individually pure elements is affected by the presence of the others. This goes well with the anti-mechanical spirit of the Marxist mode of reasoning. I will refer to this as the many-modes-of-production solution.

On the other hand, we could try to further analyse the abstract pure mode of production itself, and come up with some additional features that ought to be relevant for differentiating the wage-earners into classes. This approach has sometimes taken the form of the analysis of the concept of ownership. In other cases, the analysis is functional. Sometimes it focuses on the question of distribution. However, I am going to argue that most of the time, all of these lines of thought reduce to the same basic approach: namely, the approach based on the division of labour. Accordingly, I will refer to such attempts as the division-of-labour solutions.

Marx and the Division of Labour

The originator of the division of labour approach is none other than Marx himself, even though this approach served quite a different purpose at the time. The young Marx did not yet hit upon the notion of exploitation; his early writings, some together with Engels – The German Ideology, Economic and Philosophical Manuscripts of 1844, The Communist Manifesto – do not yet contain either the term or the notion of exploitation. It is quite clear that in these works, Marx had not yet arrived at the conception of surplus labour. Instead, the existence of classes is derived from the evolution of an increasingly complex division of labour.

This process is particularly well described in *The German Ideology*. Here, individual classes 'split off' from the previously existing ones as productive technology develops, as it allows for and calls for increasing specialisation. Thus, 'town' splits away from the 'countryside' – meaning that industrial-commercial activities split away from agricultural production, creating a class of peasants and a class of burghers; trade splits away from industrial production, creating a class of merchants and a class of artisans; and finally perhaps stockholding splits away from artisanship, creating a class of capitalists and a class of modern proletarians (Marx and Engels 1965, pp. 64-77).

Thus, there is here no notion that classes should be defined relationally, as complementary and at the same time mutually antagonistic camps. There is, of course, clear awareness of conflict and struggle, with the peasants in the

countryside being oppressed by the feudal landlords, and with the proletarians struggling against the capitalists. In *The German Ideology*, this struggle is not yet understood as the driving force of history, as it becomes in the *Communist* Manifesto – in the sense that the evolution of the division of labour proceeds secularly, independently of such struggles. However, even for the *Communist Manifesto* it remains true that the conflict is not yet based on the notion of exploitation and owes more to the Hegelian master-slave dialectic.

Rattansi (1982) argues that in The German Ideology, Marx conflates 'class' with the 'division of labour', and that it is only in his mature writings that he comes to distinguish between the two. But as I have just argued, it is more precise to say that in that work, Marx sees class as a consequence of the division of labour; and he understands it this way because he had not yet arrived at the conception of surplus labour and exploitation. The burden of the class division is seen in The German Ideology as following from the fact of a 'natural' division of labour, rather than a 'voluntary' one. The term 'natural division of labour' means that rather than the distribution of production tasks being determined consciously and rationally, it develops in a haphazard, inequitable way, without any regard for the consequences for the individuals who carry them out. This idea is broadly in line with the materialist conception of history, according to which the material technologies of production of the means of subsistence determine the basic outlines of the society. The realm of necessity will only finally be escaped when the society gains the power to govern itself consciously and rationally, thus arriving at an agreed-upon – 'voluntary' – division of labour. This will then allow us "to do one thing today and another tomorrow, to hunt in the morning, fish in the afternoon, rear cattle in the evening, criticise after

⁵ A somewhat tenuous unity of the two elements – class struggle and the development of productive technology – is finally achieved in the famous 1859 'Preface to A Contribution to the Critique of Political Economy' (Marx 1951). We could read the preface as suggesting that class struggle, which develops according to its own dynamic, plays a decisive role at the moment of 'social revolution', where the old relations of production – which are necessarily social relations – no longer allow for the development of the forces of production.

dinner, just as I have a mind, without ever becoming hunter, fisherman, herdsman or critic" (Marx and Engels 1965, pp. 44-45)

This quote is quite unfortunate, as it allows a vast scope for misinterpretation (Rattansi being a case in point). However, in the light of what has just been said, it should be clear that Marx is not talking about switching activities at a whim. Such an interpretation is quite silly, and we have independent grounds to believe that Marx was not a silly thinker. Thus, it makes sense to think that what he is trying to say here is that while the 'natural' division of labour condemns a person through an impersonal and uncompromising mechanism to a single occupation, perhaps for a lifetime, a conscious agreement of the producers and a conscious shaping of the productive abilities allows for a variety of productive tasks, without the individual being yoked to any of them. This does not imply that people can simply drop whatever they are doing at any moment and run away to do something else; it does imply that in the process of agreeing on the tasks to be performed, they can express their preferences and these will be properly taken into account.

In *The German Ideology*, Marx also makes the claim that the division between mental and manual labour is the first real division of labour: "Division of labour only becomes truly such from the moment when a division of material and mental labour appears. (The first form of ideologists, priests, is concurrent.)" (Marx and Engels 1965, p. 43). In line with his hypothesis that classes are a consequence of the 'natural' division of labour, this would seem to imply that the first class division occurs between the 'mental workers' and the 'manual workers'; and indeed such a conclusion has been drawn, as we shall see later.

In the context of the division of labour, it is interesting to note Marx's discussion of the 'work of control and surveillance' in *Capital*.

Marx makes two distinct points. First, he claims that capitalist profit cannot be explained by the wages of supervision and management – the (notional) existence of which he does not deny – since when there is an actual

employee of the capitalist performing this work, their wages are comparatively low; they certainly do not exhaust the profit of the enterprise.⁶

Marx's second claim is more interesting from the present point of view. He argues that although co-ordination and organisation are necessary in any society with an advanced division of labour, the particular form this takes under capitalism is *not* necessary. There are two possible meanings that could be attached to this claim; it is not entirely clear which if any Marx would have preferred. In the first place, we could understand it to mean that while co-ordination is always necessary in a complex society, production itself might have different *aims*, in terms of its purpose, i. e. of what is actually being produced. Thus, to organise production with a view to achieving profit, as under capitalism, is qualitatively different from organising it to supply the human needs, as ought to have been the case under Marx's Communism.

The second understanding of the claim is broader. It is not only the aim of production which is different under the different modes of production; the very structure of co-ordination must look differently if we expect labour to become a real human need. Under such understanding, it is the authoritarian aspect of co-ordination under capitalism that must be eliminated, with production being organised along democratic, autonomy-enhancing lines. There are of course significant strands of 'autonomist', 'workerist' Marxism that endorse and develop precisely this view. We shall try to support this view by an argument from the general notion of reproduction.

But although I have argued that conflating mental labour with domination and manual labour with subordination is wrong, there is of course a sense in which both are the result of the division of labour, or at least a division of activity generally speaking. Since co-ordination of productive activities is a

⁶ This may seem somewhat less valid today, given what we know about the extremely large remuneration packages of the top executives of big corporations. However, this phenomenon is largely due to existence of very significant *rents* accruing to these positions, as will be argued below; besides, the point stands that the profits of the enterprise are far from being exhausted by the managers' pay.

requirement for any complex society, and authoritarian direction is one form of such co-ordination, we can easily see the division between the dominating and the subordinated group as a result of the division of labour. This is true even if the dominating group, thanks to its elevated standing, takes on all sorts of activities that actually have nothing to do with production *per se* – such as hunting, poetry, wars etc.

What conclusions can we draw from the discussion so far? As we have seen, before Marx arrived at the canonical understanding of class as based on exploitation, he was conceptualising class as being based on the division of labour. My first main claim is that the move from division of labour to exploitation has never really been completely satisfactory. The tension between the two concepts has never really been overcome. As we shall see, to produce a richer picture of the capitalist mode of production, many theorists of classes consciously or unconsciously grapple back towards the division-of-labour concept of class, sometimes to use it as a complementary element, sometimes to completely supplant exploitation as the basis for the distinction between classes. By this I do not mean to suggest that they are pursuing any sort of 'return to (young) Marx'. Rather, I see this as a reflection of the fact that there simply is something to the division of labour which has produces class-like features – and that these theorists, independently of – but similarly to – the Marx of *The German Ideology*, are trying to somehow deal with this fact.

Poulantzas: Ownership Versus the Division of Labour

For every theory that refuses to proceed to identify the whole wage-earning class with the proletariat, there are two fundamental problems.

The first one is that of *identification*: just *who* are the 'middle classes'? What is their proper theoretical status? On the other hand, there is also the problem of *demarcation*. This refers to the question of boundaries within the grouping of the wage-earners. Given that the problematic 'bosses' and 'middle classes' are

precisely those who belong to the wage-earning stratum, just where do the dividing lines between them and the working class lie?

Of course, if the identification of the non-proletarian wage-earners is achieved constructively, that is, by positively identifying the characteristics which divide them from the workers, then in effect both problems have been solved at once. It may be thought that this is in fact what we should expect from a successful Marxian theory of the 'middle classes'. And yet, as we shall see, the work of Nicos Poulantzas, which has become a basic reference point in the debate on classes, is characterised by the fact that it approaches the two questions as separate issues.

Poulantzas' Dogmatic Motivation

Poulantzas uses quite a few theoretical innovations in order to accomplish his project. He distinguishes 'economic ownership' and 'possession'; introduces 'ideological and political' criteria to the determination of class status, and assigns a new interpretation to the traditional distinctions between 'productive' and 'unproductive' labour, as well as 'mental' and 'manual' labour.

But for all these innovations⁷, the motivation for employing them is fairly straightforwardly a dogmatic one. Plus ça change, plus c'est la même chose. In my opinion, the key to Poulantzas' approach appears in the following quotation from his article 'On Social Classes' (Poulantzas 1973, p. 38): "Unless we consider that the capitalist mode of production has been superseded and that we are now in some kind of 'post-industrial' or 'technocratic' society which produces this new class, how can we maintain that capitalism itself produces a new class in the course of its development?" Obviously, the implied suggestion is that capitalism cannot produce such a new class. But if that is so, then the classes we are left with are at most those of the capitalist social formation — bourgeoisie, proletariat, and petty bourgeoisie.

⁷ For the most part, Poulantzas would deny that they *are* innovations, claiming that he was preceded by the classics of Marxism.

Thus, the aim of Poulantzas' theoretical enterprise is to show that despite all appearances to the contrary, the basic three-class Marxist model is essentially correct. Of course, once this theoretical choice is made, one is *bound to* try to reduce the wage-earning 'middle classes' to one of the 'classical' classes of Marxism. In other words, Poulantzas embarks on the solution to the identification problem first and *independently* of the demarcation.

Identifying the 'middle classes' with the proletariat amounts to the 'ideological illusion' solution; this option Poulantzas rejects. Similarly, identification with the bourgeoisie would not do, since there is another candidate for this, namely the other problematic category of 'the bosses' – and these are thought to be distinct from the middle classes proper. This leaves just one alternative: to amalgamate the wage-earning 'middle classes' with the petty bourgeoisie, giving rise to the expression Poulantzas is so well-known for, 'the new petty bourgeoisie'.

Hence, it becomes imperative that the professionals, experts, teachers, bureaucrats, managers etc. be reduced to petty bourgeoisie, regardless of any possible divergences between the original class of this name and the variegated group to be reduced. The fundamental truth of the traditional Marxist viewpoint is taken as a given; it is all a matter of beating recalcitrant reality into shape so that it conforms to this viewpoint.

Of course, even if the motivation behind Poulantzas' approach is essentially dogmatic, to state this cannot count as a critique of his theory. The reasons he gives for considering the wage-earning 'middle classes' a part of the petty bourgeoisie, and 'the bosses' as part of the bourgeoisie need to be considered in their own right, regardless of the motivation behind them.

To separate the two groups above from the working class, Poulantzas uses two different strategies. 'The bosses' are identified with the bourgeoisie through an analysis that, despite rhetorical asides, occurs essentially on the economic plane. On the other hand, in the discussion of the 'middle classes', Poulantzas postulates that aside from the economic considerations, it is also the ideological

and the political characteristics that are essential for the determination of class status. I will now take these two strategies in turn.

Ownership and the Division of Labour

In the first place, Poulantzas distinguishes the purely 'legal' ownership from the real ownership relation, 'economic ownership'. This refers to "real economic control of the means of production, i. e. the power to assign the means of production to given uses and so to dispose of the products obtained". On the other hand, he also points to a *second* 'relation of production' aside from the ownership, termed 'possession', which refers to "the capacity to put the means of production into operation".

This analysis serves Poulantzas to describe that stratum of wage-earners which, despite appearances, belongs to the bourgeoisie. This corresponds to those agents who regardless of the legal ownership relations relate to the means of production in terms of economic ownership, possession, or both.

This is an important point in our discussion. Similarly to Poulantzas, other theorists also focused on the analysis of ownership as an important route towards a solution of the problem of non-proletarian wage-earners. I want to make two related claims. On the one hand, I believe that what is really intended by these theorists is the issue of the division of labour rather than of ownership. On other hand, it seems to me that the analysis of ownership is a dead-end, because it mistakes the property relations for the distinguishing characteristic of classes, whereas in reality these relations are just a formal expression of the underlying exploitation dynamic.

We can start by noting that for the early Marx, the division of labour and the private property were in some sense equivalent concepts, nothing but two aspects of the same phenomenon.⁸ We can interpret this, roughly, as saying that

^{8 &}quot;With the division of labour, in which all these contradictions are implicit, and which in its turn is based on the natural division of labour in the family and the separation of society into individual families opposed to one another, is given simultaneously the distribution, and indeed the unequal distribution, both quantitative and qualitative, of

just like the division of labour means an increasing differentiation in activities undertaken by different individuals, so the development of private property means an increasing differentiation in the distribution of products of these activities.

However, although the insight may be valuable, it is clearly not enough to sustain our interpretation. Instead, in sharp contrast to Poulantzas and several other theorists, I would like to argue that in a sense, there is no ownership other than legal ownership. Controversial as this may seem, it will be true as long as we adopt a sufficiently broad understanding of 'law'. Nothing much hangs on this polemical formulation, as will become clear; but it is instructive to consider the question in its light. What really is the matter is the distinction between rights, formally legal or otherwise, and regular occurrences.

Rights are the stuff of which ownership is made. Recognised rights, that is. Perhaps the recognition is already necessarily involved in the term 'right', or perhaps not. No harm is done in emphasising that ownership means not only the option of exercising some powers, but some sort of *legitimacy* in exercising them.

Now, I have claimed that legal ownership is really the only sort of ownership there is. This bold claim requires some justification. This justification lies in the particular interpretation of the term 'legal'. Under this interpretation, what is legal is not simply a matter of what is written in the legal codexes of particular nation-states. Instead, any action is legal which is recognised, perhaps enforceably, by some wider community. To adopt this interpretation is to take into account that written law enforced by the repressive forces of the modern state is a comparatively sophisticated development. Historically the far more

labour and its products, hence property: the nucleus, the first form, of which lies in the family, where wife and children are the slaves of the husband. This latent slavery in the family, though still very crude, is the first property, but even at this early stage it corresponds perfectly to the definition of modern economists who call it the power of disposing of the labour-power of others. Division of labour and private property are, moreover, identical expressions: in the one the same thing is affirmed with reference to activity as is affirmed in the other with reference to the product of the activity." (Marx and Engels 1965, p. 44 – emphasis added)

important notion is the one explicated here, which coincides with the 'law of custom' (still theoretically the basis of law even in a modern state such as the UK). Thus, as long as there is common knowledge and acknowledgment of certain rights, these rights can be understood as legitimate and legal, even if that understanding is just a tacit one.

Thus, ownership is a matter of such recognised rights. In particular, we can analyse the concept into the following:⁹

1. Utilisation:

Right to handle an item

2.Exclusion:

Right to prevent others from handling an item

3. Appropriation:

Right to keep the income derived from an item

4.Alienation:

Right to give up the item temporarily or permanently.¹⁰

5. Destruction:

Right to destroy an item

6. Final Authority:

Right to decide over the item in any circumstances not

covered by other recognised rights.

Doubtless other rights could be found in particular circumstances. Conversely, not all of these rights belong to an owner of an item always and everywhere; ownership consists of some combination of rights such as these, but that combination may well be more limited than the above.

Now, when Poulantzas (and others) tries to distinguish 'legal' ownership from other, more 'real' kinds, all that can be accomplished by such a procedure is to point to a distinction between the *written* law and the prevailing 'law of custom'. Since ownership is a matter of *rights*, it would be to say that while the person X has the right to perform some action bound up with ownership, in actual reality it is the person Y who (also) has the right to that action, since this is recognised by some relevant community.

⁹ Cottrell (1984) criticises Poulantzas for using a too rough-grained distinction and quotes an analysis, similar to the present one, found in Holesovsky (1977), into custody rights, usufruct rights, alienation and destruction.

¹⁰ This is meant to include lease, exchange, donation, discarding the item, etc.

Now this may be true. Indeed, it probably is. But it leaves completely untouched the point that is really significant for determining the class status of various actors.

Ownership concerns only what may be done, what is acceptable for the community that constitutes the universe of action. Yet, it is the division of labour that covers what in fact is done. It is one thing to say that somebody is, as a matter of right allowed to perform an action, and quite another to say that they as a matter of routine do perform it. A recognised power to wantonly destroy an item may be a legitimate part of the ownership rights relating to it, for example, but it is hardly something that is performed as a matter of course by the owners.

My claim is that it is not the matter of what actions a wage-earner is allowed to perform during their workday that is fundamental for determining their class status. It is what actions they routinely do perform. Not only do 'the bosses' have a right ('capacity') to put the means of production into operation, say; it is the basic characteristic of their position that they actually do so. It is their particular 'job description', that sets them apart from other workers — not any abstract right they might have. It is not just that they are entitled to perform certain actions; it is the fact that they routinely perform those actions as part of their daily duties.

It is for this reason that distinguishing between 'legal' and other kinds of ownership is almost irrelevant for determining the class status of various actors. Surely what Poulantzas and other similar theorists are actually aiming at is not what such actors *might* do, as a matter of recognised right of whatever sort, but what they actually do do. Which means that it is the place these actors occupy within the overall division of labour that matters, rather than the particular web of ownership rights. The 'separation of ownership from control' is not a problem for Marxism because the rights of the 'legal' owners have in practice been abolished; they have not been so abolished and could, if appropriate circumstances arose, be exercised. The real point is that while these rights

continue to exist, the actual *performance* of acts that these rights *allow* has passed on to other agents.

Thus, my second, broader claim: the analysis of property (capitalist or otherwise), of who is allowed as a matter of socially recognised right to do what, is of very limited significance for the class analysis of society. In other words, on this point I think Marx is substantially correct when he writes that such matters are part of the 'legal superstructure'. That superstructue only *reflects* the relations of production – and it is *those* that are significant. Recognised rights, whether written on paper or carried around in the heads of the individuals, are only the expression of legitimacy of the regular occurrences within a society. But it is those regular occurrences that matter, rather than whether they are recognised as legitimate.

The Demarcation of the 'Middle Classes'

As mentioned above, contrary to the class demarcation of the bourgeoisie, Poulantzas' attempt to distinguish the 'middle classes' from the proletariat is based not simply on the economic, but also the political and ideological criteria. We can understand this in terms of successive approximations. The first major delimitation is economic: Poulantzas separates the productive and the unproductive workers (understood in terms of Marx' Labour Theory of Value), and excludes the latter from the working class, on the grounds that they do not belong to the fundamental capital-labour exploitative relationship, and hence cannot claim to be members of the proletariat. However, the process of demarcation is not thereby complete: within the remaining productive workers, a stratum remains which Poulantzas excludes on the grounds that ideologically and politically, it reinforces the domination of the working class, and hence cannot be considered a part of it. The way through which the exclusion is achieved is through the use of the distinction between mental and manual labour.

However, both the 'productive vs. unproductive' and the 'manual vs. mental distinction' are given a specific twist by Poulantzas. Let us see why.

Poulantzas' definition of productive labour is different from the one explicitly found in Marx. Poulantzas writes that productive labour "is labour that produces surplus-value while directly reproducing the material elements that serve as the substratum of the relation of exploitation: labour that is directly involved in material production by producing use-values that increase material wealth". It is argued that this is not really an 'addition' to Marx's views — which simply postulate the production of surplus-value, regardless of the actual content of the labour performed — but rather that it brings out what Marx must have assumed to be the case, on the basis of his reasoning regarding the capitalist productive labour.

As many critics have pointed out (Wright 1978; Cottrell 1984; Carchedi 1987), this is in direct contradiction with Marx's example of the 'teaching factory vs. sausage factory example':

"That labourer alone is productive, who produces surplus-value for the capitalist, and thus works for the self-expansion of capital. If we may take an example from outside the sphere of production of material objects, a schoolmaster is a productive labourer when, in addition to belabouring the heads of his scholars, he works like a horse to enrich the school proprietor. That the latter has laid out his capital in a teaching factory, instead of in a sausage factory, does not alter the relation." (Marx, *Capital*, Vol. I, Chap. 16)

Yet there is a real contradiction in Marx's thought here, and the most Poulantzas can be charged with is that he went wholeheartedly for one of the horns of the dilemma. For although formally speaking, Marx indeed insisted that the productive labour is labour producing surplus value, there still seems to be a residual identification of production with material production. For consider his discussion of the 'sphere of circulation' and the 'sphere of production'. In order to identify the workers in the sphere of circulation as unproductive, we first need to have a notion of need to have a notion of circulation as distinct from

the notion of production. There is no way to consider whether surplus value is produced in one of these spheres, unless we actually can tell what sphere we are talking about. Indeed – just what tells us that circulation is *not* production? I am not denying that they are clearly distinct; I am just trying to point out that the very fact that the distinction is so obvious suggests that there *is* an intuitive notion of what production is and what it is not – after all, why should we otherwise stop at two spheres, instead of randomly divide the active economic world into three, four, five...? If there is to be a clear understanding that separates production from circulation, and does not separate other spheres, then it seems to me obvious that we do indeed need a notion of production which is *prior* to the notion of surplus value. Otherwise the claim that the work in a sphere other than the sphere of production is unproductive is simply a tautology.¹¹

Thus, there is a lingering sense that we *know* what production is; and nothing is more natural than assuming that it is something that involves 'getting one's hands dirty'. The concept may then be extended to other activities via the theory of surplus value, but this is not done consistently.

Nevertheless, to criticise Poulantzas on the grounds of his failure to do justice to the concept of productiveness is in a sense of secondary importance, since even such narrowly circumscribed working class is still too large for his purposes. Hence the need for the additional criterion, the distinction between the mental and manual labour.

Now this distinction has nothing to do with the naïve, straightforward division of labour between activities that *prima facie* appear to involve more mental than manual actions and vice versa. In fact, it could be argued that this terminology is actually quite misleading, if we take seriously what he says about

¹¹ Moreover, coming back to the example of the teaching factory, the assertion that it can produce surplus value for the capitalist is just that – an assertion; there is nothing in the example that would prevent the 'profit' of the teaching capitalist being simply a share of the revenue. Unless we can demonstrate that new value is actually being produced, there is no way to decide whether that assertion is correct.

this distinction. For "the division between mental and manual labour is simply the form taken by the political and ideological conditions of the [production] process within the process itself." (Poulantzas 1975a, pp. 234 - 235). And so

"[w]e could thus say that every form of work that takes the form of knowledge from which the direct producers are excluded, falls on the mental labour side of the capitalist production process, irrespective of its empirical/natural content, and that this is so whether the direct producers actually do know how to perform this work but do not do so (again not by chance), or whether they in fact do not know how to perform it (since they are systematically kept away from it), or whether again there is quite simply nothing that needs to be known" (Poulantzas 1975a, p. 238)

This corresponds, roughly, to the 'ideological' portion of the pair 'ideological and political'; the demarcation between the working class and the 'middle classes' is drawn in part by the ideology that portrays some of the members of the collective worker as performing work that is somehow more intellectually demanding than that of a proletarian.

On the other hand, the *political* nature of 'middle class' work is due to the authority relations that it embodies — relations arising from the nature of capitalism itself. Poulantzas starts from the premise that the *social* division of labour dominates the *technical* division. In other words, the requirements of the capitalist mode of production dominate the neutral general production requirements. Translated into a neoclassical language, it is not the technologically feasible set of productive relationships that is important; it is only the subset selected by its compatibility with the capitalist nature of production that is relevant.

"The work of management and supervision, under capitalism, is the direct reproduction, within the process of production itself, of the political relations between the capitalist class and the working class" (Poulantzas 1975a, pp. 227-228)

Poulantzas explicitly rejects the approach a là Wright and Carchedi, the line of thought that concentrates on the 'double nature' of the work of management and supervision, since the 'natures' are not equivalent: the social division of labour dominates the technical. Otherwise, says Poulantzas, the same 'double nature' would have been exhibited even by the capitalists (at least the early ones, presumably), something he obviously regards as absurd (Poulantzas 1975a, p. 228)

The 'middle classes' are thus characterised by being unproductive – hence living off the revenue created by the surplus labour of the working class – or if productive, by occupying a position deliminated by ideology as 'superior' due to the knowledge and mental abilities required, and/or a position of power vis-à-vis the working classes, performing the activities of control and surveillance.

Identification of the 'Middle Classes' with Petty Bourgeoisie

In order to identify the 'middle classes' with the 'new petty bourgeoisie', Poulantzas uses again the same concept as in the solution of the demarcation problem — namely, the 'political and ideological' criteria. It is only thanks to this consideration of the political and ideological factors that elements which appear disparate from the purely economic point of view can be unified into a single class.

We can further explicate how this is done by considering Poulantzas' implicit answer to the most glaring objection to his account. This objection should be obvious from the terms of our discussion. It is simply this: how can the 'new' and the 'old' petty bourgeoisie form a single class, when they actually belong to two different modes of production – the capitalist one and Simple Commodity Production respectively?

Poulantzas' answer is based precisely on the ideological factors. He argues that due to the 'analogous' position of the old and the new petty bourgeoisie vis-à-vis both capital and labour, analogical ideological features tend to develop. The reason for this is that the fundamental factor in the existence of classes is the class *struggle*; both the new and the old petty bourgeoisie occupy the same – 'middle' – place in the

struggle between labour and capital, and thus are shaped into a single (albeit necessarily heterogeneous) class.

This reasoning is singularly deficient. Anecdotally or even on the basis of empirical research it may well be true that the ideological and political attitudes of small shopkeepers/artisans and technicians, middle level managers, scientists etc. are quite similar. However, this fact, if it is a fact, does not explain anything; rather, it itself calls for an explanation. No theory that takes the existence of the middle classes seriously would attempt to deny that such an ideological and/or political identification exists, at least in some places and some of the time. But why is it that such diverse groups of people tend to adopt the same positions? What is it about their incomes, education, lived experience etc. that makes them do so?

The answer might seem to lie in the second part of Poulantzas's explanation: the same ideological outlook arises from the same position in the class struggle between capital and labour. If this is correct, however, then the empirical 'ideological' identification becomes superfluous as part of the explanation. If the interests of the two groupings are as a matter of fact structurally identical, then the ideological identification is at best a consequence of this fact. And even if such an ideological identification were lacking in a particular time and place, it would make no difference to the underlying structural position, and so there is no real reason to pay attention to it.

However, the position in between labour and capital is quite clearly not enough to unite the two groupings into a single class. For even if it is true that they do have structurally opposed interests to both labour and capital, how do we know that they do not have also structurally opposed interests to each other? There is an obvious argument that various groups within the Poulantzian 'petty bourgeoisie' do have such opposed interests: wage-earning employees of capitalist corporations have a prima facie interest in the market expansion of these corporations at the expense of the market share of the 'old' petty bourgeoisie; similarly, the members of state bureaucracy have an interest in an increasing tax share at the expense of both the 'old' petty bourgeoisie and the wage-earning

employees of the capitalist corporations. Why are these interests less relevant than the conflicts with the bourgeoisie and with the proletariat?

Moreover, the whole explanation fails because of a meta-theoretical reason. The whole point of the concept of class within the Marxist theory is to be one of the fundamental building blocks from which the explanations and even predictions of historical situations can be derived. Thus, the membership in the working class, or in the bourgeoisie, or any other class, should give us some idea of what to expect of the individuals in terms of their ideological and political orientation. But Poulantzas reverses this order. Instead of class being the exogenous variable, it becomes the endogenous one. We *first* need to know everything that is ideologically and politically interesting about the 'middle classes', and only *from that* can we find out their class membership. But this is a pointless procedure; nothing would be lost by simply saying that there are groups of people whose interests lie between labour and capital and leaving it at that. Claiming that these people form a single 'class' is a way of creating the impression that an explanation was given where none in fact is forthcoming.

If Poulantzas were correct, however, and both the 'new' and the 'old' petty bourgeoisie were part of the single class, what would this imply in terms of our discussion above?

Recall that we have said that a polarised, two-class view is inherent in the concept of the mode of production. It is precisely Poulantzas himself who makes a distinction between such abstract description of the society and more realistic *social formation*, in which several different modes of production are combined. As he writes, this does not mean that we can simply mechanically 'add up' the various classes of the abstract MoPs when considering a social formation. Instead, "on the one hand, their very existence [i. e. the very existence of classes] is affected by the concrete struggle that takes place within the social formation, and it is here in particular that we find the phenomenon of the polarization of other classes and class fractions around the two basic classes. (...) On the other hand, the classes of one social formation only exist in the

context of the relations of this formation with other social formations, hence of the class relations of this formation with other social formations." (Poulantzas 1975a, p. 23)¹²

This implies two things. In the first place, a social formation cannot be understood by a mechanical combination of the prior analyses of the various modes of production. And secondly, it is only at the level of the social formation that the existence of classes can really be understood.

Indeed, that is exactly what Poulantzas says in so many words:

"If we confine ourselves to modes of production alone, we find that each of them involves two classes present in their full economic, political and ideological determination — the exploiting class, which is politically and ideologically dominant, and the exploited class, which is politically and ideologically dominated: masters and slaves in the slave mode of production, lords and serfs in the feudal mode of production, bourgeois and workers in the capitalist mode of production. But a concrete society (a social formation) involves more than two classes, in so far as it is composed of various modes and forms of production. No social formation involves only two classes, but the two fundamental classes of any social formation are those of the dominant mode of production in that formation." (Poulantzas 1975a, p. 22)

At the abstract methodological level, these two points may be unobjectionable. And there is a sense in which the approach Poulantzas actually pursues in his analysis of the 'new petty bourgeoisie' is entirely consistent with them. Nevertheless, I would like to argue that there are two fatal weaknesses which undermines his particular application of this abstract methodology.

The first point is that according to this methodology, it is the non-mechanical combination of the various modes of production that allows for the emergence of some classes, or parts of the classes. Yet, there is nothing about the

¹² As the quote goes on to make clear, this latter point concerns phenomena such as imperialism, i. e. roughly speaking the way in which *inter-state* relations affect the respective domestic social structures.

'addition' of Simple Commodity Production to capitalism that would compel the creation of the 'new petty bourgeoisie'. Poulantzas describes no mechanism whereby the fact that small-scale production induces the separation of the wage-earning class into the 'new petty bourgeoisie' and the proletariat. Yet it is precisely this that would have to happen if it was due to the co-existence of the various modes of production that the 'new petty bourgeoisie' came to existence. Otherwise the existence of the 'new petty bourgeoisie' is not due to the existence of the additional mode of production, and this 'new petty bourgeoisie' turns out to be in fact an organic part of the capitalist mode of production itself. In order to reject this option, we would have to believe that if it came to pass that the 'old' petty bourgeoisie were to completely disappear, and the social formation would thereby be reduced to the pure capitalist mode of production, the new petty bourgeoisie would have disappeared as well.

But why should we believe that? What is the necessary connection between the existence of the small shop-keeper on the one hand, and the technician, the middle manager, the state bureaucrat on the other? There is none.

Of course, there is always 'the struggle'. Since within the Poulantzanian universe, the political and the ideological dimensions always matter, it might be claimed that the existence of the 'old' petty bourgeoisie does not cause the appearance of the structural positions of the technician, the middle manager or the state bureaucrat; but that it *does* induce the common ideological and political attitudes towards the bourgeoisie and the proletariat.

Now this is actually where the second fatal weakness becomes clear. It appears *prima facie* that for Poulantzas, 'struggle is everything': classes do not exist outside of it, or to put it in an apparently paradoxical way, class struggle exists before classes do. In this respect, the Althusserian Poulantzas is at one with the prominent anti-Althusserian E. P. Thompson, who put the same point in this way:

"[T]he notion of class entails the notion of historical relationship. (...) Moreover, we cannot have two distinct classes, each with an independent being, and then bring them *into* relationship with each other. We cannot have love without lovers, nor deference without squires and labourers. And class happens when some men, as a result of common experiences (inherited or shared) feel and articulate the identity of their interests as between themselves, and as against other men whose interests are different from (and usually opposed to) theirs." (Thompson 1972, pp. 9-10)

This understanding of classes is commonly taken to be the major difference between the Marxist viewpoints and those of the Weberian 'stratification theories' 13

But while this is a plausible claim, it is important to realise just why the struggle is so important for Marxism. In the first place, class struggle must necessarily be understood as systematic. It is not that classes 'happen to' be in a conflict; there is a fundamental conflict of interest between them, a defining conflict. But although this is important, it is not enough for a Marxist understanding. For such a general claim would equally apply to an 'anarchist' or a 'Dahrendorfian' reading of conflict, subject only to an additional postulation that 'people love freedom', or in other words that autonomy tends to be preferable to authority. Then there would be a systematic conflict between the ruling and the ruled, the commanding and the obeying—and yet, this would not in itself be a class conflict. An army is an authoritarian institution with many levels of obedience; yet even if the supposition of the generally freedom-loving human nature were true, while these levels of obedience would represent conflict groups, they would not thereby become Marxian classes.

No – the systematic conflict that Marxism talks about is rooted in the material reproduction of the human life; it is the conflict represented by the exploitative relationship. That is why the 'struggle' that creates classes is in the first place 'economic', in the sense of concerning the parameters of the

¹³ A point often stressed by Erik Olin Wright, e. g. Wright (2005b).

exploitative relationship: how much will the exploiters be able to get away with, under what conditions will the exploited have to provide the surplus? Only secondarily, once the consciousness of the conflict becomes sufficiently developed, can we talk about the *political* level of the conflict, where the very existence of the exploitative relationship is called into question, and thus the issue of the political order comes on the agenda.

Now the difficulty with Poulantzas is that he takes this second, more sophisticated level of conflict as definitive; or more precisely, that he conflates the two kinds of class conflict into one. Thus, the class struggle between the bourgeoisie and the proletariat arises because of the fundamental exploitative relationship. Hence, it is a conflict relating to the extraction of the surplus from the exploited. Now, there is no reason why at the very least the 'productive mental workers' should have any interests fundamentally opposed to those of the proletariat at this level; the exploitative relationships applies to all productive workers. (At least Poulantzas has given us no reason to think otherwise.) Moreover, it is highly questionable why even the 'unproductive' workers should be anything but neutral at this point, rather than being opposed to the putative proletarians. It is *only* once we move to the level of the *political* struggle, the class struggle for power, that any significant differences of interest are plausible. But this is a weak reason for differentiating classes. For then the distinction between the 'new petty bourgeoisie' and the proletariat seems to turn on the intensity of this political conflict – and that is quite obviously a matter of a particular historical conjuncture rather than the characteristic of the social formation as a whole. Are we to deduce that just because at present, there is no longer any significant political force pushing for the fundamental change of the social structure in the Western countries, that there is now no 'new petty bourgeoisie? This would seem a strange sort of conclusion indeed!

Instead, it seems to me that the sort of conflict that is definitive of classes is more fundamental, and turns precisely on the question of exploitation. It is the struggle that directly emanates from the exploitative relationship that turns

the exploiters and the exploited into separate classes. What happens in the various stages of that struggle may be very important and interesting, but cannot affect the basic social structure defined by the mode of production, or by the several modes of production combined into a social formation.

Thus Poulantzas' understanding of the struggle which creates classes is in my view seriously faulty. However, even if we *did* accept this understanding, his procedure of identifying 'new petty bourgeoisie' as the product of the capitalist social formation would not be saved. Recall that the claim would have to be made to the effect that it is the existence of the 'old' petty bourgeoisie that induces the conflictual position of the petty bourgeoisie as a whole. In other words, that the existence of 'old petty bourgeoisie' induces the conflictual position for its 'new' part as well – that this is the way in which the presence of Simple Commodity Production makes a difference within the capitalist social formation.

But such a claim, were it to be made, is scarcely believable. If we do define classes on the basis of their systematic conflicts with other classes, then the existence of the 'old' petty bourgeoisie makes no difference at all to the existence of the 'new' one. The conflicts that Poulantzas identifies as arising, on the one hand, between the bourgeoisie vis-à-vis the petty bourgeoisie, and on the other hand between the petty bourgeoisie vis-à-vis the proletariat, would be just as prominent for the 'middle class' wage-earners quite regardless of whether the small shopkeepers and the artisans existed or not. Perhaps we might want to claim that it is precisely the 'old' petty bourgeoisie that is somehow structurally needed to formulate the ideological and the political position of the middle class. But such a claim would hardly make sense, at least prima facie: the 'old' petty bourgeoisie is defined primarily by its relation to its means of production, whereas the 'new' is defined by either being unproductive wage-labourers, or by falling on the side of 'mental' labour. However different this concept of 'mental labour' is from a purely technocratic one, it is clear that if any group has a claim

to be necessary for the creation of ideology and political attitude, it is much more likely to be the 'new' rather than the 'old' petty bourgeoisie.

In other words, I am presenting the conclusion that even if the right level of abstraction for the conceptualisation of classes is the social formation, Poulantzas does not show Simple Commodity Production should make any difference. He does not show why the particular capitalist social formation that includes Simple Commodity Production gives rise to the existence of the 'new petty bourgeoisie'. On the contrary, all the criteria he applies to separate out the proletariat and the 'new petty bourgeoisie' could be used whether the 'old' petty bourgeoisie were present or not. If these criteria are correct, then contrary to Marx and to Poulantzas' own claims, the new petty bourgeoisie is an organic part of the capitalist mode of production itself — quite regardless of whether other modes of production are present or not.

This is not accidental. We have here the first example of the theorist who, in trying to devise a more realistic map of the class relations within capitalism, harks back to the same idea with which Marx had originally started - namely, the division-of-labour concept of class. This fact might not be immediately obvious, given all the talk about the struggle that Poulantzas makes. However, once it is realised that this concerns only the second of the two problems at hand, namely the problem of identification of the wage-earning 'middle classes' with petty bourgeoisie, it is possible to bracket these references and concentrate exclusively on the characteristics which, according to Poulantzas, divide these agents from workers. Then it is possible to see clearly that the way the 'new petty bourgeoisie' is actually defined refers exclusively to division-of-labour distinctions. For if we consider the various criteria that Poulantzas gives for excluding groups of wage-earners from the working class, we see clearly that they all refer, explicitly or implicitly, to the kind of activity performed. Economic ownership and possession, mental and manual labour, and in Poulantzas' own formulation even productive and unproductive labour – all these distinctions turn on what is being done by the agents in question, be it the activity of control

over investments, direct physical supervision of production, activities involving 'secret' knowledge, activities without such knowledge, direct material production or non-material activities. There is no way we can make these distinctions without referring to the actual 'doings'. But then there is no way we can identify the Poulantzian classes without also referring to the types of activity performed. Which, of course, is precisely the hallmark of the division-of-labour approaches to the question of class.

My conclusions regarding Poulantzas are for the most part negative, but still significant. I would locate the crux of the many difficulties that I have been pointing out in the dogmatic decision to reject any innovation to the traditional conception of classes as being based purely on the two-place relation of exploitation. As I have argued, this in reality proved to be an untenable position for Poulantzas anyway, since in the process of describing the 'new petty bourgeoisie', in the end he still fell back on the division-of-labour concept of classes. However, due to the dogmatic decision at the beginning he was forced to do this in an *ad hoc* and unsatisfactory way. In fact, there seems to be a relation between keeping to the orthodox views on the one hand and the *ad hoc* feel that permeates much of Poulantzas' work: without seriously examining the basic assumptions, there really is no other way to justify his views other than relying on *ad hoc* modifications.

The moral, then, is clear: second-order modifications will not do; what is necessary in a successful model of classes for today's world is to deal with the very basic Marxian concepts themselves.

Wright: Contradictory Class Locations

Erik Olin Wright's most famous innovation is the concept of 'contradictory class locations'. These locations are contradictory because people in them find themselves with contradictory interests – not just apparently, but *objectively* so.

Thus, the change Wright brings into thinking about classes can be explained as follows: the implicit understanding of classes seemed to have been something close to 'equivalence classes' in mathematics — the usual unstated assumption was that society is divided into classes neatly, with no overlaps and no leftovers, with everybody belonging to exactly one class. The boundaries of classes were thought to be at least conceptually clear-cut.

This seems to make sense, if classes are meant to be based on mutual conflict. And Wright, just like Poulantzas, does indeed put great stress on the role of conflict in the Marxian theories. It is one of the recurrent themes of his work that the difference between a Marxian theory and the theories of stratification lies precisely in the fact that for Marxists, classes are strictly relational categories; they are groups with antagonistic interests. No such consequence follows from the stratification theories, which divide society into layers completely independently of whether there are any particular relations between them, much less relations of conflict. Thus, although it may be a consequence of the Marxist theory that there is e. g. a stratification of incomes in a capitalist society – and perhaps there should be such a consequence, if this is the empirical reality which the theory is trying to capture – this is not a defining characteristic of classes, which would exist even if a re-distributive action by the state acted to reduce the differences in incomes.

Wright's major innovation is to keep this conflictual definition of classes, but at the same time to turn them into sets that can overlap. People who find themselves in the intersections of these sets thus have two opposing interests at the same time.

This conceptual innovation is remarkably persistent in Wright's writings. However, to concentrate too much on it (as is often done) would be to miss the much larger shifts that have occurred several times in Wright's thinking. While 'contradictory class locations' are indeed important in that development, it is necessary to bear in mind the context and the consequences of the particular way in which they are theorised, as will soon become clear.

The Initial Formulation: Scope of Control

Wright's initial formulation of the concept of contradictory was quite clearly based on an underlying division of labour conception. The reasons he offered for the emergence of contradictory relations with the contradictory relations of class were the loss of control over the labour process by workers, the differentiation of the functions of capital, and the development of complex hierarchies (Wright 1978, pp. 64-74). While these developments refer to quite different aspects of the overall social reproductive activity, it is quite clear that they all crucially depend on the gradual differentiation of tasks and increased specialisation. Taking the reasons described in turn: the loss of control over the labour process by workers, as conceived by Marxism, means that such control comes to be exercised by someone else, in early capitalism in particular by the capitalist class; this becomes one of the functions that is inherent in capital understood as a social relation. However, as capitalism develops beyond the bounds that were still operative in Marx's time, these functions become differentiated and attach themselves to different structural positions: as mentioned above, no longer is the entrepreneur, the financier, the manager, the supervisor etc. united in the single person of the capitalist. This is what Wright refers to as the differentiation of the functions of capital, and in his initial discussion (Wright 1978), this is still conceived in essentially Poulantzanian terms, discussing both the gradual differentiation of economic ownership and possession and the partial dissociation between legal and economic ownership. It is clear that regardless of whether the functional differentiation of capital is conceived with the help of these particular distinctions or whether a more finegrained analysis is employed, the upshot is that structural positions are identified on the basis of the kind of activity routinely attached to them. Actually, Wright discusses such a more refined sort of analysis under the heading of the development of complex hierarchies, whereby the various dimensions of the capital functions are further internally differentiated. As a result, of course, what

really arises is a fairly complex description of activities undertaken within the modern capitalism – that is, a description based on the division of labour.

The way Wright characterises this division of labour is in terms of *control*: control over the physical means of production, control over labour-power, and control over investments (Wright 1978, p. 73). Because such control is of course a matter of degree, this allows the conceptualisation of the 'contradictory class locations'. The 'proper' classes are theorised as those positions within the overall productive activity that are characterised by a combination of 'full' or 'zero' control along the different dimensions. Contradictory class locations are those which include *fractional* control along one or more dimensions – that is, 'partial' or 'minimal' control.

Given that Wright includes the petty bourgeoisie as one of the three 'basic' classes, it seems that he is talking about a combination of various modes of production, i. e. a social formation. This would mean that just like Poulantzas, he involves both the division-of-labour and the many-modes-of-production as parts of the solution to the problem of the 'middle classes'. However, this impression is mistaken. The concept of the mode of production actually plays no role at all in the characterisation. All three 'basic' classes — bourgeoisie, proletariat and the petty bourgeoisie — are described solely by using the dimensions of control described above. It follows that the concept of the mode of production, or equivalently of exploitation, does no work in Wright's initial characterisation; it is entirely redundant. We would not need to know anything about exploitative relations, and we could still identify the three basic classes and the contradictory locations using just Wright's dimensions of control. The division-of-labour concept of classes thus entirely displaces exploitation as the basis for the class relation in Wright's initial formulation of his theory.

A Re-Formulation: Multiple Exploitations

Now it is precisely this fact that Wright came to consider a problem for his conceptualisation. In his *Classes* (1985), he characterises his earlier conception as

at bottom resting on the notion of domination rather than exploitation (Wright 1985, p. 56). As he realises, "[t]his would lead class analysis firmly in the direction of Dahrendorf's analysis of classes as positions within authority relations" (Wright 1985, p. 57), an outcome Wright as a self-conscious Marxist is keen to avoid. Note that the subjunctive is entirely appropriate here: Wright's conception would lead to such an outcome, but it is not yet identical with it. For unlike Wright's conception, the Dahrendorfian conception of classes is not limited to production (unless we extend the concept of production to all activities undertaken through a hierarchical sort of organisation). Thus, Wright's conception overlaps with Dahrendorf's, rather than being coextensive with it; in Wright's theory, authority relations are a token of the more general characterisation of Wright's conception, which is that it is a division-of-labour concept of classes.

The approach that Wright adopts in *Classes* (1985) is to keep the explanation of 'middle classes' in terms of contradictory class locations, while changing the sphere of relevant contradictions from domination to exploitation. Wright himself describes this second approach as follows: "the basic strategy I adopted for moving from the abstract to the concrete is to see concrete class structures as consisting of *different combinations of class relations* within abstract class structure concepts. Thus, for example, we can abstractly define the class relations of capitalism and feudalism and then describe a concrete class structure as a particular form of combination of these abstractly defined relations." (Wright 1989b, p. 277; emphasis added)

What this implies in terms of our discussion should be clear. It represents a move away from the division-of-labour solution towards the many-modes-of-production solution. For if we accept, as Marxists commonly do, that the type of exploitation is definitive of a mode of production, then multiple types of exploitation represent multiple modes of production. Thus, Wright effectively admits that classes are really only defined at the social formation level of abstraction, rather than at the mode of production one. Unlike Poulantzas,

though, Wright in his second conceptualisation of the contradictory class positions applies this solution consistently. Both the *demarcation* and the *identification* of the 'middle classes' are achieved in one fell swoop, by construction: the 'middle classes' are defined as the locus of those who are at the same time exploited and exploiters, thereby establishing the dividing line from other wage-earners, which at the same time provides the means of their identification as the occupiers of contradictory locations.

However, for this solution to work, a concept of exploitation is needed which allows a single person to be a participant in multiple exploitative relationships at the same time. This is extraordinarily difficult, if the positions selected as the contradictory ones are to largely coincide with those that the earlier, division-of-labour concept designated as such. Not every kind of contradictory positions will do for that purpose. It is not enough, for example, to be a 'part-time' exploiter and a 'part-time' exploited. For example, we can envisage a relatively well-off farmer in a poor rural environment, who can afford to employ and does in fact seasonally employ a number of labourers to work on his fields and to help with the harvest. Nevertheless, while the farmer is relatively rich compared to his neighbours, he still nevertheless cannot afford all the industrial products he needs simply from the proceeds of his agricultural activity - and thus he is forced to spend a few months during wintertime working in a factory. Such a person might represent a problem for the Marxist theory, in that he is neither an exploiter nor an exploited consistently; but this is a different problem from the one of the wage-earning 'middle classes'. This is simply a combination of two different class positions, rather than a single contradictory position. Nor is it enough to require that the contradictory exploitative relations occur 'at the same time', as it were. This would the case for a worker who happens to own some shares in a corporation (whether their own or another one makes no difference). Such a worker might of course have contradictory interests, in a sense. But although their position may in the real life appear to be a 'middle class' one, in case sufficient income is generated from

these shares, it is not really this sort of position that was problematic to begin with. ¹⁴ There is nothing preventing a wage-earner from being at the same time a capitalist in this sense; earlier Marxists might want to deny that such a stratum is historically significant, or to argue that the development of capitalism leads away from the possibility that such a stratum is stable or increasing. But conceptually there is nothing very difficult about its existence. The problematic strata are those wage-earners who do *not prima facie* appear to be capitalists in this straightforward way, due to the fact they are *not* owners of capital in an obvious sense – and yet on the immediate naïve view seem to be 'middle class'.

The concept of exploitation that Wright uses for his purposes originates with John Roemer. In my view, this is not accidental.

It is, of course, possible to use the original Marxian conception to define multiple, mutually overlapping types of exploitation (in fact, two such cases have just been described). Recall that according to that notion, exploitation is the appropriation of surplus labour. As I have just pointed out, the relevant problematic positions are the ones that involve wage-earning activities. It could be said that these positions are associated with distinct periods of exploiting and being exploited. This would be closer to the kind of intermittent exploitation described above than to a genuine contradiction, however. Moreover, it does not really seem possible to actually distinguish such periods on a principled basis, at least not as far as the vast majority of 'middle class' positions are concerned.

The alternative, then, is to consider the wage-earning activity itself simply as labour. Then all wage-earners are *prima facie* exploiters or exploited, depending on whether they are consuming goods embodying more labour time than they have given in, or vice versa. However, we could treat the magnitude of their surplus labour – positive or negative – as notional *net* surplus labour. Thus, the candidates for the contradictory class positions would be those who,

¹⁴ Although such a type of contradictory class location can also be identified, and indeed has been identified by Wright at a later stage (Wright 2005b, p. 17).

¹⁵ Such a view has been proposed by Carchedi (1977) and will be criticised below.

regardless of this net result, notionally *first* provide their own surplus labour, as it were, and *then* appropriate surplus labour of others.

This is not a straightforward notion, but perhaps we could try to make sense of it by explaining that the 'contradictories' are exploited vis-à-vis the capitalist employer, while at the same time somehow exploiting others. This effectively means that 'contradictories' belong to two different, albeit overlapping, modes of production.

While already at this point the conception strains credibility, we have not yet arrived at its greatest difficulty. This is that if the notion described is to work, we must be able to describe two independent ways of appropriating surplus labour – two mechanisms which are capable of functioning *independently* of each other. Otherwise there is no real sense in which the 'contradictories' both provide and appropriate surplus labour; no 'netting' of it actually occurs, and the whole description is just a meaningless game of mental accounting. Unless we can really say that the two amounts of surplus labour are somehow embedded in *different* exploitative relations, we cannot really identify the two different quantities in the first place – other than by arbitrary assignment.

Now, postulating such different exploitative mechanisms within what appears to be a straightforwardly capitalist relationship is in itself hard to imagine. But suppose it were possible: that just means we face the other horn of the dilemma. If the two forms of exploitation are really independent of each other, then this description of mutually overlapping modes of production is just that — a description of *overlapping* modes of exploitation. There is no inherent contradiction of the relevant sort involved here. The supposed contradictories do have different sorts of interests — but vis-à-vis groups that are mutually independent. There is no reason why these supposedly 'contradictory' interests could not be happily satisfied at the same time, as they depend on separate mechanisms. The supposed contradiction evaporates.

¹⁶ Perhaps we could say there is a *moral* contradiction, but this has nothing to do with contradictory *material interests*.

Thus, if we used the original, Marxian labour-transfer approach to exploitation, the 'contradictory class locations' would collapse into a straightforward many-modes-of-production notion. Straightforward in the abstract, of course; as pointed out above, it is very difficult to see how what mechanism we could invoke that would be different from the capitalist one, while co-existing with it in the guise of the wage-labour relationship.

Thus, it is not surprising that it was only after the alternative Roemerian notion of exploitation came into existence that the re-formulation of Wright's theory in terms of exploitation could occur. We shall have an opportunity to discuss Roemer's concept of exploitation later on in detail. Here, let me just anticipate by using one of the issues in this discussion to explain why Roemer's conception 'succeeds' where Marx's 'fails': the Roemerian notion of exploitation is not a relation. Wright does amend it in such a way that it does become one, admittedly. However, the resulting definition is precisely of the sort that allows Wright to have his cake and eat it, too: there is enough of a relation to bind the various strata together, but it is not this which then defines the 'contradiction'. The contradictoriness of the contradictory class positions is thus still an illusion: where the strata are related, they are not related in a contradictory way; and where contradiction is postulated, no relation between them is actually specified.

Let us now look at Wright's reformulation in detail, in order to substantiate these claims as well as to bring out its other relevant features. The definition of exploitation in the Roemerian approach used by Wright is a 'property rights' one, or alternatively a 'game-theoretic' one. According to this definition, a coalition S of agents from a society N is exploited if these two conditions are satisfied:

[&]quot;(1). There is an alternative, which we may conceive of as hypothetically feasible, in which S would be better off than in its present situation.

^{(2).} Under this alternative, the complement to S, the coalition N - S = S', would be worse off than at present." (Roemer *GTEC*, p. 194).

We also need to append at least one further condition – to rule out cases in which there is no interaction between the two coalitions, for example. Roemer discusses a 'dominance' condition in order to do this – the requirement that the coalition S' dominates S. Even so, as it stands this is a definition-schema rather than a definition. What we need is some way of specifying the 'hypothetically feasible alternative', which can be done in 'silly' or 'interesting' ways. ¹⁷ In his original formulation, Roemer interprets the feasible alternatives as a 'withdrawal' of a given group from society with some share of productive assets (broadly speaking), including land, capital goods, or skills.

Wright departs from Roemer's approach in two ways: first, in what are considered the relevant hypothetical alternatives, and second, in appending an additional condition to the definition-schema, requiring that the exploited appropriate the fruits of labour of the exploited (Wright 1985, p. 74). Without this additional condition, Wright argues, Roemer's criteria define only 'economic oppression', but not exploitation. Thus, for example, the unemployed are economically oppressed rather than exploited, since if they withdrew from the society (presumably with their per capita stock of capital?), they would become better off; however, they cannot be said to be exploited, since they do not transfer any labour to anyone. It is at this precise point that the Roemer-style definition changes from a non-relation to a relation.

Exploitation vs. Economic Oppression

But why be interested in exploitation rather than economic oppression anyway? Wright argues that an exploitative relationship differs from pure economic oppression because it is something like a dialectical unity – while the exploiters have antagonistic interests to the exploited, they are also bound to them in a way in which the pure oppressors are not. The exploiters *need* the exploited, whereas the oppressors "would not be hurt if all of the oppressed

¹⁷ Roemer *GTEC*, p. 197

simply disappeared or died" (Wright 1985, p. 75). Let me pause here to note that while there is some truth in this argument, which Wright used to defend the importance of the concept of exploitation also in later writings (Wright 2005b), it is not generally valid. It assumes that the only way in which a group of people may serve to make another group of people 'better off' is by supplying labour. But that is clearly false, as can be demonstrated precisely on the paradigm case of the unemployed.

The unemployed, on the very traditional Marxian grounds, serve a very important purpose for the capitalist class. And if they disappeared, it is by no means certain that this class would not be hurt — on the contrary, we have good grounds to deduce the opposite. It is certainly true that the capitalist taxpayers would much prefer to *not have to finance the unemployment benefits*¹⁸. But this is a very different statement from saying that they would prefer *for the unemployed not to exist*.

The difference comes out clearly from Marx's discussion of the 'reserve army of labour'. If it is true to say that the existence of the unemployed pushes down the wages of the employed workers, then there is an obvious reason why the first statement might be true and at the same time the second would be false. The higher are the unemployment benefits, the less punishing is the threat of unemployment, and hence the higher is the wage which the workers can negotiate with the bosses. So lowering the unemployment benefits has a clearly beneficial effect for the capitalists. However, the *disappearance* of the unemployed would convert the situation to one of *full employment* — i. e., suddenly the bargaining position of the workers would not be weakened, but on the contrary, massively strengthened. This is *not* what the capitalists would devoutly wish for.

I think the mistake Wrightsaythat makes here is that he uses the fully abstract two-place exploitation relationship in a connection where the abstraction is too great and bound to lead us astray. In particular, what the example shows, in my opinion, is that for the exploitative relationship to exist,

¹⁸ Absent unpleasant consequences, such as an increase in crime.

various conditions have to be satisfied, and this may mean that various functional roles may need to be fulfilled – roles which correspond neither to the position of the exploited nor the exploiter. In the case discussed, while surplus labour is not being extracted from the unemployed, their existence is an important contributory factor to the possibility of its extraction. I believe this sort of functional considerations is very important, when it comes to trying to come up with a more precise picture of the class structure of today's capitalist social formation.

Wright's Kinds of Exploitation

Let me now return to Wright's first correction of Roemer, that concerning the formulation of alternatives. Instead of Roemer's counterfactuals, which will be examined below, Wright proposes his own, which correspond to the feudal, the capitalist, the 'statist' and the socialist exploitation respectively. One reason for the change is to describe the rules of withdrawal consistently as leaving with a per capita share of the relevant assets, in contrast to Roemer's varying postulations.

Feudal exploitation is caused by the differential ownership of labour-power: feudal bondage is described as partial ownership of other people's labour-power. Thus, feudal lords effectively own more than one unit, while the serfs own less. If the serfs withdrew with their per capita share of labour-power, they would be better off. Capitalist exploitation, in contrast, is caused in the familiar way by the differential ownership of the material means of production, and need not concern us here.

Organisation exploitation, the way Wright understands it, is an attempt to capture the class position of the managerial strata using the Roemerian concept. Wright argues that aside from labour-power, the material means of production, and skills, there is a factor of production which he terms 'organisation'. The idea is that aside from all these separate elements, there is some contribution to the output made by the way in which they are put together. This is the organisation,

and differential access to it can be made a basis of exploitation. Since managers have privileged access to this 'good', they are beneficiaries of this sort of exploitation.

Finally skills exploitation is based on the differential ownership of skills, due to either an unequal distribution of natural talents, or to the artificial restriction of the supply of 'ratified' skills, which turns this into a *credentials* exploitation. The point is that the owners of these naturally or artificially rare skills appropriate *rents*, in other words incomes above the value of their own production.

Note that, as Wright admits, it is impossible to really talk about withdrawals with the per capita share of organisation or skills. Instead, the counterfactual must be understood in terms of an analogy; what the redistribution of 'ownership rights in organisation' means is democratisation of control (Wright 1985, p. 84), while regarding skills, such re-distribution means that no-one is appropriating higher incomes simply on the basis of skills (Wright 1985, p. 84).

Exploitation and Domination

Guglielmo Carchedi criticised Wright for allegedly using a non-Marxist notion of exploitation (Carchedi 1989), since as he says, Wright writes about exploitation that it is "an economically oppresive appropriation of the fruits of the labor of one class by another" (Wright 1985, p. 77) As against this, Carchedi quotes Lucio Colletti: "In other words, (...) capitalist appropriation is not exclusively or primarily and appropriation of things, but rather an appropriation of subjectivity, of working energy itself, of the physical and intellectual powers of man." (Carchedi 1989, p. 108). This is actually a fundamental point of disagreement. Wright is consciously or unconsciously echoing the writings of John Roemer, on whose game-theoretic notion of exploitation Wright's later work (Wright 1985) is based.

Both Roemer and Wright perceive exploitation purely in terms of *consumption*. Issues such as domination within the labour process, or the appropriation of the surplus time, seem to be entirely irrelevant for them. As a matter of fact, Roemer repeatedly argued that 'petty domination' occurring within the labour process is not at all essential for capitalist exploitation (see Roemer 1982, pp. 93-94; Roemer 2008).

The relation between domination and exploitation is, in my opinion, one of the crucial issues in the discussion of class. There is no getting away from the fact that the issue of classes is not simply the one of poverty, or more generally consumption inequality – both of which could be ascribed to exploitation – but also of *oppression*. The precise nature of that oppression and the precise way in which it is related to exploitation is something to be clarified; but it is clear that an exclusive focus on consumption is not going to help with this clarification. We shall have more to say about this issue in further chapters.

Are Multiple Exploitations Contradictory?

Above, we have already alluded to a different problem with Wright's account. Recall that from the discussion of the Marxian notion of exploitation, we concluded that it is not really possible to derive *contradictory* class locations on its basis. All we can achieve using that concept is to characterise some individuals as being party to *multiple* exploitative relationships, without however the relevant sort of contradiction arising.

Now, the argument can actually be generalised. For its essence is simply this: if someone is to be exploited and an exploiter at the same time, it has to be the case that they are party to (at least) two different, mutually independent exploitative mechanisms — unless, that is, it is possible to specify a *three-place* (or even more) exploitation relation. Since no such notion has been suggested as yet and on the first glance does not even seem to make sense, multiple modes of exploitation are unavoidable. However, once we grant this conclusion, there is no way that we can get *contradictory interests* arising from such multiply-determined positions. For if the

two mechanisms of exploitation are independent, there is nothing that forces their occupants to entertain mutually contradictory wishes: from independent mechanisms, independent interests arise. Thus, the multiple modes of exploitation cannot really be used to underpin the notion of the contradictory class relations. And as none of the links in the argument use the notion of the transfer of labour, this line of reasoning applies just as much to the Roemerian notion of class as it does to Marxian.

Whence then the impression that contradictory class positions can in fact by supported by recourse to Roemer? I would like to argue that the reason lies in the fact that the Roemerian notion, as amended by Wright, comes in two parts. The first part is Roemer's own counterfactual criterion for assigning the terms 'exploited' and 'exploiters'. This part, as has already been suggested, does not specify any relation between the two groups. Such a relation is supplied by Wright's addition, namely the criterion of the transfer of the (product of) labour.

Wright in his *Classes* (1985) never actually spells out the way in which he uses the combined criterion – he asserts that some positions are both exploiters and the exploited, but does not show how the conditions demanded by the criterion are fulfilled. This is exactly why the impression arises that the positions are actually contradictory. What happens is that the labour-transfer criterion appears to tie all the supposed contradictory class locations as well as the working class to the capitalist. This is why it seems that on the one hand, a) they are all exploited and b) they all are part of the single relation. On the other hand, the status of these 'middle strata' as exploiters is determined solely on the basis of the Roemerian counterfactuals. For although Wright wants to say that these exploiters appropriate the fruits of other people's labour, the most he really achieves is showing that they earn more than the value of their labour-power¹⁹. Because of course, no way in which a labour transfer to these putative exploiters

¹⁹ This point – that the newly-proposed kinds of exploitation really only amount to the *lessening* of exploitation – will be further considered below.

occurs is specified. Nor can it be, since in order to exploit the working class, there would have to be a separate relation between that class and the occupants of the contradictory class positions, distinct from the capitalist wage-labour relation. And surely enough, Wright does not postulate any such relation.

Thus, it is the inconsistent application of the two-part criterion that allows Wright to have his cake and eat it, too. Thanks to this inconsistent application, it appears as though there was only *one* relation tying all the various strata together, thereby ensuring that there will be a genuine contradiction, but at the same time it seems that there are *multiple* relations, which ensure that some people can be exploiters and exploited at the same time.

As a concrete example, let us take the contradictory position involving the organisation exploitation. The managers are in the position of the exploited on the conventional grounds that they supply the surplus labour to the capitalist – this is the labour-transfer part. ²⁰ But they are *exploiters* on the grounds that if the asset they 'own' were re-distributed, or in other words, if the organisational structure were democratised, they would be worse off. It is not shown that anyone transfers their labour to them, nor how this is done independently of the capitalist mode of exploitation. In other words, the managers are exploiters on the original Roemerian grounds alone. It is not and cannot be suggested by Wright that they also appropriate someone else's labour by a mechanism different from the capitalist wage-labour. If it were, then our argument against contradiction would apply, and such people would be party to multiple modes of exploitation without any contradiction in their own interests.

I think that Wright was nevertheless on the right track when he appended his 'labour-transfer' condition to Roemer's definition of exploitation – even though I believe that this inadvertently defeats the whole point of Roemer's game-theoretical approach. As I shall argue below, that point was to try to *avoid*

²⁰ They might also be exploited on Roemerian grounds, but that is irrelevant, since Roemer's notion is not relational and therefore by definition would not specify the relation required.

at all costs the bothersome notions involving labour and labour transfers; as I shall also argue, this was misguided.

Wright's Self-Criticisms

On the basis of his conception of exploitation Wright proceeds to identify classes and contradictory class positions. However, he also describes unresolved problems, some of which in fact later on (Wright 1989) led him to draw back from this conceptualisation.

Two of these problems are significant, in my opinion: the organisation exploitation and the skills/credentials exploitation.

First, Wright worries that there may not be any such thing as 'organisation exploitation'. 'Exploitative' incomes of the managers may be due to their special 'managerial skill'; or they may be the result of the strategic nature of their jobs, which are difficult to monitor yet essential for good running of the organisation, and hence attract large rewards. In the later writings, Wright (1989) adds another worry that finally put paid to the notion of organisation exploitation and hence the contradictory class location that was based on it. Wright's theory leads to an expectation that their particular form of exploitation would lead the exploiters to favour the social formation in which that form of exploitation was dominant. Yet, capitalist managers seemed to be little enamoured by the 'state bureaucratic socialism', or 'statism', which according to Wright's theory was the social formation based on the organisation exploitation.

This objection is indeed significant. However, there is always the possibility that Wright simply misidentified the exploitation mechanism of 'statism', which might have nothing to do with organisation exploitation as conceived by him. However, there is an independent reason why the notion of organisation exploitation is deeply suspect, and which again comes from the thinking based on the Sraffian input-output surplus economics.

Wright claims that 'organisation' is a factor of production in addition to labour, the material means of production (to which should be added raw

materials). There is an obvious intuitive sense in which this is true: a crowd of workers standing beside an assortment of machinery and raw materials is not production – in fact, it sounds quite like the description of a strike, i. e. the *stoppage* of production. Furthermore, it is clear that the value of a functioning capitalist firm is greater than the sum of the values of its individual material capital assets and the wage bill (even if we do not take the stock market valuation as the relevant measure of value). Despite all that, it is nevertheless questionable to what extent the organisation of production can be conceptualised as a productive *resource* in its own right.

To begin with the last point: clearly, a functioning firm involves on the one hand certain types of 'know-how', organisational in the wider sense including both the structures of relations between people and the technology; and on the other hand the work of organisation — 'putting the knowledge into practice'. Now there is no reason, at least within Wright's framework, why we should consider such work anything other than type of labour. Thus the only candidate for the productive resource is the organisational knowledge involved. But while such knowledge can attract a scarcity premium, both because of artificial scarcity cause by the proprietary defensive measures (patents, secrecy etc.) and because of its partially 'subjective' and 'localised' nature (see e. g. Hayek 1945), i. e. its embodiment within particular individuals which prevents its wide dissemination, this still does not imply that it is actually a productive resource.

In fact, within the Sraffian input-output economics, where knowledge is implicitly treated as a public good, there is neither a price tag nor a particular factor of production called 'knowledge'. Production processes are here characterised by their inputs and outputs; but no more sophisticated description of technology is required. In a world described by Sraffa, individual firms might exist; yet their value would be no different from the sum of value of their assets. This is because the value of these assets is *itself* determined (partially) by the prevailing technology. In other words, things are valuable depending on how they are being used. But if this is so, then putting a price tag on technology

separately, aside from the very inputs that define it, amounts to an instance of double-counting. If we take everything that goes into production and that comes out of it into account, and if we abstract from artificial and natural barriers to knowledge production (attracting rents), then there is nothing more to be talked about; the technology/knowledge/organisation has been fully accounted for. Hence, there is no such thing as organisation in Wright's sense, and so no such thing as organisation exploitation.

Regarding the second problem, Wright was uneasy about describing relations based on 'skills exploitation' as relations of class.²¹ To this, many critics added an even more serious charge: 'skills exploitation' is not exploitation at all; achieving a higher income on the basis of the possession of rare skills is a *lessening* of exploitation of the skill possessors, rather than the result of these possessors' exploitation of others.²² Wright became convinced of the correctness of this criticism – which was one of the reasons why he abandoned the approach based on exploitation – and in his later writings, he instead refers to the *rents* earned by the possessors of the rare skills.²³

I would argue that the reason why Wright could ever consider rents accruing to skills as the result of 'exploitation' is his reliance on the neoclassical theory of distribution. In his discussion in *Classes* (1985), he tried to justify the concept as follows: "To appropriate the fruits of someone else's labour is equivalent to saying that a person consumes more than they produce. If the income of a person with skill assets is identical to their 'marginal product, as neo-classical economists like to argue, how can we say that they are consuming 'more' than their own contribution? ... When credentials are operating, employers will bid up the wages of the owners of the credential above the cost of producing the skills." (Wright 1985, p. 77) Now, of course, the whole point of the Marxian Labour Theory of Value is that the wage is *not* the 'whole product' of the worker. Wright of course is very sceptical of the LTV; however,

²¹ Wright (1985), p. 95

²² See e. g. Carchedi (1989), pp. 110-111

²³ Similar understanding of the 'middle class' incomes is found in Carchedi (1977).

instead of the alternative school of surplus economics, the Sraffian one, from which stem many criticisms of the Marxian theory, he opts for the neoclassical view. Had he adopted the Sraffian standpoint, it would be easy to see that the wage can *still* be understood as the cost of reproduction of labour-power, while profit is equivalent to the surplus product produced by the (collective) labour-power; this clearly implies that above-standard wages need be in no way the result of 'exploitation', but rather the lessening of it, precisely as required.²⁴ However, even under the purely neoclassical approach Wright's reasoning is faulty. The marginal product of labour is the notional measure of the effectivness of additional labour, not the product of any actual workers (which might be better measured by the average product).

Contradictory Class Locations Today: Eclecticism

Be that as it may, on the basis of his own self-criticisms, along with the objections of other critics, Wright gave up on the project of identifying the contradictory class locations on the basis of different forms of exploitation. The direction in which he headed instead can be described as 'backwards and sideways': on the one hand, he returns to the original concept of contradictory class locations, on the other hand, he adds several interesting considerations which, however, are barely embedded in the wider Marxian theory. Among these are the *mediated class locations* and *temporal locations*.

The concept of the mediated class locations results from reflecting on the fact that many individuals may be in significant relationships with others, whose class position is different from their own. The paradigmatic case is that of housewives, whose class position is understood as the mediated class position of their husbands. In general, differing class positions between spouses will have an influence on each of their class positions; if such 'cross-class' marriages are common in a society, this can be expected to have a significant effect when

²⁴ These points will be argued at greater length in later chapters.

compared to a society where households are class-homogenous. Similarly, mediated class positions are relevant for the status of children, etc.

The temporal locations refers to the fact that individual class location at a point in time might not be a very good indication of the individual agents' 'overall' class position, so to speak. A student taking a summer job at a building site does not thereby become working class, despite occupying a working class job. Wright thus comes to the conclusion that it is the temporal trajectory through the class space that is significant, rather than the location at a particular moment in time.

The version of the 'contradictory class positions' that is currently on offer underscores the fact that Wright seems to have abandoned the effort at theoretical synthesis and is now content with exploring different facets of class as and when they seem to appear significant. The latest description of the 'contradictory class locations' of the sort that we are interested in comes in terms of the different bundles of 'rights and powers':

"If the rights and powers associated with class relations are really complex bundles of decomposable rights and power, then they can potentially be partially unbundled and reorganized in complex ways. This can generate class locations which I have referred to as "contradictory locations within class relations"(...) Managers within corporations, for example, can be viewed as exercising some of the powers of capital – hiring and firing workers, making decisions about new technologies and changes in the labor process, etc. – and in this respect occupy the capitalist location within the class relations of capitalism. On the other hand, in general they cannot sell a factory and convert the value of its assets into personal consumption, and they can be fired from their jobs if the owners are unhappy. In these respects they occupy the working class location within class relations. The assumption behind this analytical strategy for understanding the class character of managers, then, is that the specific pattern of rights and powers over productive resources that are combined in a given location define a set of real and significant causal processes." (Wright 2005b, p. 10)

From this description, several things are clear. First of all, Wright has moved on from the simple two-part analysis of ownership found in Poulantzas. However, he still erroneously identifies the significant feature with the *ability* to do X rather than the *actuality* of doing X— that is, with ownership/power rather than with the division of labour. But most importantly, what is clear is that there is now almost no reason to call the class locations in question 'contradictory'. If we leave aside the rhetorical mention of 'occupying a capitalist/working class location' in the above quote, there is nothing in the description of the actual actions of the managers that would cause them to entertain any actually contradictory interests. The fact that they may hire and fire while themselves capable of being hired and fired, for example, puts them at best into the middle of some sort of hierarchy; however, there is nothing inherently contradictory about such a position.

Indeed, Wright's own insistence on the *relational* nature of classes should have suggested to him that the contradictoriness is illusory. He characterised some positions as contradictory on the basis of the fact that they share some of the characteristics of both the capitalist and the working class. However, this would seem to suggest that such characteristics somehow embody the 'essence' of what it means to be a capitalist or a worker — that they *define* these class positions. But that is clearly false on Wright's own understanding of classes: the

^{25 &}quot;The rights and powers in question are not defined with respect to the ownership or control of things in general, but only of resources or assets insofar as they are deployed in production. A capitalist is not someone who simply owns machines, but someone who owns machines, deploys those machines in a production process, hires owners of labor power to use them, directs the process by which the machines are used to produce things and appropriates the profits from the use of those machines. A collector of machines is not, by virtue of owning those machines, a capitalist. To count as a class relation it is therefore not sufficient that there be unequal rights and powers over the sheer possession of a resource. There must also be unequal rights and powers over the appropriation of the results of that use. In general this implies appropriating income generated by the deployment of the resource in question." (Wright, 2005b, pp. 6-7) Notice that there is a discrepancy between the concrete description of the capitalist and the general characterisation of class relations as consisting in 'unequal rights and powers over the appropriation of the results of that use'. The concrete description includes references to activities within production, absent from the general characterisation.

capitalist class is capitalist because of the relationship it enters into with the working class, not because of any characteristics that it may possess independently of that relationship, or even as a result of it. Wright's procedure is rather like observing that blood relatives tend to look similar and deducing that such similarity is the essence of the relation. Similarly to Roemer, whose case will be considered below, Wright confuses the consequences of the exploitative relationship with its essence.

Thus, in the end Wright's attempt to theorise the middle classes must be judged unsuccessful in Marxian terms. This is not to say that there is nothing interesting in the concepts developed by him; far from it. However, the theses offered could be just as much accepted by a (left-wing) Weberian, and in a sense Wright admits as much. 26 The difference he traces between the Weberian theory and his sort of Marxism centres on exploitation, which according to him forms the centrepiece of the Marxist approach. In contrast to the less specific Weberian theory, within Marxism exploitation is the 'anchor' that delimits the kinds of possible class mechanisms, which means, according to Wright, that "the Weberian strategy of class analysis is nested within the Marxist model" (Wright, 2005b, p. 19) This would seem to imply that the Weberian strategy is more specific than the Marxian one; however, Wright himself says almost immediately that the methodological openness of the Weberian approach allows it to include concepts such as exploitation as need be. Moreover, his own researches and most innovative concepts are by now fairly eclectic and seem to have little to do with the putative conceptual 'anchor', i. e. exploitation. It would seem that beside the rhetorical protestations, Wright is no longer doing Marxism – albeit he probably continues to share at least some of the underlying

^{26 &}quot;This nesting of the Weberian concept of class within the Marxist means that for certain kinds of questions there will be little practical difference between Marxist and Weberian analyses. This is especially the case for micro-questions about the impact of class on the lives of individuals. ... Frank Parkin once made a well-known quip in a book about class theory that "Inside every neo-Marxist is a Weberian struggling to get out". The argument presented here suggests a complementary proposition, that "Inside every leftist neo-Weberian is a Marxist struggling to stay hidden." (Wright 2005b, p. 19)

Marxist motivations. Tongue in cheek, we might want to say that Wright is a Marxist – it is just that his theory is not.

Carchedi: A Functionalist Account of Exploitation

Notable among the attempts to solve the problems of the 'middle classes' is the functionalist approach of Guglielmo Carchedi.

Carchedi's starting point is Lenin's definition of classes, which uses a fourfold distinction in terms of productive status, ownership, function, and 'consequently' wealth (the share of it, the mode of acquiring it, etc.) The last criterion, however, does not play a real role in the determination of class status, since it is contingent upon the other ones. Thus, first, there are the producers and the non-producers; secondly, the owners and the non-owners; and finally, there are those performing the function of labour and the function of non-labour (capital).

However, as Cottrell (1984, p. 83) points out, in practice it is really only the two distinctions in terms of ownership and function that actually matter for the understanding of the capitalist, the working and the middle class. For while Carchedi understands the distinction between the producers and the non-producers in 'orthodox' Marxist terms as the distinction between those who produce surplus value and those who do not, this is not used to exclude the non-productive workers from the proletarian along Poulantzanian lines. Carchedi identifies the possibility that while the non-productive workers do not themselves create new values, the labour-time they put in production may nevertheless be greater than that embodied in the goods they consume. This possibility he terms 'economic oppression', and allows for the inclusion of the economically oppressed among the working class. It is really only the ownership and the function that are relevant in his discussion.

Obviously, the understanding of economic oppression just mentioned differs from the Wrightian one above. Recall that Wright labelled as economically oppressive those situations where some group would have been

better off under a hypothetical alternative and its complement would have been worse off. The Wrightian understanding is obviously far wider than Carchedi's. For this reason, I would suggest that a better name for Carchedi's concept would be 'quasi-exploitation'. This makes sense, since from the point of view of the unproductive worker themselves, there is no difference between their position and an exploited one; and then the broader term could be reserved for a greater variety of situations. Although it is not entirely fair to the author, I will at times use this new designation, in the interests of the ease of expression.

In Carchedi's terms, the capitalist class is then defined as the group of owners, (quasi-)exploiters, and non-labourers, while the working class correspondingly consists of non-owners, (quasi-)exploited and labourers. Since the second of the three distinctions drops out from view, the trouble really arises when ownership is 'misaligned' with the function. This misalignment allows of degrees: there are some agents who are non-owners, yet perform solely the function of capital; other non-owners, however, may perform a mixture of the functions of labour and capital. It is important to note, however, that these are seen as temporally distinct: it is possible to perform either of the two activities, but *not at the same time* (Carchedi 1977, p. 8).

What exactly is non-labour? It is the activity of 'control and surveillance'. Carchedi believes that this is distinct from the activity of the organisation of the labour process – and not just logically, but as we have just pointed out, also in practice, temporally. In effect, two processes are going on within capitalism, not simultaneously but intermittently: one is the actual process of production of use-values; the other is the process of production of surplus value. To the first one corresponds the activity of organisation of production; to the second one, the activity of control and surveillance.

Cottrell (1984, pp.84 - 86) charges that this understanding is different from Marx's, but more importantly, that Marx's version is more convincing. According to this view, the authoritarian workplace relations are the *form* which the co-ordination of production takes under capitalism. Surveillance and control

are not activities separate from the organisation of production; they *are* the organisation of production, under the capitalist conditions.

However, this criticism is far less strong than it seems at the first sight. For suppose we admit that it is impossible to distinguish the 'work of control and surveillance' from the 'work of co-ordination and unity' (the terms are from Carchedi 1977, p. 63), and so it is impossible to distinguish the 'function of capital' from the 'function of labour' along the lines Carchedi wishes. What of it? Granted, some of the things Carchedi wants to say are now unutterable: his 'theory of proletarianisation' of the new middle classes, according to which the share of the function of labour increases in the work of these strata and the share of the function of capital correspondingly declines, is now impossible. But the basic strategy of distinguishing the 'new middle classes' from the proletariat proper is untouched. If we really accept that control and surveillance are an integral part of the capitalist co-ordination, then those who perform this work without possessing any capital can still be identified as the 'middle classes'. Here is what Carchedi says: "This fact, that the new middle class performs the global function of capital even without owning the means of production, and that it performs this function in conjunction with the function of the collective worker, is the basic point for an understanding of the nature of this class" (Carchedi 1977, p. 89) Now as long as there is any sort of work other than supervision and management, and we identify this other work with the 'function of the collective worker', this quote could stand despite the sort of criticism advanced above. It would no longer be the case that the 'new middle class' is necessarily involved in both 'labour' and 'non-labour', but it would be possible; and crucially, it would remain true that the function of capital were performed without the ownership of capital.

Whether Carchedi would accept such a modification or not (and he probably would not), it is clear that in our terms, Carchedi represents yet another attempt to combine the exploitation, surplus concept of class with the division-of-labour concept. We can of course accept his reasons for calling the

activity of surveillance and control 'non-labour'; nevertheless the point remains that the division within the stratum of wage-earners is being made on the grounds of activity performed. It is in many ways an attempt quite similar to Wright's, who indeed explicitly identifies it as 'essentially the same insight' as in the case of the contradictory class locations (Wright 1989, p. 302) – although of course there are also some important differences. Unlike Wright, Carchedi bases his approach explicitly on the labour theory of value. And secondly, Carchedi's views are far more orientated towards the division-of-labour pole than to the ownership-rights pole, which is the main locus of interest for Wright. In that respect, he is close to the relevant realities.

What makes for a major difference between the two theorists, and what renders Carchedi's work interesting indeed, is the effort he makes to fuse the exploitation and the division-of-labour concepts. As should be clear from the discussion, the division of labour that is relevant for Carchedi is based on exploitation: the function of capital is to extract surplus labour. Thus, it is really the activity of exploitation, exploitation-as-work that is the relevant sort of 'labour' (or as he puts it, 'non-labour') for determining the status of the 'middle classes'. Basically, Carchedi attempts to postulate that authoritarian production relations form (part of) the essence of exploitation. This would mean that when such authoritarian activity becomes separated from the appropriation of the surplus product, it nevertheless still 'inherits' the characteristic of being exploitative.

This is an intriguing idea, but unfortunately it fails. First of all, it is clear that we can observe authoritarian relations in many areas other than production – the army, the school, the church, for example. Should we consider these relations also 'exploitative'? It seems to me that we are damned if we do and damned if we do not. Suppose we go for the first option: this means we would have to extent the notion of 'production' to just about any hierarchically organised activity. And even if we swallowed that, we would have to believe that these relations are 'exploitative' even if no exploitation in terms of surplus labour occurs. And such situations are quite clearly possible, as having authority

over someone does not imply that this someone supplies surplus labour. To believe in exploitative relations without any surplus labour, however, really stretches belief too far. It does not seem possible to argue that *all* authoritarian relations are exploitative in this way.

But going for the second option and accept that in spheres other than production, authoritarian relations are not identical with the 'activity of exploitation' is not much better. For why should the essentially same activity of supervision and control inherit the characteristic stamp of exploitation in one area and not in the others? And if it does not, which does make sense, is this not a reason to doubt that such activity is in any sense 'fundamentally' exploitative? It seems to me that it is quite plausible to claim that the 'work of surveillance and control' within production is but one token of the genus that occurs in very many guises in human societies. Indeed, it is much more plausible than the alternative claim that it constitutes a fundamentally exploitative activity within production and not so in other areas.

For these reasons alone, it does not make much sense to identify 'work of control and surveillance' with the activity of exploitation. There is, however, another argument, which is in my opinion even more decisive, since it does not rely on us leaving the sphere of production.

The argument is simply that authoritarian organisation of production can occur even without any surplus being produced, and thus without any surplus labour being appropriated. There is no logical reason why a subsistence economy could not be organised along authoritarian lines. It is, of course, possible to argue the other way and claim that the presence of authoritarian work relations indicates the presence of the surplus – whereby those who order others are really consuming the surplus product. However, this implies that they are parasites that the rest of the society could do without. But there is no independent reason to believe this to be the case. There is no necessary logical connection between the subsistence economy and an egalitarian division of labour. It may well be that under some circumstances, in certain geographical

areas and with a certain set of known technologies, there is simply no way of organising production in an egalitarian way and ensuring survival. No reason has ever been given why this 'primitive authoritarianism', as opposed to primitive communism, should not be a logical possibility.

But if so, if authoritarian relations are even in some case necessary simply for *subsistence* rather than for the production of surplus, then the whole idea of identifying them with the activity of exploitation comes crashing down. For otherwise we would have the absurd situation of exploitation without any surplus labour! That is clearly an untenable position.

A possible response to this argument would be to say that the Carchedian identification of the 'work of control and surveillance' with the exploitative function was never meant metaphysically; that it cannot be understood ahistorically as valid outside the capitalist mode of production. Such references to historically contingent 'laws' are indeed a common sort of defence among Marxists. Moreover, Carchedi himself never claims that the distinctions made have any validity outside of the capitalist mode of production; thus it could be argued that in identifying the 'work of control and surveillance' with the activity of exploitation we are erecting a straw-man.²⁷

This objection amounts to saying that while the 'work of control and surveillance' happens to coincide with the 'function of capital' within capitalism, this is contingent on the capitalist mode of production. However, the trouble is that unless we do believe that there is something more fundamental about authoritarian relations that welds them to exploitation, there is simply no reason why we should identify the two! Granted, without such activity, surplus labour would not be produced. But then, neither would it be produced without the 'function of labour' itself. Why should we focus our attention on just this particular sort of activity, unless we believe that there is some intrinsic characteristic which

²⁷ It should be noted, however, that limiting the theory of classes to capitalism seriously weakens the claim of Marxism to be a theory of history; thus *some* sort of extension of Carchedi's theory would be required to safeguard this claim, even if not the particular extension we have been considering.

makes it a candidate for being identified with the exploitative function? If there is no such characteristic, then the 'work of surveillance and control' is just one activity of many — very, very many — that happen to be performed within a capitalist enterprise, and its identification with the function of capital is completely unmotivated.

Thus, I believe that Carchedi's attempt to fuse the exploitation concept with the division-of-labour concept of class ultimately fails. This is not to say that authoritarian division of labour does not matter for capitalism, or for exploitative systems generally — quite the contrary. What I am saying is simply that the conflation of the two concepts is illegitimate. Authoritarian relations cannot be subsumed under exploitation, and vice versa. There may be a certain sort of relation between them, and indeed I shall argue that this is so. But they are not identical.

Nevertheless, Carchedi's approach remains inspiring, in that instead of focusing simply on the content of the activities within the division of labour, as is common among the theorists of class, he directs our attention also to their *function*. That function is important for the determination of class is a valuable insight, and I shall be using it in later chapters.

Bahro: Mental vs. Manual Labour Again

Rudolf Bahro's Alternative in Eastern Europe (1978) is not a work explicitly concerned with the notion of class. It is, as the German subtitle suggests, a "contribution to the critique of the actually existing socialism". It is an extensive work dealing with the origins, the nature of, and the transcendence of the Soviet-type regimes. However, it contains many important passages concerning the question of nature and significance of classes.

First of all, although the book was written while the author was a citizen of the former German Democratic Republic and a (dissenting) member of its ruling party, there are some striking resemblances between its themes and some of the features of the so-called Western Marxism. In particular, for our purposes it is significant that Bahro is in agreement with a prominent strand of Western Marxism that emphasises the integration of the working class into Western capitalism, rejects the belief in its revolutionary character, and in effect abandons class as a central explanatory concept.

Bahro's work represents an extension of this de-emphasis from capitalism to the 'actually existing socialism' or 'proto-socialism' (Bahro's term), attempting to demonstrate that the 'working class' is not a significant player in the politics of the system. He goes as far as claiming the concept 'inapplicable' to this type of society in the title of one of his chapters, although the actual point made in the chapter is less strong, arguing simply that no transformative activity can be expected from this class *qua* class. Bahro claims that instead of the proletariat being a revolutionary class within the 'proto-socialist' society, members of *all* classes are to be drawn towards a revolutionary project. Thus, the buds of the political ecology of the future founding member of the German Greens can already be seen through the swathes of Marxist rhetoric.

Such an un-Marxist approach is perhaps more easily understood if we realise that Bahro was writing in a context of the society *without* property-based classes, and thus the meaning of an alliance of the members of 'all classes' is quite different to what it appears to be from the Western perspective. The social context in which Bahro's work was written is decisive in other respects as well. While the essential tenor of Marx's work is the singular importance of private property and its development, with the state hovering in the background sometimes as the mystified and alienated expression of common interest (Marx and Engels 1965, p. 45), sometimes as the tool of the ruling classes, Bahro effectively reverses the importance of the two phenomena. Writing under a nominally 'socialist' regime, Bahro relates the existence of that regime to the 'Asiatic' mode of production, analogically to Wittfogel (1957), though never mentioning him by name; and claims that the state-organised production existed on a far wider geographical scale and for a far longer period of history than was the case with private property. On Bahro's account, it seems that the state as the

essential organising force of the economy was the rule for millennia, in comparison to which the development of private property is an accidental blip occurring only on a comparatively tiny area of the small continent of Europe.

Given this view, and given the character of the society he is in the main analysing, it is natural that for Bahro, the important source of class differentiation does not lie in the direction of property. Instead, he focuses very much and quite explicitly on the division of labour, in particular the division between mental and manual labour. Bahro claims that this division was the first basis of class division according to Marx, basing this on *The German Ideology*.²⁸

However, Bahro does not conceive of the distinction between the mental and manual labour in straightforward terms. In this respect, he is similar to Poulantzas, although the exact explication of these terms is quite different in the two cases. It would be more correct to say that for Bahro, the division between mental and manual work is *at the root* of the far more complex modern day problem, which can be summed up under the heading of 'subalternity'.

Subalternity, in Bahro's terms, is "the mentality and behavior of dependent "little people" alienated from the overall totality" (Bahro 1979, p. 195). The opposite of subalternity is that mode of individual existence which enables to consciously shape the total social reality – to participate in planning, in strategic thinking, in the general development of the higher intellectual functions in the service of grasping 'the overall totality'. To overcome subalternity, and thus to eliminate the division between the rulers and the ruled, as well as the intellectuals and the non-intellectuals, was to be, according to Bahro, the main task of the movement for the transcendence of the 'actually existing socialism'.

²⁸ As we have seen, this claim is not literally correct (recall that what Marx and Engels actually said was that "the *division of labour* only becomes truly such from the moment when a division of material and mental labour appears", Marx and Engels 1965, p. 43, emphasis added). Nevertheless, there is a case to be made that such an interpretation, or at least such a direction of development of Marx's thought could be made to stand.

Authoritarian Organisation Is Not the Same As Mental Labour

In this context, I believe that it is important to bring out the difference between 'mental' and 'manual' labour on the one hand, and 'domination' and 'subordination' on the other. At times Bahro gives the impression of conflating the two distinctions; yet it is quite easy to show that such a conflation is illegitimate.

It is true that domination cannot be exercised as 'manual labour', in the trivial sense that commanding human beings does not mean literal manual manipulation of them. Brute physical force may involve such manipulation, of course; but while domination may be *based* on such physical acts of violence, it is not identical with them. In this sense, domination cannot be identified with manual labour, and thus it may seem 'natural' to understand it as primarily mental labour.

Nevertheless, at least in the direct, personal, face-to-face sense, domination is not really well understood in this way either. While the activity of commanding others may require the use of the powers of conception, so does most if not all manual labour; only the most routinised manual processes could plausibly be thought to be devoid of such conceptual work.

Thus, the exercise of domination does not imply mental labour as a separate category. The dominating group need not be a group involved primarily in mental labour at all. A caste of warriors may well be ruling a sea of peasants without thereby becoming 'mental labourers'.

Conversely, there are many kinds of unquestionably mental activity, from philosophy through theoretical physics to artistic creation, which involve no direct personal domination whatsoever. The fact that the working activity is occurring inside someone's mind does not imply anything for their relationship towards others.

The conclusion seems to be that the two distinctions are simply on a different plane. Differentiating between mental and manual labour means that the focus is the nature of the activities of the individual in question, quite

separately from any social context in which those activities may be performed. In other words, it does not matter what social interactions are occurring; what is important is simply the kind of doings of the individual in question.

On the other hand, domination vs. subordination are intrinsically social concepts, indeed this is immediately seen from their 'dialectical unity'. We cannot have domination without subordination and vice versa for the precise reason that no individual can be either dominating or subordinated *on their own*. The relationship requires precisely social interaction, a relationship between two or more individuals. The precise nature of their activities is immaterial in this context.

Thus, while mental labour and domination may often *coincide* within the same person, and manual labour might correspondingly coincide with subordination, the two pairs of concepts nevertheless refer to quite different aspects of reality. Their empirical correlation is a matter for explanation, not a reason for identification.

Bahro's work is important for the present purpose, because it focuses very clearly on one of the most important characteristics of the division of labour – namely the impact it makes on the individual performing a given sort of labour. I do not believe that it is really possible to build the concept of class simply on these sorts of effects, as Bahro seems to intend at least some of the time. But this is not to deny their importance, nor the salience of the concepts that he uses to analyse them, all of which will come to the fore at the appropriate moment.

Albert and Hahnel: Exploitation and the Division of Labour

Michael Albert and Robin Hahnel represent the radical theorists of the erstwhile New Left, who in their analysis of historical development and class eventually broke with Marxism precisely over the questions of the division of labour.

Albert and Hahnel identify three basic classes within capitalism - as opposed to classical Marxism, which only admits two capitalism-produced classes (with petty bourgeoisie belonging of course to a different mode of production). For Albert and Hahnel, the three classes of capitalism are the capitalist, the working class, and the *co-ordinatorist* class. Just as the capitalist class is distinguished by the fact that it monopolises the (material) means of production, the co-ordinatorist class is characterised by the fact that it monopolises skilled, empowering, creative and pleasant positions within the social division of labour. Among the co-ordinatorist class, we would thus find the state bureaucrats, company managers, doctors, lawyers, etc. In the broader theory, Albert and Hahnel see the co-ordinators as the class that got into the saddle in the countries of the 'actually existing socialism', and they regard Marxism as the ideology of this class. For these authors, part of the evidence for this notion is the very fact that Marxism fails to acknowledge the existence of this class; in their view, this means that it obscures the relevant features of reality and prevents the working class from recognising its own interests, which are objectively divergent from those of the co-ordinators.

Albert and Hahnel's recipe for abolishing classes is described in their various books on 'participatory economics' (Parecon for short) – c. f. Looking Forward (Albert and Hahnel 1991a), The Political Economy of Participatory Economics (Albert and Hahnel 1991b), Parecon (Albert 2003), Economic Justice and Democracy (Hahnel 2005) Aside from employing a co-ordinating mechanism based on a sort of decentralised planning, the authors place great emphasis on the existence of 'balanced job complexes'. This means that instead of specialising in a particular branch of production, every worker is assigned a set of tasks which contains both empowering, creative elements, and tedious, routine and menial ones. This is done in such a way that everybody in the society experiences all aspects of production roughly equally – hence the term 'balanced' – although it is of course not being suggested that everybody is involved in exactly the same activities. The objective is to break up the monopoly of the co-ordinatorist class

on the 'luxury' activities, enable equal access to them and thus an equal opportunity for development.

With the proviso that (parts of) the co-ordinatorist class have significant power over their own remuneration, and thus cannot be precisely characterised as being party to the wage-labour relationship with capital, we might want to say that Albert & Hahnel use two different analytical knives to carve out classes from the society as a whole.²⁹ In the first place, society is divided into the owners of capitalist property, who constitute the capitalist class, and those without such property. This latter group is then further divided, using the 'knife' of the division of labour, into the co-ordinators and the working class proper.

There are obvious similarities between this conceptualisation of classes and that of Bahro, for example – as indeed are the recipes that are suggested for the elimination of the existence of classes. The main criticism we may want to advance is that while the picture is extremely suggestive and admirably close to empirical reality, there is very little suggestion of a wider theory justifying the use of just these tools for the identification of classes. The proposition that it is the co-ordinatorist class that vies for power with the capitalists, achieving it in the Soviet-type regimes, is hard to take seriously, given what we know about the political preferences of co-ordinators within the Western countries. (One might refer here to Wright's self-criticism above regarding the wishes of these strata.) While there is no denying that some sections of this stratum might welcome the extension of state power, if it represents the extension of their own power, there is little suggestion that there is a stable preference for the overall social planning along Soviet lines, much less for a Soviet-style dictatorship – among whose victims the 'co-ordinators' were all too often over-represented.

Bourdieu: Life Experience and Forms of Capital

While Pierre Bourdieu is in part clearly inspired by Marxism, the distinctivness of his theory is equally clear. To characterise the social world,

²⁹ In private communication, Michael Albert has endorsed this picture.

Bourdieu uses a whole series of concepts of his own invention. As Weininger (2005, p. 119) says, these concepts for the most part arose within the context of actual empirical investigations, rather than on the basis of entirely self-contained theoretical work, and hence it is not easy to describe Bourdieu's approach in context-free abstract terms. However, I shall do my best to try to sketch the essentials of Bourdieu's thinking, albeit it should be borne in mind that much of its richness is by necessity going to be left out.

The consideration of the existence of social classes, then, might start with one of Bourdieu's specific concept, that of social space.

This social space is multidimensional, and characterised by Bourdieu in a variety of ways. There is, for example, the following description: "The "social reality" which Durkheim spoke of is an ensemble of invisible relations, those very relations which constitute a space of positions external to each other and defined by their proximity to, neighborhood with, or distance from each other, and also by their relative position, above or below or yet in between, in the middle" (Bourdieu 1986, p. 16) Sociology is then understood as 'social topology', an analysis of positions and their spatial relations. On the other hand, since these positions are associated with 'active properties', 'powers', the social space can also be described "as a field of forces, i. e., as a set of objective power relations that impose themselves on all who enter the field" (Bourdieu 1985, p. 723) Both the topological and the field descriptions, however, are to be taken more as metaphors, rather than serious attempts to impose a mathematical structure on the social research, and are used as such.

What distinguishes the various 'planes' of the social space are the kinds of capital that are relevant on them. Bourdieu generalises this economic concept, so that spheres of social existence other than the economic one can be characterised in terms of capital as well. Thus, there are in his thinking four kinds of capital – or better, three plus one. Aside from the classic case of economic capital, there are also the cultural and the social kinds; and finally also something called the 'symbolic' capital.

Capital in general is characterised as "accumulated labour (in its materialized form or its 'incorporated,' embodied form) which, when appropriated on a private, i. e. exclusive, basis by agents or groups of agents, enables them to appropriate social energy in the form of reified or living labour" (Bourdieu 1986, p. 46) Here, capital is understood as a material good, whether existing outside of the human body, or accumulated inside it. This fits the usual usage within neoclassical economics, at least to some extent. However, sometimes Bourdieu takes more of a Marxist tack and talks about capital as a social *relation*, the relation of power: "Capital ... represents a power over the [social] field (at a given moment) and, more precisely, over the accumulated product of past labor (in particular over the set of instruments of production) and thereby over the mechanisms tending to ensure the production of a particular category of goods and so over a set of incomes and profits" (Bourdieu 1985, p 724). The immediate identification of the ownership relation and the good owned is however more common in his writings.

Economic capital, then, is the straightforward material wealth, "which is immediately and directly convertible into money and may be institutionalised in the form of property rights" (Bourdieu 1989, p. 47). Cultural capital in its embodied form consists of accumulated knowledge, acquired intellectual as well as aesthetic abilities and sensitivities, etc.; in the objectified form, it consists of the various material objects ("pictures, books, dictionaries, instruments, machines, etc.") viewed from the point of view of the symbolic/mental content embodied in them, rather than from the point of view of immediate material properties; and finally in the institutionalised form, it consists of various 'official', i. e. recognised titles confirming the possession of the embodied cultural capital (educational qualifications being the paradigmatic case of this). Social capital is an attempt to theorise in terms of capital the wealth of 'connections', that which is acquired by 'networking', gaining implicit or explicit membership in groups, etc.

Finally, there is symbolic capital, "commonly called prestige, reputation, renown, etc., which is the form in which the different forms of capital are

perceived and recognized as legitimate" (Bourdieu 1985, p. 724). This last notion seems a little odd, in that it can hardly be thought to be on the same ontological footing as the other three, given that it is the *form* these other three take. It would make more sense to say that such symbolic capital attaches to a person who is seen as having acquired some other form of capital in a recognised and legitimate way—if that is indeed the intention of the term.

With the help of these notions, it is possible to construct neighbourhoods in the social space, positions with relatively similar amounts of the various sorts of capital. Assuming that these amounts of capital are conditioning factors, and that their effects are continuous, we might agree with Bourdieu that "consequently they [the agents] have every chance of having similar dispositions and interests, and thus of producing practices and representations of a similar kind" (Bourdieu 1987, p. 5) These conditionings, dispositions and interests are summarised in Bourdieu's term 'habitus', which according to him is literally inscribed in the body.

The habitus can perhaps best be understood as the source of preconscious responses ('practices') to situations; as Weininger (2005, p. 124-125) remarks, these responses have nothing to do with either the compliance with norm or with rational calculation. This is why habitus is a set of *dispositions*: it shapes the way in which we are inclined to act, without the conscious direction of our behaviour. But the habitus is not identical with 'habit': it might be perhaps said that while a habit designates the exact same response, the habitus generates a response which, even though it might be unique in itself, is of the same *family* of responses.³⁰

As stated above, according to Bourdieu groups possessing similar amounts of capital develop similar habituses, thus the whole 'styles of life'. Now given

³⁰ Although note that "we must begin by acknowledging that, for Bourdieu, the process through which the habitus is constituted is not situated—or at least not primarily situated—at the "point of production." In other words, although the occupational system comprises the institutional core of the "class structure" for Bourdieu, it is neither the labor market nor the shop floor (or office cubicle) which functions as the site in which the causal processes giving rise to a class-specific habitus unfold." (Weininger 2005, p. 125, emphasis added) Instead, it is basically the 'lived experience', as Wright (1989b, pp. 288) puts it.

these similarities, we might be tempted to identify these groups with classes. Such a temptation should be resisted, says Bourdieu. These are just 'classes on paper'. They are theoretical constructions, artefacts of the sociologist's intellect. They are at best 'potential' classes, which might become real if mobilised, but that need not ever happen. For this reason, Bourdieu claims that such potential classes are different from both the Marxist classes-in-themselves and classes-for-themselves. The main objection seems to be that the transition from one to the other is described "in terms of logic that is either totally determinist or totally voluntarist" (Bourdieu 1985, p. 726). The former option makes the distinction conceptually redundant, even if important historically. The latter amounts to a 'sleight of hand', which removes 'the most essential questions': who gets the members of the potential class to realise their commonality? And what is the relation between the theoretical 'class' and the representations that agents independently and constantly produce within their own consciousness?

Thus, Bourdieu sees classes as just one instance of a 'group', where group is understood as a mobilized, self-conscious entity. Since groups do not have real collective consciousness, this implies that the individual members of the group are aware of their mutual connections, act in some basic solidarity with each other, interact together etc. Classes, then, are such mobilized groups, characterised by the closeness of position in social space – which means, by the closeness in the particular amounts of capital of various sorts that they hold.

It should be pointed out that one of the theoretical virtues of Bourdieu's conceptualisation is that he does not get seduced by the Siren call of property relations, the view that what matters for the determination of class membership is ownership.³¹ However, at the same time it seems that Bourdieu leans too far

^{31 &}quot;(...) it must be recognized that for Bourdieu, the notion of a class structure encompasses the entirety of the occupational division of labor. This implies that he grants the notion a considerably wider purview than do Marxian theories, which restrict its scope to a system of positions defined in terms of ownership of and/or control over the means of production. Consequently, Bourdieu is not confronted by the problem upon which so many Marxian theories have foundered—namely, that of determining how to cope with all those positions in the division of labor which cannot

in the opposite direction – despite the superficially Marxian language he sometimes uses, he fails to do justice to the concept of surplus production and exploitation.

It seems clear that while he chooses the term 'capital' to designate a particular feature of social reality, this is not capital in the Marxian sense of the term, even if a nod is given in the direction of 'accumulated labour'. For Bourdieu's analysis focuses on the *status* of the possessors of capital, rather than on any *production* going on. This should not be confused with the dogmatic objection that there really is only the economic capital. There may well be good reasons to try to extend the concept to other areas. However, if there is an essential characteristic of capital in the Marxian sense, it is that it is a means of production; it is used in order to enforce and appropriate surplus labour, and thus to increase the overall social wealth. It is hard to see how equivalent claims could be made about Bourdieu's 'cultural' and 'social' capital. An increase in one's level of education or culture is not achieved by employing the existing level in order to force *someone else* to produce a surplus; the same goes for the set of networking connections one 'possesses'.

Rather than 'capital' in the Marxian sense, the obvious connotation of Bourdieu's term seems to be simply 'riches' or 'wealth'. To be sure, these may be used in productive processes. But the way they are used seems far closer to how an artisan utilises the means of production they own – to work with them oneself. There does not appear any straightforward concept of exploitation attached to Bourdieu's novel kinds of 'capital'.

Furthermore, the putative 'cultural' and 'social' capital lacks another essential characteristic of the concept, whether in the Marxian or neoclassical

be characterized in terms of the canonical division between "owners" and "workers" (or which cannot be characterized "adequately" or "satisfactorily" in these terms). Thus, his model effectively encompasses not only the "middle class" occupations that have been the source of so much grief in the Marxist tradition, but also those which have hovered at the fringes of most class analytical schemes, including positions in public administration and the state "apparatus," the so-called "professions," and—not least of all—intellectuals, artists, and other "cultural producers"." (Weininger 2005, p. 122)

understanding: it is not alienable. In this respect, it is far more akin to the land under feudalism, which was also tied to the person of the landowner by birth, so to speak, than to the capitalist form of private property. Given the essential inalienability of cultural/social capital, it cannot be exchanged for anything, and thus there can be no market for it (although there certainly can be a market for its *products*).³²

Perhaps relatedly, it is not clear from Bourdieu's writings what the precise relationship is between the various social fields he identifies. Lumping all the disparate elements under the unifying term 'capital' seems to imply an essential equality in the ontological and practical status of the various spheres, in the sharp contrast to the orthodox Marxist picture, in which the 'superstructure' is subordinated to the economic 'base'. We do not need to go that far to feel uneasy about postulating such full equality, however. Bourdieu does seem to suggest at times that the economic does have primacy in some sense, but it is not specified what this means, and at any rate for the most part he talks about the reproduction in the various fields as if it were able to proceed autonomously. This seems a serious drawback, as any real-world experience with the question of financing higher education, for example, would suggest.

Bourdieu's writings present a far richer picture of the real experience of class than most that we have been considering, and the concepts of social field, habitus and – despite the criticisms above – even the extended notion of capital clearly merit much further attention.

³² Bourdieu does talk about 'converting' one form of capital into another; however, this is quite woolly language. Granted that money can perhaps buy connections, but it can hardly buy culture – at best, it can buy the *opportunity* to gain culture, but labour is still required. Moreover, and more importantly, getting income by gaining access to well-paid positions through educational credentials and/or networking *does not mean* that the latter *disappear*, that they 'get used up', as would be the case with money capital. Thus, the analogy does not work.

Conclusion

What have we learned? The existence of the wage-earning 'middle classes' poses a fundamental challenge to the Marxian concept of class based on exploitation, for the exploitation relation recognised only two possible classes: the exploiters and the exploited. I have tried to argue that the various solutions that have been advanced to deal with this problem consist mostly in falling back to an alternative, division-of-labour conceptualisation of class — sometimes supplementing, other times supplanting the exploitation concept. While I have tried to probe and criticise the various solutions proposed, most contain valuable elements that should certainly be a part of a sophisticated theory of classes. However, none seems to adequately theorise the nature and the need for the division-of-labour concept; for the most part, it is an *ad hoc* addition without a deeper theoretical justification. In the next chapter, I will therefore try to clarify the notion of exploitation and what mileage we can get out of it, and in the process specify the general theory of reproduction that I take to be the illuminating kernel of Marxism.

Chapter III

Exploitation Is Not a Game A Critique of John Roemer

In Chapter IV, I will try to reconstruct and clarify a concept of exploitation on which a theory of class can be based. But in order to present my own views, I would first like to critically discuss the theoretical work of John Roemer. Roemer is an important reference point in the modern debate on classes. His methodology, adopted explicitly as an import from neoclassical economics, as well as many of his conclusions, made him a target of criticisms of a wide range of more classically-minded Marxists, who find his work unacceptable. Nevertheless, Roemer has had some influence on other theorists – Erik Olin Wright, as mentioned above, being probably the most prominent among them.

Ethical Egalitarianism vs. Historical Materialism

It is by now a well-rehearsed point that Roemer is not and probably never really was a Marxist in the sense of developing historical materialism. Instead, his project as a whole can now be seen to be one of ethical egalitarianism. I think it is fair to say that Roemer is not so much concerned with the positive issue of what exists, but rather with the normative issue of what should be the case. Thus, unlike Marx, Roemer focuses not on analysis of existing affairs, but rather on the questions of justice and injustice. In particular, his ethical concerns are bound up with a strong commitment to equality as a guiding principle.

While there is a long-standing tradition of left-wing egalitarian thinking (cf. Crosland 1956, Bobbio 1995), it is instructive to note that this tradition comes

¹ Roberts (1997) uses the term 'ethical socialism' more frequently than egalitarianism in characterisation of Roemer's positions. However, if we take socialism to mean common ownership of the means of production, then I do not think Roemer is necessarily a socialist. When socialism in this sense is considered in his work, it tends to be as a means to an end, and the end is one of equality.

from the *non-Marxist, right wing* of Social Democracy. Arguably, equality was the goal that was adopted in contrast to the Marxist stress on common ownership of the means of production.

Marx himself was certainly no ethical egalitarian. First, it is well known that Marx rather tended to eschew the issues of morality, despite the arguments that there was an ethical theory underlying his views (Popper 2002, Cohen 2000). Secondly, equality makes hardly any appearance in his work, whose main focus is on the issues of class struggle, exploitation, and (the elimination of) private property of the means of production. And finally, if we look at Marx's description of communism, we can see that in his view this 'ideal society' would not really be concerned with equality either.

The familiar slogans summing up the lower and the higher stage of communism respectively are 'From each according to their ability, to each according to their contribution' and 'From each according to their ability, to each according to their need' (Marx 1951, p. 23)²

The first slogan expresses still a 'bourgeois right', taking as it does for granted that differences in natural talents are grounds for differential reward (Marx 1951, p. 22). Thus, both the highly talented and the untalented will work as much as they can, but far from being rewarded equally, the highly talented will be better off just thanks to their natural gifts.

This sort of inequality is meant to be eliminated in the higher stage of communism, where the rewards will be on the basis of need rather than contribution. However, just as with contributions, needs differ from person to person. There is thus no assumption that the rewards will be equalised. Those with greater needs will receive more, those whose needs are more modest will receive less.

As we can see, the fact that equality was Roemer's guiding principle meant that he was developing a different line of inquiry from Marx's from the very

² Only the second slogan actually makes an appearance in the *Critique of the Gotha Programme*, the first is implied by the immediately preceding passages, but not actually stated in the now-familiar form.

beginning. Nevertheless, the issues he was ostensibly concerned with – exploitation and class – are the same ones that we are focusing on. For this reason, it is important to discuss his views, even if our conclusions can be expected to be quite different from the ones Roemer arrives at.

I will concentrate on Roemer's General Theory of Exploitation and Class (1982) – from now on referred to as GTEC –, although the discussion will also bring in his important article 'Should Marxists Be Interested in Exploitation?' (1985) and occasionally touch upon some other of his writings.

The Ostensible and the Real Purpose of the GTEC

Roemer's ostensible purpose in *GTEC* was to provide a concept of exploitation that would account for the continuing existence of various undesirable features of the states that were claiming to be socialist. Roemer claims that, in line with the general materialist conception of history, the phenomena resembling the previous class societies must be explained on the basis of the theory of exploitation. However, to cope with an unexpected task—explaining exploitation under socialism—this theory needs to be re-formulated, generalised. This is illustrated by drawing a parallel with Marx's approach. Marx's problem, according to Roemer, was how to explain "the persistent accumulation of wealth by one class and the persistent impoverishment of another, in an economic system characterized by voluntary trade" (Roemer, GTEC, p. 6), as opposed to the previous system, where the reasons for accumulation and impoverishment consisted quite obviously in the "coercive institution of labor exchange". To solve this problem, "Marx constructed his theory of value and exploitation" (Roemer *GTEC*, p. 6) Now,

"[i]n the transition to socialist society, the institutional culprit responsible for capitalist exploitation has been eliminated. ... The institutional dimension which we are now required to vary is the one labelled "ownership locus of the means of production," not the one with which Marx was concerned, labelled "coerciveness of the institution of labor exchange". The formal problem, however, has the same

abstract structure for us as for Marx. He required a theory of exploitation which was robust even when one relaxed the coerciveness of its institution of labor exchange; we require a theory of exploitation which is robust even when one relaxes the institutional specification concerning the private locus of ownership of the means of production." (Roemer *GTEC*, pp. 6-7)

I believe that in this quote and the passages preceding it, Roemer confuses two quite different aspects of Marx's work. These are, on the one hand, the *concept* of exploitation, and on the other, the *theory* of (capitalist) exploitation. Although the confusion may appear slight at a first glance, in fact it has some very serious consequences.

What Marx did, in the first place, was to identify surplus labour as the source of accumulated wealth. In effect, he explained the accumulation of wealth with the new concept of his own invention – namely, exploitation.

Now this concept and the explanations based on it are quite independent from any particular institutional setting. That is why all class societies could be characterised as societies based on exploitation (which is the common Marxist understanding). This does not mean, of course, that there is any exploitation 'in abstract', aside from the particular mechanisms through which it is being realised. Indeed, the way in which surplus labour is squeezed out of direct producers, Marxists generally concur, is the basic characteristic of a mode of production. Yet, the *notion* of exploitation can be understood completely without the need to postulate any one of such institutional mechanisms.

Marx's other achievement was to examine the institutional structure of capitalism and provide an explanation of how exploitation occurs even under the conditions of 'free exchange'. Correct or not, this is what his theory of *capitalist* exploitation was doing.

To sum up, the concept of exploitation was the basis on which Marx explained the general accumulation of wealth, while the theory of capitalist exploitation explained the way in which it occurred under capitalism.

Now, Roemer identifies a problem for Marxism, in that the 'actually existing socialism' did not appear to eliminate phenomena associated with class societies. There is not much to fault in that diagnosis. His cure, however, diverges distinctly from that suggested by Marx's example.

To provide a Marxian explanation of the class-like character of nominally socialist societies would be to take the *concept* of exploitation invented by Marx and try to devise a *theory* of how exploitation is possible in these societies. In other words, it would be to consider the structure of 'actually existing socialism' and try to explain how the institutional settings of that society allowed exploitation to occur even under the conditions of 'no private property'.

And indeed, this is precisely what a slew of Marxist dissidents in Eastern Europe had been doing for years, from Djilas (1957) through Kuro and Modzelewski (1965) through to Bahro (1978), Bondy (2002) and Kagarlitsky (1988). Given that all of these writers were – at a certain point of their intellectual trajectory at any rate – both critical of the system *and* relying on the Marxist scheme of thought, they could not help but try to look for ways in which the 'actually existing socialism' was in fact a structure based on exploitation. Given the nature of the problem, this is logical and consistent with the Marxist mode of thinking. But this is not what Roemer does.

Instead of devising a theory of how exploitation occurs within the 'actually existing socialism', he takes to task the very *concept* of exploitation invented by Marx. And instead of examining the actual structure of the Soviet-type society, he makes exploitation-concepts of his own devising jump through hoops of examples with institutional settings that have nothing to do with the structure of such a society.

There may of course be reasons for such a procedure. What I am claiming, however, is that the ostensible reason for Roemer's approach does not justify his actual methodology. Marx's original concept of exploitation is *already* 'general' in Roemer's sense, in that there is no reason why it should not be able to explain the accumulation of wealth in any society under consideration,

including 'actually existing socialism'. The effort to 'generalise' it thus completely lacks motivation. The only reason why one might want to do this is if the varying fictional settings show this concept to be wanting by a *different* set of criteria from the one it was originally judged by. And this is indeed the case with Roemer.

What Roemer actually does, as opposed to his proclaimed intention, is to try to see under what conditions do phenomena which share some of the features of Marxian exploitation (but are not identical with it) arise in a market economy. As it happens, Roemer's work does turn out to be useful for my purposes, in that in order to integrate the notions of exploitation and division of labour, it is necessary to generalise the former notion, and some of Roemer's ideas do point a way towards such a generalisation. However, it is clear that there will need to be a parting of ways, too, for as I have already pointed out, Roemer is not actually interested in the materialist conception of history, instead, he examines concepts that allow him to develop his views of justice. It is hardly surprising that methodology suited for the former purpose is not the same as the one fashioned for the latter.

Roemer's 'Heresies'

In the course of his work, Roemer 'proves' various results that appear 'heretical' from the point of view of orthodox Marxism. I will now list those issues on which I would like to concentrate my critical analysis.

In the first place, Roemer shows that 'Marxian-like exploitation' can occur in a subsistence society, i. e. one in which no surplus is produced beyond the needs of production. Second, this phenomenon furthermore occurs in a market economy which is *pre*-capitalist, that is, it contains no labour market.³ Third, Roemer shows that the labour market and the credit market are 'functionally equivalent', in the sense that if two otherwise identical economies possess a labour market and a credit market respectively, exactly the same amounts of

³ Nor a credit market – the significance of which will be seen immediately.

exploitation will result. Fourth, Roemer provides a definition of exploitation which excludes any talk of transfer of labour altogether, presenting it as the 'general' definition of exploitation. Finally, in his later work he disposes of the notion of exploitation altogether, claiming to show that it is not relevant for any of the reasons usually advanced; most importantly, he claims exploitation is not a good explanation of the existence of profit.

Subsistence as Necessary Compensation

The first two results are actually tied together: what Roemer shows is that 'Marxian-like exploitation' can occur within a *subsistence pre-capitalist* economy. I would like to unbundle the two issues, however. There are separate things to be said about subsistence and about the possibility of exploitation purely through exchange of commodities. In particular, I believe that the first issue illustrates how Roemer misunderstands the concept of subsistence and what role it plays in Marxist thinking, while the second issue is to do with his faulty conception of exploitation.

Let us then concentrate on the first of Roemer's 'heresies', the identification of 'Marxian-like exploitation' in a subsistence economy, that is, in an economy where no surplus is being produced.

Roemer proves his result using a neoclassical-style optimisation model, which is the hallmark of his approach. The model describes a society where everybody produces for the market, having access to the same set of techniques; where production requires an initial stock of resources (circulating capital), and the resources are unequally distributed among the producers.

The optimisation problem is based on some further assumptions, most of which are unobjectionable and need not concern us here. There is, however, one assumption that Roemer makes for *all* of his 'subsistence economy' models, and this assumption is objectionable indeed. It is the statement to the effect that all producers require the same basket of subsistence goods to survive.

I claim that the counter-intuitive result of 'exploitation' without surplus labour is partly due to this assumption. For the correct interpretation of this premise reveals that Roemer fails to understand the Marxian concept of subsistence, and his model shows nothing contrary to usual Marxist thinking. For Roemer seems to believe that identical consumption baskets for all producers, regardless of the amount of work performed by them, represents subsistence. In this I think he is mistaken.

The Marxian notion of subsistence needs to be fleshed out as part of the whole notion of individual reproduction. Subsistence is that amount of consumption goods which allows the producer to *just* reproduce themselves — that is, to be tomorrow substantially the same in all the relevant qualities as they are today. In production, the worker 'runs themselves down'; in order to 'build themselves up' again, and thus achieve (simple) reproduction, they need the subsistence amount of goods.

It follows that there is no *single* basket of subsistence for any and all producers, even if we assume them to be identical. The amount of subsistence depends crucially on the amount of work performed. This is a completely intuitive notion: a layabout Peter, who does nothing but stare into the wall all day long, hardly requires the same amount of sustenance as his identical twin lumberjack Paul, who chops and lugs and tugs from sunup to sundown.

Thus, Roemer's model in fact tacitly involves surplus labour the moment he derives that the amount of work performed by different producers is different. If some work less than others, but consume the same, this means that part of what they consume is unnecessary for their reproduction. Thus, they are receiving *above-subsistence income*, which in a technical sense is a *luxury* – and hence part of a surplus in which surplus labour of other producers is embodied.

That this is so can be further seen from the fact that Roemer only seems to distinguish two types of economy: a subsistence one and an accumulating one. If there is any surplus/surplus labour, then in his understanding it must be given over to building up capital, come what may.

But this is obviously wrong. There is clearly a third possibility: an economy where surplus is being produced, but instead of being accumulated, it is simply consumed. Indeed, this is precisely the sort of economy that Sraffa describes in his Production of Commodities by Means of Commodities (1960), from which a whole tradition of critique of Marxism derives — a tradition to which has Roemer contributed at times. Thus it is a wonder that he failed to notice the basic fact about the Sraffa model — namely that while there is no accumulation in it, there is certainly production of the surplus.

Conversely, the Sraffian model of subsistence economy shows clearly that Roemer's characterisation does *not* apply to such an economy. A description of Sraffa's model was already provided in Chap. I; here I just want to remind the reader of some of its relevant features. Sraffa uses an input-output schema in which labour inputs are not represented directly, but only through the subsistence requirements of labourers; thus instead of X hours of labour, Y baskets of food are included in the equations. Implicit here is the same idea as was already propounded above: that there is a one-to-one relationship between the amount of subsistence required and the amount of labour performed. Roemer breaks the correspondence; for him the amount of subsistence is given exogenously and independently of any labour. This is one reason for Roemer's 'heretical' result.

As a counterargument to Roemer's 'proof' of the existence of exploitation in a subsistence society, however, this is a relatively minor point. For it is exposed to an objection that after all, subsistence is *not* just compensation for labour performed. There is something which we could call an 'absolute' or 'reserve' level of subsistence, which is required simply to survive when no effort is being performed. If Peter and Paul need each other in order to survive, yet Paul is doing the lion's share of the work, then even if Peter actually only consumes the exact amount necessary to survive (rather than the same as Paul),

⁴ Sraffa (1960) does not literally use 'baskets of food', but that is immaterial; the basic point still stands.

even so it is clear that in some sense Paul is feeding his co-worker. For both Peter and Paul need at least the same 'absolute subsistence bundle', which requires labour to be produced; it is only on top of that that each receives compensation for labour performed.

In my opinion, Roemer's misconception of subsistence throws some light on his misunderstanding of Marxism, which is quite possibly bound up with his neoclassical methodology. For the notion of subsistence is closely tied to that of necessity (and thus also its counterpart). The notions of the 'realm of necessity' and the 'realm of freedom' are in my opinion paramount for Marxist thought. They are an embodiment of the fundamental Marxist tenet that the history of humankind is shaped by material forces, i. e. forces of material necessity, far more than by the free decisions of human beings — at least until the classless society finally arrives. In any class society, the primary producers are constrained by the need to produce their means of subsistence; and it is precisely this constraint that allows for the existence of exploitation.

The existence of 'absolute subsistence level', corresponding to what in biology is called the 'basal metabolic rate', the amount of energy that the organism requires for survival in its most inactive state, is in my opinion undeniable. Even when no work at all is performed, this physiological minimum must be supplied, otherwise the organism will fail to reproduce itself.

Yet, neoclassical economic models tend to leave out the necessity of this basic level of consumption, as if it were an unimportant complication. But it is only because the necessity of basic absolute subsistence is not being addressed that the neoclassical model of labour supply can treat the problem as one of a trade-off between 'labour' and 'leisure'. The pedestrian necessity that a worker *has to* work for a living, which of course is the starting point of Marxism, tends to be left out of consideration altogether.

The logic of the neoclassical approach itself would in fact dictate that this necessity should be modelled as an additional constraint for the utility-maximising agent. Such a constraint, however, is not part of the standard exposition of the

neoclassical notion of labour supply. The possibility suggests a way of modelling Marxian (rather than Roemerian) exploitation within the neoclassical model: if, given the subsistence constraint, we find that the subsistence bundle can only be purchased after X hours of labour, given the necessity of selling labour-power, and yet the productive possibilities allow for the production of the bundle after Y<X hours, then the agent is being exploited.

Exploitation Through the Price Mechanism?

Now, before turning to the issue of 'absolute subsistence', let me examine Roemer's claim that he produced 'Marxian-like exploitation' purely through exchange of commodities, without labour becoming a commodity itself, i. e. without a labour market, and also without a credit market, whereby producers could hire capital.

This claim is very interesting. Effectively, what Roemer seems to be saying is that the existence of price mechanism is under some circumstances sufficient to force some producers to work more than is necessary for their own needs.

Roemer first proves that as long as commodities exchange at their labour values, everybody in the society works the same amount of time, namely the social average; and that the converse also holds (*GTEC*, p. 36). Next, he shows that there are also sustainable long-term situations (reproducible equilibria) where agents do not work the socially average labour time. This is the situation he terms exploitative, since the poor producers work more than the social average, while the rich producers work less; and in fact the rich work less than they would have done had there been no trade.

Now, by the previously mentioned theorem, the fact that agents do not work the socially average labour time means that prices diverge from labour values. This is the situation classically called 'unequal exchange'. Yet, this should be worrying. For as it notoriously well-known, the challenge Marx set himself was to provide an explanation for the extraction of surplus labour *without* unequal exchange. As he was well aware, it is quite easy to point out that

somebody is being 'exploited', in the sense of being taken advantage of, when the commodities they exchange with others are not traded at their values. What Roemer does is verify this insight using fairly sophisticated mathematical techniques, but otherwise it would be correct to say that he does not even arrive at Marx's starting point.⁵

Moreover, consider that while Roemer's description assumes some sort of mutual dependence of the rich and the poor, this is hardly enough to claim that he is describing a single *society*. For his description would easily apply to two tribal, unequally endowed, geographically separated communities, who nevertheless need each others' produce, and whose representatives met at certain times of the year in order to barter. It would be true that if we averaged the labour inputs over the two communities, the poorly endowed one would turn out to work more than this 'social average', whereas the well endowed one would be working less. However, in what exact sense would this really be a 'social' average? Are the couple of meetings a year enough to make these two tribe a single society, such that it would make sense to ascribe a set of productive possibilities to it?

Surely a far more intuitive picture is that these are *two* societies, one of which through luck or otherwise happens to be in a better position than the other. If that better position allows the wealthier community to throw its weight about in trade negotiations, this may be in some sense unjust. But that injustice has nothing to do with a fictitious 'socially necessary labour average'. If there is exploitation here, it is exploitation of the *bargaining position*. This is clear if we consider a pure exchange economy, where no production is going on, and the two communities simply happen to *find* the various precious resources. The poorer community would still end up with the terms of trade being against it, purely due to its bargaining strength; but there would be no deviation from 'socially necessary average labour' to blame this on.

⁵ From a different point of view, this is also a remark made in Roberts (1997).

This can be clearly seen from the real-world interpretation Roemer offers for his results. He says that his construction can be used to model unequal exchange between the poor and the rich countries. But, as the apologists for the existing trade regime are always quick to point out, free trade would not occur unless it were to the advantage of both parties. It would serve no purpose for the critics of the current regime to pretend that this is not the case. Instead, the rejoinder should be that while 'free trade' may be preferable to no trade, the rich countries exploit their position (note the word!) by forcing the poor countries to accept terms which are unjust. The injustice lies in the fact that the distribution of benefits of trade is skewed towards the party that already possesses more wealth. But it is hardly an instance of labour exploitation, since without trade, not just the rich country would have to perform more labour (as Roemer suggests), but the same would apply also to the poor country – it too would be forced to perform even more labour over the 'average socially necessary' level (i. e. averaging over the productive possibilities of both parties regardless over whether they are trading or not).6

Roemerian and Marxian exploitation

What this suggests is that while Roemer may well have a *prima facie* case for having identified an *unjust situation*, it is far from clear that he has discovered an instance of *exploitation*. Partly the argument will turn on his understanding of this concept, which is interesting in its own right.

Let me say once again that Roemer calls the situation 'exploitative' because the poor producers work more than is on average socially necessary to produce the subsistence bundle, while the rich work less. He justifies calling this 'exploitation' in two ways. First of all, he provides a little story about 'murder

⁶ The no-trade possibility is excluded in Roemer's formal model under consideration, since there the rich and the poor are part of the same subsistence society, i. e. without trade neither party could survive. Nevertheless, the point is still important and would presumably stand out should the model be modified to include a possibility of surplus production (and thus also survival without trade).

and theft'. If the rich producer killed the poor one and took their possessions, they would now have to work *more* than before. In other words, in some sense the poor producer is working 'for' the rich. On the other hand, if the poor producer killed the rich one and appropriated their capital, they could now get away with working *less* than before. Hence – Roemer claims – we cannot simply say that the two are both benefiting from social co-operation; for the disappearance of the rich producer makes the poor one *better off*, which could not be the case if they were both gaining from (or at least not losing out on) co-operation.

The second 'justification' is really just a promise of one, for it refers to the 'general' game-theoretic notion of exploitation provided by Roemer later in the GTEC, which has to be justified in its own right. I shall leave that aside for the moment, since there will be an opportunity to discuss this general notion in more detail later on.

Is the murder-and-theft story a convincing one as a justification for calling the phenomenon identified 'Marxian-like exploitation'? Let us put the classical and the current Roemerian notion side by side. According to the classical concept, exploitation exists when one group of people, aside from performing labour necessary for their own subsistence, also produces subsistence and possible luxuries for another group of people. According to Roemer, exploitation exists when one group of people works more than is on average necessary to produce their means of subsistence, while another group of people works less.

Now clearly, if one group of people works to feed themselves *and* another group, and we assume that this other group is not doing any work⁷, then clearly the former are working more than is on average necessary to produce their

⁷ A justifiable assumption in this context, since the exploiters do not *need* to do any work for their own subsistence – it is provided by the exploited – and since we need to compare the definitions under identical circumstances, i. e. *without* direct coercion or supervision, and so we should assume the exploiters need not perform these activities either.

means of subsistence, while the latter are working less. So the exploited and the exploiters in the classical sense are also the exploited and the exploiters respectively in the Roemerian sense.

The opposite, of course, does not necessarily hold: the poor producers in Roemer's example are 'exploited' in his sense, and yet it is impossible to say that they provide 'more labour than is necessary for their survival' — since they themselves do not provide all such necessary labour, part of it being supplied by the rich producers.

I think that the way to think about the two concepts is to see the Marxian one as the extreme special case of Roemer's. If we start from the situation where two groups of workers supply equal amounts of labour and then vary it by adding to the burden of one group and lightening that of the other, we have Roemerian exploitation. Then in the limit, the first group will perform *all* the labour necessary for its upkeep as well as for the survival of the second group, while this second group will perform none — which is precisely the situation of Marxian exploitation.

Thus Roemer generalises the Marxian notion in the direction of *inegalitarian* division of labour. What I mean by this is that he takes the relevant characteristic of exploitation to be the differential amounts of labour performed. In other words, again this is looking at exploitation primarily from the point of view of justice.

I do not necessarily have a quarrel with that, but I would like to point out that aside from Marx's jaundiced view of 'justice', his notion of exploitation was significant, because it allowed the development of a dynamical theory of history: if there is surplus labour in the canonical sense, then surplus can be accumulated and used for expanded reproduction of the society, thus moving the society forward. This is not exactly the case with Roemer's concept.

Furthermore, there is an important problem with this concept: it fails to include any notion of causality. It is of course true that in the actual example, a type of causal mechanism is specified which explains *why* the amounts of labour

performed are different. However, this is no part of the definition of exploitation itself.

Why is this significant? Consider the following example:

Suppose there is a classically exploited working class, providing necessary labour for its own subsistence, as well as surplus labour to a capitalist class. For the sake of the example, let me also make the following unrealistic assumptions:

1) There is a clear difference between the wage goods supporting the working class and the luxuries that the capitalists live on. Thus, both classes need food, but say that while the workers make do with bread, the capitalists consume caviar. 2) All workers are involved in production of both the wage goods and the luxuries, with the work-time equally split between the production of both types of goods. 3) There are constant returns to scale in the production of wage goods, but increasing returns in the production of luxuries.

Now suppose a group of workers through successful organisation wins a decrease of the working day, from 12 hours to 10, let us say. The capitalists do not want to reduce their profits, and hence their consumption of luxuries. Since there are economies of scale in the luxury production, they need the lucky trade-unionists to spend the same amount of time in that production as before. It follows that if nothing else changed, there would be a reduction in the production of wage goods, since this is where labour expenditure of the trade-unionists will go down. But since there is no decrease in pay, the deficit of wage goods must come from somewhere. In order to make up for it, the capitalists force the unlucky unorganised workers to increase their labour time from 12 hours to 14.

Now, since the amount of time spent on luxury production has not changed for any worker, it is clear that every one of them is still putting in the same amount of surplus labour, if that is defined as labour over that necessary to reproduce the worker. For none of the labour time spent on the production of luxuries is necessary for that reproduction. Thus, all the workers are still

being exploited and still put in exactly the same surplus labour. There is an obvious division between the working class and the capitalist class.

On the other hand, there is now clearly unequal division of labour within the working class. While the working class as a whole still supplies both the necessary and the surplus labour, the shares of necessary labour performed are unequal. Internally, the class is divided. The successful trade-unionists have become a 'labour aristocracy' – they perform less necessary labour than the unorganised workers, and are better paid. Now, we might believe that the position of labour aristocracy makes it less revolutionary. We might even want to say that that positions is unfair, with regard to other workers. But what we would certainly not say is that the labour aristocracy exploits the other workers.

And yet the description fits Roemer's condition precisely: the labour aristocracy performs less than the average amount of the socially necessary labour, while the rest of the workers perform more.

The trouble is that in the example given, while the labour aristocracy can be said to be a *beneficiary* of exploitation, it is certainly in no sense its *originator*. That is precisely what is wrong with Roemer's concept: since it does not in itself require that there is a specific type of causal relationship between the 'underworked' and the 'overworked' group, it is vulnerable to the sort of challenges where the causal relations are different from what we intuitively expect to be the case with exploitation. As will be seen, this feature is inherited by the later, still more general Roemerian concepts.

Does Unequal Ownership Really Cause Exploitation?

Finally, let me note that despite rhetorical flourishes, Roemer does not actually prove that unequal ownership of capital *implies* even his own notion of 'exploitation'. What he shows is that inegalitarian solutions *exist* under unequal ownership, not that they are the only solutions. Hence, unequal ownership makes it possible that unequal labour expenditure occurs; but there is no proof that it forces such unequal expenditure. Nor can this be proved, in my opinion.

For Roemer's proof of existence requires an implied condition that different techniques are differently capital- and labour-intensive, and that capital is distributed in such a way that the rich can operate a set of techniques which overall is strictly more capital-intensive than the one available to the poor. It is this which allows the 'rich' producers to work less than the poor: since in aggregate the society just manages to reproduce itself, anything produced by the rich will find a market (the poor would not be able to do it themselves) and thus they can concentrate on the capital-intensive production, safe in the knowledge that the poor have no choice but exert themselves in labour-intensive techniques. If capital were distributed equally, this could not work, for if anyone tried to just go for capital-intensive techniques (instead of the average mix of techniques), not enough would be produced, as there is no mechanism to force the rest of the society to supply extra labour.

However, even under unequal ownership the unequal expenditure of labour need not be the case. If all possible technologies embody have the same 'organic composition of capital' - that is, require an equal ratio of labour to capital - then clearly it does not matter how much capital is owned by whom. Using a lot of capital equipment would imply using a lot of labour; if the aim is to minimise labour, then everybody will use the minimum capital they can get away with. The possession of this minimum is guaranteed by Roemer's condition that every producer has enough (financial) capital to guarantee the production of the (value of) the means of subsistence. Thus, everybody will perform exactly the same minimum of labour necessary.

Finally, we need not require that all possible technologies are equally capital-intensive. It is enough to postulate that although there are differences in intensity, the unequal distribution of capital still gives a chance to all to use the exact same set of technologies. Thus, although some people will have excess capital, they do not possess enough of it to access any highly capital-intensive technologies not available to others; conversely, although there are some very labour-intensive technologies, nobody is forced through lack of capital to use

them. The situation then is exactly equivalent to the one of equal ownership. Which is precisely the point: what Roemer really shows is not that ownership of capital matters, but that access to productive technology matters. If that access is restricted, then unequal expenditure of labour is a possibility, even if the distribution of capital is equal - such as when there are non-market restrictions in place (for example racist laws which allow 'whites only' to use their capital in a particular way). Conversely, if access is equal, then the distribution of capital is irrelevant — such as the case described above, where differences in wealth do not prevent everybody from using the same set of technologies.

Domination and Exploitation

Let us now consider Roemer's isomorphism between the 'Labour Market Island' and the 'Credit Market Island'.

Similarly to what is the case about the work as a whole, Roemer has two targets in this chapter. Here, the secondary one is the neoclassical contention that in a perfectly competitive economy, Marxian exploitation does not exist, since it is claimed that it does not matter whether capital hires labour or labour hires capital. An equal-size profit, or rather 'return on capital', exists either way, the neoclassicals argue. Hence it is not true that profit (interest) is due to the capitalists exploiting the workers, since there are no capitalists of the relevant sort in a scenario where workers hire capital.

Roemer does not deny that there is no fundamental difference between the labour market scenario and the credit market scenario. However, he subverts the argument to show that since exploitation demonstrably *does* exist under the labour market scenario, and since the Labour Market Island and the Credit Market Island are isomorphic, logically it necessarily also exists under the credit market scenario. Instead of proving the non-existence of exploitation, the most the neoclassical story shows that it does exist even absent the hiring of labour.

This is precisely what constitutes the attack on Roemer's other, primary target: the Marxist contention that exploitation under capitalism relies on the

subordination of the worker to the capitalist in the labour process. Given what has just been said, this contention simply cannot be true. Of course, this does not mean that the difference between the labour market and the credit market is empirically and historically unimportant, and Roemer says as much. Instead, the point is that there is no essential difference between them when looked at from the point of view of exploitation. That, according to Roemer, can be accomplished equivalently in both situations.

The differences arise on a lower level of abstraction. These include issues such as enforcement costs – for the labour market, supervision of hired labour is necessary, whereas for the credit market Roemer postulates the existence of collateral as an equivalent necessity. If there are increasing returns to scale, and we do not abstract from the organisational and informational problems, then labour market will be favoured, since it represents a form of overcoming those problems in itself. Thus, Roemer concludes that the explanation of the prevalence of labour markets over credit markets must be due to the imperfections mentioned – transaction costs, economies of sale, information, risk – rather than to exploitation *per se*.

Now there is a theme here which recurs in Roemer's later writings. Namely, it is the contention that, in our terminology, exploitation and the authoritarian division of labour are two separate issues, which are joined together at most contingently rather than logically.

A case in point is the iconoclastic 'Should Marxists Be Interested in Exploitation?' (Roemer 1985). The structure of Roemer's argument in this paper is to enumerate the reasons why exploitation might be thought to be an important issue and then to argue one-by-one against these justifications. Thus, he tries to show that neither the existence of profit, nor domination, nor alienation, nor inequality give good grounds to be interested in exploitation.

I take it that the most important argument in this connection is the one against exploitation as the explanation of capitalist accumulation. I will present my own take on this question in the next chapter. At this point, however, I

would like to concentrate on Roemer's claims regarding 'domination', which are bound up with the issue we have been considering.

Roemer distinguishes between two types of domination – the 'overall' power structure that protects the existing pattern of ownership of the means of production, and the authoritarian division of labour – the "hierarchical and autocratic structure of work" (Roemer 1985, p. 39). Roemer terms these two concepts domination¹ and domination². In the interests of greater clarity, however, I shall take the liberty to refer to them as 'power' and 'supervision' respectively.

As regards power, Roemer argues three points. It may have a role in determining values under imperfect competition, but that means it is "characteristically non-capitalist". It implies exploitation, in the trivial sense that if there is power, protecting unequal distribution of property rights, then there will be exploitation; however this is no reason to look at exploitation, for if power is evil, we should be looking directly at it. Finally and relatedly, if exploitation flows from the unequal distribution of property rights, and if power is needed to protect them, then exploitation does imply power — but exploitation is only a 'transmission channel', so to speak, and the relevant problem is the unequal distribution itself.

Now, Roemer does not actually specify that what he is referring to here in this discussion is *not* exploitation as such, but exploitation in a (competitive) market economy. I think this is significant. For the market mechanism of course is not the only way through which exploitation can be accomplished; far from it. The obvious example of direct coercion, which played *the* major role in exploitative modes of production for millennia, cannot be discounted. Now as I have already noted in the previous chapter, there is an argument that private property of the means of production is *not* the defining characteristic of such modes of production. There is the Wittfogel-Bahro argument that for long periods of history in many parts of the world the dominant mode of exploitation did not rest upon private property at all. Rather, exploitation rested

on direct coercion, which developed at first from the necessity of accepting the hierarchical division of labour simply in order to survive.

What this implies is that Roemer's argument that power is only needed to protect inequalities in private property is false. We *could* stretch the meaning of 'property' to include any instance of direct coercion, but that would turn the whole argument into a tautology. If we reject this option, it is perfectly imaginable and quite possibly historically accurate to say that power was used to protect the existing mode of exploitation, without protecting inequalities in the ownership of property as such.

In general, it seems to me that Roemer achieves his result only because he assumes what is to be proven. For if the assumption is that exploitation can only exist as a result of the unequal ownership of property, then obviously whatever exploitation can do for us, unequal ownership of property can do better. It could be argued that the assumption is Marx's rather than Roemer's, for as has been noted already, Marx and Engels in their The German Ideology do talk about the development of class society as the development of 'private property'. Of course, Marx could simply be wrong about that, as the above Wittfogel-Bahro thesis suggests. But even if not, it would seem to me to be clearly quite alien to the spirit of Marx's writing to assume that private property thus means one and the same thing in all periods of history. In particular, it hardly means the existence of competitive markets, which is one of Roemer's constant assumptions. Indeed, Marx's 'development of private property' suggests a Hegelian 'unfolding', under which new features of property are revealed as history progresses, with the capitalist competitive markets representing its highest stage. Thus Marx arguably would say that far from simply protecting the *inequality* of ownership, power exists primarily to protect the nature of ownership itself - for example, to protect the possibility and actuality of ownership of human beings under slavery. It is doubtful that this would fit very well under Roemer's ahistoric notion of 'property'.

The real issue thus becomes whether we can equate the existence of exploitation with the unequal distribution of property rights the way that Roemer does. On the basis of what has been said so far, I would rather claim that it is the mode of exploitation that defines both the nature of property and the role it plays (if any) in the society. In that case, an argument can be made that power exists not simply to protect property, but to protect the existing mode of exploitation itself against the revolts of the exploited. Hence, exploitation does imply the existence of power (Roemer's domination¹), and so Roemer is wrong to try to argue exploitation away.

Regarding supervision, Roemer refers precisely to the argument from GTEC discussed above: since exploitation can exist in a market economy even absent the labour market, it cannot be the case that exploitation implies supervision. He further mentions the case of exploitation even under Simple Commodity Production, when capital is distributed unequally. Roemer's conclusion is by now familiar: the existence of the authoritarian supervision under capitalism is not due to capitalist exploitation per se, but rather to the market imperfections, in particular the fact that "labor contract is not costlessly enforceable, nor can it be perfectly delineated" (Roemer 1985, p. 44)⁸

In his dictionary entry for 'Socialism', Roemer expresses the same point again, and to drive it home, he uses the following example: "Imagine that the worker and capitalist could contract about every eventuality that might occur during production. If, in addition, the contract were costlessly enforceable (imagine an omnipotent arbitrator who is at hand to deal with any disagreement), then there would be no petty coercion at the point of production: capitalists would not try to speed up assembly lines, force workers to work overtime, cheat them of their

In response to a possible objection that his previous model do not take account of the preference for non-authoritarian work, Roemer claims to have constructed a model which does take this preference into account, with the result that subordinated agents are exploited and superior agents are exploiters, but the 'petty bourgeois' self-employed agents can be either exploiters or exploited. Hence it is still the case that domination implies exploitation, but not vice versa, as in the original model.

wages, discipline them in demeaning ways, and so on." (Roemer 2008, emphasis added)

I believe that the passage just quoted, and in particular the part I highlighted, make it clear that there must be something wrong with Roemer's views. For imagine the following analogy: if we first described a theocratic dictatorship where there is much 'petty domination' by the priests to punish any divergence from the holy creed, and then compared it to a world where the omnipotent deity was at hand to lay down the punishment instantly themselves, then we would hardly say that the second case is one of 'no coercion'. On the contrary, surely we would be inclined to call it a world of *perfect* coercion. Of course such perfect coercion makes 'petty domination' superfluous. But that is hardly reason to believe that the arrangement is somehow non-coercive in itself.

Lest it be thought that the argument applies only to Roemer's unfortunate analogy, let me extend it to his original claim. What he says is that authoritarian division of labour is solely due to 'imperfections' that have nothing to do with exploitation as such. However, what is exploitation, if not appropriation of surplus labour? The claim that under perfect foresight and costless enforceability, the exploited could contract for every eventuality that occurred while working for the exploiter may be true. But does that not seem to imply perfect subordination to the will of the exploiter? It does not much matter whether the exploiter enforces their will during the time of exploitation or beforehand. And the only difference between costless and costly enforceability is that the second case – the one that empirically occurs – is one of less subordination.

Thus, if exploitation implies that the exploited provides some of their time to the exploiter, this does seem to be connected to the issue of surrendering autonomy, i. e. to accepting the authoritarian division of labour. Now, there is an interesting wrinkle in the argument: it may be the case that under some

⁹ Roemer of course does say that exploitation can be many other things – he uses quite a few different definitions of the term, including some that have nothing to do with labour at all. However, at this stage in the proceedings this is an acceptable use of the term.

circumstances, it is actually beneficial for the exploiter to provide space for a certain amount of autonomy on the part of the exploited. However, the important point to note is that whether the exploited will work autonomously is not up to them. The very decision on the amount of autonomy at work is not the worker's to be made. In terms of Roemer's examples, the autonomous sphere would be precisely specified in the perfect and costlessly enforceable contract. Thus even if empirically some of the exploited are not largely subject to somebody else's will, the fact remains that this is so only at the say-so of the exploiters. Thus in a larger sense, it is still the exploiters who are in the position of authority, even if it happens to be in their advantage not to use it for 'petty domination'.

Finally, to return to the issue of the isomorphism between the Labour Market Island and the Credit Market Island, it is instructive to note the experience of the Yugoslav economy, in which enterprises formally belonged to the workers who were employed by them, while these enterprises were relating to each other through the market. Despite the fact that in this case, 'labour was hiring capital' – since ownership is formally equivalent to a permanent hire – there was hardly any difference in the hierarchical relations inside the enterprise. True, the workers had been formally electing their managers; however in practice, the relations in the workplace were indistinguishable from the situation in the capitalist market economies.

What this suggests is that the authoritarian organisation of labour is a very 'efficient' means for the production of the surplus — and thus may well emerge even under the regime of the Credit Market Island. Formally speaking, it might be the case that the workers would in a sense impose such organisation on themselves, in the recognition of the fact that otherwise the surplus required for the payment of interest would not be produced. But there should be no doubt that the supervisors — who might well be elected — would be performing a role in the interest of the creditors; what in the last chapter I mentioned Carchedi suggestively describing as 'the function of capital'. Thus, it might well turn out

that the Yugoslav experience was not accidental, and that the Labour Market Island and the Credit Market Island are not only isomorphic, but in practice actually indistinguishable.

Roemer's Generalised Definition of Exploitation

As I have said at the beginning of this discussion, Roemer's procedure is not to try to devise a special theory of how exploitation occurs under various institutional settings, but rather, designing a new concept of exploitation. Moving along this path, Roemer uses three different notion of exploitation in GTEC. According to the first notion, exploitation exists when one group of people performs more than the average socially necessary labour to obtain its subsistence bundle and another group of people performs less (the inegalitarian expenditure of labour mentioned above). According to the second exploitation exists if the one group of people cannot possibly purchase a consumption bundle which contains at least as much labour as they had worked, while another group cannot possibly purchase a bundle containing at most the labour they had provided. And finally according to the third, 'general' definition, exploitation exists if under a hypothetically feasible alternative, one group of people become better off and the complementary group becomes worse off.

I will now attempt to provide a critique of the third, most general of Roemer's definitions. In full, this definition states:

"A coalition S, in a larger society N, is exploited if and only if:

- 1. There is an alternative, which we may conceive of as hypothetically feasible, in which S would be better off than in its present situation.
- 2. Under this alternative, the complement to S, the coalition N-S=S', would be worse off than at present.

The formal analysis in this chapter will take exploitation to be characterised by (1) and (2), although a third condition is also necessary to rule out certain bizarre examples, namely:

3. S'is in a relationship of dominance to S." (Roemer GTEC, pp. 194-195)."

The first problem is that the definition as it stands does not actually define 'exploitation' – instead, it only defines the exploited and the exploiting group. But it does not specify any actual relation between the 'exploited' and the 'exploiting' group. (This is precisely the reason why Roemer feels compelled to attach the condition of 'dominance' to his definition. It is only that condition that ensures that the two groups are even part of the same society, not to mention that one 'exploits' the other.)

Roemer himself would not actually be overly worried by the fact that his definition does not cover any relations. For even when he later, for the sake of example, used the labour-transfer approach to exploitation, he was quite explicit that this did *not* involve any relations between classes:

"It is important to note that exploitation is not defined relationally. The statement "A exploits B" is not defined, but rather "A is an exploiter" and "B is exploited". Exploitation, as I conceive it, refers to the relationship between a person and society as a whole as measured by the transfer of the person's labor to the society, and the reverse transfer of society's labor to the person, as embodied in goods the person claims." (Roemer 1985, p. 31)

But he *should* be worried, I think. For Marx, all exploitation is the appropriation of surplus labour; its various forms only differ in how this appropriation occurs. Thus, Marx is giving us a definition of a *relationship* between two groups in a society, which can play itself out through various possible *processes*. All Roemer's approach is telling us, however, is how to assign a name to a particular group within a society; there is no suggestion that the same kind of relationship is binding this group to its complement in each case.

This is significant, because Roemer in this definition has completely severed any sort of link between the considerations of justice and the description of how the society *actually works*. His definition might be important

from the former point of view (although he himself came to doubt it). It has nothing to tell us about the latter issue, however.

I think that Roemer is basically here bending over backwards trying to avoid saying that there is a transfer of labour from one group of people to another (recall that ironically, this was precisely what Wright thought was missing from Roemer's account). Most likely this is due to his deep awareness of problems with what is usually called 'the Labour Theory of Value'. Granted that such problems exist – I will consider them in a later chapter. However, Roemer goes so far that he ends up sacrificing all talk of even a causal connection between the status of the putatively exploited group and the putatively exploiting group. Instead, he falls back on its observable consequences – or in other words, on a correlation between the low status of one group and the high status of the other group. For that is precisely what the idea of 'withdrawals' amounts to: the common existence of groups A and B is correlated with the worsening of the situation of A and the improvement of the situation of B (without loss of generality), compared to their separate existence. And while Roemer does realise that at least some connection between the two groups is necessary and tries to supply it by postulating that one group dominates the other, this is far from enough, because domination is not necessarily the connection of the relevant kind – that would be only exploitation itself, but Roemer refuses to consider it causally.

Thus, his account suffers from all the usual flaws of the attempts to avoid the causal talk. Since correlation is not causation, the three conditions specified by Roemer would classify as exploitative the states of affairs where the result occurs by *coincidence*, the ones where there is a *third cause* of the situation, and finally, where the *causation is reverse* to what we would call exploitation.

It might not be particularly likely that a society would exist to which Roemer's three conditions applied, and yet the better position of the dominating group B over the group A was simply a coincidence. Certainly it is unlikely that such 'happy' coincidence could persist for any length of time without collapsing

into either a more egalitarian state of affairs or more straightforward exploitation. But regardless of the likelihood, conceptually it is clear that the satisfaction of the three conditions really *might* be coincidental. Since there is no causal talk in Roemer's definition, there is no way to exclude this possibility.

On the other hand, it is not too difficult to imagine a situation in which the three conditions apply, yet there is no real exploitation of one group by another going on, and instead, a third cause is responsible for that situation. Consider, for example, a society consisting of two tribes, which has been colonised by an outside power. Whether it be a natural occurrence or a result of a conscious divide et impera policy of the colonising power, tribe B happens to dominate tribe A socially, perhaps on the basis of religion. Now, say that both tribes are actually forced to work for the colonists, being left with next to no subsistence — but with the crucial proviso that the colonists redistribute part of the surplus acquired. Of course, they do this in a lopsided way, favouring the dominant faction.

Now if the dominated tribe managed to withdraw from this situation with its per capita share of productive resources, then obviously it would become better off. Equally, since the dominant tribe B would no longer be receiving that part of the surplus which was produced by the dominated tribe A, it would become worse off. The condition of domination is satisfied by assumption.

And yet, I think it is obvious that we would hardly call this a situation of exploitation. It would of course be a situation that is unjust, there is no doubt about that; but the source of the injustice is clearly the presence of the colonising power, which both causes the production of the surplus and its unequal distribution among the tribes.¹¹ Thus, Roemer's definition clearly fails by producing a false positive.

¹⁰ Apparently the relative position of the Tutsis and the Hutus in colonised Africa was something along these lines – though not bound up with religion – with the differential status encouraged by the colonial power.

¹¹ This is of course an analogy of the 'labour aristocracy' example above – again, we have here beneficiaries of exploitation, who nevertheless are not themselves exploiters

It is also possible to construct an example where the definition fails due to causation being the reverse of what we expect to see in an exploitative situation. Imagine a society of hunters-gatherers (for simplicity, let us say that the 'hunts' are limited to very small mammals, like rodents). This society happens to be divided into two groups: the very skilled and the very unskilled. The skilled also happen to dominate the unskilled, again perhaps mainly in a religious sense, being looked upon in awe as the clearly blessed. Now the skilled are by definition much better at gathering food than the unskilled. In the area that both groups share, they are therefore always first in finding the 'low hanging fruit' and also they manage to get more of it — with the unskilled having to work harder and with less success.

Now if the unskilled 'withdrew' with their fair share of resources – or rather, if the area was proportionately divided between the two – then they would become better off, since they would now have guaranteed access to some of the spots to which the skilled usually beat them; and conversely, the skilled would become worse off for the very same reason. Again, the domination condition is also satisfied, by assumption.

But again, I think it is clear that this situation is emphatically *not* what is normally meant by 'exploitation'. Perhaps in some very loose sense it could be said that the skilled 'exploit their position', or more precisely, 'exploit their abilities'. However, they very definitely do *not* exploit the unskilled. We may again find the situation unjust, if we believe that the genetic lottery should not be determinant of one's life chances — as I do happen to believe. But again, the source of injustice is not exploitation — if it is injustice, then it lies in abuse of one group's abilities, at the expense of the other group. And so again, Roemer's definition produces the intuitively wrong result.

PART II

RECONSTRUCTING THE FUNDAMENTAL CONCEPTS

Chapter IV

Back to Basics Reproduction, Subsistence, Exploitation, Class

Having criticised John Roemer's conception of exploitation, I would now like to present my own reconstruction of the notion of exploitation and its significance. Along the way, several other important Marxian notions will also be analysed.

Reproduction

The most valuable element of the Marxian theory, its conceptual core, is that it is a theory of *reproduction*. Reproduction in the Marxian sense means simply 'renewal', with the further distinctions between *simple*, *extended* and *expanded* reproduction.

Simple reproduction refers to a process whereby some object undergoes a transformation such that at the end of it, it is in the salient aspects the same as in the beginning.

Extended reproduction is a process whereby the object is changed through the transformation, but only quantitatively. That is, while the salient characteristics have numerically increased under some measure, the object is still essentially characterised by them.

Finally, under expanded reproduction, the object undergoes a transformation at the end of which it has developed, grown, or in other words changed qualitatively. The assumption is that this change was progressive (degeneration does not count as expanded reproduction, but rather as failure of simple reproduction).

Production and Compensation

A human being is a *process*. In other words, people, just like animals and other living organisms, are constantly engaged in the process of renewal.

A simple picture of individual reproduction is as follows. The reproductive cycle is divided into two phases: the productive one and the compensatory one. In the productive one, a person is involved in *external metabolism* (Bahro after Marx) with nature, transforming natural materials into means of consumption. These are consumed in the compensatory phase, involving the *internal metabolism*. In order to reproduce themselves completely, both phases are required: during the productive phase, the stock of working ability (labour-power) is being run down; during the compensatory phase, it is being built up again. For simple reproduction, there needs to be a balance between the two phases: too little production relative to compensation results in atrophy, whereas too little compensation results in degradation of the organism.

These two phases are of course distinct logically rather than temporally. On the biological level, the reproduction cycle occurs continuously, literally with every intake and outflow of breath. It is also correct to say that many if not all activities have their productive and compensatory aspects. However, it is clear that at different points in time, either production or compensation dominates — it is either the external or internal transformations that occupy the greater part of the organism's capacities.

This simple picture is indeed only the first approximation to reality, if for no other reason, then because it contains no reference to types of activity other than material transformations; yet human beings are involved in many activities of other kinds. These will be incorporated into the picture later.

Simple Reproduction: A Society of Humanoid Robots

Let us now imagine a very simple society allowing us to grasp the essential notions of surplus production and surplus appropriation – in short, exploitation.

I will assume that the individuals in our simple model society exist on the basis of simple reproduction. I am thus postulating that the individuals need to produce their means of subsistence; but given these means of subsistence, they can completely reproduce themselves, so that they at the end of the productive cycle they are exactly the same as at the beginning. Furthermore, I am assuming that the process of reproduction is not just individual, but *social* — in other words, there is division of labour between the individual agents, which is being reproduced just as much as is their individual existence.

Now this picture is of course vastly simplified, akin to abstract economic models. However, many discussions of class do not explicitly involve many more elements than the above, especially if they are focused on exploitation. To make clear how much is abstracted from when the model is specifed as above, let me make the restrictive assumptions explicit.

What I have described above is really a society of some sort of humanoid robots. They have never been born, and assuming sufficient means of subsistence, they will never die. Neither do they get old, nor ill, and they have full physical power, knowledge and skills (mental and physical) required to perform any task within a possible division of labour, given the existing knowledge of the techniques of production. On the other hand, they never acquire any *more* of either power, knowledge, or skills.

While these restrictions may seem outlandish, really they are doing no more then specifying all the features of real human societies that are being abstracted from. Thus, what is being done is assuming away the whole process of sexual reproduction and socialisation of the new human beings — which amounts to saying that the agents are immortal and eternal. Equally, I am assuming away the process of education, and this must mean that all the knowledge required is already present in the agents' heads. Similarly, there is no need to provide for their physical maintenance (health), other than through the production and consumption of the means of subsistence. Finally, the assumption of individual simple reproduction must mean that no particular

activity can have any effect on the agents' bodies or minds: given that the individual is exactly the same in all the relevant respects at the beginning and at the end of the productive cycle, it must follow that the activity performed in the meantime has no lasting effect on them. Even if one agent spends the whole day solving equations of particle physics while another one spends the whole day digging ditches, at the end of the day the slate gets wiped clean, so to speak, and the two could swap places without any difficulty.

This picture may seem so far removed from reality that it may well be asked whether it can be of any use in discussing human societies. There are two answers to the question. First of all, the restrictive assumptions will obviously have to be dropped later on, in order to come closer to a realistic view of the society. In the meantime, however, they serve as in any similar conceptual endeavour to clarify our vision, to 'reveal what was hidden', to allow us to focus on the essential features of the reality.

But secondly, it is very important to realise that while spelling out these conditions makes the picture appear far, far removed from reality, many discussions of class in fact occur on the level very close to the one just described. In particular, if the discussion of class ignores the issues of socialisation and sexual reproduction, proceeding exactly as if people were never born and did not need to be brought up. To the extent that such discussions abstract from the issue of education and acquiring skills and knowledge, they tacitly assume that everything necessary to take part in production is already present; and so on. Thus if our picture is to be thought to be too unrealistic to allow us to come to any significant conclusions, the same must be the case for all discussions which make the same assumptions implicitly. Contrariwise, if we can derive significant results about classes despite the austerity of the description, it will be clear that their existence does not in fact depend on the complicated features of reality.

I do believe that the austere picture is in fact sufficient for deducing the most interesting characteristics of class. The reason is that what is being abstracted from are essentially all features of *biological reproduction*, while what remains is the process of *material reproduction*. It seems clear that the issue of class arises primarily in the latter sphere, and although there will be of course significant interactions with the other reproduction process in real life, these constitute the next, more complex level of analysis. Accordingly, for the most part I will be using the simple model, always specifying if in some respect it is being supplemented by more realistic assumptions.

Subsistence

In the description I have just given, I mentioned the term *means of subsistence*. The intuitive meaning of this phrase is clear. However, it is worth spelling it out, since its precise import is a point of some controversy.

In the Marxist description of the working of capitalism, workers are often said to be earning subsistence wages. If this is true about capitalism, then it is probably justifiable to say that subsistence level of compensation is probably the rule for the exploited in all modes of production.

This view is often used as a counter-argument against the Marxist theory. Workers in the Western capitalism, or at any rate the majority of them, live at a level that is far above simple 'subsistence'.

Against this, it is pointed out that Marx's concept of the wage included an 'historical and moral element' (Marx 1954, p. 171); and as is well known, Marx also insisted on the expansion of *needs* (rather than just wants) with the development of productive technologies.

I believe we need to distinguish between two different meanings of the term. On the one hand, we have what can be called the *social* subsistence, which is nothing more than the social implicitly defined minimum 'standard of living'. This is a notional poverty line, implicitly present in people's minds; whoever is at or falls below this standard is generally seen as 'poor'. This corresponds closely, with Marx 'historical and moral element' of the wage.

On the other hand, there is also 'subsistence proper', that is, *physiological* subsistence. This is the level of compensation which is needed for 'bare survival'. In other words, the subsistence level of compensation is the bundle of goods and other means of recuperation (sleep etc.) which are required for the simple reproduction of the human being.

One difficulty often mentioned in connection with the concept such as the above is that there does not seem to be any particular level of compensation that can be seen as *the* level of subsistence. Human beings are capable of surviving under an enormous range of adverse circumstances, from concentration camps to Arctic expeditions, and so the notion of a 'minimum' seems meaningless.

However, this objection does not pay enough attention to the notion of simple reproduction. It is one thing to say that a human being may survive, for a time, in extremely adverse circumstances. It is quite another to say that they may be able to *completely reproduce* their relevant capabilities under such circumstances. Indeed, it is quite clear that most extreme conditions imply the failure of simple reproduction, a gradual degradation of the organism, which if continued would eventually lead to death. Thus, what subsistence level of consumption implies is that such degradation does *not* occur, that the person is capable of performing exactly the same way 'tomorrow' as they are 'today'.

Now of course, followed through to its logical conclusion, such a notion of subsistence turns out to be vacuous in the real world. For we are not immortal; eventually, all of our bodies will run down and die. This means that *no* level of compensation will literally guarantee that we are capable of the same things 'tomorrow' as we are 'today'.

There are several possible answers to this difficulty. On the one hand, it might be said that the discussion is confined to the short run, in which the abstraction more or less holds. However, such a conception would not take us very far, since what is required is a theory of class reproduction that holds over long historical periods of time.

Another possibility is to model the situation by separating the issue of *immediate reproduction* from the *reproductive capability*. This is to say that people do indeed reproduce themselves, but in doing so gradually run down their stock of reproductive capability. So, it is as if the total reproduction consisted of two processes: on the one hand, perfect simple reproduction, to which is on the other hand added the effect of their reproductive capability: when young, the effect is positive, with the final result being expanded reproduction; while after maturity, the net result is less than simple reproduction, as the reproductive capability gradually declines.

I think that something like this might be quite a good model for questions concerning individual agents — for example, for studying the differential effects of nurturing and deprived conditions. However, for the most part I prefer yet another interpretation, which is that the concept of reproduction should be understood *collectively* rather than individually. Thus, individual workers will get ill and old, and eventually die. However, there is a level of physical subsistence that *just* allows the simple reproduction of the exploited *class*, whereby the old and ill workers are gradually replaced by the young and healthy ones. I think we will get all the mileage we need from this notion of subsistence. So overall, it is the whole group of people that can be said 'never to have been born' and to be 'immortal'.

However, there *is* another point that needs to be made. The objection that there is no specifiable 'minimum' of compensation needed to keep a person alive is incorrect, once we postulate that the person needs to be completely reproduced. Nevertheless, in a different sort of sense it is true to say that there is no *single* level of subsistence. This is so for at least two reasons.

In the first place, since the subsistence level is what is needed to exactly reproduce the present state, it obviously depends on what the present state actually *is.* Presumably, less compensation is required to reproduce an undeveloped body or mind than a developed one. Thus, subsistence is always relative to what standard has already been achieved, in some sense.

Far more importantly, however, from the discussion of production and compensation above it follows immediately that subsistence is also relative in another sense. This is due to the varying amount of exertion that is required by the assorted possible engagements. Different sorts and amounts of productive activities will require different sorts and amounts of compensation goods to recuperate the run-down bodies. Chopping down trees for twelve hours a day will presumably require a higher level of compensation than walking through the woods and picking wild berries.¹

Thus, it is important to realise that the physiological level of subsistence is always relative to the activities performed. An 'absolute' minimum would presumably have to refer to something like the compensatory requirements of a person resting in complete peace, whose every need is taken care and whose body thus performs no activities at all, save for the actual compensation itself. As mentioned before, this is close to the biological concept of the 'basal metabolic rate'. This, however, is clearly not the idea of subsistence that would be very useful in discussing production. Therefore it is always necessary to bear in mind that the subsistence level of compensation also implies a definite level of productive activity.²

Thus, the notion of subsistence I shall be employing is one of the *pure reproduction level*. Given a certain level of development of human capabilities, and given a certain amount of exertion, it is just what is required to bring up the human being back to the initial level. Any compensation beyond the pure subsistence is, in a particular technical sense, a luxury.

In what follows, I shall be focusing initially precisely on the level of physiological subsistence. This is in line with the very simplified picture I am using at this moment. Of course, human beings are not really the biological

¹ This is of course one of the morals of the discussion of John Roemer's views in the previous chapter.

² It may be impossible, even conceptually, to specify one single bundle of goods that corresponds to compensation at any productive level. But this is hardly a serious problem; even if there is a somewhat fuzzy *range* rather than a single point in the space of bundles, this will do for our purposes.

automatons described; they live in a society, with its corresponding culture; they are influenced by the activities they are performing, etc. Thus the level of their *social* reproduction is far beyond the simple biological requirements of subsistence. These matters can be dealt with; however, in terms of the explication of the existence of classes, they are secondary, as we shall see.

Necessary Labour

Given this notion of subsistence, I am now in a position to define necessary labour. This will be understood as the total amount of productive activities that is required to produce the means of subsistence, given technology and the existing state of human capabilities.

This definition requires some further discussion. First of all, it refers to total amount of productive activities, rather than to labours of individuals. This is unavoidable. Since I am assuming a division of labour in the simple society, it automatically follows that necessary labour is collective. Under division of labour, no individual is capable of producing everything that is necessary to renew themselves. Their individual activity of course may form a part of necessary labour; conversely, it may make sense to refer to that portion of their activities which is contained in the total subsistence productive activities as their 'individual' necessary labour. However, generally speaking, the concept is a social one; given specialisation, such necessary labour of an individual presupposes the social necessary labour.

Secondly, it may seem that the definition above is circular. I have said that the means of subsistence depend on the amount of activity performed; yet here I claim that the necessary activities are determined by the amount of the means of subsistence.

However, the impression is false. This is because the definition does not actually require that the same agents perform the necessary labour and consume

³ To begin with, we shall subsume under 'labour' all activities which are form a part of the process of social production, whatever their nature.

the means of subsistence (although in real societies this will be the case). Instead, what is being said is something like the following. Given the existing state of human capabilities – the level which needs to be reproduced – and given some amount of activity of our agents, whatever that activity happens to be, that is, regardless of whether it is productive in any sense or not – given these two things, a certain amount of the means of subsistence is required to bring these agents back to the original state. Secondly, now that we know this, we can specify, given technology, what amount of productive ability is needed to produce these means of subsistence. That amount is necessary labour.

The impression of circularity arises because, if the society is to reproduce itself, there needs to be an *equilibrium* between the amount of productive activities performed and the necessary labour needed to supply compensation for those activities. If out of the 16 active hours, only 2 are spent producing the means of subsistence, whereas given this expenditure of energy 4 hours are needed to produce the means of subsistence, reproduction will fail. In order to achieve precisely simple reproduction (without any luxuries), the time of subsistence production must match the amount of necessary labour—namely, 4 hours.

Surplus and Exploitation

The lowest level of human development can be defined as that stage of history at which necessary labour and the corresponding necessary compensation fully matched all available capabilities for action. In other words, technology was so undeveloped that just to arrive at the same level of capability, human beings had to use up all available energy in subsistence production, or in necessary compensation. Even the apparent periods of 'leisure' were in reality just a necessary counterpart of the previous expenditure of energy. The human life was occurring fully in the realm of necessity.

⁴ In other words, the productivity was only just developed enough so that *all* the available capability had to be devoted to the necessary reproduction.

It can be doubted whether such a period of history really existed; and if it did, whether the beings described did not have more in common with animals than modern humans. However, this is a useful benchmark of what it means to talk about a pure subsistence society.

If we now allow technology to develop,⁵ necessary labour and necessary compensation shrink relatively to the total time available. Instead of taking up the whole of the available time, they only cover a part of it. Thus we see the appearance of something never previously seen in the world history: genuinely *free* time. This is fundamentally qualitatively different from the simple 'leisure' mentioned above. The necessary compensation may be far more pleasant than necessary labour; however, both are firmly placed on the terrain of necessity. In contrast, the time *neither* spent in subsistence production *nor* in compensation for that production is genuinely *liberated*; it is the time which belongs to the realm of freedom and in which autonomous activities could be performed.

This conclusion is enormously important, because it allows us to see exploitation as essentially the appropriation of the living individuality, regardless of a particular institutional mechanism used for this purpose. This allows for the resolution of the debate over whether exploitation is primarily the appropriation of goods, regardless of domination within production, or primarily the appropriation of the power to produce goods. What seems to be the case is that it is necessary to distinguish between an actual, personal, one-to-one relationship of domination (or authority or subordination), such as between the master and the servant, and a broader, *class* relationship of domination of the whole way of life. Roemer may well be right when he says that 'petty' domination in production is not necessary for the capitalist mode of production. It may well be, after all, that at least in some industries the most efficient way of

⁵ There is a slight problem here, in that if all the time available was taken up by necessary activities, how were the technological improvements ever thought of ? But perhaps we could just assume that the initial improvements occurred simply randomly, and the consequent reduction in necessary labour allowed for others to come in their wake.

organising capitalist production will under some historical conditions turn out to be a target-based organisation of largely autonomous teams. However, in the broader sense, there *is* an essential aspect of domination contained in exploitation, in that for exploitation to exist, the exploiting class *must* take over the genuinely free time of the exploited, and turn it into a surplus labour time. Now it may be that this is done through an apparently impersonal mechanism, such as the marketplace; and in that sense the exploiting class might not be dominating the exploited 'in person', so to speak. However, the existence of the exploitative surplus implies that the liberated time has been taken over for alien purposes, and in that sense the exploited *do* remain subordinate, regardless of how immediately obvious that reality appears.

So when Carchedi charges that Wright's concept of the 'appropriation of the fruit of labour' of others is unsatisfactory, because it would allow the 'elimination' of exploitation by the simple means of redistributing the surplus product, he is right. Exploitation results from the fact that the surplus product has been produced in the first place. It is 'too late' to do anything about this when the time for redistribution comes around. The 'free' time had already been taken over and subordinated to the requirements of the exploiters. Redistributing the surplus may be some sort of compensation for this, but it cannot do away with the fact.

On the other hand, if the charge is that exploitation, capitalist or any other sort, demands the direct involvement of the exploiter in production, and hence *personal* appropriation of the living individuality, then the charge is false. The exploited might be forced to produce the surplus through a variety of mechanisms, some of which need to involve little face-to-face authoritarian interaction *within production*. Class domination is not 'petty domination'. In that sense – but in that sense alone – it is Wright and Roemer who are right on this score.

Exploitation and Poverty

From what has been said so far, it appears that the chief evil of exploitation is that it constitutes a species of unfreedom. It is the appropriation of the very life itself that is at the root of the exploitative relations.

Yet, historically speaking, the notion of exploitation was bound up with the existence of *poverty*, rather than with unfreedom. Lack of freedom certainly played a role in some class societies, such as under slavery or serfdom. But that sort of 'political' unfreedom, that is, lack of freedom sanctioned by the legal and political structure of the society, appears to be a separate issue from the very basic fact that almost all class societies were predominantly divided into the rich and the poor. Can our explication of exploitation account for that?

First of all, I would argue that stressing the domination aspect of exploitation is in fact a virtue rather than a vice. The concept sketched out above does allow for the consideration of poverty, as will be seen shortly. However, the significant point is that it also allows for an identification of an exploitative relationship even when superficially nobody seems to be particularly poor. It will turn out that exploitation appears in different guises at the opposite ends of the spectrum, so to speak. Under certain conditions, at one extreme, exploitation manifests itself as material poverty. At the other extreme, under different conditions, material poverty is not in evidence, however the lack of autonomy is still significant.

This is singularly important. Much ink has been spilt over the question whether Marx's *Capital* argues that capitalism will progressively impoverish the working class in absolute or only relative terms. I believe that the way the concept of exploitation has been spelled out here allows for the possibility that in absolute material terms, the working class may be getting progressively better off, and yet this constitutes no theoretical concession with regard to exploitation.

First of all, it the difference between absolute and relative poverty should be stressed. It seems to me that a good way of making the distinction is by referring to our earlier concepts of physiological and social subsistence. Absolute poverty could then be seen as a living standard which *just* allows the physiological reproduction of the individual, a bare survival level. Anyone above this level may still be poor, however in quite a different sense. The poverty is now *relative* – relative to the socially accepted average standard, i. e. the social subsistence.

Now absolute poverty obviously predates exploitation (of course if we believe that there were societies without exploitation). A subsistence society whose technology did not allow anything but physiological subsistence would be poor in this absolute sense.

Thus, being poor and being exploited are not co-extensive concepts under many circumstances. Obviously, in a pure exchange economy, for example, there is no exploitation, but there may easily be 'the rich' and 'the poor'.

Similarly, in a productive economy, if the productivity of labour is low – as it generally was up until the emergence of capitalism – everybody can be poor even in the absence of exploitation. Poor from our present point of view, that is; in other words, unable to acquire much of what we have come to regard the basic necessities of life.

In the above discussion, exploitation has been described in its limiting, extreme case. In that limit, the necessary labour is defined as labour needed for producing the subsistence bundle of goods, where the relevant concept of subsistence is the physiological one. This implies that in theory all the time liberated from the work for physiological subsistence is 'up for grabs' for the exploiters.

But of course, this need not be the case. Here, the distinction between physiological and social subsistence comes into play. It may well be, and historically indeed it was the case, that the generally accepted standard of living was somewhat higher than the pure physiological minimum. Given this accepted standard of living, the necessary labour was also greater and thus the time available for exploitation lower.

Now, if we believe that up until the emergence of capitalism, the productivity of labour was generally fairly low, this inclines us to believe that there was quite consistent pressure on the exploiters to push the living standards of the exploited as low as possible, to allow for the increase in the supply of surplus labour. Obviously, this is a sweeping generalisation which would likely to be qualified in various ways in most of the historically existing societies. Nevertheless, it seems correct to recognise that the conflict over the living standard of the exploited was one of the major parts of the exploitative conflict overall. The various peasants' revolts, for example, tended to be precipitated by the increases in the demands of the feudal lords that had been felt to be intolerable.

Once productivity started rising significantly, as happened chiefly with the development of capitalism, the pressure on the exploiters to extract the maximum possible surplus labour eased significantly. This is not to say that there was none; but unlike before, it was the consequence of the *social* rather than *material* necessity.

This is the reason why we can expect that in societies with a relatively low level of development, exploitation will mean that the standard of living of the exploited will be closer to the absolute physiological level of subsistence than in highly developed societies. Hence, exploitation will manifest itself as poverty or as unfreedom depending on how far the productivity of labour has progressed in a given society.

Now it is of course true that exploitation-as-unfreedom may be far less *salient* as a motive force of social struggles than exploitation-as-poverty. This is indeed a very important issue. I would say that one of the main reasons why class and class struggle fell in significance in developed capitalist societies is precisely because exploitation lost much of its salience.

Level of Reproduction, Activity, Environment

However, there is actually much more that can be said about the issue of poverty, freedom and exploitation. The discussion above already suggested that there is *more than one dimension* in which exploitation can manifest itself. This leads to the idea that in order to investigate properly how it affects the lives of human beings, it is necessary to first determine what are the relevant aspects of their lives that might be so affected.

I would like to claim that these can be summarised under the headings of capability, activity, and environment.

The notion of capability I am of course borrowing from Amartya Sen (e. g. Sen 1985), although I do not claim that my use is exactly the same as the original. In particular, the idea of capability becomes useful when considering what the 'level' in the 'level of reproduction' actually means. While above this was left unclear, it is now possible to say that the level at which a human being reproduces themselves corresponds to the set of capabilities that they possess at the beginning of the cycle of reproduction. In other words, someone who is pable of accomplishing much with their endowment of capabilities is better off, ceteris paribus, than someone who can do very little.

However, although Sen similarly uses this notion in considering the 'quality of life', I believe this is too little to completely describe its relevant aspects. Another important issue is *what* is actually being done during the process of reproduction, and how *low* or *high* does that process take the individual.

Taking the former claim first, it is relevant not only what the agent is capable of potentially doing, but also what they actually do do. Regardless of the reasons for their action, it will have some impact on the organism itself. And similarly, since the agent does not act in a vacuum, but in the midst of a natural and later also social world, the environment in which they act also matters for their actual experience. That experience of action in an environment may be a pleasant one or an unpleasant one, and may take differently long times. In other

words, the quality of life depends, on the one hand, what the agent actively does, but on the other hand, also on what they passively *endure*.⁶

Finally and relatedly, aside from the immediate impact of actions and endurance of the environment, there is the issue of the 'inner homeostat' of the agent. Since the world in which we live is one of uncertainty, the agent will be experiencing different levels of 'tension', depending on how safe or unsafe they consider their situation to be, what actions they expect themselves to be called upon to perform, etc. In short, the 'inner peace' is also a very relevant consideration; almost nothing among the other aspects can compensate for an extremely heightened sense of tension in the agent.

In effect, it is possible to state that for all three elements – capability, activity, and environment – there is an external and an internal aspect. Internal capability includes those accumulated capacities which have been or have become part of the organism itself, while external capability refers to those options provided by the existence of outside resources – including productive technology. External activity requires no special remarks; internal activity refers to those processes going on inside the body – part of the 'beings' in the 'beings and doings'. Finally, aside from the external environment, there is also the internal state, another sort of 'beings'

Now it is possible that since Sen defines capability as a set of functionings, and functionings are to be thought of as 'beings and doings', the impact of actions, endurance and tension might be considered to have been already included in the notion of capability. For reasons that will become apparent later, however, I prefer to explicitly spell out these different aspects of the experience of life and reserve the name 'capability' for the set of available actions.

⁶ Similar sort of reasoning led Cohen (1989) to develop the concept of 'mid-fare' as the focus for an egalitarian theory of justice.

⁷ I realise that it may well be difficult to distinguish between internal activities and internal environment; however, this question might be resolved in practice, here I find it convenient to use both terms for reasons of theoretical elegance.

Of course, all of these aspects can be applied just as much to the time spent in necessary labour as they can be to the 'liberated time'. So for example, not only is it relevant what actions are performed and what has to be endured during labour-time, but also, what options one possesses and to what extent can one feel relaxed during the 'free' time. This is what it means to say that *both* the amount of liberated time *and* its quality matter – an agent with heaps of free time but few capabilities is not necessarily better off than one with less free time but more options (cf. an unemployed worker vs. a high-income professional in capitalism).

Now we can see that the issue of *poverty* is essentially one of the level of reproduction, that is, the possibilities available, while *free time* is an issue of self-determination vs. necessary labour. Both are relevant and both are to do with exploitation. And in fact, I will in the end try to demonstrate that in a sense, all of the different aspects of quality of life can be subsumed under a kind of exploitation.

Technology

Let me now briefly turn to the question of technology. In the discussion above, I have only used a vague expression, 'given technology'. This is not accidental.

There are at least four different ways in which we could understand what this phrase means. Every society could be characterised by the set of technologies which is actually currently in use. But this is not the only set that might be relevant for our purposes. For there may be other ways of producing that are known, even if they are not actually used. On the other hand, not all these technologies may actually be available, in the sense that not all the inputs required are currently present (nor can they be produced within some definite time-horizon). Finally, some technologies might be 'available', in the sense that everything required is present, yet they remain unknown.

Thus, we arrive at the question of the meaning of 'necessity' in necessary labour. Each of the four ways of viewing technology has their claim on being the right explication of 'necessity'.

The first understanding is the one that Marx actually used in defining labour values under capitalism. As is well known, according to Marx the value of a commodity is the amount of socially necessary labour that goes into its production, where 'socially necessary' means the average amount of labour currently used to produce it. The justification of understanding the 'given technology' in this way is fairly clear. If we are looking at exploitation, we need to consider the labour actually performed. It is not much use saying that if other technologies were used, a different amount of labour would be necessary. It might be true, but it is not relevant to the world as it stands. And exploitation is meant to play an explanatory role in that actual world; it is meant to explain its actual workings.

However, to say that it is the known technology which is relevant has the merit of being more 'morally important', if that is what we are after. The oppression resulting from exploitation is far worse if technologies that do not minimise the use of labour are used. Apparently, the ancient Romans were familiar with the principles of the steam engine, but since slave labour was far cheaper, preferred the production using the slaves; this was clearly to the detriment of the slaves themselves.

Nevertheless, if we are concerned with the workings of the actual world, we may want to focus our attention not just on the technologies that are known, but those actually available. Not everything that is logically and physically possible may also be economically feasible; the inputs required might simply not be there. As a simple example, consider a group of people washed up on a desert island. Even if they do possess the knowledge of fairly advanced productive techniques, this is likely to not be very much use to them. More seriously, while various technological possibilities are known to the inhabitants

⁸ De Ste. Croix (1981).

of many poor countries, they may be beyond the bounds of possibility within some definite time horizon, if the inputs required are simply not available to them.

Finally, there is a sense in which only that labour is necessary which is using the best possible technologies, regardless of whether they are actually known. If we were solely concerned with the meaning of necessity, such a view could be justified. From the point of view of a more advanced society, much of the past suffering was, strictly speaking, unnecessary. For centuries, it was well within the bounds of possibility, for example, to prevent the spread of disease by the simple expedient of washing hands. We would hardly like to say that many of the preventable deaths were 'necessary'; but if they were not necessary, then given simple Aristotelian logic they must have been unnecessary. Hence, what we seem to be regarding as necessary is only that utilising the best available approach, regardless of its availability at the time.

Since each of these notions of 'technology' has its uses, is there a principled way in which it can be taken in the discussion of class? I would argue that the technology should be strictly understood as that which is actually in use. The reason is because, on the basic Marxist grounds, the mode of exploitation at least strongly constrains and at most forces a particular division of labour. This idea can be understood roughly as follows (using a 'neoclassical' sort of language): given the existing sort of resources, both produced and natural, and given the state of general knowledge, there is a set of feasible technologies. However, not all of these technologies are consistent with the existing social relationships between groups of people — in particular, the relationship of exploitation. If this relationship is to be preserved, only a certain subset of the feasible set of technologies is selected. In the limit, there is only one possible technology consistent with the mode of production. This is what it means to say that exploitation constrains or forces the choice of technology.

Of course, if we now abandon the neoclassical description, a question arises as to what mechanism causes only exploitation-consistent technologies to

chosen. A naïve sort of answer would be that the exploiting class is not stupid and makes sure that only those techniques are chosen which do not threaten its power. This view can sometimes be found in Marxist writings, and although naïve, it is not entirely without merit. It is true that at the level of particular person-to-person relations, the exploiters can see which techniques lead to the preservation/strengthening of their position, and contrariwise which undermine that position. However, while this point is undoubtedly part of the answer, it is not the full answer.

This is because the naïve view does not take into the account that putatively rational actions at the local level may not have intended consequences at the global level (and/or other levels in between). To illustrate this, we might imagine a scenario in which an over-regimented factory regime leads to such an increase of resentment that a working-class organisation *outside the factory gates* arises that threatens the mode of exploitation globally. Thus, what we need is an explanation of how the mode of exploitation forces the division of labour *by itself*, not through self-conscious actions of the exploiting class trying to preserve its position.

This would seem to lead us in the direction of methodological holism, on the one hand, and teleology, on the other. However, neither is really a necessary path to be taken. First of all, there is a difference between the historical process of the development of the mode of production and its theoretical reflection in a model. For the model, we can postulate an absolute mechanism of selection of the appropriate division of labour. In the empirical reality, there will be constant local deviations, fluctuations, changes — the selection mechanism will manifest itself as the famous 'law of tendency'. This is simply to say that those techniques which have undesirable consequences for the exploiting class will not necessarily be identified in advance; instead, they will sometimes be eliminated only as a result of the process of learning, other times their effects will be neutralised through other means (mainly political). Finally, it is not only possible, but indeed necessary that at the moment of epochal transition, the

division of labour is *not* straightforwardly functional for the receding mode of exploitation – which is the meaning of another famous claim, that the embryo of the new society is carried within the womb of the old.

The postulate that the mode of exploitation forces the division of labour is thus the property of the *model* rather than of the historical reality. It is being made to emphasise that *while* the mode of production continues to reproduce itself, doing so over a whole historical epoch, the division of labour cannot be directly contradictory to it. So the point is that *on average*, the technology chosen *will* be functional for the existing mode of production, not because of a teleological 'pull' of the optimal goal, but because of a 'push' of both the independent technological development within the mode of production *and* social struggles accompanying it. How exactly this happens, however, is not a matter for abstract theory, but for detailed empirical examination.

The claim that the mode of exploitation forces the division of labour is crucial from the present point of view. This is because if the division of labour has particular consequences for the class structure of the society, this is ultimately tied to the mode of exploitation itself, *even though* it is not a direct effect of it. If a mode of exploitation requires a particular authoritarian division of labour, for example, then although the direct effect of this mode is simply the division into the exploiters and the exploited, the indirect effect is also the division between the rulers and the ruled.

Physiological vs. Social subsistence – Parasitic vs. Functional exploitation

To the distinction between physiological and social subsistence, another pair of concepts can now be related. This is the distinction between *functional* and *parasitic* exploitation. Functional exploitation can be defined as that exploitative relationship which increases the level of social subsistence above physiological subsistence. In other words, while the direct producers are indeed exploited, it is also true that they do reap certain benefits from their position.

This may well seem quite counter-intuitive. After all, as the old radical trade-union song goes,

Is there ought we hold in common

With the greedy parasite

Who would lash us into serfdom

And would crush us with his might?

This short stanza encapsulates a view of exploitation that is fairly common in the Marxist literature. Arguably, it is also *the* intuitive picture of exploitation, regardless of whether one believes it actually exists or not. Under this picture, the exploitation is a *parasitic* relationship: on the one hand, there are the toiling multitudes straining to survive, who, on the other hand, also have to feed the deadweight mass of their exploiters.

Under this conception, getting rid of exploitation could be understood as a logically simple operation of 'cutting off' the exploiting layer, leaving all the other relationships within the society essentially unchanged. Historically, we could understand Lenin's approach during the Bolshevik revolution as embodying this view. All that 'the end of exploitation' entailed was getting rid of the coupon-clippers; everything else was to remain practically the same. While the absentee owners were done away with, in contrast the 'specialists' and the 'directors' inherited from the *ancien regime* were seen as indispensable for the new society. If not literally as persons, then certainly in terms of structural positions, with Lenin coming out very strongly in favour of 'one-man management' (e. g. Lenin 1965a, pp. 211-213) and the use of such specialists (Lenin 1969, pp. 76 – 81).¹⁰

⁹ I was of course inspired to include this extract from *Solidarity Forever* by a similar passage in Cohen (2000).

¹⁰ Later, the 'cutting off' of the 'parasites' was implemented in Stalin's 'elimination of the kulaks as a class' in a horrifically literal way.

I take it for granted that the resulting type of society was certainly *not* what we would like to call 'a classless society'. If classes are based on exploitation, and if the 'abolition' of the expropriating stratum did not eliminate them, then this suggests that the simple picture of exploitation as a parasitic relationship is not the whole story. And indeed, there are strands of Marxism which provide hints for the more sophisticated understanding, which makes space for the notion of functional exploitation.

The pride of place should of course be given to Marx's own idea that capitalist exploitation is necessary in order to develop the productive forces of the society, mainly in terms of the constant improvement of the productive technologies:

"The bourgeoisie, during its rule of scarce one hundred years, has created more massive and more colossal productive forces than have all preceding generations together. Subjection of Nature's forces to man, machinery, application of chemistry to industry and agriculture, steam-navigation, railways, electric telegraphs, clearing of whole continents for cultivation, canalisation of rivers, whole populations conjured out of the ground — what earlier century had even a presentiment that such productive forces slumbered in the lap of social labour?" (Marx and Engels 1967, p. 85)

In fact, under at least one interpretation of the Marxist general theory of history this functional view of exploitation would be regarded as canonical.¹¹ According to this interpretation, society moves through the stages of the class societies due to the development of the productive forces, where first the relations of production serve as the forms of development of these forces, only to turn into their fetters. Thus, a change in the class structure – that is, a change in the mode of production – arises because the old class structure, involving the

¹¹ The most detailed defence of this interpretation is provided by Cohen (1978); however, we need not subscribe to this particular explication of it in order to see that it is a very prominent strand of Marx's thinking.

old forms of exploitation, is *no longer* conducive to the development of the productive forces.

But, of course, that must mean that at one point, the old mode of exploitation was so conducive. Thus, Marx's view of the bourgeoisie should in fact be seen as just one instance of the general phenomenon, whereby the exploitative class is functionally necessary to secure material progress for humankind – without thereby invalidating the claim that their relationship is exploitative.

Thus, when Nozick (1974) defends private property on the grounds that with private property, the standard of living is higher than without it, this could be admitted by Marxists without much cause for concern. Indeed, it is precisely what the Marxist theory itself is saying. If we understand private property as a shorthand for exploitation, then the productivist interpretation of the Marxist theory would be saying something like the following: a class society represents progress over primitive communism, because the existence of exploitation allows for the development of the productive forces and thus an increase in the standard of living of the exploited classes. Up to the point where the existing class structure – i. e., the existing mode of exploitation – is still beneficial for the development of the productive forces, exploitation is functionally necessary.¹²

However, this of course does not mean that it will eternally remain so; when further productive progress is impeded by the existing exploitative relationships, these will be overthrown.

Up until that point, there may have been both a parasitic and a functional element to the actually existing exploitative relationship. But during the specific periods of history, those when the old exploitative relationship turns into a fetter on the development of the productive forces, the old exploitative class ceases to be functionally necessary at all. It might still be *contingently functional*, since it is possible that under the existing technological arrangements, the activities of the exploiting class are needed – but at the same time, *alternative*

¹² This point arose from a discussion with David Ronnegard.

technological arrangements, under which the same living standards would be secured *without* the old exploiting classes, are already known. The other possibility is that the old exploitative class plays no functional role whatsoever any more and thus turns into a purely parasitical addendum to the social organism. This is when the 'epoch of social revolution' is due.

This understanding of functionally necessary exploitation is, of course, closely tied up with the expansionary possibilities of society. Does it follow, then, that if the structure of the society remains essentially unchanging, exploitation is necessarily parasitic? I would say that there is at least a logical possibility of functional exploitation even under these circumstances.

Under the view just mentioned, exploitation is functional because the development of the productive forces is viewed as ultimately beneficial for humankind. When human society finally passes through the last stage of its class phase of development, it will have at its disposal the accumulated productive forces from the past. However, this says nothing about the usefulness of exploitation *during* the process of development.

I would suggest that it is possible that exploitation may have beneficial effects even while it is actually happening. Instead of just suffering for the greater good of later generations, the exploited classes might be enjoying some of the fruits of their forbearance, in the guise of the beneficial effects of productive progress.

If this were the case, exploitation would be functional in a second sense. While the exploited classes would be performing surplus labour in order to 'feed' the exploiting classes, the existence of those exploiting classes would *not* be purely parasitical, nor would they be necessary simply for the future production possibilities. Exploitation would be functionally necessary, because its existence would guarantee that the living standard of the exploited is higher than in the previous stage of the class society.

Now it needs to be stressed that just because exploitation is functionally necessary rather than parasitical, it does not cease to be exploitation. This is quite obvious in the

first sense of the functional necessity. One can hardly accuse Marx of being an apologist for capitalism; yet the stress he places on the functional role of bourgeoisie in the development of the productive forces is unmistakable. There is nothing contradictory in believing that a repugnant process is necessary in order to achieve beneficial results.

But, obviously, the same goes for the second sense of functional necessity. The fact that a better alternative than a repugnant one is currently unavailable does not stop the latter from being repugnant. In fact, it is precisely what makes exploitation such a deeply contradictory phenomenon. While an exploitative class society may be necessary in order to secure material progress, it is at the same time a fundamentally conflictual society for the precise reason that the exploitative relationship is one of domination, repression, surplus extraction etc. Thus, the exploited class under these conditions is in a 'double bind' – it needs the exploiters for its own standard of living, but at the same time it is oppressed by their very existence and thus constantly involved in a systematic conflict with them, whatever its actual intensity at any point in time.

Once we understand the concept of functionally necessary exploitation, more light is also thrown on the alternative, parasitic exploitation. For it is now possible to see that even purely parasitical exploitation does *not* necessarily imply that the exploiting class need do literally 'nothing' — meaning that it does not need to perform any sort of exertion. For example, we could have a class society in which the tensions between the exploiters and the exploited run so high that the exploiters need to spend a great amount of their time practising the art of war and designing new weapons in order to keep the exploited in check. However, exploitation may well be purely parasitical in the sense that if the exploiting class were to disappear, this would in no way adversely affect the material standard of living of the exploited. Thus, it is possible that the exploiting class performs a lot of activities which they find subjectively necessary, and which are also objectively necessary if the system is to keep reproducing itself as a class society, but which nevertheless contribute literally

nothing to the labour necessary for the exploited class. Thus the criterion for whether exploitation is parasitical is not whether the exploiting class can simply 'creams off' the surplus without any exertion, but whether any exertion it might be making is in any way beneficial to the exploited class.

In fact, from the above we can derive quite a different pair of distinctions. Exploitation may be either *active* or *passive*, depending on the behaviour of the exploiting class. In the scenario just described, much activity is necessary. Similarly, in the trade-union song at the beginning of this section, the 'greedy parasite' needs to employ a lash to get his or her way.

However, it is possible that the exploiters delegate all their activities further down, and become pure 'rentiers' or 'coupon-clippers'. Apparently something like this was the case with the great slave-owners of antiquity (De Ste. Croix 1981). This would be a *passive* exploiting class, whose activity is limited to coming along and creaming off the surplus, as mentioned above.

Finally, there is one last distinction we can make, between expansionary and stationary exploitation. This, of course, refers to the question of reproduction of the society as a whole. If an exploitative society is in the state of simple reproduction, i. e. just managing to exactly reproduce all the relevant relationships, we have stationary exploitation. This is not the same as parasitic, nor the same as passive exploitation though: the exploitative relationship may be functional, for it may be bringing current benefits to the exploited; and it may be quite active, in the way was described above, for example. On the other hand, expansionary exploitation may mean that the productive possibilities of the society as a whole constantly increase, yet if no benefits of these increases go to the exploited, it remains a parasitic relationship. Similarly, if the expansion is due to the existence of exploitative class, but all the activities are delegated down to the exploited, it is quite possible that exploitation is expansionary and at the same time passive.

Now, what we were doing up to now was playing with some sort of undefined, intuitive concept of exploitation, trying to see whether our intuition could generate some characteristics that we can generally apply to the concept. However, exploitation is not an intuitively primary concept. It originates with Marx as quite a specific sort of notion with its specific uses. Thus, it is important to spell out just what we will exploitation to be, at least in the first approximation. Only then we can judge whether the various distinctions we have described make any sense; and also, how do other views that are to be discussed later compare with the classical concept.

Thus, I take it that the canonical notion of exploitation refers to the situation where one group of people engages not only in necessary labour to provide the means of subsistence for itself, but also in surplus labour that provides the means of subsistence and possibly means of luxury for another group of people. Thus, exploitation is a relationship between these two groups of people, the former of which is called the exploited class and the latter the exploiting class.

Of course, in order to understand this definition, we still need to clarify all the italicised terms. This task will be undertaken later on. For now, let me just point out that our distinctions indeed make sense.

The exploitative relationship is *parasitic* if the surplus labour given over to the exploiters makes no difference in the status of the exploited, now or ever; it is *functional* if the its existence raises the standard of living of the exploited over the subsistence level, either now or for the future generations. It is *active* if the exploiters have to make sure surplus labour is given over, and *passive* if they can delegate any necessary supervision and/or enforcement to the exploited. Finally, it is *stationary* if surplus labour makes no difference to the structure of the society, and *expansionary* if it is invested in further expansion of the economy.

As we can see, the existence of exploitative relationship may have quite distinct effects on both the division of labour within the society (depending on its active/passive nature), as well as on the division of income (with the fruits of exploitation being distributed differently depending on the parasitic/functional role of exploitation). Thus, these distinctions will be relevant for the discussion of class and how it is related to exploitation.

From Class Structure to Class Agency

Within the analysis of class relations, there is a certain distinction that has been made many times in many different guises: class as a structural feature of a particular society and class as a more-or-less cohesive group of actual people. When Marx talks about a mass that in the struggle 'constitutes itself as a class for itself' (Marx p. 158); when Wright talks of 'class structure' and 'class formation' (e. g. Wright 1985 p.6, p. 14); when Giddens described 'structuration' as a process whereby 'economic classes' become 'social classes' (Giddens 1983, p. 105), and when Bourdieu talks about 'classes on paper' and 'actual classes', these concepts do differ in many important respects; but they share the facet of distinguishing between the 'analytical' and the 'lived' entity. My preferred way of formulating this distinction is as one between 'class structure' and 'class agency', with 'class formation' as a process whereby the movement from one to the other occurs.

In what follows I want to concentrate on class structure. I perceive this as the more fundamental of the two: once we understand class structure of a society, we may then try to follow the ways in which the manifestations of this structure influences the formation of class as agency.

However, this process is a vast topic in itself, and I cannot hope to cover it within the confines of this work. What I can do is to suggest a simple hypothesis of how this process may frequently work.

It seems obvious that the mediating term between structure and agency is class *experience*. Now this experience is not a simple thing; it may be experience of many different aspects of the class relationship. For example, the experience of life in, say, a working-class neighbourhood, or contrariwise, the regular experience of expensive sporting activities, such as yachting; the experience of power and responsibility at the top of a large capitalist corporation, or contrariwise the experience of a 'cog in the machine' in a sweatshop-style factory; the employee's experience of a row with their manager – and the manager's experience of a row with their subordinate. While all of them inform

the process of class formation, they are quite distinct and arising from different aspects of the class relations. In particular, I would like to distinguish between the

- a) experience of production
- b) experience of consumption
- c) experience of conflict

For both of the first two terms, the relevant factors are things like the environment in which they occur, the objects that are used, activities that are performed with these objects, etc. The experience of conflict, in contrast, is the direct experience of the antagonistic class relation (regardless of whether this is seen as such by the participants). It has been suggested that it is this experience of conflict which is the determinant one for the class formation¹³. I think that while this is undoubtedly an enormously important factor, it would be a mistake to leave out the other two sorts of experience. One's productive and consumptive activities are directly dependent on one's standing in the existing class relations. Bourdieu's approach, for example, could be seen as concentrating strongly on the experience of consumpton¹⁴ rather than any overt conflict – and yet it is an examination of class par excellence.

In fact, it can be suggested that without such class experiences outside of the direct conflict, the process of class formation would be much more difficult. Revolutionary Marxists like to stress the role of the conflictual situations in forging bonds among the members of the working class; yet solidarity and realisation of the common interest are much easier when people already perceive others as being in some sense similar to themselves – even if this sense is perhaps quite vague.

¹³ See e. g. the already quoted passage in E. P. Thompson (1972), pp. 9-10.

¹⁴ Bourdieu (1984).

This brings me to another link in the chain: the emergence of class awareness. This very useful term is due to Giddens (1983, p. 111) and it is subtly different from the more widely known concept of class consciousness. The idea is that individuals can become aware of certain fundamental commonalities on the one hand, and certain fundamental differences on the other, without necessarily being able to consciously articulate them in terms of class. Giddens' example is the type of middle class whose members believe that they achieved their positions in life through their own efforts, rather than any sort of class membership. I would stretch the concept to far greater lengths, however. It seems to me that a clear sense of 'Us' and 'Them' can often be observed to exist in many different types of societies, such that a focused analysis would reveal strong, if not absolute correlation with class relationships — although such analysis is hardly ever undertaken by the members of the society themselves. In other words, class awareness is in my view a pervasive phenomenon, far more so than class consciousness. 15

The awareness of class may then give rise to the development of a particular *class identity*, which is a further step towards a conscious articulation of class relationships. If the class identity leads to the realisation of interests that all members of the given class share, this can be properly called *class consciousness*. And finally, such consciousness may – although does not have to – lead to actions in the class interests, thus constituting *class agency*.

I do not claim that the sequence

structure — experience — awareness — identity — consciousness — agency

Visitors to Britain can sometimes be heard to express incredulity at the solid contours of the class relationships in this country, often implying that such a phenomenon is absent in their homeland. While this may be true in the sense of greater 'social mobility' in these other countries – or in other words, far smaller extent of intra-class reproduction (see below) – some of that amazement should be taken with a pinch of salt. The difference is mainly in how strongly the class awareness is openly articulated in term of class, rather than in the underlying relationships themselves; if pressed, most foreigners would be hardly likely to deny that they very well understand who 'Us' and 'Them' are in their own country.

is some sort of necessary or linear progression — in fact, the empirical reality around us would be quite enough to disprove such a claim. It is more of an 'ideal-type', paradigm notion of the process of class formation. The exact conditions under which each stage gives rise to the next one is a matter for empirical sociological research. I simply believe that the sequence described might be a useful guiding thread for precisely that sort of research — and perhaps even for groups of types other than classes.

Class as a Fundamentally Conflictual Relationship

Although, as I have said, the experience of conflict is not the only sort of class experience available to individuals, it is a basic Marxist tenet that the class relationship does arise from conflict. In what follows later in this chapter, I will try to present a fairly detailed hypothesis regarding the nature of the class relationship. Before I get to the main argument, however, I would like to sketch out a preliminary picture of its contours. It is not meant to be particularly original; on the contrary, what I would like to do is to describe clearly what I take to be, as far as Marxian theorists are concerned, relatively uncontroversial features of the class relationship.

These features can be in my view expressed by the following statement:

Structural class relationship arises from the systematic conflict between two groups of agents that are bound together by the particular form of the material reproduction of the given society.

Every clause in this statement counts. I will go through them one by one, to clarify their importance.

First of all, as has been said already, in this view classes are based on conflict. This is quite clearly in contradiction to stratification theories, which arbitrarily divide society into 'classes' according to the theorist's whim. But even more importantly, it is also a challenge to the Weberian view that the existence of class is due to differential economic chances of individuals on the market.

That formulation sees no essential conflict between classes – some individuals may be better off and others worse off, but while that may be a cause for envy, there is nothing that says that this may not be altogether an accident, and that in fact, there may be an inverse relationship between the life-chances of particular groups.

Secondly, the conflict needs to be systematic. Obviously so – there are hundreds, perhaps millions of conflicts and conflictual situations occurring every day, but not all of them give rise to classes. Classes arise from a conflict that is in some sense fundamental for the given society, in other words, it is large-scale, influencing more or less everybody in society, playing itself out again and again in countless encounters – in short, it is a systematic feature of the given community.

Thirdly, this systematic conflict must be to do with the material reproduction. This is because there may be more than one source of such systematic conflict within a society – gender and age come to mind immediately. As I have said before and will soon have an occasion to repeat again, these are among the features of human society that I consciously abstract from. Such different conflicts have their own dynamic, which may interact with the class relationship, but in themselves they are distinct from it. The bond with material reproduction is precisely what gives the class relationship its specificity.

Next, I claim that this systematic material conflict actually ties the two parties together. This is meant to express the old idea that the class relationship is 'dialectical' – that while the classes are mutually hostile, at the same time they cannot avoid living with each other, within a given mode of production. This postulation may perhaps be quite controversial after all; if we take it that exploitation is purely parasitical, then it is quite true that the exploiters need the exploited – but it is by definition untrue that the exploited need the exploiters. As it happens, I will later on argue that such a situation is the exception rather than the rule within exploitative societies; however, for the moment let me just make clear that the point is somewhat different: the idea is that the two classes

mutually define each other – that they are necessarily part of the same society. This is to distinguish class conflict from other types of systematic conflict that might conceivably arise from the process of material reproduction – conflicts in which the two parties basically have nothing to do with each other. Military conflict over a scarce productive resource, such as oil, comes to mind.

One final clarification: when I talk about 'conflict', this does not at all require an actual open skirmish between any two parties. Instead, the conflict is structural, which can be understood as saying that in some dimension, the two parties play a zero-sum game within the given mode of production. They may or may not be aware of this; they may or may not consciously strive to change their position; they may or may not be attempting to change the rules of the game. However, it is clear that if the rules stipulate that one party's gain is the other party's loss, then conflict is inscribed into the very structure of the society. It may remain latent – people may well 'suffer in silence', even for very long periods of time. But the point is that as long as another group benefits from that, they will be suffering. Thus, the existence of classes implies this sort of fundamental conflictual situation even if there is no observable conflict whatsoever.

PART III

A DUAL THEORY OF EXPLOITATION AND PRICE

Chapter V

If Profit Is the Answer, What Should Be the Question? Income from Capital and the Labour Theory of Value

In this chapter, I will attempt to show that no alternative explanation of profit to the one provided by the Labour Theory of Value — or in other words, no explanation which attempts to avoid the unpalatable idea of exploitation — is in fact adequate. The next chapter will then be devoted to the Marxian theory of prices, the Sraffian critique of it and the precise relation between the Marxian and the Sraffian approaches to the economy.

What is Profit?

There are many different possible answers to this question.¹ For example, 'profit is the reward for sacrifice of waiting'. Or, 'profit is the incentive needed to induce the entrepreneur to enter production'. Or 'profit is the interest earned on capital invested'. Or 'profit is the marginal product of capital'. Or finally, 'profit is the surplus labour appropriated by the capitalist class in the form of surplus value'.²

Not all these answers are mutually exclusive. In fact, I would like to argue that for the most part, these answers are compatible for the very simple reason that they are answering different questions. In a sense, these propositions are literally speaking past each other.

My initial inspiration for the approach employed in this chapter came from van Fraasen's pragmatic account of explanation (van Fraasen 1991).

² It must be noted that 'interest' and 'profit' are in general quite distinct terms, the former referring to the income acquired under particular institutional arrangement by refraining from consumption, while the latter corresponds to the income arising from the difference in the costs and revenues of goods for sale (usually but not necessarily newly produced goods). However, I phrase the claim above due to the fact that under a particular, Austrian view of the economic world, profit essentially is nothing but interest.

The reason is that the question, 'What is profit?' is really multidimensional. When we ask it, we could be implicitly after a *justification* of profit. And the notion of justification itself could be understood in two ways: a moral one or a pragmatic one. A morally justificatory answer to the question 'What is profit?' involves trying to somehow present profit as something that is a result of *desert,* something that the profit-maker *ought to* receive. Thus, 'profit is the reward for sacrifice of waiting' could be understood as such a moral answer to the question of profits. On the other hand, a pragmatic justification of profit would leave the deservedness or otherwise of profits aside, and would concentrate on why it is generally better for everyone that profits exist rather than not. Thus, if we believe that it is better for society to produce than not to produce, we can take the answer 'profit is the incentive needed to induce productive use of capital' to be a pragmatic answer to the question of profits.

Another way to understand the question of profits is to demand to know what determines the size of profits. Again, there is a fork in the road as to how we take that question. It could be that we want to know the actual causal factors that determine the magnitude of profits — without necessarily asking to be told the actual practical way of finding a numerical result. Thus, we could say that 'profit is the marginal product of capital' is just such an answer; while we may not know what the actual marginal product is, we might believe that this is in some sense the determining factor. But we could also take the determination of the size of profits as an epistemological issue. We might be after the variables that would allow us to determine the size of profits, without necessarily claiming that these variables themselves are the 'deep' causal factors that fix this magnitude. We could choose to understand 'profit is the interest on capital invested' in this way.

Finally, there is what I would like to call the *ontological* dimension of the question of profits. The ontological answer to the question of profits reaches in a sense far deeper than any of the other ones. Just like the most fundamental question of ontology generally can be thought of as 'Why is there something rather than nothing?' the ontological question of profits asks, 'Why are there profits rather

than there not being profits?' Regardless of whether whoever gets profits is justified in getting them, and regardless of whether it is somehow good for the society that they get them – how come there is anything that might be thought of as an object of justification? Regardless of the causal factors that fix the size of the profit share, regardless of what variables there are that help us to find out this size – how come there is this thing which happens to have a particular size at all? To spell it out fully and unambiguously, how come that when a particular sociotechnological process occurs, there is at the end somehow more of what we at this stage shall call valuable stuff than there was at the beginning?

It will be my contention that neoclassical theories of profit are unable to provide an answer to the ontological question. From the point of view of ideology, in fact the neoclassical answers tend to be used in order to *avoid* it, by substituting a different question altogether, one of the above. I shall argue that only the Marxian approach can be seen as attempting to answer the ontological question at all.

I would like this discussion to be as unprejudiced as possible. That is, I would like to allow the neoclassical/Austrian theories as much space for the use of their own concepts as possible, without judging them on the basis of the alternative Marxian conception. In other words, what I am attempting is closer to an immanent rather than a transcendent critique. For this reason, I will try to avoid a judgement between the subjectivist and the objectivist views of value. This is in line with the effort to save the discussion of prices and their nature until the next chapter. We will therefore say nothing about whether the value of things comes from their subjective utility, or the objective characteristics of the production process. Therefore the understanding of 'goods' in this chapter will simply be 'things of value', whatever value happens to be; or 'valuables' for short.

However, it is not really po ssible to conduct this sort of examination without having some intuitive idea of the object of our discussion – in this case, profits. For fairness' sake, let us spell out this intuitive idea at this point. Profit, in our conception, has at least two essential characteristics. On the one hand,

profit is *disposable income* of a particular group of people, which can be used either for consumption, or for commanding goods and labour in order to produce more profit (investment). This, of course, is the capitalist class, but since I am trying not to prejudice the issue, as well as because 'class' is the very notion under discussion, globally speaking, I prefer not to use the term here. However, the point that I do want to stress is that there is indeed a group of people who receives profit as (part of their) income and that this group is free to use it for any economic purpose they like. The fundamental nature of these profits is goods and services rather money; as is quite common, money is to be seen only as claims on goods and services.

The second major characteristic of profits is that these goods are *new* goods, they are additions to the mountain of already-existing valuables; and they are also something over and above whatever erosion of the existing mountain of goods occurs (i. e., they do not simply cover depreciation). So, profit, apart from being disposable income, is also characterised by the fact that it is constituted by an an essential *increase* in the stock of valuables. In other words, I am always at least implicitly talking about the *capitalist* profit rather than profit in general – in the sense that unlike the so-called 'merchant profit', capitalist profit is not simply the result of re-distribution of the existing goods and services; it is always necessarily an outcome of *production*.

Compatibility of Various Answers

Now I have claimed that there are logically distinct answers to the question of profits, and that, therefore, at least some of these answers may be compatible with each other. However, as the answers are commonly understood, neither statement seems completely correct. To begin with the latter, if we for instance accept the Marxian claim that profit is a form of surplus value, then the size of the profit is determined by certain objective causal factors, those determining the degree of exploitation. On the other hand, if we believe that profit is a

marginal product of capital, then the causal factors in question are different – most significantly, they are *subjective*.³

Similarly, the claim that profit is the marginal product of capital is usually taken to be not a statement of pure causal relationship, but also an epistemological and under some interpretations even a moral one – this is how we could find out what the size of the profit actually is, at least hypothetically; and given that the profit maker advances X amount of capital into production, perhaps the marginal product of this X is what they are *entitled* to.

It seems to me that both of these common impressions are mistaken. In the first place, the whole discussion of profits has from the time immemorial been full of *implicature*.⁴ Usually purposely so. If Marxists use terms such as 'exploitation', 'appropriation', or 'squeezing out the surplus labour', this carries very clear moral overtones.⁵ Conversely, if neoclassicals talk about each factor of production achieving its marginal product, there is equally an ethical purpose here, albeit in an opposite direction.

Logically speaking, though, such understanding is unjustified. We can 'purify' each answer to the question of profits in such a way that it is clear which dimension of the question is at stake. What usually happens in a discussion, however, is that the different aspects are *not* clearly distinguished; and thus instead of a single solution, the answers to the question of profits come in *clusters*. These are the implicatures mentioned earlier. What this means is that

I mean here of course the *value* concept, rather than the physical marginal product of capital. As the neoclassical theorists realized, the 'income' and thus also the 'product of capital' that is relevant in the neoclassical theory must necessarily be just as subjective a notion as the utility derived from particular material goods – indeed, the income is a form of utility. Thus 'psychic income' of Fisher (1930). Income, just like cost, is only identified with money quantities in neoclassical economics as an approximation; the 'true' theory is in terms of the subjective quantities.

^{4 &#}x27;Implicature' – as opposed to 'implication' – refers to the pragmatic notion that depending on the context and the way in which words are used, they may suggest additional meanings which are not part of their semantic meaning, nor are they logically implied by constructions in which they are contained. For the full explication, see Grice (1975).

⁵ Marx was of course famously cool towards the notions of 'morality' or even 'injustice'; however it seems to me that the sense of moral outrage in his works, even if expressed indirectly precisely by means such as implicature, is inescapable.

although the different aspects of the question are often conflated and ran together in an argument, they clearly *can* be distinguished – and should be, if we are to make any progress with an analysis.

As to the question of compatibility, clearly it does not arise for those answers that do tend to cluster together; it is already obvious that they are compatible. But what about those that seem clearly at each others' throats, such as the neoclassical and the Marxian answers? I believe that the answer here lies in dissolving the confusion between the causal and the epistemological aspect of the question. For if we take our theories to be primarily epistemological devices, we see that both the objective and the subjective approaches can be 'right' in a certain sense. That is, they might both be routes to a numerically identical result. Part of the reason why this is usually not seen is that economics does *not*, as a matter of course, achieve any particular numerical results; thus when the rate of profit, say, is expressed in terms of different variables, it appears that different results have been arrived at. Which, obviously, is not necessarily the case.

This is the claim that I will argue for in a later chapter. I will argue that for all its flaws, the neoclassical subjective approach is not necessarily faulty under all possible circumstances. It just so happens that the Marxian, or more generally surplus approach, is for many purposes the superior one.

At this point, what I would like to concentrate on is a critique of the neoclassical, and along the way also the Austrian theories of profit. I would like to show that these theories fail to do justice to the notion of profit, and that the only appropriate theory is one which stresses and can explain the existence of a surplus of commodities.⁶

⁶ For the moment, I will regard the Marxian and the Sraffian versions of surplus economics as interchangeable and complementary. This approach will be justified in the next chapter. At this point may it suffice that broadly speaking, both are expressions of the same Classical tradition in economics.

Neoclassical and Austrian Theories of Profit

There is no single neoclassical theory of profit. Among neoclassical theorists, there are major differences in understanding the concept. In the first place, is profit to be understood as some sort of residual payment, or as a return to a factor of production? And if it is the latter, is profit really a sort of wage/rent for some sort of productive activity of a living person, or is it a bona fide return on capital?

In some sense, the most natural way of understanding profit is as the difference between revenues and costs. This is also the basis of the 'profit as a residual' point of view. In a capitalist enterprise, after all the various 'factors of production' have been paid, whatever remains is profit. This profit is thus a 'non-contractual payment,' not being fixed in advance.⁷

However, as it stands this is only the so-called accounting profit. To arrive at pure economic profit, the neoclassical view postulates that we need to impute a value to all those productive services which have been used up, but which have not been bought in the given period of production – either because they have been purchased by the enterprise in the past, or because they are inalienable properties of the living person representing the enterprise. Only once these imputed costs have been subtracted from the accounting net revenue do we arrive at the economic 'pure profit'.

The difficulty is that economic textbooks show as an incontrovertible mathematical fact that in the static, perfectly competitive, perfect certainty Walrasian general equilibrium model, such pure profits are zero. Indeed—at the equilibrium level of production, the total cost is equal marginal cost times the number of units produced; and since perfect competition reduces prices to the level of marginal costs, this is also precisely equal to the total revenue.⁸

^{7 &}quot;Factors are hired on a contractual basis, whereas an entrepreneur receives a residual income" (P. R. G. Layard and A. A. Walters, *Microeconomic Theory*, New York: McGraw-Hill, 1978; quoted in Shand 1984).

⁸ It does not matter that payment for some productive services is not contractual; since we are in a timeless equilibrium, the value of such services can be determined precisely by the payment they would otherwise attract on the market.

Now of course, an age-old concept that stems from the actual social world of economics and in fact shows remarkable persistence in the minds of both the public and the businesspeople cannot be eliminated purely by a piece of mathematical reasoning. Thus, the neoclassical theorists have over decades come up with various ways of accounting for profit. The four major ways of dealing with it which we will consider below can be listed as follows: abolish certainty, turn profits into wages, turn it into a price, or let time flow.

Profit as a Reward for Uncertainty-Bearing

The first way out was pursued by Knight in his *Risk, Uncertainty, and Profit* (1933). Knight's formulation is a development of the theory of profit as a risk premium. Knight points out (correctly, at least within the world of neoclassical competitive equilibrium) that if risks are calculable, then they are also insurable; and hence they would have to be factored in in the cost calculations. Thus profit cannot be a reward for calculable risk, since factoring in risks as costs means we are still imprisoned in the Walrasian zero-residual universe. The only risks which are not so factorable into costs are those that cannot be calculated even in principle. For these, Knight reserves the name 'uncertainty'. Profits are then understood as that part of income which results from such unpredictable 'good times'. As Weston (1954, p. 154) puts it, "[p]lanned total product and planned total costs, however, are likely to differ from those actually realized. If expectations are not realized, residuals will arise. These residuals represent an income-flow element contained in payments to owners of productive services.."

⁹ See also later restatements by Weston (1950, 1954).

¹⁰ This concept of radical or deep uncertainty had in fact been already employed in an economic context by Keynes (1936), who first formulated it in his *Treatise on Probability* (1921). There are interesting echoes of this idea of incalculable uncertainty in the writings of thinkers so disparate as Marx (uncertainty as a result of the 'anarchy of the market') and Hayek (market results unknowable due to being outcomes that were not intended by any particular actor). Such frequent occurrence of a concept, or at least of a family of concepts, seems to suggest that something very real about the capitalist economy is being described.

This last quote should be sufficient to make it clear how singularly unsatisfying this is as a theory of profit. For although profit is a residual sort of income in one sense – in the sense that it is that which remains when all the other factors have been paid off – it is very much not a residual from the *intentional* point of view. And it is precisely the intentional point of view which is relevant when considering the functioning of a capitalist entreprise. Profits are not just lucky 'left-overs'; they are an *required* return on capital invested. Profit is the *goal* of capitalist production, its very *telos*; yet the Knightian theory turns it into an after-thought, despite the fact that without a reasonable *expectation* of profit, no capital will be expended at all.

Weston (1950), developing Knight's theory, in fact comes to the very logical conclusion that, given that profit is seen as the fruit of uncertainty, and therefore is fundamentally unpredictable, it makes no sense to talk about it being 'maximized'. But how could we take seriously a theory which asserts that profit is actually a completely unpredictable variable, literally a fluke, a stroke of super-random good luck? Are we really expected to believe that vast sums of money have been invested again and again over the past several hundred years simply in a pious hope that occasionally a nugget or two of gold may turn up as a result? Such a thought seems absurd. The occasional income from unecertainty would hardly merit the lofty designation 'profit'. We can hardly do better than to paraphrase what Gottlieb (1950) has Marx say about production with no expectation of profit at all, by simply adding the word 'random': "To engage in business (buying and selling) and to come out only with occasional random profit seems no less purposeless than absurd" (Gottlieb 1950, p. 173, fn. 2). There is clearly a regular expectation of profit in the capitalists' investment; this expectation may and often does fail to be realized; but it is certainly there.

This defect of the 'uncertainty' theory is somewhat remedied in various 'Austrian' theories of profit. There are certain similarities between the Knightian notion of uncertainty and the Austrian ideas about the dynamic nature of the market process. The difference between the two viewpoints lies in the Austrian

emphasis on the *active engagement* with uncertainty; profit is not just the occasional piece of good luck, but precisely the motivating element for setting sail towards the unknown shores of the future.

The Austrian emphasis on entrepreneurial activity can take more than one form. For example, there is the Schumpeterian theory of profit as reward for innovation. This is a theory of purposely introduced unexpected changes whose outcome is unknowable in advance. The Schumpeterian entrepreneur introduces innovations into the production process (widely understood), thus attempting to gain advantage over the competitors and to reap the rewards in the form of profits.

Of course, in the final analysis this is hardly adequate as a theory of profit, as it is really only a story about a temporary monopoly advantage; the innovator has monopoly access to superior technology. It is instructive to note that a similar story appears also in Marx in the guise of the explanation of technological progress under capitalism – the individual capitalists introduce technological changes in the attempt to save on labour costs and thus undercut competition. Marx, however, correctly identifies the resulting profits as *supernormal* rather than normal profits (as, actually, does Schumpeter himself). Due to their competitive advantage, the innovator is capable of commanding a greater amount of profit with the same amount of capital as competitors; but while this explains the *extra* profit received, it does not explain the normal profit of all those technologically less advanced competitors.

Another version of the Austrian theory is the Misesian-Kirznerian one, in which the entrepreneur acts not as the 'creative destroyer', but as the arbitrageur that brings things into balance:

"There is an interesting contrast between Schumpeter's and Kirzner's views of profit. Both see profits as the incentive which stimulates entrepreneurship, however, Kirzner's entrepreneur acquires his profit through a kind of arbitrage whereas Schumpeter's is the result of innovation. The latter saw entrepreneur as a destroyer of existing productive entreprises by his introduction of new products, and the creator of disequilibrium ('creative destruction'). Furthermore,

Schumpeter saw monopoly not as an obstacle but as a spur to efficiency. Kirzner's entrepreneur, by contrast, is not a destructive element but more in the nature of a catalyst, in the absence of which the competitive market economy would cease to function properly; entrepreneurial action is viewed as tending to promote equilibrium rather than to upset it, as in the Schumpeter theory." (Shand 1984, p. 85)

Kirzner's entrepreneur is 'alert to opportunities' for arbitrage: "Entrepreneurship does not consist in exchanging (or physically converting) owned assets of low value into assets of higher value. It consist in exploiting the difference between two sets of prices for the same goods. It consists in buying at the low price and selling at the higher price." (Kirzner 1979, p. 95)

The difficulty with the Kirznerian view is that it fails the essential test for an adequate theory of profit: it contains no explanation at all of the *ontological origin* of profits. The role of the arbitrageur is, clearly, to bring about the 'proper' allocation of the *existing goods*. While they may be making a profit in the process, this is akin to the merchant profit of the pre-capitalist era. It does not matter whether we believe in the subjective or the objective theory of value; the fact is that without a theory where profit is closely tied to *production* of new values, no explanation has in fact been provided. At best, the Kirznerian entrepreneur can help themselves to a greater portion of the existing goods that would be the case without their being alert. In no way do they, however, make it possible for *new* goods come into existence.

Moreover, the Austrian view of profit in all its versions is a fundamentally disequilibrium one. This is one more reason why it does not really serve as the explanation of the general phenomenon of profit. For an individual entrepreneur, profit may be a result of a 'lucky bet'. But the capitalist production could not go on at all unless there was a general expectation that some capital-owners will be rewarded for investing capital. The market game may be a lottery; but even in a lottery some will be guaranteed prizes. There is thus the need to explain a deeper phenomenon of equilibrium profits. It is child's play to

generate profits when there are obstacles to competition, or when there is no equilibrium. The problem Marx faced and overcame is how to generate profits even when both parts of the term 'competitive equilibrium' actually hold. Thus one of the major differences between the Marxian and the neoclassical/Austrian theories can be stated in a few words: the existence of steady-state positive profits.

In seeing profits as rewards for activity Austrians are in fact also quite close to the Wage/Rent Theory of Profit – despite their claims to the contrary, due to the fact that "there is no demand for entrepreneurial services and they cannot be hired for example, like capital or managerial skill" (Shand 1984, p. 85)¹¹. The underlying similarity of these views, as well as their fatal flaw, will be considered next.

Profit as Wage

The explanation of profit as a reward for managerial / supervisory / entrepreneurial activities is quite an old one. In fact, it is so old that in part it was already rebutted by Marx's pointing out that these activities are not properly to be understood as part of the capitalist's role, since they can be 'contracted out':

"The labour of supervision and management (...) is directly and inseparably connected, also under the capitalist system, with productive functions which all combined social labour assigns to individuals as their special tasks. The wages of an *epitropos*, or *régisseur*, as he was called in feudal France, are entirely divorced from profit and assume the form of wages for skilled labour whenever the business is operated on a sufficiently large scale to warrant paying for such a manager (...)

The capitalist mode of production has brought matters to a point where the work of supervision, entirely divorced from the ownership of capital, is always readily obtainable." (Marx 1966, p. 386)

Of course, the Austrians would object that while this may apply to more-or-less routine managerial activities, characterised as 'Robbinsian economising' (Kirzner

¹¹ I think the latter part of the quote can be interpreted as true only under a very narrow interpretation of 'hiring' – for what else is the role of venture capitalists, if not to find and finance promising entrepreneurs?

1979), it certainly does not apply to the activity of the entrepreneur. This is because, on the Austrian view, there is no market for entrepreneurial abilities, entrepreneurial income is not contractual, and entrepreneurs are employers rather than employees.¹²

On the other hand, this notion would be quite compatible with the Walrasian neoclassical theory, under which 'normal profit' is understood as one of the costs of production – it could be seen as the income earned by whoever is organising production, whether we understand that person to be the 'entrepreneur', the 'manager', or the 'supervisor'. If the Austrians object that the services of this agent are not contracted for, the neoclassical approach has no such qualms: the income may be a residual, but from the point of view of production it is a cost and as such must be accounted for, whether contracted for or not.

There is, however, one thing which all theories of profit as a reward for 'capitalist' activities have in common: they are not theories of a return on capital. This is really quite fundamental, and the reason why all such theories are necessarily inadequate.

There is an essential difference between payments which constitute compensation for activity and those which do not. The first sort of payment is on par with wages, whether they are formally contracted for or not. By the very subjectivist logic itself, unless the payment for entrepreneurial activities at least compensates for the 'internal' costs incurred by the entrepreneur, such activities will not be undertaken. If the payment exceeds the level necessary for compensation, then we are moving into the territory of rents; but these are still rents on actual human services performed rather than on anything else.

Profit, however, is *not* this sort of compensatory payment. As a *return on capital*, it is potentially present whether the owner of a particular set of capital-

^{12 &}quot;[A manager] is not quite the Kirzner entrepreneur, who is depicted not as managing but as *employing* managers to implement the exploitation of profit chances which he alone in the firm perceives." (Shand 1984, p. 86)

¹³ The other possible interpretation of these 'normal profits', according to which they are a compensation for the sacrifice of 'waiting', will be discussed below.

goods involves themselves personally in production or not. In practice, it may well be that various income elements are all mixed together, such as was the case with the early capitalists, who embodied the entrepreneur-manager-supervisor (perhaps partially even the worker) and the capital-owner in one person. But that does not mean that these elements are not conceptually distinct.

From the present point of view, any human being engaged in an activity which is necessary for production partly 'spends themselves' or 'uses themselves up' in that activity. The agent needs to reproduce themselves — that is, literally renew themselves so that they are as capable of performing their duties the next day as they are today. This means that all such duties necessary for production need to be 'compensated for' or 'rewarded' (here obviously without any moral undertones).

However, this is very clearly distinct from profit as a return on capital. That sort of profit does not require any sort of actual exertion by the profit-maker. 'Make your money work harder', a financial industry advertisement used to say — and that is precisely *all* that profit as a return on capital requires. Anybody with a penny to their name in the bank is a 'capitalist' in this sense, as long as their money is earning interest, despite the fact that they themselves take no part at all in the productive activities which that money allows to be performed. Clearly, then, return on capital is nothing to do with whatever human services the capital-owner *may happen* to be performing.

This is clearly fundamental to the existence of profit. If all profit was just compensation for actual personal involvement in productive activity, there could be no notion of the principal-agent problem, for example, as it would be impossible to delegate the task of profit-maximization. Profit would only be accruing to whoever was *actually* involved in the running of the enterprise, and thus there could be no principals whatsoever. Whatever profit is, it is distinct from compensation for services performed.

The fact that the Walrasian general equilibrium cannot capture this does not mean that there is no element of profit beyond wages and rent, only that Walrasian economic theory is inadequate. Similarly, just because the Austrians focus on exploiting disequilibrium situations, whether by creating them or by eliminating them, does not detract from the larger point that this only goes on on the background of general certainty that capital as a whole will be earning returns (with the exact distribution of these returns being unknowable in a disequilibrium situation).

Profit as the Marginal Product of Capital

The equation of profit with the 'rental price of capital' is nowadays rarely made explicitly. It is not clear whether this is because the neoclassical theorists are embarrassed to be using the concepts discredited in the so-called Cambridge Capital Controversies, or on the contrary, because such an equation is understood to be self-evident.

Nevertheless, it remains the fact that the textbook expositions normally include the so-called 'neoclassical theory of distribution'. Its essential idea is that the price of each 'factor of production' is equal to its marginal product (in terms of value rather than physical amounts). The mathematical statement of this theory demonstrates this by showing that under perfect competition, i. e. when all firms act as price-takers, the optimum point of production occurs when the marginal product of each of the inputs is just equal to its market-determined price. If we can then take the *whole* economy as being represented by one giant 'production function', with constant returns to scale, then at the optimum point of production the whole social income is exhausted by the sum of the marginal products of the individual inputs.

This simple relationship is accorded the title of the 'theory of distribution', because the variety of inputs into production is reduced to only two categories, namely labour and capital (historically speaking, the categories would of course also include the third 'factor of production', namely land). Tacitly this is

understood to mean that each of the 'three great estates' receives the share of income that is determined by the ratio of its actual income (the marginal product times the amount of the factor of production in use) to total output.

This neoclassical understanding was intended as an answer to the Classical idea that distribution of class incomes is logically prior to the determination of prices of individual goods. The neoclassical theorem neatly demonstrates that actually, class income is itself a kind of price. It thus allowed the theorists to have their cake and eat it: while it confirmed the basic intuition of the general equilibrium approach that 'everything depended on everything else', or at least all prices were dependent on each other, at the same time it provided a way of determining the class incomes - despite the fact that the Classical notion of income distribution being prior to price determination did not even make sense within the neoclassical paradigm.

The 'moral' content of the theory was forcefully stressed by one of its originators, J. B. Clark (1899). Later neoclassical theorists were not so full of hubris, being aware of the simple point that there was no reason why the marginal profit of capital should constitute income of a separate class of capital owners; from the point of view of marginal productivity theory, it is entirely irrelevant whether the marginal products of the capital goods are received by a class of capitalists, by the state, or by the 'owners of labour', i. e. workers. In fact, in the full description of the general equilibrium, it turns out that incomes are in a sense morally arbitrary, since the supply of individual inputs, including of course the labour supply, depends on who owns those inputs. Thus if under the Classical understanding, prices cannot depend *just* on relative scarcities, since they are primarily dependent on the distribution of income, it is still true that within neoclassical economics, prices cannot depend on scarcities pure and simple, as they are also dependent on the prior distribution of *income-generating assets*. ¹⁴

¹⁴ This is the kernel of Roemer's (1982) neoclassically-inspired notion of exploitation - exploitation occurs when there is an unequal initial distribution of assets.

We could of course tell some sort of Nozickian story about property rights, under which at least *some* 'initial' distributions could be considered morally legitimate. There are further difficulties, to do with the fact that hardly any actually existing real-world asset holdings could be thought to be the legitimate outcomes of such legitimate initial distributions; and there is also the somewhat obvious objection that ownership of an asset does not necessarily justify the appropriation of the output from the use of that asset. But this is not the route we are going to take, as there are massive conceptual problems with the whole scheme underlying this line of thought in the first place.

First of all, the Clarkian marginal productivity theory was exploded by the Sraffa-inspired critique of the neoclassical concept of capital. ¹⁵ In the course of the Cambridge Capital Controversies, the Sraffian theorists argued that the concept of the economy-wide production function cannot serve the purposes it is intended for, since one of its arguments - namely, the amount of capital – is dependent on the very magnitude that the production function is supposed to yield – namely, the rate of interest, equated to the marginal product of capital. The input-output schema underlying the Sraffian approach to economics demonstrated very clearly that in fact, capital goods are in a very deep sense heterogeneous; therefore to aggregate them in a value-denominated concept of capital, it is first necessary to determine the prevailing rate of profit in the economy. This is a vindication of the Classical approach, which stressed the income distribution – division between capital and labour – as being prior to price determination.

While the neoclassical theorists actually explicitly admitted defeat in the particular battle over the production function (Samuelson 1966), and hence a fortiori over the concept of the marginal product of capital, within the wider war the results were not nearly so favourable to the Sraffians. It could be said that

¹⁵ Here just as much as in the discussion of the Sraffian critique of Marxian economics, it must be said that while Piero Sraffa provided the theoretical foundation for these enterprises, he himself did not actually take part in the controversies described, meaning that no particular position should or can be ascribed to him personally.

the neoclassicals simply abandoned the territory, imposing a blockade and a trade embargo. Instead of accepting the superiority of the Sraffian paradigm, the neoclassical theorists retreated rhetorically (though not in the textbooks) to the Walrasian disaggregated general equilibrium, where there is no single production function for the economy as a whole, but nevertheless each capital good earns its own marginal product as its price (cf. the views of Mark Blaug in Caravale 1977).

I would now like to argue that this move to disaggregated equilibrium cannot in fact save the marginal product concept of profit. Actually, it is precisely this defensive move which will make it clear that even if the original substance concept of capital itself held good, profit could not possibly be equated with the marginal product of capital.

The disaggregated general equilibrium system, does no longer allow for the recognition of the 'three (or two) great estates' of the society, corresponding to the landlords, the capitalists and the workers. Abstracting from land ownership, there are now only the workers on the one hand, and then the many latheowners, steel-mill-owners, fleet-of-lorries-owners, and so on. Each of the group of owners now constitutes a separate 'class'. Curiously, this is very much like the conception Marx considers, and rejects, in the fragment on classes at the end of *Capital*; dividing society into classes on the basis of such disaggregated sources of income seems absurd to him.

But whether Marx was right in this or not, such conception is not going to fly. First, it is to be noted that in a sense, this will in the end not really help to avoid the 'Cambridge-style' Sraffian critique. For if it remains the case that competition will drive the various rates of profit r_i to the same general level r_i , then the question remains, where exactly does that level of the rate of profits come from? Care is needed here: the question is not why the rates of profit converge – this is due to competition, as just stated. Rather, the question is, why

¹⁶ In fact, to be perfectly precise, the fragmentation of the capital-owning class should go as far as division into classes on the basis of ownership of a particular type of capital-good, down to its product specifications.

do these rates of profit settle on *the* particular value of r, rather than a different one?¹⁷

But secondly, in a disaggregated description of the equilibrium, we can now see clearly what was originally obscured by lumping all the various produced means of production into the catch-all substance of 'capital': namely, that the marginal product under either conception does not possess the same characteristics as the 'income of the capital-owners'.

If a circulating capital good, a widget, is being used in production, it may well be true that the optimum requires it to be used in such a way that the price of a further unit is just equal to the value of increased output. But for each such capital good, its own price is itself equal to the marginal cost of its production, under neoclassical assumptions. What this means is that the revenue of the widget-firm is exactly equal to its costs, as per usual in the Walrasian equilibrium. But these costs include precisely and only the prices of individual inputs into the production of widgets. In other words, for each 'capitalist' – each producer of widgets – their revenue allows *neither* for their consumption *nor* for investment. Which, of course, are *the* uses of profit, as ordinarily understood.

What is being argued here is that while the amount of widgets being used may be regulated by the price and the marginal product of the widget, from the point of view of an individual purchaser, that marginal product bears no relationship at all to the income of the *owner* of the firm producing widgets. The 'return on capital', as distinct from the *costs* of production, is exactly zero. Of course, among these costs may be compensation for whatever productive activities the owner happens to undertake - for their supervisory / managerial / labour inputs into production - or for their entrepreneurial activities. Such costs,

¹⁷ This is similar to Marx's objection to 'vulgar economy': how can supply and demand explain price, since supply and demand can be in equilibrium at any value – what then explains the *particular* value that they settle on? (The marginalists got around this problem by invoking the differential calculus, allowing 'infinitely small' disturbances of equilibrium, which then in turn allowed for the price ratios to be expressed as ratios of marginal utilities. Marx unfortunately was not privy to this sort of mathematical knowledge.)

from the neoclassical point of view, fall under the rubric of labour costs, wages and/or rents (depending on the elasticity of supply of these activities). But as I have already argued, the class income of capital-owners qua capital-owners is conceptually distinct from such costs; that class income is pure profit rather than any sort of wage, it is a return on capital invested, disposable income of the capital-producer. Regardless of the magnitude of the price of their product - which means, regardless of the marginal product of widgets - that return on capital, in the sense of the residual income with which the investor can dispose as they see fit, is still zero.

The situation is exactly the same if we now consider the widget to be a durable capital good and turn our attention to its owner (as distinct from its producer firm). The quasi-rents earned by the widget during its economic lifetime may well be equal to its marginal product, but this only just covers the cost of its original purchase (including the appropriate discount factor). Thus, again none of this revenue constitutes the disposable income of the widget-owner; if it did, then the original purchase price of the widget could not have been the equilibrium one (as the value to the purchaser would have to be greater than what they in fact paid for it).

Now, in the whole discussion it matters not one iota whether the talk is about individual, disaggregated heterogeneous capital goods, or a homogeneous substance of capital. As long as capital is understood as the produced input (which of course is its defining characteristic), then it must be the case that the revenue of its producers *just* covers the cost of its production. As these costs do not include disposable income of the firm-owners¹⁸, neither can the revenue cover any of that income. In other words, the ratio of the marginal product of capital to the total income is equivalent to the *cost* of producing that capital within a given period; *not* in any sense the disposable income of the capitalist class.

¹⁸ Unless a compensation for 'waiting' is required – but this is a separate claim that will be discussed below.

There should be nothing all that surprising about this; it is a simple consequence of the Walrasian conception. The only way in which the price of capital goods could include an element of 'return on capital invested' is if it included a mark-up over actual costs. But such a mark-up is of course inconsistent with the neoclassical notion of perfect competition; and thus, we have reached the very same conclusion as we started with: namely, that under Walrasian perfect competition, no pure profits are possible.

In this connection, it is interesting to note a remarkable property of such a Walrasian system. Since it effectively assumes that there is nothing left over after all the requirements of production have been satisfied – or in other words, that there is no surplus over the amounts of necessary inputs – if such a system is to last longer than a single period, then it must be that everything that is produced as output is also *exactly* used up in inputs. What this means is that such a Walrasian system comes to look remarkably like the Sraffian system of 'production for subsistence' (to be described in more detail in the next chapter). And irony of all ironies, in this particular variety of the system, in other words one in which there is no surplus produced, it can be demonstrated that the prices of all 'basic' products are in fact equal to their Marxian labour values. ¹⁹ Thus, it turns out that Walrasian perfect competition is in effect equivalent to the Marxian 'simple commodity production', where goods are being produced for the market rather than for direct consumption, but there is (as yet) no exploitation, and hence, exactly as is to be expected, no profits.

Profits can *only* come into play when there *is* a surplus of labour – and hence a surplus of commodities – over the requirements of immediate reproduction of the productive relationships. This is the fundamental lesson of Marx, one which is clearly visible in the Sraffian system. My critique of the neoclassical conceptualisation of profit as marginal product of capital concentrated on this point, rather than on the point of heterogeneity of capital.

^{19 &#}x27;Basic' here is a technical term of the Sraffian approach – roughly speaking, all basic commodities are used in the production of each other, though not necessarily directly; they are 'price-determining' rather than 'price-determined'.

In my opinion, this critique is more general, since it is independent of the exact nature of capital (although I in no way deviate from the view that capital is, in fact, heterogeneous).

Thus, I conclude that the attempt to conceptualise profit as the marginal return of capital is unsuccessful. It may be that within a *partial equilibrium* framework, the marginal productivity theory can serve as an epistemological tool to find the required 'demand for capital goods', although the serviceability of the partial equilibrium framework itself is questionable. But as far as general equilibrium is concerned, if such an equilibrium is *reproducible* ²⁰, that is, if it can persist through time, then marginal products are simply unnecessary; the equilibrium prices of individual capital goods can be found directly from the productive requirements of the economy, as the Sraffian analysis demonstrates.

As the reader will have noticed, in this part of the discussion I have been using the term 'Sraffian' rather a lot more than the term 'Marxian'. Yet there is a widespread view according to which, while perhaps growing out of similar roots, Marxian and Sraffian viewpoints are ultimately incompatible. I do not believe this to be the case; but the precise description of the relationship between the two approaches will have to wait until the next chapter.

It may still be objected at this point that I have in fact misidentified what the intuitive idea of profits corresponds to in the Walrasian equilibrium. After all, without expected 'normal profits', no production would really take place. However, what exactly is the nature of these 'normal profits', if they are not understood as the intuitive 'revenues minus costs'? As I hope to have demonstrated, if they are understood as a special kind of wage, then they cannot be a return on capital, and hence do not correspond to the intuitive idea of profit. On the other hand, as has been just shown, if they are indeed a 'return on capital', then they cannot be the disposable income of a particular group of people. Nor can they be understood as a type of rent, since under perfect competition, they would be competed away. If these 'normal profits' are not to

²⁰ The term is Roemer's (1981, p. 41)

be a complete mystery, the only remaining way of explaining them is to consider them a compensation for the sacrifice of 'waiting'. This is the idea to which I now turn.

Profit as Interest

Interest theories of profit have probably the longest pedigree of all the neoclassical explanations of profit. All of them share the same essential idea, that of 'agio' or 'time preference'. It is argued, or sometimes simply assumed, that human beings prefer present consumption to future consumption. If possible, they would like to use their income *now* rather than wait for later. This means that, assuming full employment of labour, if there is to be any investment (which requires postponed consumption) at all, and thus any use of capital at all, there must be a 'reward' attached to it, which balances out the 'sacrifice' undertaken in waiting for consumption. This reward is profit, or interest, depending on the precise terminology used.

This basic idea has been around for a very long time. "We find versions of it in Smith, Ricardo, and Mill. Whether it is called an *abstinence* theory or an *impatience* theory or a *waiting* theory is unimportant" (Bliss 1990, pp. 227-8) It was formulated explicitly in terms of 'sacrifice' and 'reward' by Nassau Senior (1951). Similarly for Marshall (1898), the 'real cost of a thing' was the 'efforts and sacrifices' undertaken in obtaining it, where labour falls under the rubric of effort, while 'waiting' is a sacrifice.

On the basis of this simple idea, neoclassical theorists derive the *rate* of interest, as essentially equal to the marginal rate of substitution between the present and the future (at least on 'the first approximation' – Fisher 1930). This means that, given their income and a market interest rate, an individual decides whether it maximizes their utility to borrow or to lend. One individual's action has no effect on the interest rate, but if at a given rate there are too many loans

²¹ To be sure, cases to the contrary are sometimes considered; Fisher (1930) does discuss a few factors which promote 'patience' rather than 'impatience'. In general, however, it is impatience that is deemed relevant.

demanded or offered, the interest rate adjusts until an equilibrium is reached, in which the individuals are just indifferent between further lending and borrowing — or in other words, the marginal rate of substitution is precisely equal to the interest rate.

Moral/Pragmatic Justification of Profit as Interest

First of all, let us make the obvious point that if all that mattered was really the *time* dimension of production, then interest could not be a reward purely to the profit-makers. The early theorists with their doctrine of the 'wage-fund' may have been assuming that wages are an advance paid to the workers before production is finished; but such an assumption is clearly arbitrary, when we look at the real world. In hundreds of cases, *the workers are waiting, too* – if the point is really waiting; the fact that production takes time affects the workers just as much as the capitalists. The difference is that while for a pure profit-maker, waiting is the only 'sacrifice' they have to make, the worker must also put in his blood and sweat before getting any income from the co-operative enterprise of production.

Thus, if all that mattered for the existence of profit was the fact that production takes time, wages would have to include a portion of the reward for waiting just as much as the income of the profit-maker. Note that since time flows for both the workers and the profit-maker equally, so would have the total final 'reward for waiting' have to be equal for both. But in addition, wages would of course have to include also the second component, the compensation for the disutility of work. This implies that the workers' income would have to be always strictly greater – probably far greater – than any income of the profit-maker.

Now of course, the obvious objection at this point is that the waitings that the profit-maker and the workers are not equivalent, and so neither are the rewards for them. For the workers do not *own* anything, unlike the profit-maker;

and it is the ownership right in capital goods that implies the reward for waiting accrues to the profit-maker rather than the workers.

But note that now we are no longer talking about any *moral justification* of profit. For the fact that the profit-makers have a legal right to dispose with some material goods as they see fit has nothing to do with being rewarded for sacrifice *in terms of time*. That sacrifice is equivalent for both the profit-maker and the workers; if ownership makes any difference to the rewards, then we should concentrate on that, and forget the 'time dimension' altogether.

However, what about the case where wages are in fact paid in advance? The underlying picture is that while the workers needed to be paid at the beginning of the period of production, simply in order to survive that period, this was not the case for the capitalist, who could afford to 'wait'. Clearly though, the capitalist did not 'wait' for consumption during the whole time the workers were consuming their income. The profit-maker would consume just as much — in fact very likely more so — as the workers during the period of production. Thus the very idea of profit as a reward for 'waiting' involves a reward for refraining from *extra* consumption. In other words, it is assumed that the profit-maker owns resources *over and above* those necessary to withstand the period of 'waiting' — and that the workers do not possess such resources (if they did, they would not need to work for the capitalist).

This of course is nothing but the Marxian description of the functioning of capitalism. Without an inequality in the holdings of capital goods – including the means of consumption – no profits would be possible. This can hardly count as a convincing moral justification for their existence.

It is thus clear that what is really intended by calling 'waiting' a sacrifice is not simply waiting, but the idea of refraining from consumption which *could be had* already at time t zero. Workers do not own anything, and so have no consumption to refrain from; this is not the case for the profit-maker, who could (so the reasoning goes) give up on the rigmarole of production altogether and simply consume what he has.

However, why should this understandable point be seen as a *moral* justification of profit? There is nothing particularly moral about the decision whether to consume now or later. This may not be easy to see for someone brought up in a society where saving is generally seen as a Good Thing; but the good in this case is clearly a pragmatic rather than a moral notion. The huntergatherer societies which (so the theory goes) always consumed as much as was humanly possible whenever they could – thus practising the opposite of the supposedly 'virtuous' refraining from consumption – were not in any sense immoral. Nor in fact were they being irrational, given that under the circumstances of their life it was not actually possible to store goods for future consumption.

The very idea of refraining from consumption could become to be seen in a positive light *only because* it became possible on the one hand to physically store perishable goods, but even more importantly, because it became possible to *sustain a claim* to goods over time. If there was no way to enforce ownership rights – in other words, if the production possibilities of society did not allow for the development of protective powers, culminating in the development of the state – then it could easily be completely irrational to refrain from consumption; for there would be no reason to believe that the goods to be consumed will be around tomorrow just as much as they are today.

Thus, not only is saving not a particularly moral act, it is not under all circumstances even a particularly rational one. The idea that it *should* be rewarded can only arise if it is presumed that not only is it possible to preserve claims to material goods, but in fact those goods were themselves acquired in a legitimate way from the moral point of view. But then the conclusion that profit is morally deserved becomes contingent on the particular 'initial situation'. If the initial difference between the owners and the non-owners is solely the result of violent expropriation, then no profit can be seen as a morally legitimate reward. It is, of course, very likely that the initial differences in ownership resulted not from any benign legitimate exchanges, but from plunder, pillage and forced

expropriation (such as, for example, described by Marx under the name of the 'primitive accumulation of capital').

We could of course imagine that the 'initial situation' is one of complete equality (for clarity's sake), where some people do refrain from consumption and thereby acquire the greater stock of goods, which then allows them to go on accumulating. Note that this implies that there was in the society mentioned already a surplus over the level necessary for pure survival — otherwise refraining from consumption would not have been at all possible. But the more salient point is, why should even under such circumstances saving be rewarded? If it happens to be a moral thing to do — so what? After all, there is a non-trivial view that 'virtue is its own reward'. We do not reward people for not murdering, not cheating or not stealing. Why should we reward them for not consuming?

The real point, of course, which has been floating around in this whole discussion, is that 'rewarding' profit-makers for refraining from consumption is necessary in order to get them to allow their producer goods to be used in production. There is thus an assumption made that everybody, or at least all profit-makers, has a preference for current over future consumption. This assumption itself may or may not be justified – perhaps, on some view of the good life, a life-plan should include a limited amount of consumption every day; we may not believe that gorging ourselves to the limit of our material possibilities is the best lifestyle ever.²²

But even if that assumption does happen to be justified, at least in the case of the profit-makers, it clearly has nothing to do with morality at all. Demanding a payment for doing or not doing X may or may not be moral, generally speaking;

²² Ironically enough, if Weber's (1976) critique of Marx were right – the critique that it was the Protestant ethic of renouncing consumption that spurred the development of capitalism, rather than the capitalist social relations bringing forth its own "forms of consciousness", such as Protestantism – then of course those Protestant capitalists ought not have to have been rewarded for deferring their consumption; after all, they were doing precisely what they wanted to do. Profit then was not a necessary payment to induce them to refrain from consumption, contrary to the view under discussion. It becomes mysterious why it should exist at all – and thus the Protestant-ethic type of view "explains" the development of capitalism by the pursuit of an unexplained variable.

it depends on the nature of X. But in this particular case, it is much more likely that if anything, profits from production are immoral rather than moral.

Consider a situation in which you happen to be lost in the desert; exhausted, on the verge of death, you arrive at a well. However, the well happens to be guarded by a large, armed man, who tells you that you can only drink from the well if for the rest of your life you agree to serve him. "The well," he says, "gets filled up from the underground waters only very slowly; if you drink today, I will have to give up part of my own consumption of water until tomorrow. This is a sacrifice on my part, and I need to be rewarded for that sacrifice."

The point of the story is not that the payment demanded is out of all proportion to the good provided (perhaps you could manage to negotiate a discount). Nor is the point the question of whether the man has a 'right' to demand such a payment. The point is simply that *unless you agree to pay, you die.* Your decision in no way concerns complicated questions of moral theory. It is a simple pragmatic matter. The payment is necessary to induce the man to refrain from consumption — let us assume this really is true — and you happen to be really in need of that refraining.

The moral of the story is of course not original at all. In the context of the capitalist economy, it just a development of the old Marxist idea that the nonowners of producer goods require those goods for their continued existence; thus, they find it necessary to agree to work for the owners, at the price negotiated. In other words, assuming that it is true that the profit-makers need to be paid in order for them to refrain from consumption, this is not a moral, but a *pragmatic* justification of profit. If the non-owners will starve, or even if they will just be noticeably worse off²³ without engaging in production involving the producer goods owned by others, then pragmatically it makes sense for them to pay the owners for the privilege – always assuming that such a payment

²³ Does anybody doubt that the non-owners engage in the labour for which they have to pay the owners *non-voluntarily*, in the sense that they do not have the luxury of not doing so? They certainly do not do it out of the goodness of their hearts.

is in fact necessary in order for the owners to refrain from simply consuming the goods. But there is nothing more moral about it than giving in to blackmail.

And just as in the case of blackmail, the whole situation would change if the owners did not possess their bargaining powers. In other words, this pragmatic 'justification' of profit relies on the very fact that the producers' goods are in fact owned by people other than the ones who require them for production. Thus at bottom, profit-makers extract profit simply 'because we can'. Profits are only necessary because there is a capitalist class which can extract them. Thus, if we ask the question 'why do profits exist?', this line of thinking eventually arrives at an answer which reduces to 'because the capitalists exist'. This of course is true and no radical theorist would reject it; but it is not very enlightening, and in no way it constitutes a justification of profits.

Pragmatic justification comes also in other guises, such as the idea that accumulation allows for technological progress, which ultimately benefits everybody. Again, there is no moral element involved here – there is no moral reason why technological progress *should* be attained through the actions of private profit-makers; the only reason can be precisely only pragmatic – 'because it works (and nothing else does)'. This is in itself arguable, of course. But most of all, it is clear that all this sort of argument does is to establish why it is *better* for everybody for there to be profits; it does not answer the question where they come from, what they are.

The Ontological Failure of Interest Theories of Profit

The fundamental difficulty with pure interest theory of profit is that it completely fails to capture the essential characteristic of capitalist profit. In terms of the distinctions we made at the beginning of this chapter, it has nothing to say about the ontological dimension of profit. It completely bypasses the fact that profit represents a claim on *new* valuables; that it is ontologically speaking a surplus over the value that has existed before production took place.

This failure is due to the fact that pure interest theory of profit concentrates exclusively on the *distribution* of income, to the neglect of its origin. This is obvious when we consider the inspiration of such theories. Interest, that is, additional payment for an advanced loan, has existed since time immemorial. But capitalism has not. It may well be true that practically speaking, advancing money, for whatever purpose, under many historical circumstances attracts interest payments. However, only under the capitalist mode of production can those interest payments be thought of as resulting from production, as being profits. Thus, pure interest theories of profit do not address the real problem at all, as they fail to distinguish between 'pure exchange economies' and 'productive economies' – and only in the latter does it make any sense to talk about profit.

Thus, we see that profit is not a necessary condition for the payment for 'waiting'. Nor, of course, is it a sufficient one. The Soviet-type economy may have been grossly inefficient in many ways, but it did survive for quite a considerable amount of time, and its dissolution was due to a complex of social, political and economic factors, rather than a straightforward economic collapse. Nevertheless, and despite the fact that 'human impatience' was hardly abolished by the Soviet power, there was no market for capital in that type of economy, and thus no interest payments of the relevant sort. There was, of course, an economic *surplus* being produced, new valuables coming into existence; but these did not manifest themselves in the form of interest.

Profit is then neither necessary nor sufficient for interest payments. Moreover, it is quite obvious that neither is 'waiting' itself a sufficient condition for the existence of profits. While production does take time, it is the *production* that is relevant for the existence of profit, rather than the time. All the waiting in the world will not bring forth any profits, if all we do during the time we wait is wiggle our thumbs. And conversely, even if time played no role, if production were able to produce a surplus, there would still be profits. Indeed – suppose that the time dimension of production were reversed: that is, even though

labour and capital goods would need to be employed for a particular amount of time, finished commodities would appear instantaneously at the *beginning* of the production process rather than at the end of it.²⁴ Would anyone believe that in this case, profit would disappear? Clearly, as long as more valuables would result from production then were put in, profits would continue to exist, quite regardless of when that result occurred.

The problem was sometimes glimpsed, but hardly ever properly considered by the neoclassical theorists. Boehm-Bawerk tries to address the issue by inventing the teleological fiction that capital goods – including the means of subsistence of the workers – really are 'future commodities; and since goods to be obtained in the future are undervalued in the present, the resulting difference between the price of those goods *now* (i. e. wages and generally speaking costs) and the price in the *future* (the value of the finished commodity) is profit.' (Boehm-Bawerk 1891, pp. 299-300)

But of course, capital goods are not future goods. Capitalism is not a time machine. The only sense in which they can be thought of as 'future commodities' is that they are *destined* to produce such commodities (and be used up in production). But even that is clearly false, as Boehm-Bawerk himself well realises: "This is not to say, of course, that, to make present goods out of future goods, it is sufficient that time should elapse and the future become the present. The goods themselves must not remain stationary. On their part they must bridge over the gap which divides them from the present, and this they do through the production which changes them from goods of remote rank into finished and final products. If there is no production process, if the capital is left dead, the means of production always remain undervalued future goods." (Boehm-Bawerk 1891, pp. 302-303) So there is no 'destiny' that capital goods must follow; it is only if they are actually used productively that they produce profit. Which of course makes perfect intuitive sense, but clearly has nothing at

²⁴ If such an idea seems utterly beyond the wildest imagination, think of examples where the 'sacrifice' is indeed brought only quite some time after the 'reward' – such as suffering a hangover after being pleasantly drunk.

all to do with any time preference, whose existence is completely independent of this issue.²⁵

Irving Fisher, whose theory of the interest rate as 'the internal rate of return over cost' (Fisher 1930) underlies neoclassical thinking to this day, does not even come close to addressing the problem. At a first glance, it appears that his theory is designed to cover both grounds of time preference and productivity, as Boehm-Bawerk tried to do before him. The theory of 'human impatience' and 'investment opportunity' give rise to the 'first' and 'second approximation' respectively.26 Thus, Fisher envisages a two-stage process, in which first each individual maximises maximizes the present value of their income, by appropriately 'investing their capital', using the market interest rate, while in the second stage, they lend or borrow to smooth their consumption path in line with their preferences. In order to maximize their income, individuals compare in a pair-wise fashion all their 'investment opportunities', using the market interest rate and their own 'rate of return over cost', which is meant to express how much gain one alternative brings relative to the cost on giving up the other. Similarly to the first approximation, the market interest rate adjusts, until an equilibrium is reached, in which marginal rate of substitution between periods is equal to the 'marginal rate of return over cost' which is equal to the interest rate.

Pasinetti (1969) criticised Fisher's concept of the 'marginal rate of return over cost' as being just as vulnerable to the Sraffian critique as the marginal product of capital, in the sense that only under very restrictive assumptions can it be thought of as independent of the Sraffian concept of the rate of profit.²⁷

Incidentally, notice how capital goods "bridge over the gap which divides them from the present", how they "do" things; elsewhere Boehm-Bawerk talks of capital "maturing" and "ripening" into finished consumption commodities. All these metaphors of course deflect attention from the fact that capital goods do not themselves do anything, much less "ripen" into anything – that they are passive elements with which the work is done, rather than active agents of production.

There is also the 'third approximation', in which risk is included in the calculation, and where the interest rate is thus increased to reflect the level of risk.

²⁷ And moreover, that there are really two concepts involved in Fisher's reasoning, one

Without disputing this critique, I would like to concentrate on the dimension of Fisher's theory mentioned above. The point is that when Fisher considers the maximisation of income streams, there seems to be no awareness of the fact that there is anything to be discussed about this very possibility of maximisation. How come there *are* 'opportunities to invest'? Why will any effort undertaken by an individual result in *more* income than there was available before — crucially, more than a compensation for the effort undertaken? Assuming that effort was at all involved, of course, rather than just 'letting one's money work', which makes the process even more mysterious.

Fisher simply does not touch on the issue we are concerned with. He assumes the existence of profits, rather than explaining them. The procedure he describes may or may not be adequate for finding out the numerical value of the rate of interest; but it certainly has nothing to say about why profits are even possible.

The Marxian Alternative

I hope to have shown that none of the theories above answer the *ontological* question of how profit is possible. For profits are just one expression of the following amazing fact about human productive activity: it *is* productive. In some sense, more comes out of the production than went into it. The output is *more* than just the sum of the inputs; the economy *grows*; people get *richer*. In an important sense, we are getting something out of nothing: 'something' appears – additional income – that did not exist before. How is *that* possible?

Marx's theory is the only one that even *attempts* to answer this question. The neoclassical theory cannot even begin to answer it, for as I have pointed out, in the Walrasian steady state there *are* no pure profits and there *is* no income over and above the 'factor prices', i. e. what really *has* existed in the

of which considers ex ante comparisons between various investment alternatives, whereas the other one is based on comparisons of ex post switching between alternatives. As Pasinetti points out, not only are the rates of return in the two cases different concepts, but the first one might in general not even exist.

world already in some form. Even if we take into account the 'normal profits', under the very understanding that the theory dictates, namely that they are a compensation for sacrifice, the total amount of wealth *in subjective terms* could not have increased at all! This is because the interest acquired only just compensates the sacrifice, or in other words, if production were not undertaken, nor would the sacrifice occur and thus exactly the same 'psychic income' would be available. The only way some *additional* income could arise would be the outcome of Knight's 'uncertainty'. But these random fluctuations either have a mean of zero²⁸, in which case again there *is* really no additional income, or else we do get a positive increment – but the theory is completely silent about where it comes from. The failure to answer the ontological question of profits is endemic to the neoclassical theory.

As is well known, *Marx's* explanation of profits turns on the distinction between *labour* and *labour-power*. The worker gets paid a 'fair price' for their labour-power — that is, the amount that is needed to reproduce this labour-power to the point at which it was before production began. But labour-power as an ability to work is itself capable of *producing more than is necessary for its own reproduction*. This is the answer to the riddle of profits — and also to the more fundamental riddle of surplus output.

This, in turn, can be seen as the further development of the characteristics of life in general. While modern physical theories are postulated on some version of the second law of thermodynamics, and thus contain the notion that over time, the universe progresses towards a more disorganised state, the phenomenon of life seems to constitute a local exception to this general trend. It is the basic characteristic of organic things that they are more complicated, more organised objects than inorganic things. Not only that, but these living things from the beginning were able to reproduce themselves, to create new versions of themselves, and thereby increase the amount of order existing

Of course, 'uncertain' results are by Knight's definition incalculable ex ante; however they certainly can be recorded and their mean calculated ex post.

within the environment. Biological evolution further emphasised this basic characteristic by producing organisms with ever more complicated internal structure.²⁹ Finally, with human beings, life arrived at the stage where more order, more design was the result of conscious deliberation. The coming into being of life itself, its 'extended reproduction' and propagation, its resulting in the coming into being of conscious beings, and their own creative activity, are all increases in order rather than disorder, thus running counter to the general tendency of entropy to grow.

The fact that human labour-power is capable of producing more than is necessary for its own reproduction – over historical time, of course, since this would be impossible without the development of productive forces – is thus an expression of this general trend in the development of living beings. Profit is a historical form of the outcome of this capability of surplus production. It is the result of a long period of historical development of human productive instruments, without which people would often not be able even to reproduce themselves (as in fact had sometimes been the case in history).

From this wider philosophical perspective, we can see clearly why Knight's characterisation of the labour theory of value as taking profit 'narrowly literally' as all income accruing to capital (i. e. more or less identifying it with interest) is thoroughly misguided. For this is understanding the question of profit as a purely distributional issue; but the point of Marxian theory goes much deeper: it is concerned with the very production of additional income (with profit being only a particular form of it). It is not that the fact that this surplus is appropriated by the capitalist is unimportant; it is of course of enormous social significance — after all, it was the very reason why Marx undertook his investigation in the first place. But the theory says more and of even greater significance, connecting the purely capitalist form of production to the wider biological world of humans and this is its decisive virtue.

To be sure, under some circumstance evolution may favour organisms with *simpler* internal structure than those already in existence; however all that matters is that *sometimes* natural selection will lead to more order appearing in the world.

Now these general points about surplus production do not discriminate among the two schools of 'surplus economics', the Marxian one and the Sraffian one. On a closer look, however, it seems that there is a major difference between the two. It is a vital part of the Marxian theory that there is a one-to-one mapping between surplus labour and the value of the surplus commodities. By contrast, the Sraffian theory makes do with the description of the composition of the physical surplus of commodities³⁰ and is completely silent as to its origin.

However, the difference is more imagined than real. There is hardly a plausible interpretation of the Sraffian surplus that would not account for it in terms of surplus labour. Profit is no result of some sort of mystical 'productivity of capital', at which already Marx himself was poking fun – and not just because for Sraffa, there is no 'capital', properly speaking. As is clear to everybody but the neoclassical economists, non-living things are just matter without any sort of productive capability at all. It is of course straightforwardly true that very few kinds of labour can go on without productive instruments, and next to none without an object on which labour is performed. But even though observations of 'marginal return' can then be performed, 'productivity of capital', or any nonliving thing, remains a pure abstraction without any corresponding ability in the real world. On the other hand, necessary labour and surplus labour are hardly abstractions of the same kind – it makes a clear intuitive sense to say that if the workers have produced everything that is needed in order to live for another period, and yet keep producing, the labour performed constitutes surplus labour.

The only real alternative is that in some productive processes, there appears a 'manna from heaven' – useful articles which, however, are not themselves part of the bundle of goods *necessary* for labour-power reproduction,

³⁰ The word 'physical' is not strictly correct, as there is nothing in Sraffa that requires commodities to be of physical nature; services as well as goods are admissible. The point being made is that Sraffian economics proceeds from the description of actual input and output coefficients rather than the corresponding labour values.

and which happen to be an unavoidable by-products of necessary labour. Under such conditions, the surplus could be constituted partly or completely by such 'manna from heaven', in which case there would be less or no surplus labour at all.³¹ It seems clear, however, that such cases would be literally miraculous; even if, stretching our credulity, we granted that *sometimes* such cases might occur, it is beyond belief that they could possibly constitute the underlying basis of the modern industrial economy.

The real differences between the Marxian and the Sraffian theories of the economy will be discussed in the next chapter. For now, I would like to conclude that the superiority of the surplus view of profit over the neoclassical one has been sufficiently demonstrated, and that therefore, the claim that the wage labour – capital relationship is the basic class relationship of capitalism has also been confirmed.

Roemer (1981, p. 48) considers this possibility, giving the example in which the workers' labour produces 'bread and diamonds', with the diamonds being unnecessary for subsistence but at the same time valued by the capitalists, who appropriate them – Roemer shows that if no productive process produces such 'diamonds', this is a sufficient condition for the Fundamental Marxian Theorem to hold.

Chapter VI

What Price Value? The Transformation Problem and the Sraffian Critique

It may well be that attack is the best defence, as it is sometimes claimed; and I have been on the offensive in the previous chapter, trying to prove the virtues of the Marxian theory by attacking the available alternatives at their weak points. However, to prove the relevance of the Marxian theory, it is necessary also to attend to the wounds it has itself sustained over the years. The question I shall want to answer is thus whether the problems of the 'Labour Theory of Value' are so serious that despite all its proclaimed merits, a theory of classes can no longer be based on it.

The Transformation Problem

The main line of attack on Marxian economics over the years concentrated on the so-called "Transformation Problem". This results from the fact that in general, prices of individual commodities diverge from their labour values – that is, from the amounts of labour embodied in them.¹

Marx, just like Ricardo before him, was very well aware of this divergence. Nevertheless, again just like Ricardo, Marx did use the proposition that commodities do exchange at values. However, the purposes of the two theorists were qualitatively different.

For Ricardo, the proposition just mentioned was at least sometimes a good approximation of reality – hence the whimsical moniker '93% Labour Theory of

I am not referring here to the market prices, that is, the actual prices at which commodities are sold and which fluctuate with temporarily deviations in supply and demand, but rather to the so-called 'prices of production', which can be thought of as the long-term averages from which the market prices randomly deviate (the mean of these deviations being of course zero).

Value'². For Marx, however, the proposition was not intended to play any empirical role at all. The claim that commodities exchange at value – so that 'price equals value' – was used in the first volume of *Capital* as a simplifying assumption in order to reveal what had been hidden, not as an actual approximation to reality. The idea was that the relationships revealed under the simplifying assumption would remain unaltered – invariant – even when it was dropped.

But dropped it had to be. At least if Marx was to follow the general assumption made by his Classical predecessors, Smith and Ricardo, that the profit rates in all industries tended to equality; and if he was to keep his own assumption that the rates of exploitation in all industries were also equal. The first proposition follows from the consideration that under free competition, capital would move from branch of production to branch of production in search of the highest rate of profit, until all such possibilities were exhausted, and hence all the rates must have been equalised. Analogously—Marx thought—workers would also move from trade to trade in the attempt to minimise the rate of exploitation, until all such possibilities were exhausted, too, and all workers were exploited to the same degree. This of course assumes that workers can somehow *see* the effects of exploitation; but that assumption followed from empirically justifiable conditions of an equal-length labour day, competition among workers driving the money wage per hour to the same level.³

² Stigler (1958)

³ Strictly speaking, this is only true as long as all the workers buy exactly the same goods with their money wages. If this is the case, then the labour embodied in those goods is the same for all workers; and since the labour day is of equal length, the ratio of paid to unpaid labour (i. e. the rate of exploitation) will also be equal. However, if the composition of the consumption bundle purchased by the money wage is different among different workers, then there is a problem – in fact, it is exactly the same transformation problem that I am about to discuss, the one that bedevilled Marxian economics in the context of capital goods. Namely, if it is not in general the case that prices are proportional to labour values, it follows that equally priced but differently composed consumption bundles may contain different amounts of labour. This implies that for workers purchasing such different consumption bundles with their equal money wages, the ratio of paid to unpaid labour would in general not be equal in all industries. Marx's second assumption would then turn out

However, if these two assumptions hold, and profit is nothing but surplus value transformed, then prices will in general necessarily diverge from labour values. For if they did not, the capitalists employing a large amount of labour relative to capital would also receive a large amount of surplus value relative to capital — or in other words, a high rate of profit; while conversely, their competitors in relatively capital-intensive industries would receive a low rate — and so the rates of profit could not be equalised.⁴

Marx's solution to this riddle is based on the fundamental idea that competition *redistributes* the surplus value among the capitalists, so that in the end the rates of profit are equalised. The process occurs precisely through the adjustment of prices, which thus necessarily diverge from values.

In Baumol's (1974, p. 53) image, it is as if all the surplus value accumulated by the individual capitalists was concentrated in a giant storehouse, from which it is then doled out back to them precisely in proportion to the capital they have invested. The idea has a pleasing property that it makes exploitation clearly a class phenomenon, in that it is not simply the result of the relationship of an individual capitalist with their workforce, but instead of all the capitalist with all the workers.

Between the theory of the 'transformed' prices and the original theory which made the 'laws of motion' of capitalism clear on the basis of equality of prices and values (as well as of profits and surplus values) a link is maintained through two quantitative conditions. Since competition can neither create nor destroy value, it is postulated that the sum of prices must be the same before and after the transformation of prices; and for the same reasons, the same is true of profits and surplus values.

The transformation problem then is the problem of showing exactly *how* the original values are transformed into the new 'prices of production', so that the two conditions above hold. The sketch of this solution in *Capital*, Vol. III

to be unjustified.

This exception to this would occur if in fact the capital to labour ration – or the 'organic composition of capital' – were in fact the same in all industries.

involves five different branches of production; to arrive at the price of production, Marx multiplies the cost of production (C + V) – that is, the sum of the constant and variable capital invested – by (1 + r), where r is the economy-wide equalised profit rate. This profit rate, according to Marx, is equal to the ratio of the total surplus value S and the value of the total invested capital, (C + V). In other words, we get that for each individual good i, the price p_i is equal to

So for the economy as a whole, it is the case that

$$\sum_{i=1}^{n} p_{i} = \sum_{i=1}^{n} (C_{i} + V_{i})(1+r) = (1+r)\sum_{i=1}^{n} (C_{i} + V_{i}) = \left(1 + \frac{S}{C+V}\right)\sum_{i=1}^{n} (C_{i} + V_{i}) = \left(\frac{C+V+S}{C+V}\right)\sum_{i=1}^{n} (C_{i} + V_{i}) = \left(\frac{C+V+S}{C+V}\right)(C+V) = (C+V+S)$$

or in other words, the sum of all prices is equal to the sum of all values. This is the first of Marx's two famous 'conditions of invariance. On the other hand, since the profit \square_i made on an individual good i is capital invested times the rate of profit, i. e. (C + V) r, then

or, the sum of all profits is equal to the sum of all surplus values – the second of Marx's conditions.

The trouble is that if this sketch is understood as all there is to the solution of the transformation problem, then, as a long line of critics has claimed, it is decidedly faulty. The defects of Marx's procedure, as first formulated by Bortkiewicz (1968), and repeated many times since, are as follows:

First, in Marx's solution, the capital invested is reckoned in value terms—i. e., it is understood to be (C + V) as above. But this implies that the capitalists are buying their inputs at value. However, the output is reckoned in terms of price; in other words, the selling goes on at the transformed prices of production. But if values are transformed into prices *generally*, for every capitalist, then Marx's sketch cannot be the whole story—because then *all* capitalists need to be buying their inputs at price, and yet at the same time Marx's procedure implies some are buying the inputs at value. This is a contradiction. The proper solution requires that the transformed prices are equilibrium prices—the same for all the capitalists—and hence they must in some sense appear on both sides of the equation, both where the individual *costs* are being described and where it is *revenues* that are concerned.

Secondly, the solution based on Marx's sketch recognises no distinction between the use to which the various outputs are put. But this cannot be correct, the critics claimed. In particular, there is a difference between luxury goods and capital/wage goods. Marx's procedure makes the final prices of production dependent on the values of luxury goods. However, the luxuries do not constitute an input into any branches of production, and so their prices cannot influence the prices of other goods. Whether they go up or down, this causes no increase in any capitalist's cost, and hence cannot have any impact on the price of their output, either. This is what Marx's procedure fails to take into account.

Thirdly, as Steedman (1977, p. 30) argued, the equalised profit rate cannot in general be equal to $\frac{S}{C+V}$. This is because the observable rate of profits – that is, the one that influences the capitalists' behaviour in shifting capital from one sphere to another – is determined by the ratio of revenue *in price terms* to the total capital invested *also* in terms of price. This ratio will clearly be in general

equal to $\frac{S}{C+V}$ only if prices are proportional to values – and yet, that is precisely the situation Marx is trying to get away from. However, if prices are *not* proportional to values, the two ratios can only be equal 'by fluke'; and so Marx was unjustified in using the aforementioned ratio.

The 'correct' solution, first devised by Bortkiewicz (1968), removed these flaws, but only at a cost of introducing a much deeper problem from the Marxian point of view. The solution may be consistent, but in general, it does not allow for both of Marx's 'invariance conditions' to hold at the same time. What this means is that while mathematically the solution is satisfactory, it ends up sacrificing the very conceptual framework within which the transformation problem was conceived. If value is not conserved in transformation, then price cannot be viewed as just a form of value; on the other hand, if surplus value is not conserved, then equally profit cannot be viewed as just a form of it.

There were various attempts to explain this problem away (cf. Seton 1957, Sweezy 1968), or to pretend the difficulty was just a sort of unimportant trifle (Moszkowska 1929; Steedman 1977, p. 34). Other Marxists were led to propose various replacements for the 'invariance conditions' (see Laibman 1973). As will be argued later, none of these responses were satisfactory and most in fact deeply underestimated the significance of Marx's conditions.

Dual-System View

Bortkiewicz's solution stood at the beginning of what came to be called the 'dual-system approach' to the Transformation Problem. What this means is that the transformation is understood as the mapping between two systems of simultaneous equations – one in value terms, the other in price terms – where both are understood as different descriptions of the *same* underlying social-physical economy. These two descriptions then constitute simply two different 'accounting systems'.

⁵ The somewhat unusual term 'social-physical economy' is meant to indicate the fact

The reason why both of the conditions Marx required for his transformation cannot in general hold at the same time is that in the price system, there is only one 'degree of freedom'. That is, the system is underspecified to the extent that while *relative* prices can be derived, this does not hold for 'absolute' prices. Thus, in order to close the system – to find out 'actual' prices – some sort of numeraire needs to be chosen; and this can be done precisely by imposing one – but *only* one – of Marx's two conditions.

As if this was not difficulty enough, the dual-system approach leads to an even more fundamental problem for the Marxian worldview. If, as we just stated, it really is possible to describe the economy in terms of a system of simultaneous equations in price terms, then why look at the value accounting system at all? After all, as long as we can guarantee that the price system has a solution, we can simply derive the prices of production under an equalised profit rate from the price system itself. Thus, contrary to Marx's claim of the essential nature of value, prices of production can be derived without any reference to value quantities. This is what can be called the *redundancy critique* of the Labour Theory of Value.⁶

The redundancy critique was already implicit in Bortkiewicz's solution to the transformation problem, in that the solution involved solving a system of equations which yielded the transformed prices and the equalised rate of profit simultaneously. Thus, the value quantities constituted simply the coefficients of

that while the economy is characterised by the prevailing technical and material conditions, these themselves in turn depend on the prevailing social relationships. This is a point of some importance in what follows, and one often not noted by non-Marxist economists investigating Marxian problems (such as Morishima).

One of the standard responses on the part of Marxists used to be along the lines that even if the critique is correct in its own terms, it does not touch upon the fact that it is the social relations of production that in fact determine the technology and the distribution – and therefore, that Labour Theory of Value is still relevant, since it describes the processes through which this occurs. I cannot help but at least partially agree with Steedman (1977, p.21) – such a response seems to me obscurantist. Granted that capitalism develops partly under the pressures of class struggle, which affect both distribution and the technology chosen by the capitalists. However, I do not see what role could the Labour Theory of Value as a theory of price (as opposed to broader Marxian theory of history) play in this process. Not to mention the fact that of course, this response leaves the actual point of Steedmanite critique untouched.

the system; if different, equally valid coefficients could be found, then values would drop out of the picture. The redundancy critique was later explicitly stated by the doyen of neoclassical economics, Paul Samuelson – twice, in fact: with scholarly detachment in (1957) and with cutting sarcasm in (1971). Finally, the criticism became one of the cornerstones of the general critique of the Labour Theory of Value stemming from the development of Sraffian economics.

I would like to note at this point that 'Sraffian economics' is not necessarily the same as the 'economics of Sraffa'. In what follows, I generally apply the label 'Sraffian' to the current of the newly-revived Classical economics that became severely critical of Marx's Labour Theory of Value. It is not so clear, however, that Sraffa himself took the same dim view of the theory. In fact, an argument could be made that some points in his *Production of Commodities...* (1960) hint at sympathies towards this theory – such as the chapter on the 'reduction to dated quantities of labour' (Sraffa 1960, pp. 34-40).

Nevertheless, I have to say that the views of Sraffa as a historical person are much less relevant than the logic of his system. It may be considered an irony of fate if the theory of a sympathiser of Marx led to the latter's rejection, an example of the operation of the Law of Unintended Consequences. No matter how one might to wish to characterise it, however, if it can be shown that the theoretical structure first created by Sraffa can be used in order to criticise Marx, then such a demonstration clearly takes precedence over any background thoughts or wishes the historical Piero Sraffa might have had. Ironic it may be, but that is not a sufficient objection to such a critique.

Thus, Steedman's (1977, p. 52) rejected not simply Marx's solution to the transformation problem, but effectively the problem itself. Sraffa's system allows the determination of prices of production from the data on the physical structure of the economy and the real wage – these provide the 'different coefficients' for the Bortkiewicz's solution mentioned above. Of course, if this data depended on labour values, then the Marxian viewpoint would still

effectively be justified. But the dependence is exactly the other way round, at least according to the Sraffian point of view: if labour value of a commodity is the amount of labour used in its production, directly and indirectly, then the physical structure and the real wage determine *both* the price *and* the value accounting system. For this reason, deriving labour values first and then transforming them into prices is 'an unnecessary detour', as Samuelson had claimed. It is possible to find prices without going through the rigmarole of transforming the labour values, and so there is no call for transformation at all.⁷ Thus Marxian value is redundant. Metaphorically speaking, the Steedmanite attitude to the Labour Theory of Value is the same as was Laplace's, when asked by Napoleon what role did God play in his description of the Solar System: "Sir, I did not need that hypothesis."

From the Marxian point of view, these are clearly quite unpalatable conclusions. Two ways out of the predicament have recently gained currency, which will now be examined in turn.

Steedman's (1977, p. 48) argument is in fact stronger than this; he claims that it is not only possible but necessary to go straight from the physical structure/real wage to prices, since the calculation through labour values gives the wrong results. However, in general this is true only if we either include the 'luxury goods' (or the so-called non-basic goods more generally), as Steedman did in his numerical example; or if we postulate that the wage contains a portion of what Sraffa called the 'surplus'. However if care could be taken of the luxury goods problem, and if Marx implicitly treated the wage as not containing any part of the surplus (see below), then this stronger impossibility critique does not go through.

The Temporal Single System (TSS) Approach

As we have noted, the reason why only one of Marx's conditions can hold is that mathematically speaking, the system of price equations allows only one degree of freedom. And moreover, it is precisely the fact that this system of price equations exists that gives rise to the redundancy critique. Thus, a natural reaction among Marxists may be to deny that Marx intended a dual-system interpretation of the transformation problem.

Accordingly, in the 'single-system' view the transformation problem does not involve two different descriptions of the same economy, but rather a single system in which values and prices both play a role. In particular, the 'temporal single-system' (TSS) version of this view interprets the relationship between prices and values as one of *time*: values come first, and are then transformed into prices; so values appear on the left hand side of the equation, only to turn into prices of production on the right hand side. Then the so-called logical defects of Marx's procedure disappear — why this is so will be described below — and since there is only *one* system, the redundancy critique also vanishes.

While I have some sympathy with the single-system views, I believe that the TSS also possesses some serious deficiencies. First of all, the TSS theorists effectively attack the equilibrium methodology of the Sraffians, explicitly claiming that the transformation is fundamentally a disequilibrium sort of process. I think this emphasis on disequilibrium is mistaken.

Of course, it is hardly disputable that Marx was not employing a completely clear-cut idea of equilibrium, since such a clear-cut idea was the fruit of later developments. Similarly, it is entirely correct to say that much of his thinking *did* involve obvious disequilibrium situations. And finally it is undoubtedly true that the transformation as a real process – the process through which competition adjusts prices – occurs as a disequilibrium phenomenon.

The TSS approach is presented, for example, in Kliman and McGlone (1988, 1999) and in the contributions to Freeman and Carchedi (1996).

Despite all that, however, the *result* of the process is at least notionally one in which a position of rest was reached – after all, the prices adjust *so that* the rates of profit are equalised; and there is no reason for them to move any further. The postulation of an equal rate of profit is thus an equilibrium condition if anything is. And Marx's sketch of the procedure clearly does involve this equilibrium condition – the rates of profit are all supposed to have been equalised to $\frac{S}{C+V}$. Now this clearly indicates that whatever the nature of the *process*, the nature of *Marx's transformation procedure* is not one of a description of a disequilibrium. It is hardly coherent to use a magnitude which implies that the 'final' position of rest has been reached, while at the same time insisting that the prices are still undergoing change. Conversely, if we really are out of equilibrium, then clearly the profit rates could be as different as we like.

On the other hand, the TSS theorists effectively also assert the primacy of labour value over the socio-physical description of the economy. This second claim is not so explicitly prominent in their writings, yet it is fundamental. For the TSS view to be correct, it must be that the labour values are what determines the socio-physical structure of the economy, rather than the other way round. It must be that somehow, the labour values cause the structure of the economic relationships. For nobody can deny that writing up a TSS interpretation is possible; the question is whether this leads to the right sort of results. But the Sraffian approach to economics, which starts from the socio-physical description, was after all not developed as a way of solving the transformation problem; it is a way of understanding the economy in its own right, even if a critique of Marx's transformation procedure is implied by it. Thus in order to defeat the critique, it is necessary to prove that the Sraffian conceptualisation is somehow wrong, and that the approach which starts from labour value is in some way superior.

I do not believe this is possible. I do not believe that anybody would like to claim that labour value is an actual physical entity doing some real work in the world of nature. But if that is not the case, then it must be a theoretical term, required because it can do some real theoretical work for us, in getting down to the real empirical phenomena. Granted that perhaps such theoretical work involves just general abstract explanation of phenomena such as exploitation (although I do not believe that is the case). However, if 'labour value' is a term that is meant to serve as a variable in an algebraic theory of price, then the calculation of socially necessary labour time is essential, as we cannot observe it directly. But then to reject the only known way of doing this, which involves precisely reading off the labour values from the structure of the economy, is inconsistent with the desire to make the term labour value actually useful – that is, useful for anything other than metaphysical hand-waving. As Schefold writes, "[l]abour values were (...) introduced as 'technical' magnitudes in the same sense as the input-output structure of the economy is today regarded as 'technical'. The labour values served as a conceptual tool because they could be used to explain prices at least approximately and because they could be thought of as given, although they could not be calculated mathematically from the inputoutput structure prior to the development of linear algebra." (Schefold 1989, p. 8) Arguing against the validity of the Sraffian approach thus ends up defeating the very purpose which motivates such arguments, in my opinion.

The 'New Interpretation' Approach

On the other hand, instead of denying the validity of an equilibrium approach, it is possible to avoid the dual-system interpretation by denying that labour values are determined by the underlying economy in the way that that approach claims. Instead, the 'New Interpretation', due to Duménil (1984) and Foley (1986), claims that Marx intended labour values to have precise monetary equivalents; he was moving freely between specifying value in terms of money and in terms of labour. It follows that there is an equivalence between the money unit and a certain amount of labour – which is what Foley (1986), claiming to follow Marx, calls 'the value of money'.

Furthermore, the 'New Solution', as it was originally called, makes an assumption that it is *not* the real wage that is fixed during the transformation, but instead the 'labour contained in money', or simply the labour commanded by the money wage. Then the Bortkiewiczian solution is denied the crucial assumption of the value of labour-power remaining the same before and after the transformation.

These two assumption dispose of the redundancy critique. Labour value is independent of the socio-physical input-output matrix, since it is calculated through an equivalence of total labour time in an economy and the total amount of money in circulation; and furthermore, there is no prior specification of the real wage, without which the Sraffian price system cannot get off the ground. Adding the assumption that Marx's two conditions apply to *net* rather than gross output — which effectively means that the total value of the wage goods plus profits equals their total price — the proponents of this approach show that Marx's two conditions do in fact hold.

The trouble is that as the proponents of this approach themselves admit (Foley 1986), this is because Marx's two conditions are under this approach effectively simple accounting identities. Or in other words, if we *postulate* that the total amount of labour in an economy just simply is equivalent to the total amount of money in circulation, then given that prices are in equilibrium and thus stable, the total labour is then tautologically the measure of expenditure on the net output (since expenditure on intermediate goods – which is nothing but constant capital – cancels out). So total net value is equal to total net price by definition. Similarly, defining the real wage as money wage multiplied by the value of money means that the real wage in terms of labour will always be dependent on profits in terms of *prices* – since the total expenditure on money wages is equal to total net price minus total profits. Then it is no wonder that given a stable 'value of money', the real wage will always accommodate itself to make total surplus value exactly equal to total profits. Given the identity of total net value and total net price, and the postulated identity of total money wage bill

with total value of labour-power, the differences between the value and the price magnitudes also have to be the same.

Thus, the 'New Interpretation' seems to be solving the transformation problem by a definitional sleight of hand. It is hard to see how one can consider a series of accounting identities a *theory* of prices. To interpret total labour value as a straightforward equivalent of the money total seems to rob the Marxian theory of all explanatory power, for it means simply a dogmatic *assertion* of rather than an argument for the relevance of the labour values for the economy.

Moreover, the fact that real wage does not stay constant during transformation should be ringing alarm bells for any thoughtful Marxist. For as I have argued, the concept of subsistence level of consumption, and hence subsistence wage, is both well-defined and necessary for the Marxian project. There is a one-to-one correspondence between the equilibrium level of subsistence and the equilibrium amount of labour expended. Different amounts of labour-power expenditure require different amounts of replenishment—and conversely, different consumption bundles will allow only definite, different uses of labour-power. Therefore, one cannot tamper with the real wage without thereby affecting also the total amount of labour performed in the economy, which would disturb the whole of the picture of transformation. In effect, the argument is that far from being 'neo-Ricardian' in spirit, 9 the assumption of a constant real wage is a vitally important one from the Marxian point of view.

Finally, while it is arguably correct that Marx asserts the equivalence of money and value, he *also* quite obviously asserts value to be embodied labour-time. After all, if he did not, where did the 'traditional' interpretation, which used to be accepted by Marxists just as much as non-Marxists, come from? It is one thing to claim that this traditional interpretation is one-sided and that even Marx's followers neglected his monetary analyses (as Brunhoff 1990, pp. 32-35 does). It is quite another to simply plump purely for the claim to the *neglect* of embodied labour-time. What seems clear, in fact, is that Marx intended *both*

⁹ Loranger (2004).

interpretations of labour value – which means, very simply, that he took money to be the expression of embodied labour time. We can hardly reach the right 'Marxian' solution while accepting only one part of the claim.

And a claim it is, in the sense of something to be demonstrated, rather than simply postulated. The theory should show how it happens to be the case that if labour value is labour-time embodied in commodities, this will mean that there is a definite correspondence between the monetary unit and a certain amount of labour. If we simply dogmatically assert this correspondence, it is not even right to claim that the monetary part of the claim dominates – since on this basis it is not even possible to calculate the labour-time embodied in commodities, and thus cannot begin to verify the equivalence between money and embodied labour-time.

Due to all these defects, I believe it is necessary to reject the 'New Interpretation' approach to the transformation problem, and look for the way out of the difficulties elsewhere.

TSS and the Substance View of Value

Now despite the criticisms levelled at the TSS interpretation, there is something to the single-system view. Unlike the vast majority of the critical discussions, it does seem to at least partially grasp Marx's basic vision of the economy. Labour value in Marx's understanding is not just any old labour time; nor in fact simply the 'socially necessary labour time'. It is a theoretical term designating a substance, something flowing through the channels of the economy – which in turn are shaped and formed by this substance.¹⁰ (It might help to

Mirowski's (1989) is a very perceptive work in this respect, in that it not only correctly identifies Marx's theory as a substance theory of value, but also points this out as the major feature separating it from the marginalist "field theory of value". Elson (1979), with whom I otherwise disagree in many respects, provides a very good and careful discussion of the various conceptual distinctions that are applied to labour by Marx before we actually arrive at the concept of the substance of value – an exposition which I find second in importance only to the description of this progression in Chapter 1 of Capital Vol. I itself.

imagine Philips' and Newlyn's¹¹ hydraulic model of a Keynesian economy.) For this reason, it has some properties touched upon by the TSS interpretation, which the critics of Marx's transformation procedure mostly fail to note.

It is not surprising that economists of both Neoclassical and Sraffian bent¹² find the image of labour value substance flowing through the economy alien and irrelevant for their work. Yet without understanding Marx's view of the economy, we cannot properly grasp just what it is that is going on in the transformation problem, nor see why Marx's mistakes are not as obvious or as illogical as it might at first seem.

First of all, if we take the view of value as a substance seriously, then it becomes very clear why Marx did not seem to have spotted the 'obvious' fact that he did not transform inputs. For what transforming inputs effectively means is that strictly speaking, values disappear from *both* sides of the equation. What we have done is effectively to turn the problem into one of finding equilibrium prices – which has indeed been proclaimed as the virtue of the 'correct' solutions – and equilibrium prices are all that our equations really

While generally called simply Phillips hydraulic machine', the prototype was in fact built together by Bill Phillips and Walter Newlyn (Leeson 2000, p. xiii)

Or to be more precise, the theorists of *anti-Marxist* Sraffian bent – economists such as Ronald Meek (1973) or Maurice Dobb (1973) found, on the contrary, that Marxian labour value and Sraffa's system actually seemed to complement rather than contradict each other.

There is of course the argument, appealing to a well-known passage in Capital, according to which he did in fact spot this, but fudged the inevitable conclusion: "We had originally assumed that the cost-price of a commodity equalled the value of the commodities consumed in its production. But for the buyer the price of production of a specific commodity is its cost-price, and may thus pass as cost-price into the prices of other commodities. Since the price of production may differ from the value of a commodity, it follows that the cost-price of a commodity containing this price of production of another commodity may also stand above or below that portion of its total value derived from the value of the means of production consumed by it. It is necessary to remember this modified significance of the cost-price, and to bear in mind that there is always the possibility of an error if the cost-price of a commodity in any particular sphere is identified with the value of the means of production consumed by it. Our present analysis does not necessitate a closer examination of this point." (Marx 1966, pp. 164-165). In my opinion, this passage is not nearly as straightforward in meaning as it might seem to the critics of Marx's procedure precisely because under the substance view of value, the procedure makes a certain amount of sense, as will become immediately clear.

contain.¹⁴ In other words, we are *already* in the second of the two schemes of the dual-system approach. As we have already pointed out, this is implicitly so already in the Bortkiewicz's solution, and the point is sharpened to perfection in the version of the critique stemming from Sraffian economics. But this, as we also already know, is not so much a solution to the problem as a refusal to be bothered with the problem at all.

If, however, we *did* want to solve the transformation problem, as Marx most certainly did, then this could not be a satisfactory sort of approach. In fact, taking value to be the substance of the economic activities then almost forces our hand in *not* transforming inputs. The key word is 'transformation'. If we want to *transform* values, then they need to be included, so that the work can be done on them. To take an analogy, when transforming wood into furniture, a carpenter needs to work on the *wood;* it would make no sense to demand that furniture itself be transformed. Thus, it seems a perfectly logical step to place values on the left-hand side of the process, to be transformed into the results on the right-hand side. Values flow, they are split up and joined depending on the shape channels within the economy; but it is *their* flow that is important, and hence we must in some sense be starting from them.

This is not to say that the criticism to the effect that "if we do not transform input prices then we commit the absurdity of assuming that the price paid from a commodity by the immediate purchaser can differ from the price received by the immediate seller" (Steedman 1977, p. 31) is necessarily incorrect. At this moment we just want to point out that there *is* a rationale behind Marx procedure, and that just because it conflicts with other considerations it does not mean it is automatically wrong.

^{14 &#}x27;Equilibrium' is here – as elsewhere in this chapter – meant to be defined by the condition that all profit rates are equal – in other words, 'equilibrium prices' are those prices of production that allow for this condition to hold. I do believe that at such prices, demand and supply would also be balanced, however that is a separate argument from the present one.

Now there is actually an approach to the transformation problem which seems to take that rationale seriously, and yet arrive at the Sraffian prices. This is Shaikh's (1977) iterative solution. In effect, what the solution says is that Marx's procedure is indeed just a sketch of the right approach; that the substance of value is re-distributed through competition not just once, as the sketch seems to suggest, but repeatedly, until an equilibrium is reached – an equilibrium in which prices of course coincide with the Sraffian ones.

There are two problems with the iterative solution. On the one hand, despite appearances labour values *still* turn out to be irrelevant after all. This is because we do not need to know them in order to employ the iterative procedure – the starting point of the algorithm is in fact arbitrary. As Hodgson commented, we could start with "the number of letters in the name of the commodity when that name is translated into Serbo-Croat" (quoted in Howard and King 1992, p. 276). This should not really be all that surprising. If the iterative solution is a logically equivalent procedure to the Sraffian calculations, in that both necessarily arrive at the same conclusion, then if the knowledge of labour values is unnecessary for the former, the same can be reasonably expected to be the case for the latter.

Secondly, under Shaikh's procedure, Marx's two conditions do not in general both hold, again just like in any other solution of the Bortkiewiczian lineage. But, as we said above, contrary to the claims of some Marxists, this constitutes a deep problem indeed. For if we take the substance view of value seriously, then the two conditions of transformation — 'total value equals total price' and 'total surplus value equals total profit' — are not at all arbitrary, cannot be easily replaced, and should *not* be even understood simply as 'invariance conditions'.

The reason is that these conditions come from a simple application of the conservation principles¹⁵ to the substance of value. According to Marx, new

¹⁵ The role of the conservation principles in the development of economics was described very thoroughly by Mirowski in *More Heat Than Light* (1989).

value comes into being solely through the human activity of labour. Then it immediately follows that whatever happens in the sphere of circulation, it cannot affect the total amount of value in existence. Much less can the total amount of value be affected by symbolic manipulations of the theorist. Hence, however competition redistributes the individual portions of value — or in other words, whatever the final production prices are — the total amount of value must have remained constant. Prices are just so many vessels carrying the substance of value; but pouring the substance in and out of these vessels cannot affect how much of it there will be in the end. Hence if we add up the individual amounts at the end of the process — when we have arrived at prices of production — the total must be exactly equal to the total at the beginning. And so, total price = total value. Nothing has been gained, nothing has been lost.

The exact same reasoning applies to surplus value and profit. Once we accept that profit *is* surplus value, in the deep ontological sense, then no sort of re-distribution can affect the amount of it. Hence, in the end, we must end up with exactly the same amount of the substance of value (in this case, surplus value) as we had at the beginning.¹⁶

This goes to show why thinking about the two principles as 'normalisation conditions' is utterly wrongheaded. Normalisation implies an essentially arbitrary choice of numeraire, a pure matter of convenience of an essentially epistemological nature – we choose any one of an infinity of normalisation

Cockshott & Cottrell (2004) mistakenly assert that Mirowski (1989) has claimed that Marx's difficulties stemmed from his confusing a 'substance' and a 'field' theory of value, as a consequence of which Marx asserted 'one principle of conservation too many'. While the last phrase is indeed to be found in Mirowski, it is not supposed to have followed from the alleged conflict between a substance and a field theory of value, but simply from the mathematical properties of the dual-system solution. Moreover, the conflict that Mirowski sees Marx as being a victim of is between a 'real cost' and a 'historical cost' labour theories of value, both of which are substance theories. Cockshott & Cottrell simply confuse the main argument of Mirowski's book, which asserts that neoclassical economics is an attempt at formulating a field theory of value, with the passage on the transformation problem, which is tangential to this main argument. Finally, as will become clear, I also reject Mirowski's own conclusion – Marx did not assert one conservation principle too many, but precisely as many as were needed by his theory.

conditions because we happen to be interested in what the system looks like from a particular point of view. But Marx's conditions have nothing at all to do with such a purely conventional approach. Instead, they are an organic part of the theory. If the two conditions do not hold, then the whole system comes crashing to the ground. For either the substance of value is then not conserved in circulation, or surplus labour is not the only source of surplus product and hence profit. Both avenues open up the frightening possibility of profit arising from processes other than exploitation (whether from exchange, 'productivity of capital', manna from heaven, or whatever). Hence replacing them by some other 'invariance conditions' is, from a Marxian point of view, a pointless exercise – the skies will *already* have fallen, regardless of whether some solution to the transformation problem 'works' under such replacement invariance conditions.

We have now arrived at the point where the approach to be taken in the following pages can be spelled out. What I am going to argue is that in failing to take value as a substance seriously, the line of criticism stemming from Bortkiewicz (1968) and reaching through to Steedman (1977) and beyond also failed to notice that a very important substantive claim is implied about the economy by Marx's theory. For when the critics note that only one of Marx's two conditions can be imposed – note the word! – on the price system, they fail to understand a very simple, yet fundamental point. Quite obviously, the fact that there is only one degree of freedom in the price system is just a formal mathematical property of a system of equations. It is not a consequence of any known economic fact; it would be true of the system even if a completely different interpretation were given to the set of equations, or indeed, none at all. But Marx's two conditions are not formal – if they apply to anything at all, they must apply precisely to the actual underlying economic system, completely regardless of what formulation is chosen to represent it. To take the formal mathematical property of a system of equations as a disproof of Marx's substantive theory of the economy is a non-sequitur of the highest order. Granted that Marx's two

conditions are not general in the *mathematical* sense of the word; now the question should clearly be answered, can they nevertheless be true about that subset of the systems of equations that can sensibly represent the real economies?¹⁷ And if not, just what it is about Marx's *substantive* theory of the economy that is wrong?

Thus, I charge that ironically, despite claiming that the socio-physical economy underlies *both* the value and the price schema, Marx's critics failed to investigate just what it is that makes Marx's conditions fail in that underlying economy. And by focusing simply on the price system, as the redundancy critique directs, they failed to notice that there *is* something to be investigated. Such an investigation is precisely what will now be undertaken.

Elson's Explication of the Substance View

Before we can proceed to say just what makes the conservation of value principles fail in a Sraffian-type economy, it is first necessary to grasp what exactly is meant by Marx's 'substance of value'. I will advance a particular interpretation of this substance, one which is never found in Marx explicitly, yet one which I believe to be almost necessarily implied by his postulations.

First of all, let us repeat that contrary to the naïve view, the substance of value is not simply identical with labour-time. In the first place, value is understood by Marx to be specifically bound up with the capitalist mode of production, not with production in general. Hence labour-time, even socially necessary labour-time, does not exhaust the description of the nature of value, as both of these terms apply to all the different (class) modes of production in history. Furthermore, even within the capitalist economy, not all labour-time is

¹⁷ Incidentally, this also gives us another indication that the TSS interpretation is misguided. The TSS theorists want to give up on the dual-system view partly because they believe it prevents the possibility of Marx's two conditions holding. But if we are correct in arguing that the formal property of the number of degrees of freedom of a formal system does not coincide with the scope of Marx's conditions, which relate to the properties of the underlying real economy, then this motivation for rejecting the dual-system interpretations vanishes.

understood by Marx to be contributing to the production of value – as is well known, the 'unproductive workers', the bank clerks, the accountants etc., who contribute to the running of the sphere of circulation, are not meant to be producing value. Now as these workers do not produce value, a fortiori they cannot produce surplus value, and hence they are incapable of being exploited. However, this does not mean that they cannot be 'hard done by', or economically oppressed, as Carchedi (1987) puts it – this happens if the labour time contained in their consumption bundle is less than the labour time they put in during their work hours. The mechanism of oppression is in fact identical to exploitation, with the difference that the labour-time of unproductive workers does not count as value. Now this is something that both indicates the difference of the substance of value from simple labour time, and calls into question the broader Marxian class theory, as we shall see later.

But if value is not straightforwardly labour-time, then just what is it? In order to clarify the matter, I will help myself to the explication provided by Elson in her (1979). Now I should point out that I disagree with Elson on many counts, indeed with the whole tenor of her argument. First of all, she argues that the point of the Labour Theory of Value is to be neither a 'proof of exploitation' nor an explanation of prices in the conventional sense. Against the first notion, she argues that it fails to give the notion of value its proper due, since it is being made synonymous simply with labour-time. Such a notion of value, however, is entirely redundant, just as the Sraffian critics claim. For under such an interpretation, the capitalist exploitation could be equally well understood by thinking solely in terms of the division of the surplus product, which is in fact precisely what the Sraffian critics do. The second view, namely that LTV is "one of a number of theories of equilibrium price" (Elson 1979, p. 116) she attributes to the majority of the Anglo-Saxon Marxist economists. Against this view, she argues that the point of the LTV is not to be such an explanation of the price magnitudes; rather, its purpose is political. Thus, while in its own terms the Sraffian critique is quite correct, it is also irrelevant to the Marxian theory.

Now I do agree that Marx's theory could hardly be understood as a 'proof' of exploitation; instead, it starts from the postulation that exploitation does indeed exist under capitalism, and proceeds to identify the mechanism through which it occurs. Nevertheless, as will become clear, I do not think that the redundancy critique arises simply from identifying labour-time with value. And secondly, I do believe that that Marx intended his theory to be, among many other things, also an explanation of equilibrium prices (of production). This was necessary in order to demonstrate the bankruptcy and ideological nature of the alternative, burgeois theories. While Marx was a 'constructive critic' of political economy, he intended to be a 'destructive critic' of vulgar economy, that is, of price theories based on supply and demand. He was attempting to demonstrate that without the understanding of the basic social structure of capitalism - that is, without understanding capitalist exploitation and the social form it takes -ascientific understanding of the economy is simply impossible. But if this was so, then he necessarily required a theory of prices superior to the one he was denigrating. It is true, of course, that Marx's concerns were far wider than this one, rather technical, issue; he was criticising not just the answers, but also the questions of political economy. But he was well aware that exclaiming 'the grapes are sour!' is a very poor sort of criticism indeed.

Nevertheless, at the same time I think that Elson provides a brilliant discussion of Marx' analysis, which contains much that is illuminating and useful for our purposes. In the first place, Elson contrasts two pairs of distinctions – private vs. social labour and concrete vs. abstract labour. She is insistent on the point that all four of these properties are simply aspects of human labour, present in all social epochs (albeit due to their particular ways of producing different epochs give prominence to different aspects.) She is equally insistent that private labour should not be conflated with concrete labour, nor abstract labour with social labour.

Instead, she argues that private labour is work in its aspect as undertaken by a particular individual, without the knowledge or consciousness of its being a part of the mosaic of the overall social co-operation. Concrete labour, on the other hand, adds to this the notion of labour as an interaction between a human being and nature, which brings out the diversity of various kinds of human labour. Concrete labour is concrete, because it has its own particular object — whether it happens to be the making of coats or adding up of accounts.

Abstract labour - understandably enough — abstracts from these peculiar individual characteristics of human work and takes only what they all have in common, namely the fact that they are all expenditures of human active capabilities over a period of time. It is labour, rather than say an art or a hobby, because it is also understood to be undertaken as a part of the co-ordinated activity within the economy. Thus far the concept coincides with social labour as well. The difference between the two is that abstract labour focuses on the quantitative dimension of labour — its magnitude, the portion of the whole social total expended, while social labour is mainly concerned with the qualitative aspect.

All four aspects of labour are always present; however, in different modes of production, they are represented in different ways. As Elson argues, for Marx it was labour in its abstract aspect that is dominant in capitalism. This because only in its abstract aspect can labour be understood as being exchangeable — as labour reduced to its common denominator. This abstract labour becomes objectified in capitalism in the substance of value.

Note the word 'objectified'. What Marx wants to say is that the labour becomes *materialised*, that it takes on a *physical form*, that the commodities it turns into are *crystals* of value. Thus commodities may be taken as equivalents for each other in exchange – an equivalence which is strictly speaking an objectified representation of the social relations.

Elson describes the substance of value as 'the human self-activity, the human energy, embodied in the commodities'. Now what I want to argue is that

more precisely, the 'objectified abstract labour', the substance of value, should in fact be understood as representing the *generalised productive capability* of the given human society (in its aspect as a capitalist economy). It is the capability of *creating* new, more organised forms of matter – but a capability that occurs under capitalist productive relations.

In the first place, one needs to note that the notion of an economy producing a surplus, and therefore also the existence of surplus labour, presumes a certain stage of development of productive technology. Within the mathematical treatments of Marxian economics, this requirement comes out clearly under the simple name of the condition of 'productivity' (c. f. Morishima 1973; Fujimori 1982) — the economy must be capable of producing more of the outputs than there were inputs, otherwise it achieves at most a subsistence level of development. Human beings are capable of producing more than is necessary for their own survival, but in order to do this they need material means of production, which only become available as history unfolds itself; for countless millennia, human societies had been living close to the subsistence level. Capitalism presupposes a certain level of technological development, and thus the notion of objectified abstract labour in quite an obvious sense depends on this level having been achieved. This, however, is only a minor point, since the condition applies to any surplus-producing economy, not just capitalism.

However, as we know, value – labour embodied in a particular commodity – consists of both direct labour and labour embodied in the material inputs. Now for Marx this was a theoretical postulation, without any way of making the idea operational. However, the development of the input-output approaches of Leontief, von Neumann and Sraffa allowed exactly the sort of calculation necessary, provided only that we take labour values to be the socially necessary labour time expended under conditions of general equilibrium.

But while the procedure of solving a system of simultaneous equations describing production has become canonical, the full import of it has rarely been spelled out. What is being implied by it is that the particular productive

relationships operational within the economy determine collectively the labour values embodied in the individual commodity. Before the advent of the inputoutput schemas, it might have been tempting to think of labour value of a
commodity as being primarily determined by its own production process. The
canonical way of calculating of labour values, however, makes very clear the
implicit point that since indirect labour enters into labour value just as much as
direct labour, all the interconnections and dependencies within the productive relationships of
the economy as a whole play their part in determining value of a single commodity. For
instance, an improvement in some of the productive technologies might easily
lead to changes of the labour values of many commodities which themselves
have nothing to do with those technologies; similarly, the total value in the
economy would also be changed.

Thus, what I would like to urge is that if value is to be understood as a 'substance', it is the substance that in some sense expresses the *generalised* capability of the economy to produce. The smaller the ratio of total living labour to total value, the more productive, more sophisticated and intricate the economy. Individual commodities are then 'crystals of value' in that they represent fractions of this overall productive capability, portions of it that were surrendered to their existence. Their 'value' represents in some sense how much productive effort went into organising those particular bits of matter in just the right way.

The full import of the fact that it is abstract labour we are talking about thus becomes clear. It is not just that we are abstracting from any qualities of labour other than its duration and the fact that it is expenditure of human productive capabilities. The point is rather that if we take the necessity for including direct and indirect labour seriously, actual human labour and 'crystallised' labour embodied in the commodities must fuse together into a homogeneous, highly abstract substance, which has little to do with the everyday image of labour (effectively equivalent to the private and/or concrete labour). It is for this reason that it is suggested that this 'labour', the amount of which is determined

by the productive structure of the economy, is in fact an expression of the productive capability of that economy – its 'value'. 18

Now if the substance of labour value is understood in this way, as a sort of summary representation of the productive capability – whether total productive capability, or that 'used up' in the production of particular commodities – then focusing on the role of value means focusing on the role of productive relationships. So if one wants to say, as Marx did, that without value, it is impossible to understand exchange-value, and hence also the particular types of exchange-value represented by prices of production, this is effectively a claim that it is the productive relationships of the economy that in some sense dominate over the exchange relationships. And moreover, if it is the case that Marx's two conditions hold in an economy, this in fact implies that the exchange relationships under capitalism (prices of production and the profit rate) are fully determined by the productive side of the economy.

The Sraffian System

To see the significance of this interpretation for the transformation problem, one needs to understand what difference it makes to the critiques of the Marxian procedure. In order to do this, we have to comprehend the nature of the Sraffian alternative. Therefore, let us now describe the basics of the Sraffian prices of production system, ¹⁹ which will also yield several other interesting points along the way.

The Sraffian system is based on the input-output schema already mentioned several times. This schema in effect represents a (very sophisticated)

This would suggest that, as surplus value is effectively the result of the living beings' productive capability, really *full* automation, that is production with *no* human inputs at all, implies the organisation of the inorganic matter to the level where in a clear sense it has become 'alive'. It is an intriguing possibility, but it is tangential to the main discussion.

Not all elements of Sraffian analysis are important for our purposes. In particular, we need not go into the construction of the 'invariable measure of value' in terms of the Standard commodity, nor in fact into the relations between the wage as conceived by Sraffa and the rate of profits.

refinement of the notions inherent already in Quesnay's *tableaux économiques*, developed further by Marx in his reproduction schemes and by Bortkiewicz in his critique of Marx's solution to the transformation problem.

Sraffa (1960) starts from a simple physical description of a subsistence economy – that is, an economy capable of producing only the precise amounts of physical inputs and means of subsistence that are needed in order for the economy to persist through time. This description is carried out in terms on an input-output table such as the following:

$$a_{11} + a_{21} + a_{31} + \dots + a_{n1} \rightarrow \sum_{i=1}^{n} a_{1i}$$

$$a_{12} + a_{22} + a_{32} + \dots + a_{n2} \rightarrow \sum_{i=1}^{n} a_{2i}$$

$$\vdots$$

$$a_{1n} + a_{2n} + a_{3n} + \dots + a_{nn} \rightarrow \sum_{i=1}^{n} a_{3i}$$

where a_{ij} is the amount of good *i* required for the production of the good *j*.

If we assume that this is a market economy, then the various products need to be exchanged between their producers. The equilibrium prices are the generalised exchange ratios which make it possible to exchange the products (outputs) of the processes in exactly such a way that all the processes can end up with the inputs required to repeat the cycle. So the input-output table is used to produce a set of simultaneous equations of the following sort:

$$p_{1}a_{11} + p_{2}a_{21} + p_{3}a_{31} + \dots + p_{n}a_{n1} = p_{1} \sum_{i=1}^{n} a_{1i}$$

$$p_{1}a_{12} + p_{2}a_{22} + p_{3}a_{32} + \dots + p_{n}a_{n2} = p_{2} \sum_{i=1}^{n} a_{2i}$$

$$\vdots$$

$$p_{1}a_{1n} + p_{2}a_{2n} + p_{3}a_{3n} + \dots + p_{n}a_{nn} = p_{n} \sum_{i=1}^{n} a_{ni}$$

where $p_1, p_2, \dots p_n$ are the relative prices and a_{ij} is the amount of good *i* required for the production of the good *j*.

It can be seen immediately that under the conditions of subsistence, these 'prices of production' are *exactly* equivalent to labour values. Indeed – given that labour value of a commodity includes both the direct labour and the labour that went into producing the physical inputs used in production, to calculate labour values we would use the input-output table in precisely the same way as for the calculation of the prices – the only difference being the label that we give to the unknown we wish to calculate.

Now, at this point we should draw attention to the fact that this corresponds exactly with the claims we have made in the previous section for our interpretation of the substance of value. In a Sraffian subsistence economy — that is, Simple Commodity Production under Simple Reproduction — the productive relationships only just make it possible to exactly repeat the economic cycle. Thus productive relationships are decisive also for exchange. They are, so to speak, 'tight'; there is no leeway for prices to deviate from values. If the economy is to go on, the exchange relationships must accommodate themselves precisely to the requirements of production. This is why the calculation of labour values and the (Sraffian) prices of production is identical in such an economy. The exchange relationships are determined completely by the requirements of production and no deviation is possible.

Next, Sraffa moves to the consideration of an economy producing a surplus. This, in fact, is the fundamental building block on which all the results of his analysis rest.

Now there is something very significant about the term 'surplus-producing economy'. For as Sraffa conceives of it, this economy does not fall under any of the Marxian categories of Simple, Extended, or Expanded Reproduction. In other words, while the economy is developed beyond the level of simple subsistence, the surplus is not used to increase the scale of the economy, nor to improve the available technologies themselves. Thus, unlike in Marx's analysis, in Sraffian economics surplus is not used for investment. As will become clear, this is a point of enormous importance.

Once we admit the existence of a surplus – a certain amount of commodities above the level necessary for the simple reproduction of the system – room appears for commodities which in fact do not enter as inputs into production at all. The classic example of such commodities is luxuries – which of course makes perfect sense, since an economy only becomes capable of producing luxuries if it is able to rise above the subsistence level – the very definition of a surplus-producing economy. Sraffa generalises this notion to all commodities which do not enter into production of *all* other commodities, whether directly as inputs, or indirectly as inputs of inputs (etc.) Such commodities are called *non-basics*, and their significance is that they do not enter into the process of equilibrium price determination. This is because their prices will passively adjust to the prices of their inputs, but will not themselves affect the prices of all other goods in the system. While basic commodities are locked into a mutually determining causal chain, non-basics are like dead-ends hanging immobile from this chain.

As we have said earlier, it was precisely the luxuries that caused one of the difficulties for Marx's transformation procedure; as Sraffa's exposition makes clear, the same problem arises from the existence of non-basics generally. Now is a good time to say that here, the Marxian camp would be well advised to shift ground.

Marx wanted to make the prices of production and the equalised profit rate dependent on luxury-producing industries, since he postulated that exploitation – extraction of surplus value – is going on just as much here as anywhere else; and since profit is meant to be nothing but transformed surplus value, he did not want to leave this industries out of transformation.

Yet, by having recourse to a device of Marx's own invention, the bothersome conclusion that the values of luxuries enter the transformation procedure can be avoided. The device I am referring to is the idea of unproductive labour (and the concomitant possibility of economic oppression). It is quite easy to postulate that the workers in luxury industries do give in

surplus labour-time, but not in fact surplus value, which is not being produced in these industries. This would fit exactly with the interpretation of labour value we have advanced above. The luxury industries do not produce inputs for production; since labour values of commodities express the fractions of productive capability that is embodied in them – as outputs *and* inputs, due to the circular nature of the economic process – luxuries in themselves do not possess any value other than that of their inputs.²⁰

Of course, this manoeuvre has as a consequence that all workers in luxury-producing industries are turned into unproductive ones. If we accept that there was a *political* point intended by Marx's distinction between productive and unproductive workers, namely that clerks, accountants etc. were to be excluded from the working class whose mission it was to bring about a revolution, then we may well be very unhappy about this re-drawing of the boundaries of the unproductive workers.²¹ However, from the economic point of view this step is unobjectionable. And since we are currently engaged in trying to formulate a theory of classes more faithful to empirical reality, we would do well not to prejudice the issue by insisting on Marx's original demarcation just at this point.

To return to the Sraffian system – the other consequence of the existence of the surplus is that there is now room for *profit* – or more precisely, for a rate-of-profit, which in the Sraffian system is the logically prior notion. The idea is that the surplus produced should be allotted to the individual processes (or, if we jump ahead, to the owners of the means of production of those processes) *in equal proportion to the means of production advanced* in those processes. Since that proportion is postulated as equal in all cases, this effectively means that the rate

What of the profits earned in the luxury-producing industries? Our suggestion leads to the conclusion that they cannot be understood as transformed surplus value, which seems to invalidate the whole of the Marxian conception. This is in fact not entirely correct, as will become clear below.

Of course, precisely such a political reading of the distinction between productive and unproductive labour is used by Poulantzas (1975a) in his discussion of the 'new petty burgeoisie'.

of profit is equal in all industries – and hence that Sraffa assumes from the start that which was the final stage of Marxian analysis.

The set of simultaneous equations which results looks as follows:

$$(1+r)(p_1a_{11}+p_2a_{21}+p_3a_{31}+\cdots+p_na_{n1})=p_1a_1$$

$$(1+r)(p_1a_{12}+p_2a_{22}+p_3a_{32}+\cdots+p_na_{n2})=p_2a_2$$

$$\vdots$$

$$(1+r)(p_1a_{1n}+p_2a_{2n}+p_3a_{3n}+\cdots+p_na_{nn})=p_na_n$$

where r is the equalised rate of profit, $p_1, p_2, \dots p_n$ are the relative prices, a_{ij} is the amount of good i required for the production of the good j and $a_1, a_2, \dots a_n$ are the respective outputs (in this case greater than the simple sums of the relevant inputs a_{ii} , since this is production with surplus).

At this point of the analysis, Sraffa makes a very important statement:

"We have up to this point regarded wages as consisting of the necessary subsistence of the workers and thus entering the system on the same footing as the fuel for the engines or the feed for the cattle. We must now take into account the other aspect of wages since, besides the ever-present element of subsistence, they may include a share of the surplus product. In view of this double character of the wage it would be inappropriate, when we come to consider the division of the surplus between capitalists and workers, to separate the two component parts of the wage and regard only the 'surplus' part as variable; whereas the goods necessary for the subsistence of the workers would continue to appear, with the fuel, etc., among the means of production.

We shall, nevertheless, refrain in this book from tampering with the traditional wage concept and shall follow the usual practice of treating the whole of the wage as variable." (Sraffa 1960, p. 10)

The significance of this passage is manifold. First of all and most significantly, understanding wage as being entirely paid out of surplus implies that the 'necessaries of life' now fall into the category of non-basics – since they will have to fall out of the equations specifying the means of production, as Sraffa himself says (Sraffa 1960, p. 10). But while to understand this as a *theory* of wages would be most unfortunate, it is acceptable as an expository device – especially since the more general case of the two-part concept of the wage has in fact been explored by some authors.²²

Secondly, the difference between the subsistence wage and 'surplus-wage' has been sometimes understood as a difference between wages paid in advance and in arrears. I think this interpretation must be rejected decisively. The time dimension of the payment is entirely irrelevant here; what matters is rather whether the amount to be paid to the workers is *known* (i. e. agreed to) in advance or not.

Thirdly, there is no theory of the division of the surplus in Sraffa – or in other words, no theory of the surplus wage. As the amount of surplus going to the wages is a critical variable of Sraffa's system, this is significant. Since an *economic* theory of the surplus division is lacking, the wage has often been interpreted as the result of the class struggle between the workers and the capitalists. This is of course a very appealing sort of interpretation from the Marxian point of view, which moreover seems to correspond to clear empirical realities – trade-unions and employers *do* in fact negotiate and/or fight over the amount of the wages; in fact, over the decades of the development of the trade-union and the socialist movement, this has become a sort of canonical form of 'class struggle' (while at the same time decried as pure 'economism' from a more theoretical Marxist standpoint). Assuming that we adopt a two-part concept of the wage rather than the pure surplus concept, the Sraffian analysis seems to be offering an elegant way of refining and illuminating Marxian ideas on the wage – when Marx says that beside subsistence, wages always include 'a historical and

²² Roncaglia (1978), Abraham-Frois and Berrebi (1979).

moral element' (Marx 1954, p. 171), this is part of the surplus wage Sraffa describes, the part that is the result of class struggles.

However, the statement about the 'historical and moral element' is at the same time a sort of fig leaf that tends to be used to cover the nakedness of the Marxian theory of wages. Because for the most part, Marx tended to use the assumption that 'the value of labour-power' is indeed equal to the value of the means of subsistence – which is just the same as saying that he was using the subsistence concept of the wage, as did other Marxists after him.

But if this is so, then not only do Sraffian ideas about the division of the surplus represent a welcome explication of Marx's thought; they are in fact an extension of quantitative analysis into an area which Marx did not cover. And since the surplus division is a determining variable for prices in the Sraffian system, this in fact means that there is no equivalent to the Sraffian problematic in Marx. Sraffa investigates how prices vary as the labour portion of the surplus changes from zero to hundred percent; but since for Marx, the wage is treated as subsistence-level bundle, this investigation cannot even begin. To put it simply, from the Sraffian point of view Marx is stuck at zero.

This is the real reason for the *impossibility critique* of the Marxian transformation algorithm, briefly mentioned above – the claim that the value schema will in general not lead to the correct prices of production. The point is that in the value schema, the workers' wage is treated as *necessary labour*, while in the Sraffian price schema, it is understood to be at least in part a portion of the *surplus*. Thus, the fully general Sraffian solution to the transformation problem must necessarily diverge from the Marxian one – or to be more precise, why the Sraffian schema must give different results from the Marxian one (since was noted, the Sraffian approach means that the Transformation Problem turns out to be a non-problem). The profit rate and the prices are influenced by the division of the surplus, but there is no such division in Marx. To restrict our attention to cases where it is possible to go from the value schema to the price schema means effectively to claim that the surplus portion of the wage is zero.

Now it is of course possible to do this; but at this stage, such a step appears to be an abandonment of a very important contribution to the theory of prices.

Sraffian versus Neoclassical Economics

Now it is important to realise just what the Sraffian schema describes. It is not any real economy, which of course never simply reproduces itself exactly—due to technological progress, investment, but also crises and tribulations. The Sraffian schema instead represents a fictitious economy which has achieved an equilibrium position such that on the one hand, profit rates are equalised, and on the other hand, the equilibrium is stable and persists through time.

The Sraffian schema thus is a step on the way to the description of the real world, embodying the important principle that to be sensible, economics must take into account the necessity of reproduction of the social world. However, it is not the final step. Thus Sraffa's subtitle, 'Prelude to a Critique of Economic Theory', could be understood to mean precisely that – that the full description of the economy would have to take into account also the changes and processes going on in the economy, finally perhaps disposing even of the very notion of equilibrium.²³

If we abstract from investment and technological progress, however, we could also view the Sraffian schema as specifying the *average* amounts of each commodity needed in order for the economy to be a self-reproducing one. The real economy, on its way to such a Sraffian equilibrium, would then be experiencing crises of overproduction and underconsumption of inputs – of some, there would not be enough to secure the full reproduction, while of others there would be too much – which would then lead to both price and quantity adjustment.

But if the Sraffian approach is to be at all relevant for the Marxian transformation problem, we also need to think of a different cause of for

²³ By this I mean disposing of it as the general requirement; the theory should be sufficiently general to describe *both* the equilibrium and the non-equilibrium situations.

price/quantity adjustment. Namely, we need to understand the story behind the equal rate of profit used in the Sraffian system — we need to have an idea of how such an equilibrium rate of profit could be actually established. It turns out that this story has deep implications for the relations between Sraffian and neoclassical economics.

As was mentioned in the beginning, on the process of achievement of equal rates of profit Marx was at one with Ricardo.²⁴ The equilibrium equal rate of profit is a result of competition – as some industries experience higher rates of profit, capital moves from one sphere to another in order to achieve the maximum profit rate available. This then pushes up prices of the commodities in the 'low rate' industries, as given the same level of demand, there is now lack of sufficient quantities of their products; conversely, the prices of the products of the 'high rate industries' goes down, as there is a relative abundance of them.²⁵

Let us note here that we should take the wage here as consisting of the subsistence and the surplus part; it is then clear that the subsistence bundle of wage goods is itself a requirement for the continuation of the system. Of course, it is possible that on the way to the equilibrium, the elements included in this bundle shift and change, just as much as the amounts of capital goods change. This is not a problem; the only requirement is for the subsistence bundle to be stable once we arrive at the equilibrium – which, by definition, it must be.

There is now a large literature on whether the process can in fact work as the Classical economists – including Marx – have understood it (e. g. Nikaido 1983, Steedman 1984, Duménil and Lévy 1987, Flaschel and Semmler 1987). It turns out that this is so under some special assumptions, which really is quite predictable. It is the opposite conclusion which would be surprising, namely, that the competitive mechanism could work its magic under any conditions whatsoever.

Broome (1979) claims that this Classical conception of competition leading to the equalisation of the profit rates implies an assumption of constant returns to scale. I do not see this. It does not matter whether the new capital arriving in an industry earns the same rate of return or in fact a lower one than the capital originally employed; all that matters is that eventually, there is convergence. More work is certainly needed to show what the conditions of this convergence are, but it does not seem a priori clear that the only possibility is constant returns to scale in all industries.

Now if this is the process leading to the Sraffian equilibrium, we should realise that this in fact constitutes an answer to those critics from the neoclassical side who charge that, as Lichtenstein (1983, p. 114) puts their contention, "only in the very special case of perfect competition with constant returns to scale will changes in consumer demand have no impact on the long-run equilibrium price" (for a particularly arrogant expression, see Samuelson 1991). Since on the way to the Sraffian equilibrium, there is *both* price and quantity adjustment, depending on the supply and demand in every particular non-equilibrium period, then the final socio-technological coefficients of the Sraffian economy must be the *equilibrium* quantities demanded, *and* supplied.

Thus, the charge only demonstrates the inability of the neoclassicals to think outside of their own paradigm. What the Sraffian system describes is an equilibrium, and as we have seen, both 'demand' and 'supply', understood as the long-run requirements of production and consumption, do of course enter into the determination of this equilibrium. But what Sraffa has demonstrated is that in order to find the equilibrium prices, we as economists simply do not need to know anything about the demand and supply 'functions' of neoclassical economics. The meaning of the demonstration is that under the two assumptions of a self-reproducing society and an equal rate of profit, the equilibrium quantities are enough to determine the equilibrium prices. As there are no changes involved – the economy is in equilibrium – neither neoclassical supply nor neoclassical demand are required at all.

Of course, if what we wanted to say was that at some point prior the establishment of the equilibrium, there was a change in 'consumer preferences' – understood as the change in their utility functions – then of course this would lead to a different set of equilibrium prices. But, obviously, also to a different set of equilibrium quantities. Thus, the correct way to approach this situation would be to specify these different quantities – i. e., a different socio-technological matrix – and read the prices off that. To try to 'solve' the problem by 'bringing in demand' instead would be like saying that in order to solve a mathematical

problem, we need to 'bring in a hammer'. The neoclassical demand is an entirely different sort of animal, which has no relevance in the given context.

The fact that Sraffa's system in fact describes a 'reproducible equilibrium'²⁶ allows us to describe the relationship between the Sraffian and the neoclassical theory in yet another way. What we should see clearly is that both theories do in fact have the same object – or, to be more precise, aim at the same goal. This goal is a description of a general equilibrium of the economy. The first difference between them arises from the fact that while the neoclassical approach is *subjective*, attempting to do this by using the general description of unobservable 'utility functions' or 'preferences' of the individual producers and consumers, the Sraffian approach is *objective*, using quantities which are in principle observable.

There is no doubt that the neoclassical approach can lead to a description of a general equilibrium, as Arrow and Debreu (1954) have demonstrated. The difficulty is that such an equilibrium is one in which all future trades are assumed to have been carried out – or, alternatively, where all such future trades are assumed to be known in advance. Not only is such an assumption drastically unrealistic; but it has the consequence of hiding the difference between two radically different sorts of futures. In the first one, the subjective preferences of the individual actors lead to a future where all trades have been carried out, because no more trades are possible – production and consumption stop and the society fails to continue to exist. In the second case – which contains a much narrower, but far more important set of futures – the society does go on, because it so happens that the subjective preferences of the individual actors ensure its continuation.

Let us leave aside for the moment the obvious point that preferences are likely to be *endogenous* for any society which does manage to keep reproducing itself – it would be an accident of cosmic proportions for the preferences to be exogenously given and yet exactly match the requirements for the continual

²⁶ John Roemer's (1981) term.

survival of the economy.²⁷ Nevertheless, it is clear that even assuming exogeneity, the neoclassical approach has no way of distinguishing between the non-reproducible and the reproducible solutions; this conditions has to be imported into it from outside.

The description of those equilibria which can go on reproducing themselves is precisely what Sraffa provides, since the requirement of continuous reproduction is a *condition* for his equilibrium. Thus, we can see that the second difference between the neoclassical and the Sraffian approach lies in the fact that the first is much more 'general' – but only in the negative sense of including an enormous number of utterly uninteresting cases, namely those where the subjective preferences of the individual actors run the economy into the ground. By specifying the reproducibility of the economy as a *condition* of the equilibrium, Sraffa is surely restricting our attention to the only cases which are actually interesting from the economic point of view.

An important lesson follows from this comparison. In the discussion of the relative merits of neoclassical and 'modern Classical' economics, two very separate issues are often confused – namely, the causal and the epistemological importance of a particular set of factors. The neoclassicals criticise Sraffa for not invoking their favourite notions, which they take to be the causal determinants of the economic process. But the Sraffian schema is an epistemological tool designed to reveal the relevant facts of the economy, for which purpose it serves perfectly well. Thus, it is one thing to assert that 'the general equilibrium is causally determined by the adjustment of supply and demand', where supply and demand are understood in some simple pre-theoretic sense. It

Not to mention the fact that preferences are in fact being manufactured on a daily basis in advanced capitalist economies.

It is possible to take a Sraffian equilibrium and, given certain assumptions, to derive the neoclassical 'inputs' into the epistemological process (initial stocks of goods and preferences) which need to exist in order for the neoclassical equilibrium to be identical with the Sraffian one. This is precisely what Roemer does in his *Analytical Foundations of Marxian Economic Theory* (1981), and what Eatwell (1982) reproaches him for. But in fact, it is an answer to a not completely uninteresting question – which of the subjective neoclassical equilibria does it actually make sense to investigate at all?

is quite another to say that 'it is epistemologically necessary to use the neoclassical constructs of the supply and the demand functions to derive the set of equilibrium prices'. The first statement is quite possibly true, and as we have seen, it is reflected in the story behind the Sraffian equilibrium. The second statement, however, is quite definitely false, as the Sraffian approach demonstrates.

Why the Law of Value Does Not Hold in a Sraffian Economy

Before we proceed, let me summarize what we have discovered so far. First of all, we pointed out that Marx necessarily needed some sort of transformation procedure which allowed the amount of the substance of value to be remain constant – both in its total and in the sub-total of surplus value – and that no other 'invariance conditions' would do. Secondly, we argued that the substance of value should be understood as a representation of the 'augmented labour' of the economy, of the total productive capability of the economy. Finally, we have described the journey to the Sraffian equilibrium, which consists of equilibrium quantities, equilibrium prices, and an equilibrium – equal – rate of profits.

Now we have the basic elements in place to establish why Marx's 'Law of Value' – the two conditions of preservation of the value totals – do not hold in a Sraffa-type economy. The answer is that prices in a Sraffa-type economy are, despite appearances, *not* completely determined by productive relationships – and it is the interference of a particular type of *consumption* that makes all the difference.

To begin with, imagine that we are given the description of a Sraffian economy which looks as if it were based on the input-output table of a subsistence economy mentioned in the Chapter I:

$$p_w$$
 240 qr. wheat $+ p_i$ 12 t. iron $+ p_p$ 18 pigs $= p_w$ 450 qr. wheat p_w 90 qr. wheat $+ p_i$ 6 t. iron $+ p_p$ 12 pigs $= p_i$ 21 t. iron p_w 120 qr. wheat $+ p_i$ 3 t. iron $+ p_p$ 30 pigs $= p_p$ 60 pigs

However, despite the formal appearance of a Sraffian 'subsistence economy', I claim that this could be equally well interpreted not as a subsistence/Simple Reproduction type of economy. Instead, all branches of production produce a surplus – but it so happens that the owners of the means of production do not sell that surplus at all, and instead just consume it themselves. Simply, whatever surplus is produced is put aside while trading is going on; therefore the only quantities that influence the equilibrium prices are the same as they would be in a subsistence economy – and hence also the final prices are the same. (Of course, we are still and will remain in the equilibrium situation – both the necessary and the surplus parts of the output are themselves equilibrium quantities.)

The divergence of prices from their subsistence magnitudes is thus not caused by the surplus as such, but by the fact that this surplus is *traded*. In fact, this shows that it is not entirely legitimate to simply automatically use the sociotechnological matrix for the calculation of the equilibrium prices, as Sraffa does, for by the same reasoning, it is only that part of the surplus produced which is actually traded that makes any difference. If we postulate the straightforward use of the matrix to produce a system of simultaneous equations, we should be aware of the fact that what we are doing is implicitly postulating an exact equality between the amount of surplus actually produced and traded – so the owners of the means of production in any industry do not consume any of their own surplus.²⁹ It is *not* the case that the owners simply 'buy' the relevant portion of the surplus from themselves. This can easily be seen by a comparison with the faux-subsistence economy case just described. There, *all* the surplus is

Until further notice I shall be assuming that all of the surplus goes to the capitalist — in other words, the 'surplus portion of the wage' is equal to zero.

'bought' by the owners themselves; but including it in the equations would cause a divergence of the prices from their appropriate levels, and would in fact prevent the economy from reproducing itself. We could, of course, *evaluate* the non-tradeable surplus in terms of the equilibrium prices; but this is a completely different procedure from allowing it to *determine* those prices. In the first case, independently determined prices are used to reckon the notional value of the surplus; in the second, the surplus exerts an influence on prices, even though it never appears on the market at all.

The Sraffian surplus-producing economy then amounts to a situation where all the surplus produced is sold on the market, just like the necessary portion of the output. However, we also know that it is only this necessary portion of the output that makes any contribution to the productive activities. By definition, the Sraffian surplus does not enter into production. Hence, the only reason why it is being traded must be for the purposes of consumption. This is *not* what Sraffa himself says, of course. The point I am making is that such a conclusion necessarily follows from his assumptions; it is implicitly present, even though not explicitly stated.

Now, we know from the description of the journey to the Sraffian equilibrium that this must be in a sense an 'equilibrium level of consumption'. While the price and quantity adjustments were going on, prices were going up and down not solely because of the need to equalize the rate of profit, but also because they were responding to the demand for the goods constituting the surplus. The final equilibrium is thus in a sense implicitly determined by the preferences of the surplus owners. These preferences thus enter into the actual determination of equilibrium values of our variables — even though we do *not* need them to *find out* these equilibrium values.

And so we have at last arrived at the reason why Value does not rule the Sraffian economy the way Marx wanted it to. In Sraffa's economy, we get something which that may be called *consumptive surplus*.³⁰ For the Law of Value to hold, we would have to have the substance of value circulating through the economy and being exactly preserved at every stage. But in a Sraffian economy, it is not; some of it 'disappears', is consumed, in an act of 'unproductive consumption' (as it used to be called in the writings of Classical economists).

We can see the difference this makes very clearly if we split the Sraffian economy in two parts: the one of 'productive consumption' (PC) and the one of 'unproductive consumption' (UC).

Within the PC part, calculating prices will of course give the exact same magnitudes as if this was a subsistence economy – hence, if the PC part was in fact a self-contained productive system, the prices would be equal to values and the Law of Value would hold exactly.

On the other hand, within the UC part, the surplus constitutes the 'initial endowment' of its owners. No production is going on here at all, and the owners solely engage in exchange. Hence what we get is in fact a description of a Walrasian pure-exchange type of economy – and prices will be here determined by the size of the endowments and the preferences of the owners.

The peculiar nature of the Sraffian economy consists in the fact that these goods for production and for unproductive consumption are *not* in fact sold on two separate markets, but together at the same time on the same market. Hence we get 'interference'; the productive relationships of the economy no longer fully determine the relevant variables.

The fact that the distribution of income is exogenous in the Sraffian model has been taken to mean by some neoclassicals as a defect, in the sense that it seems inferior to the neoclassical equilibrium, in which all prices and factor incomes are determined simultaneously.

³⁰ The term 'surplus consumption' which offers itself is confusing, since it seems to suggest consumption above some necessary level. As we shall see later, it may in fact be the case that consumption surplus constitutes precisely surplus consumption; but equally this may not be the case. It is possible that the surplus is consumed by 'pure surplus appropriators', for whom there is not in fact any necessary level of consumption, as they are not necessary for the existence of the system at all.

However, our considerations show that this seeming defect dissolves upon the proper conceptualisation of the terms. As we have said, the 'income' of the Sraffian system is in fact pure surplus consumption; and, if a separate market could be arranged for it, it would be equivalent to the neoclassical pureexchange economy.

In other words, the 'arbitrary' division of income is in fact nothing but the equally 'arbitrary' primary distribution of resources, before trading happens, in the neoclassical market. It is, to be sure, under-determined, in the sense that all we get to know is the aggregate amount of resources assigned to labour and to capital; but in principle, there would be nothing stopping us from making a more detailed assignation. The crucial point is that the Sraffian need for the description of the division of the surplus between the two groups is *in principle* no different from the need for the neoclassicals to describe the initial distribution of resources. The only difference – obviously not a major one – is that in the neoclassical system, we are talking of a 'one-shot game', whereas the Sraffian system reproduces the division of resources (which in the meantime have been consumed) repeatedly in each period.

Now we see the significance of the fact that Sraffa's 'surplus-producing economy' is neither a Simple Reproduction nor an Extended/Expanded Reproduction one. For if we look at the latter taxonomy closely, we see that it assumes *either* no surplus, *or* its productive investment. It is then no surprise that Marx's approach cannot allow for the substance of value not being the determining factor of the economy; he simply never seems to have considered seriously the possibility that instead of being re-invested, the major part of the surplus could be simply be consumed.

Indeed, his statements to the effect that surplus in capitalism is there for this precise purpose – investment – are well known:

"Accumulate, accumulate! That is Moses and the prophets! "Industry furnishes the material which saving accumulates." (...) Therefore, save, save, i.e, reconvert the greatest possible portion of surplus-value, or surplus-product into capital! Accumulation for accumulation's sake, production for production's sake: by this formula classical economy expressed the historical mission of the bourgeoisie, and did not for a single instant deceive itself over the birth-throes of wealth. (...) If to classical economy, the proletarian is but a machine for the production of surplus-value; on the other hand, the capitalist is in its eyes only a machine for the conversion of this surplus-value into additional capital." (Marx, Capital Vol. I, Chap. 24 – emphasis added)

Thus, I conclude that the Sraffian critique is in fact the result of a different set of assumptions from those of Marx. This is not to say that the critique is somehow irrelevant; on the contrary. But its precise implications are yet to be spelled out. These will be the subject of the next chapter.

Chapter VII

Beyond the Transformation Problem The Sraffian Framework As a Basis for Class Theory

In the last chapter, I claimed that the productivist notion of value explains why the Marxian approach fails in the case of a Sraffian surplus-producing economy. I would now like to argue that it is possible to buttress this conclusion by pointing to a positive confirmation that under this understanding, the Law of Value holds where we would expect it to hold. Such a confirmation can be found in the von Neumannian model of the general equilibrium (von Neumann 1945).

Von Neumann and Sraffa: A Comparison

Similarly to Sraffa, von Neumann uses the same fundamental idea a 'circular flow' of commodities. There is not a one-way road from production to consumption; instead, commodities arising as outputs may in general be understood also as inputs in the next round of social reproduction. In other words, the idea of an input-output schema underlies both of these conceptions.

Unlike Sraffa, however, von Neumann does not start from the final social equilibrium. Nor, however, does the von Neumann method of arriving at the equilibrium mirror the actual social procedure of reaching it. That is, the mathematics does not concern the process of competition through which the rates of profit are equalised in an economy. Instead, it is a proof that such an equal rates equilibrium will exist.

Unlike Sraffa, then, von Neumann starts from a list of all the possible social technologies. Since in general, more than one method might be used to produce a given commodity, a question then arises what technologies will actually be chosen – which ones will form a part of the final equilibrium

description of the Sraffian type and which ones will not. In order to decide this question, von Neumann employs the so-called profitability rule. This rule specifies that if, under the equilibrium prices, the profit rate by using the technology is smaller than the going rate, the process will not be used.¹ Similarly, it is possible that a given process will produce more than one output—in fact, under the canonical representation of fixed capital, this is necessary—and so it has to be decided which goods will actually be bought and sold and of which there will be an excess. This is done through the 'free goods' rule, specifying that goods in excess supply will have an equilibrium price of zero. (Note that this rule, used in order to take advantage of the mathematical 'duality' properties, is in reality quite problematic; since by excess supply, von Neumann understands supply over the requirements of the productive processes, his approach implies that luxuries will be free goods!)

This forms the basis of the von Neumannian 'semi-inequalities' approach, where the inequalities 'bite' just in case the processes are not used or goods are not priced, and where the equality occurs just in case the processes and goods are part of the Sraffian 'basic' production schema.

The other major difference between Sraffa and von Neumann, however, is the use to which the surplus is put. In the original von Neumann schema, *none* of the surplus, or the profit, is 'consumed by the capitalists', much less by the workers; all of it is in fact devoted to investment. Thus, Sraffa and von Neumann lie at the opposite extremes: while for the former, all of the surplus is 'consumed', for the latter, all of it is re-invested. Von Neumann specifies that this occurs in a particular way: the economy expands, but its 'structure' remains the same — or in other words, none of the productive processes used change. What this describes is of course what Marx termed 'extended reproduction',

Actually, the original formulation of the condition is in terms of no profit under equilibrium, rather than an equal *positive* profit rate. This is because von Neumann works under the neoclassical conceptualisation, in which what we call the profit rate is termed the interest rate; thus the condition can equivalently be expressed as we have done above.

where the economy grows over time, but no technological progress occurs. For this to happen, the assumption of constant returns to scale is needed, as well as the assumption that such a way of expansion is at all possible — i. e., that the goods constituting the surplus come in just the right proportions as to fit the requirements of expansion.

Now it is a well-known fact that in the von Neumann model as originally specified – that is, where all the profit is 'saved' and none of it is 'consumed by the capitalists', Marx's two conditions – the quantitative Law of Value – hold exactly. On the basis of this, Morishima (1973) even called this sort of model the 'Marx-von Neumann model'. However, for the most part this came to be seen as just a curiosum, as a sort of accident without any deeper meaning. Yet, I would like to argue that this fact constitutes in fact a striking confirmation of our interpretation, and conversely, that the interpretation can make sense of this seemingly arbitrary result.

The reason why Marx's Law of Value holds exactly in the original von Neumann model is precisely because there is no 'unproductive consumption' at all. Any consumption that occurs is strictly for the purposes of production.² Thus, given the understanding of value as a substance representing productive capability, we can see why it is necessarily the case that it is conserved in the system — any consumption of it is necessarily at the same time some sort of production. Or to put it differently, the constraints on the reproduction are now once again 'tight', they do not allow exchange-values to deviate from what is necessary for productive relationships to continue — albeit at a higher level, which explains why the individual labour values do not coincide with prices — and thus it is once again the case that it is the productive relationships that fully

While this is usually interpreted as capitalists saving all their income, this need not be so, if we assume that the owners of capital do play some active role in production – e. g. as managers, supervisors or entrepreneurs – in which case they are 'entitled' to the replenishing consumption in the model; their consumption constitutes part of the necessary inputs just as much as the consumption of the wage-workers.

determine the exchange relationships, precisely as is required for Marx's conditions to hold.

Thus, we have arrived at the conclusion that Marx's vision of the economy is one where the relations of reproduction are fundamental. That in itself should not be surprising; it is just the full implications of this that seem not to have been realised heretofore. The Marxian claim, effectively, is that the phenomena such as unproductive consumption (including luxury consumption) are negligible, unimportant for the determination of the 'laws of motion' of capitalism.

The Sraffian point of view in its original formulation can now be seen to stand at the opposite extreme to Marx. Profit is not seen to be used for investment at all; the productive constraints are 'slack', and thus prices cannot be simply read off the productive relationships pure and simple. But the case in which there is zero investment is of course only a special one; and thus the right way to view the Sraffian-von Neumannian approach is as a *generalisation* rather than a rejection of Marx – a generalisation to the case where unproductive consumption of the surplus is allowed. If Marx is superseded by Sraffa, then it is in the same way in which Einstein's theory superseded Newton's – while the underlying conceptualisation is different (geometry of space vs. forces in the former case), the older theory's equations live on as a very important special case. Indeed, such an important one that it is Newton rather than Einstein who is taught in Physics courses below the university level.

This view allows us to read *Capital* as a coherent and logical whole, disregarding as flawed only those passages where unproductive consumption seems to be considered (such as including luxuries in the transformation algorithm), which effectively go counter to the general flow. Indeed, we could even view the theory of *Capital* as an essentially correct approximation to reality, as long as we adopt the view that the unproductive consumption, whether of the capitalist or the working class, is dwarfed in importance by the investment requirements of the system. What we would then be saying, by way of analogy,

is that while Einstein's equations are closer to reality than Newton's, for the vast majority of practical purposes the three laws of Newtonian mechanics are fully sufficient.

Now it is true that the original von Neumann ray of balanced growth is unstable – it possesses what has been termed the Harrodian 'knife-edge' property. That is, its path through time is so finely balanced that any disturbance - the loss of the smallest nut or bolt - will send it gyrating further and further away from the original path. This is one of the main reasons why the fact that Marx's Law of Value holds on the von Neumann ray has been considered uninteresting. I would argue that this is not so. We should always try to bear in mind that the models are at best the descriptions of general conditions, rather than exact matches of the empirical reality; they are only true 'on average' which, after all, is one of the recurring themes of Marx's philosophical critique of political economy. So the input-output equilibrium is only the description of average conditions, rather than a requirement of actual perfect balanced growth. To come closer to reality, we should be looking for mechanisms which ensure that these average conditions do in fact occur - which, of course, may be through crises and struggles, rather than smooth corrections. Richard Goodwin (1989) is a good example of what I have in mind.

Wage, Rent and Profit

The fact that it is consumption out of surplus which makes a difference to whether the economy can be described in terms of the substance of value suggests the following threefold classification of incomes to the holders of the various inputs:

In the first place, there is 'wage'. This should be understood as 'subsistence wage'; but the best and most precise way of putting it is that this is the *pure reproduction price*. In other words, this is the exact price that allows for the exact reproduction of each input, given the existence of a particular bundle of surplus

commodities (in other words, given a particular level of extraction of surplus labour).

For any material input, the pure reproduction price is what must be paid to the industry producing it for it to be able to produce that same amount of its product plus the required surplus. As we shall see, the neoclassical 'return to capital' is in fact best understood as precisely this pure reproduction price – from which it immediately follows that it in no way represents the 'profits' consumed or invested in reality by capitalists, since no part of the pure reproduction price can be used for anything other than just that – pure reproduction – without the system failing to reproduce itself.

For non-material inputs, that is, human activities, this is the wage which will *just* allow their actors to reproduce, that is, to be as able to perform their activities tomorrow as they were today (hence subsistence wage) — always bearing in mind that one actor may be performing multiple of the various activities.

Secondly, there is what we shall call 'capitalist rent' (or just rent for short). This a claim to *consume* (unproductively) a part of the surplus produced. Thus, Sraffian surplus consists in fact *entirely* of rent, while Marx was not counting on the existence of the rent at all.

We should point out that this concept of rent differs from some other concepts known in economic theory. First of all, rent was in the first place ascribed to *non*-reproducible resources, such as land. Sraffa's treatment explicitly introduces *that* sort of rent, as a deduction from the surplus produced (same as Marx). But the rent we have in mind is closer to the so-called 'monopoly rent', that is, a surcharge extracted on the basis of restricted access to resources which in themselves may not be non-reproducible at all.

But it is important to realise that despite this superficial similarity to 'monopoly rent', the 'capitalist rent' is really quite a different sort of animal. This is because it has nothing to do with the neoclassical concept, in which rent is a

payment over the market-clearing price. Our sort of rent is income over the pure reproduction price, with the market-clearing price fluctuating around this level.

The reason why the name 'rent' was chosen is that this part of the surplus shares an important characteristic with the view of ground rent in the writing of the Classical economists. Just like the rent received by the landlords, this portion of the surplus represents a *deduction* from the total fund available for investment; it is used for simple 'unproductive consumption'. This definition of rent then implies that aside from the Sraffian surplus (which concerns only the system of basic commodities), all luxuries fall into this category.

And so finally, there is the 'real economic profit'. This is that part of the surplus which is used for extended or expanded reproduction, or in other words, for investment. All of the surplus present (implicitly) in the original formulation of the von Neumann model constituted profit, which is why it allowed the Marxian Law of Value to hold.

There is a good reason why Marx did not consider the existence of capitalist rent at all. For while the capitalist profit allowed for the consideration of surplus labour as surplus value, and thus for a particular special theory of the capitalist mode of production as being governed by the laws of the substance of value, 'rent' does not, as we by now know, allow for the consideration of the substance of value, and thus has to be considered as brute surplus labour, on par with the surplus labour extracted by the feudal lords. Such a notion was quite alien to Marx's mode of thinking, since he was looking for laws of motion specific to capitalism and therefore unlike anything he could find in the previous modes of production.

Sraffian paradigm thus constitutes an extension of Marxian thinking to include the element of rent.

The net income of the 'pure capitalist class' – i. e. after the pure reproduction price of the material means of production has been deducted – thus in general consists of three parts. On the one hand, there is the 'capitalist wage'. This is simply the pure reproduction price of 'capitalist labour' – that is,

all those productive activities which the capitalists happen to undertake themselves, ranging possibly from actual manual production to highest levels of strategic planning. Just like any other human being, the capitalist needs to reproduce themselves, and the capitalist wage just allows them to do that.

Secondly, there is the capitalist rent. As we are now talking about the 'pure capitalist class', we will ignore the possibility of the rent accruing to special skills or knowledge. In this context, the capitalist rent accrues *purely* thanks to the monopoly of the capitalist class over the material means of production, just as Marx postulated. (Of course, this applies to the capitalist profit as well.) The capitalist rent thus covers all that champagne and caviar consumed by the capitalist class.

Finally, there is the capitalist profit, over which the capitalist class exercises *power*. Power over investment thus turns out to be *the* defining characteristic of the 'pure capitalist class'; while it is conceivable, in an 'Accumulate, accumulate!/Protestant Ethic' type of capitalism, that the capitalist rent is *zero*, without the capitalist profit there is no investment, and thus no capitalism at all.

The 'pure working class', on the other hand, receives *just the subsistence wage* and nothing else. Thus, the model of 'pure capitalism' which involves just these two 'pure classes' turns out, unsurprisingly, to be the von Neumann-Marx model.

Actual vs. Counterfactual Approach to Exploitation

Given the discussion so far, it is now possible to deal also with some other objections that have been raised against the Labour Theory of Value. The first of these – the so-called co-existence of positive profits with negative surplus value under joint production – gave rise to a debate which is actually important for quite an independent reason: namely, because it demonstrates the inferiority of the counter-factual as opposed to the actual approach to exploitation.

The counter-factual approach is the basis of John Roemer's non-causal, game-theoretic definition of exploitation, which I have criticised above. But

such tendency to understand claims about the existence of exploitation as counterfactuals in fact is not limited to Roemer. It does not always play such a prominent role as in his case. But nevertheless, it is hard to avoid thinking about surplus labour as that part of the total labour time that 'would not have to be there', if only social relations were different. This is precisely the sort of counterfactual thinking I have in mind. To spell it out, the tendency to interpret exploitation counterfactually means to make exploitation dependent upon a feasible alternative arrangement, involving possibly a re-organisation of the division of labour, under which the exploited class *would* perform only labour equal to that necessary for the satisfaction of its subsistence requirements.

Now, the tendency to bring in counterfactual thinking is in a sense quite understandable. It is closely bound up with the problem of moving from the *definition* of exploitation, that is explaining what it means, to making it *operational*, that is finding out whether and to what extent it exists. The two tasks are of course of quite a different nature. To take an analogy, it is one thing to define what temperature is – a measure of the average kinetic energy of particles in a piece of matter; it is quite another to propose a way of measuring temperature.

It is here that the counterfactual approach comes into play. Let us recall, once again, the classical definition according to which exploitation exists when one group of people aside from the labour necessary for subsistence provides also surplus labour for another group's subsistence and possibly luxury. This may be clear enough a definition in itself. However, it does not help us straightaway to decide whether any particular situation is exploitative. In order to do that, we have to try to identify whether some particular group fits the characteristics of the exploited, and another of the exploiters.

Now if it is true that one group of people supplies not only necessary labour to produce their own subsistence, but also surplus labour to provide subsistence or even luxury for another group, then it follows that *if* surplus labour were eliminated, the exploited group would be better off. Nothing seems more natural, therefore, than to say that workers under capitalism, for example,

are exploited because if there were no capitalists, they would not have to work as much.

It is then easy to go straight to the conclusion that the exploited is the group of people who would *otherwise* be self-sufficient, were it not for the existence of the exploiters; while the exploiters would definitely not be self-sufficient, were it not for the existence of the exploited. Hence, we get an operational criterion for determining the existence of exploitation in a particular society. If we want to know whether anybody is exploited, we just look around to find a group that *would* be self-sufficient *if* the complementary group were eliminated.

Thus, it seems that even the canonical notion of exploitation seems to be in accord with the counterfactual notion. In fact, I do not believe this to be the case. I would like to use the rest of this section to argue that we should reject the counterfactual notion in favour of an 'actual' one.

Although highly visible in Roemer, it was actually introduced into the Marxian context by Michio Morishima (1973), in the course of the discussion of the similarities and contrasts between Marx's verbal reasoning and John von Neumann's mathematical model of economic growth (von Neumann 1929). Up to a point, von Neumann's input-output model corresponded to Marx's description of the economy quite closely. Unfortunately, because it introduced certain generalisations absent from Marx's thinking, under some of those generalised conditions the model did not allow the traditional calculation of labour values of commodities.

These generalised conditions were to do chiefly with 'joint production', that is, the case where a single production process had more than one output. This was not analysed by Marx, who made the assumption that every process had as its output a single commodity. Indeed, actual multiple-product processes could appear to be mere curiosa - such as the 'production' of wool and meat from the rearing of sheep. In the context of input-output analysis, however, the case of joint production turns out to be significant for theoretical reasons. Joint

production was introduced in order to model the existence of fixed capital, that is, the sort of input that was not completely used up during production. Marx treated the depreciation of capital in a similar way to the neoclassicals, namely as a sort of constant-rate 'radioactive decay'. However, there are good reasons to think that the joint production approach, common to, or at least easily compatible with, the models of all the main exponents of the input-output approach (Sraffa, von Neumann, Leontief), is far superior as a model of the real world.

The second generalisation that creates problems for Marxism is the possibility that more than one process can be used to produce the same commodity (commodities). Once joint production and 'multiple realisation' are admitted, it is clear that in the real world, the number of commodities actually produced and the number of processes actually used may not be equal. In terms of the model, this means that the 'production matrix' may not be a square, which in turn implies that there is no way we can calculate the labour values from the technological requirements specified.

It was in order to get around this difficulty that Morishima came up with the counterfactual approach (although he did not call it that). Instead of finding out the *actual* amount of labour embodied in the commodities, he proposed to calculate the *minimal amount of labour* needed to produce the commodities that are actually produced. These he called 'optimum value', as opposed to Marx's 'actual values'. Thus, the optimum values expressed the amounts of labour that commodities embodied when processes were chosen in such a way as to make it their production maximally efficient from the point of view of labour.

Later, Morishima (1976) augmented his definition further, one of the reasons being that 'optimum values' were not unique – the inequalities postulated were satisfied by more than one possible set of labour values. The 'true value' was no longer even defined in terms of individual commodities, but rather in terms of the labour value of the whole output. In other words, the true value expressed the minimal amount of labour needed to produce the total

output, regardless of how that labour was distributed among the individual commodities. Roemer inherited this approach when he wrote his *Analytical Foundations of Marxian Economic Theory* (1981), and further extended it in *GTEC*.

This is a counterfactual approach, for as pointed out by Morishima himself (1973 p. 187), there is no particular reason to believe that the processes selected by the labour minimisation procedure are the same as those selected by profit-maximising capitalists in an actual capitalist economy. Thus, what the counterfactual approach to values specifies is the labour content of commodities (or total commodity) under the best possible conditions for the working class. It does not say what the labour content of commodities, and thus exploitation, actually is; it specifies what it would be if work and capital were redistributed to minimise labour expenditure.

I think we should strongly resist this counterfactual understanding. The first reason is that it is closely tied with the 'moral' understanding of exploitation: workers could be better off, so it is unjust that they are not. However, I believe that Marx intended his concept to do scientific explanatory work, rather than to play a role in the discussions about morality. For this purpose, what we need is a concept that can be used when looking at an actual reality. And to understand how that actual reality works, we need to look at the facts about that reality. Although counterfactual approaches might also be using such facts, by definition their relevant features occur outside the scope of facts, in the virtual reality they imagine.

Secondly, I think that even on its own terms, the terms of moral discussion, this approach fails. For it makes the existence of exploitation depend on the existence of the superior alternative. However, what if no such alternative exists? Under the classical notion of exploitation, this is perfectly possible. It might be that there is no alternative arrangement under which the exploited class could achieve the existing standard of living with less work. In absolutely commonplace Marxist terms, we would describe this situation as one in which the exploitative mode of production had not finished its historical

work, and thus any other feasible mode of production would necessarily be less productive.

But we would still not describe this situation as one in which exploitation does not exist. We might say that the existence of exploitation is in some sense justified, or perhaps even beneficial. But that is a very different sort of claim from the one that says exploitation does not exist. Prima facie morally objectionable actions can sometimes be excused, justified, or perhaps in some situations of conflict between moral norms even beneficial. But that does not stop them from being morally objectionable in the first place. To illustrate the point graphically, the amputation of a limb may sometimes be necessary, even in a sense beneficial for the patient. But that does not mean that the amputation does not happen, and that the patient happily runs about afterwards the same way as before. The same goes for exploitation: perhaps there is no better way, but that does not stop us from describing the situation as exploitative.

But perhaps most important is the final objection that the counterfactual approach simply does not always pick out what we intuitively think of as exploitation. To see this, let us now consider the article that led Morishima to move from individual 'optimal' values to global 'true' value.

In a provocative paper, Steedman (1975) exploited a feature of the joint production model to drive home a lesson for the Marxian Labour Theory of Value. For the existence of joint production allows the possibility that some commodities will have negative 'values', if values are calculated in the way that was commonly used in the case of single-product technologies. Now under some specifications of social technology, these negative 'values' cause a perverse result: the value of labour-power turns out to be greater than the total value of the commodities produced, and hence the 'surplus value' accordingly turns out to be negative. Yet, on the level of 'appearances', nothing strange occurs: both prices and profits are positive.

³ See Gibbard (1985).

⁴ Roemer does attempt to address this point, but in my opinion unsuccessfully.

Morishima (1976) reprimanded Steedman for not using the 'optimal' values that the former proposed in his book (1973), since it was postulated there that under the conditions of joint production only such values make sense. However, this criticism was of course beside the point, as it was precisely Steedman's intention to demonstrate that the classical Marxian definition does not work under the conditions of joint production, and hence Morishima's 'optimal' values had no place in his article (as he in fact pointed out in his reply, Steedman 1976a).

Wolfstetter (1976) rejoined with a different set of objections, the most important of which for our purposes is the point that Steedman's result requires the employment of a strictly inferior technique – that is, the net product of one of the processes used must be strictly smaller for all the commodities than for an alternative process. It might then be argued, as in Desai (1979) that Steedman made a mistake in proving that such an inferior process would be used in a competitive equilibrium of a capitalist economy.

However, in a culmination of the debate Hosoda (1993) proves a remarkable result that if there are more than two processes in the economy, no particular process needs to be inferior for the positive profits to coincide with negative surplus value. It is enough to require that there exists a combination of processes used in production which is superior to another combination. Intuitively speaking, the superior combination is really like a single superior process, and vice versa for the inferior combination. Thus, although each process on its own is non-inferior, if we combine them in the 'wrong' way, we will get Steedman's result. In other words, we get positive profits with negative surplus value only if there is what we might call a Hosoda-inferior combination of productive processes in the economy. So far, nobody has advanced a reason why such an inferior outcome could not occur in a capitalist economy.

Now suppose we use the counterfactual approach to calculate the degree of exploitation in a joint production economy with Hosoda-inferiority, or *labourwise inefficiency* in force. I think it is quite obvious that we would be badly misled.

For we would disregard precisely the one important issue about such an economy that makes the counterfactual approach appear at all plausible: namely, that aside from exploitation, the workers are also suffering from labour-wise inefficiency.

But labour-wise inefficiency is quite a different sort of animal from exploitation. It is of course at least as important as exploitation, but in quite a different way. Under LW-inefficient conditions, there may be no exploitation in the classical sense — no separate exploiting class appropriating the fruits of labour of the exploited class. Yet, there will be 'surplus' labour in quite a different sense — labour *over* the amount which is necessary given the technological conditions. In other words, although the technology dictates only *so much* labour to be expended, *more* is actually performed, due to its inefficient use.

I believe that neglect of the separate existence and meaning of LW-inefficiency is precisely one of the flaws of Marxian critiques of the 'actually existing socialism'. Focusing solely on exploitation, the Marxian critics tended to emphasise the surplus-appropriation by the ruling strata of the Communist Party. I do not want to deny that such an argument can be made. To the population of the 'Communist' countries, however, it might have been far more significant to advance a Marxian critique of the *inefficiency* of the economic system, and the attendant wasted labour. For although there were differences in the living standards of the ruling and the ruled, they fell far, far behind the inequalities common in the capitalist societies; and thus the existence of exploitation was not necessarily all that plausible. On the other hand, the existence of inefficiency and hence the existence of completely pointless expenditure of labour was painfully obvious to just about any inhabitant of the former Soviet bloc.

This is not to say that LW-inefficiency is some sort of speciality of the Soviet-type regime, of course. It may well be, for example, as Marglin (1974,

Of course exploitation may have been far more important in terms of *accumulation*, but that was not what was perceived as a particularly pressing problem.

1975) suggests, that capitalists force a division of labour which is not necessary from the purely technological point of view, but which does make it easier for them to keep their power. In such a case, it is very likely that the actually existing capitalist economy is far more LW-inefficient, from the point of view of employment of labour, than its technological possibilities would allow for.

Either way, my main point is clear. LW-inefficiency is plainly a distinct issue from exploitation. Since the counterfactual approach does not allow us to distinguish the two, lumping as it does surplus labour and 'dissipated labour' (the deadweight loss due to LW-inefficiency) into one category, it cannot serve us to identify exploitation.

Instead, we should go back to the original definition of exploitation, which was in the background all along. Exploitation exists when there is *actual* surplus labour over labour that is *actually* expended on the production of subsistence for the labouring group. If we want to turn this into an operational concept and try to decide whether some individual or group is actually exploited, all we need to do is to look at the amount of labour needed to produce their subsistence bundle, *given the technologies actually employed*, and the amount of labour that is actually provided. If optimisation methodology cannot serve for this purpose, then a different way should be investigated; but the counterfactual approach is not really much help here.

Marx as an Inheritor of the Classical Substance view and Sraffian Transcendence

I am now in a position to answer the charge of irrelevance of the Labour Theory of Value. The investigation leads to the conclusion that while prices can be determined without any recourse to labour values, and indeed, in case the wage contains a portion of the surplus, they *must* be so determined, this does not mean that the substance of labour value is an economically entirely irrelevant concept. On the contrary—refusing to pay any attention to it leads us

to overlook a major conceptual question: just what is it that is the dominant feature of the economy?

For Marx, the fundamental answer to this question was that it is re/production, re/productive relationships that are *the* source of all the important economic facts. That is just what the Labour Theory of Value in its Marxian form effectively expresses. We could thus view all claims about labour-value-determined economies as claims about the capitalist economies where production is dominant in this fundamental way. We do not need to believe in labour value as an actual metaphysical substance any more than neoclassical theorists need to believe in the existence of utility. Indeed, that is precisely the relevant comparison: just like a 'utility function' can be said to exist where some relatively simple conditions⁶ are satisfied, a 'labour value substance' can be said to be determining prices where other simple conditions — namely productiveness and non-existence of unproductive consumption — are satisfied.

The problems of the Marxian theory that were brought to attention by the various critiques, culminating in the Sraffian attacks, stem at bottom from the fact that Marx inherited a 'cost of production' theory of prices from his Classical predecessors. Of course, this term is a little misleading, since it seems to imply that costs of production of a commodity are somehow fixed regardless of what its own price turns out to be. This is the case for the Sraffian non-basic commodities, but not generally, as prices of all basic commodities influence each other.

This was not yet clear to the Classical economists – hence the traditional triad of wage, profit and rent, the 'primary prices', or rewards to the fundamental factors of production, into which all other prices were meant to resolve themselves.

The simplicity is meant in *mathematical* terms. It is not being suggested that the conditions are so simple that their validity is generally to be expected – on the contrary, a large psychological literature now exists demonstrating their widespread and persistent failures in real-life human beings.

But even with this faulty conception of an 'unmoved mover' – the initial triad – there still remained the problem of the 'unchangeable measure of value', since the prices needed to be expressed in *something* – something that itself did not change as the prices changed. This was where the Ricardian labour theory of value came in.

Effectively, the search was for the underlying 'substance' that could represent the productive relationships, those which were held to be the final determinant of prices.

Marx took this theory and added the very significant observation that, absent technological change, the only way this substance could increase – the only way there could be growth, or equivalently through which the productive relationships of the economy could change (by increasing the stock of capital) was through surplus labour, which in the economy under consideration had to take the form of capitalist exploitation (involuntarily extracted unpaid labour).

Thus, the theory of prices and the theory of surplus production through exploitation were joined together. The amazing ingeniousness of this construction lay in the fact that for quite independent reasons, the *same substance*—labour value—was seen to be the main object of both theories. This must rate as a 'dialectical' achievement of the first rank, and no doubt so it must have seemed to Marx.

What the modern input-output analysis, in its Sraffian and von Neumannian guise does is to finally make clear that the 'substance' which Marx termed 'abstract labour' represents the productive relationships within the economy. Where these productive relationships are dominant, the 'Law of Value' holds and the economy is a productive cycle without any 'consumptive surplus'. These are economies to which, assuming their fully efficient use of labour, Marx's theory applies fully.⁷

By 'fully efficient' is here meant 'labour-wise efficient' – meaning that it is required that the techniques chosen are such that the expenditure of labour is minimised; this condition arises from the debate on 'positive profits with negative surplus value', considered below.

Unfortunately, the input-output analysis also demonstrated that there are conceivable economies in which the Law of Value does not hold. These are the economies which possess a consumptive surplus. For this reason, they depart from the simple productive determination of prices; 'unproductive consumption' also plays a role, and hence Marx's theory does not hold; here we must use the Sraffian generalisation.

The fact that a generalisation is required should hardly seem a spectacular surprise. After all, successive generalisations, albeit of a different kind, were the very kernel of Marx's method.⁸ The Labour Theory of Value in its simple form was not and *could not* be the theory of prices of a well-developed capitalist system. That much is obvious already from the fact that it assumes unrestrained competition. Instead, it is to be understood as an initial model of capitalism, which at the same time describes the *deep structure* of the capitalist economy.

It is the initial model in that on the basis of it, we can describe the conditions for the continued existence of capitalism in that simple form, that is, in the form of capitalism of free competition and equal exchange. But Marx's theory is dynamic – it shows that the conditions it describes are unlikely to persist precisely because of the continued development of capitalism, because of the growth of oligopolistic tendencies within the economy. Thus, we produce a series of other models which take these tendencies into account, hoping to eventually arrive at a sensible description of the capitalist economy as it actually exists.

On the other hand, the Labour Theory of Value still does describe the *deep* structure of the capitalist economy, precisely because it abstracts from various complicating developments. Because it assumes no market imperfections, no barriers to competition, no lack of information on the part of economic actors, no government interference, no supernormal profits, no technological change,

⁸ Harcourt and Kerr (1996) provide a very suggestive image of this method by likening it to an onion, where at the centre there is the simplest, most pure, most fundamental model of the capitalist system, while the outer layers correspond to the successive complications being added to the basic model.

no non-capitalist power relations, etc., and yet still arrives at profit as the outcome of surplus labour, it shows that even in the best possible world capitalism is still based on exploitation. Effectively, it is saying that if the reformers of every stripe – from dyed-in-the-wool Austrians to the most collectivist-minded Social Democrats – had their way, the end result may well be better than the situation today, but the fundamental fact of exploitation, and thus of social division into classes, would still not go away.

Theory of Exploitation vs. Theory of Prices

In the last two chapters, the question of whether a theory of classes can still be based on the Marxian theory has effectively been answered. From what has been said, it should be perfectly clear that the objections to the Marxian price theory do *not* invalidate the Marxian theory of exploitation.

Indeed, at least the following six propositions can be distinguished in what is usually unproblematically thought to fit under the single name of the Labour Theory of Value:

Qualitative Theory of Value: Commodities are crystals of abstract human labour.

This is the basic assertion that the phenomenon of value, non-existent in pre-market economies, does not arise due to the subjective characteristic of the *usefulness* of commodities, but the objective characteristic of their being products of human labour under particular conditions. Thus, it is not the 'use-value' of commodities that allows their *generalised* exchange. Exchange due to use-values would allow at most a kind of limited barter, where the exchanging parties could directly compare the usefulness they would see in the commodities on offer. However, *generalised* exchange, manifested through the existence of money, is due to the fact that all commodities are reduced to their common denominator, i. e. the fact that they are products of abstract human labour.

Theory of Surplus Production: Absent technological change, the surplus of goods and services above the level necessary for maintaining the direct producers is always and solely due to their surplus labour.

This is the claim that there is no 'manna from heaven', nor 'productivity of capital', nor any other way that goods and services above the necessary level could come into existence without involving additional labour (the only other such possibility is technological progress).

Qualitative Theory of Profits: Profit bundle of goods and services is the result of capitalist exploitation.

This proposition asserts that profit is not the result of direct coercion; nor is it due to 'theft', whereby the workers would be paid less than their labour-power was worth (under the laws of the capitalist economy). Rather, workers take part in the process with a very particular characteristics (described below), which nevertheless results in the extraction of surplus labour.

Theory of Capitalist Exploitation: Under capitalism, there is extraction and appropriation of surplus labour which is

- 1. involuntary;
- 2. due to differential ownership of the means of production;
- 3. guaranteed in the last instance by force;
- 4. extracted through the wage contract;
- 5. contested during the production process

The surplus labour under capitalism is involuntary, unlike the surplus labour needed to support the sick and the aged, for example, which would be voluntarily given under Marx's Communism (see Marx 1951, p. 21).

It is due to the differential access to the means of production (conceptualised in capitalism as their *ownership*) because unless the workers work for the capitalists, they will starve, or at any rate live at a level below that considered worth living in the society.

It is guaranteed in the last instance by force, since the differential ownership of the means of production is not a law of nature and could be challenged by the non-owners — on the small scale by crime (theft, robbery, extortion, etc.), on the large scale by a forced re-distribution (land reform, expropriation of traitors, 'Aryanisation' etc.), or even by a social revolution (changing the very mode of production itself, rather than just the personnel of the propertied classes). To prevent these events, a police and an army force are needed.

It is extracted through a wage contract, i. e. the labour market, rather than through direct coercion or other forms of manipulation, such as for example the credit market, or other types of blackmail.

And finally, it is contested during the production process, because (as is well known), the wage contract is never complete – labour must be *extracted* rather than being resignedly given.

Theory of Exchange-Value ('Law of Value Part 1.'): Prices are values transformed so that the sum of values is equal to the sum of prices.

Under capitalism, labour becomes abstract and labour-power a commodity being bought and sold. The *prices* of individual commodities are just so many *vessels* of the general *substance*, abstract labour. This proposition thus asserts a

The reason for including this strange term is to point out that re-distribution need not always have positive connotations from the point of view of justice. During World War II, Slovakia had been a puppet state of Nazi Germany; under the ruling clero-fascist regime, a policy of so-called 'Aryanisation' was introduced, whereby Jewish businesses had been confiscated from their owners and given over to non-Jews (thereby purportedly becoming 'Aryan').

quantitative relation between the total labour value and individual prices of commodities.

Quantitative Theory of Profits ('Law of Value Part 2.'): Profits are surplus values transformed so that the sum of profits is equal to the sum of surplus values.

This proposition asserts a *quantitative* relation between the observable (in principle) volume of profits and the unobservable volume of total surplus value.

Now these are distinct propositions which do not necessarily imply each other. In particular, for our purposes it is very important to realise that the existence of capitalist exploitation, as stated above, needs to be postulated independently of the other five propositions. It is not actually logically implied by them. To see this, note that it is perfectly logically possible for an economy of simple commodity production at a subsistence level to exist. This would be an economy where all commodities would exist as values – thus proposition 1 would be satisfied. As we know, it would also be an economy where all exchange-values were exactly equal to prices 10 – hence proposition 5 would be satisfied. Assuming no self-exploitation, i. e. work over the necessary level, there would be neither surplus labour nor of course profit; hence the total magnitude of both would be zero and thus trivially the proposition 6 would be satisfied. For the sake of the argument, we may assume that proposition 3 is correct, although given that there are no profits in this economy, it has no bearing one way or another. Finally, we may also safely assume that that there is no possibility of 'manna from heaven' in this economy – thus, should products which are surplus to requirements ever appear, it would have to be through additional exertion of the productive powers of the direct producers – hence proposition 2 is satisfied. But, clearly, no capitalist exploitation goes on in this economy; hence the other five propositions are not enough to generate it.

¹⁰ Sraffa (1960, p. 12).

Conversely, I would like to claim that capitalist exploitation itself does not imply four out of the five of them (on Marxist view).

Capitalist exploitation *does* assume that proposition number one – the Qualitative Theory of Value – does hold. Marx described capitalism as the mode of production based on the exchange of abstract labour; without such an exchange, there is no possibility of a labour market, hence no possibility of a wage-contract and the capitalist wage-labour exploitation.

On the other hand, the fact that *some* capitalist exploitation exists clearly does not mean that there are no *other* kinds of exploitation, which could in theory fall under the observable category of profit. For example, slave-owners in the pre-Civil War South of the USA were slave-producing their cotton for sale on the market and thus for profit. Hence observable profit is not necessarily always a result of capitalist exploitation (contrary to proposition 3).

On the other hand, the existence of a degree of capitalist exploitation does not in itself mean that there could not be any 'manna from heaven', a bundle of goods and services which just appears without any effort on part of anyone. We may be rightly sceptical about such a possibility, but that would be on grounds independent of the existence or non-existence of capitalist exploitation. Its existence thus does not imply the theory of surplus production (proposition 2).

Finally, and crucially, the existence of capitalist exploitation in itself has *no* particular implications for the numerical values of either the total price or total profit. All the characteristics of that exploitation from a) through to e) may be in place, and yet the numerically speaking, there may be no connection between labour values and prices, nor between surplus values and profits.

This is an enormously important point, since it calls attention to the fact that no theory of prices is in itself enough to disprove the existence of Marxian exploitation. Thus not only is the existence of exploitation independent of Marx's particular theory of prices of production, as critics from Joan Robinson to Steedman have

claimed,¹¹ but conversely, even the subjectivist marginalist theory of prices does not show that capitalist exploitation does not exist!¹² The contrary impression arises only because the marginalist theory is usually inextricably intertwined with the assumption of perfect competition – and as we have seen in the last chapter, this effectively amounts to the assumption of simple commodity production, an economy with no surplus, no surplus labour, no profits – and thereby of course no capitalism.

It can thus be again clearly seen that the criticisms of an undifferentiated 'Labour Theory of Value', aiming at the Marxian theory of prices of production, do not in any way touch upon the Marxian theory of surplus production and exploitation. It might thus seem that the more-or-less sympathetic critics of the Joan Robinson variety are right, nothing essential is lost when the 'metaphysical' concept of value is jettisoned, and that all is well on the Good Ship Marx. Unfortunately, that is not quite so.

From Ethics to a Conception of History

The theory of exploitation on its own gives rise at most to moral indignation. But it was not Marx's intention to fashion an *ethical* theory. On the

¹¹ Joan Robinson (1942, p. 20): "...Marx shows that the development of the capitalist system is founded on the existence of a class of workers who have no means to live except by selling their labour-power. Capitalism first expropriates the peasant and the artisan, and then exploits their labour. The possibility of exploitation depends upon the existence of a margin between total net output and the subsistence minimum of the workers. If a worker can produce no more in a day than he is obliged to eat in a day, he is not a potential object of exploitation."; Joan Robinson (1942, p. 27): "I hope that it will become clear, in the following pages, that no point of substance in Marx's argument depends upon the labour theory of value." (Robinson; Steedman (1977, pp. 47-48): "[o]ne can derive values and surplus value, showing how the values of commodities other than labour-power depend only on the (...) physical conditions of production, while the value of labour-power and surplus value depend, in addition, on the real wages of the workers. The nature of exploitation is thus revealed (...) One can also derive from the physical picture of the economy a coherent theory of prices and profits. In doing so, however, one finds that, in general (...), profits and prices cannot be derived from the ordinary value schema".

¹² In a rhetorical form which carries something of an opposite implicature to what is being suggested here, this is a point also made by Steedman (1977, p. 58): "Neoclassical economists do not commonly invoke the concept of surplus labour but they could do so without causing the slightest inconsistency with their theory."

contrary, the Marxian insistence on the historicity of moral norms should be indication enough how little relevance was attached to the abstractly 'ethical' content of the theory. Instead, the idea was to provide a *scientific* theory of the objectively existing reality. Exploitation was meant to be descriptive of a real *process*, rather than just provide a basis for some abstract 'theory of justice'. Once such a shift in understanding towards ethics occurs, there is no telling where we are going to end up – there are, after all, multiple theories of justice, argued for on grounds which do not necessarily have anything to do with exploitation at all; and thus even the 'ethical' idea of exploitation might eventually easily be abandoned altogether. Indeed, the development of Roemer's 'Analytical Marxism' seems a perfect exemplification of just such a process. Without an anchoring in the objective reality of capitalist economic relations, that is, in the theory of prices, the idea of exploitation thus remains a pure spirit over the waters, which can be blown away by the winds of philosophical fashion.

Hence, I believe there was a *reason* why Marx insisted on the fusing together of an apparently 'ethical' theory of exploitation and an 'objective' cost-based theory of capitalist prices. Indeed, it was a reason which stemmed from the very core of the Marxian theoretical belief.

For Marx, the determining characteristic of each exploitative mode of production was the way in which surplus labour was pumped out of the exploited classes. This is a fundamental, non-negotiable part of the materialist conception of history. But then if this is to hold generally, it must hold for capitalism in particular. Hence it must be that the capitalist exploitation is inextricably linked to the determining 'laws of motion' of the system. And since the development of the capitalist economy is determined by the observable economic variables, such as prices, wages and profits, there is simply no way exploitation could be added as an optional extra to whatever theory of prices we happen to favour. The whole validity of the materialist conception of history hinges on the possibility that price-formation is wholly dependent on the mechanism of exploitation.

Thus, it is true that the theory of capitalist exploitation is logically distinct from other parts of Marx's theory, as we have claimed above. And it is also true that there is no deep problem with basing a conceptualisation of classes on that theory. The difficulty is that without being embedded in a broader Marxian theory, which necessarily involves the theory of prices as well as profits and other phenomena of capitalist reality, this conceptualisation of classes will threaten to become just a *description* on a par with the so-called stratification theories. No particular consequences for the development of capitalism will follow. Of course, there is nothing stopping us from putting forward a description of this type anyway, but the best we can squeeze out of it will be a notion of class struggle, voluntaristically conceived, rather than a theory of capitalism.

Is there a way out? I believe there may be. What the Sraffian approach shows is that in general, that is if we believe in the possibility of unproductive consumption, the Marxian notion of exploitation cannot be joined with the Marxian value theory. But that does not mean that exploitation is not relevant for the explanation of the 'laws of motion' of capitalism. All it means is that it is not relevant in the way Marx intended. What the Sraffian approach in fact demonstrates is that exploitation is indeed the determining factor for capitalism, generally conceived – for it is the existence of the capitalist surplus (profit) that is its basic notion. The difference with the original Marxian theory is that it does not require exploitation to exist purely because the relations of production, including the investment relations, effectively demand its existence. Exploitation can now be conceived to cover also the totally unproductive consumption. Now, admittedly, this is closer to the Ricardo-inspired idea that the capitalists are 'stealing' part of the value that the workers produce than to Marx's much more sophisticated account; but there is nothing doing, the logic seems to be pointing this way. Given this similarity with the Ricardian ideas, and given what we know about Sraffa's own left-wing political leanings,¹³ we could perhaps with our tongue in cheek term Sraffian economics the unintended great modern restatement of Ricardian Socialism.

Of course, many Marxists would likely be unhappy with such a conclusion, and not just because of the cheeky designation we have just given it. The more fundamental point is that while the 'cost of production' theory of value is not identical with the theory of exploitation, there is clearly a close affinity between a cost-based conceptualisation of value and the materialist conception of history. So close in fact that the two may easily become confused. For as I have argued, what the cost-based theory of value suggests is that it is the productive relationships which are the dominant feature of the economy; it is not difficult to see the similarity of this idea with the notion that it is the material conditions of human reproduction that are the determinants of social development.

Nevertheless, while there is again a pleasant 'dialectical' feel to this similarity, it should be pointed out that the two notions are in fact quite distinct. Even if we wish to believe that the economy is somehow the 'material base' determining the 'superstructure' of the society – an idea that is itself severely problematic, as will be argued in later chapters – it would still not be necessary for the economic variables to be determined solely by the productive relationships. The direction of determination 'economy - society' does not also require that 'production - economy'.

But there is a far more important point to be made about the Marxian notion of exploitation and its relation to the 'laws of motion' of capitalism. For the relationship between the requirement to use the notion of exploitation and the Marxian theory of value is not nearly as straightforward as it would seem, and the pleasing dialectical match between the cost-based theory of value and the theory of exploitation will turn out not to be so pleasantly close after all.

First of all, recall that the materialist conception of history postulates that it is the way in which the exploiting class extracts the surplus labour from the

¹³ See e. g. Sen (2003).

exploited class that determines the nature of a mode of production. On the basis of this conception, Marx undertook to examine the mechanism through which exploitation occurs in capitalism, where there is no direct coercion of the sort occurring in the pre-capitalist societies.

However, in arriving at the explanation of this mechanism through the extraction of surplus *value*, Marx in fact abandoned the conception that led him to search for this mechanism in the first place! For as we have already pointed out, surplus value and surplus labour are *not* identical in capitalism, on Marx's own theory. The workers who do not themselves produce any value, yet who are an integral part of the capitalist mode of production, might be 'economically oppressed', but they are not 'capitalistically exploited'. Yet, the initial definition of exploitation involved precisely simply surplus labour — no ifs, no buts. So on that initial notion, it is the surplus labour that is relevant, rather than just the subset that falls under the rubric of surplus value.

Thus, it would seem that there are at least *two* notions of exploitation in Marx's thinking, and there is a deep contradiction between Marx's 'General Theory' of society and his 'Special Theory' of capitalism. ¹⁴ Either exploitation is the extraction of surplus labour, as the General Theory would have it, and then the extraction of surplus value is just *one* form of exploitation under capitalism, contrary to the Special Theory; or exploitation in capitalism is solely extraction of surplus value, in which case capitalism does not seem to be one of the societies described by the General Theory.

The culprit, of course, is precisely the productivist, cost-based theory of value. It is only this theory that leads inexorably to the identification of the 'relevant' surplus labour in capitalism with surplus value – since the mechanism of exploitation that Marx identified relies on the fact of the difference between the *value* produced and the *value* consumed by the worker; and that value is 'cost-based', or in other words determined by the productive relationships. This is what leads to the 'unproductive' workers being left out of the loop.

¹⁴ These very useful terms are due to Roberts (1997).

Now an argument could be made that Marx was mistaken in claiming that the labour in the sphere of circulation is unproductive of value. In fact, I have already advanced quite a different interpretation of 'unproductive labour' as labour involved in the production of non-basic goods. Indeed, we might even extend this designation to the whole of that labour which brings into the consumptive surplus (to the cries of horror from traditional Marxists no doubt). Either way, what should be clear is that the logic of the productivist interpretation of value means that some workers will indeed not be producing value by definition, despite being involved in surplus labour. Although Marx did not adopt this interpretation, he *should* have adopted it, I think. He might have done if the full implications of his own theory of value were clearer.

But if this is so, if the 'capitalist exploitation' in terms of surplus value does not even in Marx's own description of capitalism coincide with his own notion of exploitation generally, then there seems little harm done in postulating that it is exploitation in this general sense which is relevant for the laws of motion of capitalism, and that it is fairly represented in the generalised Sraffian-von Neumannian approach — with the so-called Labour Theory of Value representing just one, albeit possibly empirically the most relevant, special case of that exploitation.

PART IV

INTEGRATING THE TWO CONCEPTS OF CLASS

Chapter VIII

A Beast of Many Faces Complex Exploitation, the Sphere of Necessity and the Sphere of Freedom

In this chapter, I would like to use what I found valuable in the work of other theorists to try to build up a theoretical picture capable of integrating the surplus- and the division-of-labour-oriented approaches to class. I am afraid that the reader may find the chapter somewhat slow-going, since there is quite a large amount of various distinctions that need to be made in order to be able to proceed with the analysis. I have tried to make these introductory passages as readable as possible, and I can only ask the reader to bear with me – in the end, I certainly hope it will have proved worth the wait.

Class Structure vs. Intra-Class Reproduction

I will try to come up with a satisfactory theory of how classes work in a modern society, but I have to point out that I will of necessity leave out a whole category of issues which ordinarily fall under the heading of class. These are the issues to do with intra-class reproduction, or in other words, first, how family background of individuals influences their class position, and second, whether an individual is indeed confined to a single class position throughout life, or whether there is a certain class *trajectory* they can be expected to take. Or to put it in yet another way, there will be no discussion of 'social mobility', either between generations or within them.

The reason for this has been stated at the very beginning. I am for the most part examining a simple model without individual birth, death, or disease; without sexual reproduction; without socialisation; without growth and development. Effectively, I am abstracting from all the features concerning the biological reproduction of individuals (simple and extended). This procedure is defensible, in fact required in my view, as long as the model is viewed as

concerning the perfect reproduction of *classes* as aggregates of individuals, so that when a proletarian dies, another is just ready to take their place in production, etc. While still an abstraction, I think it makes sense to proceed in this way, since as I am arguing, class-like features of human existence arise from the need for material reproduction, rather than other biological characteristics; while there are other kinds of reproduction associated with them, conceptually they point to a distinct problem area.

The cost associated with this abstraction is precisely that I have nothing to say about intra-class reproduction. That is, I will need to leave out issues which tend to be most closely tied to the problem of class in most people's minds, such as what standard of education they can achieve for their children (individually or as citizens and voters) and thus how they can improve their life-chances; what social networks exist that allow the high-status families to reproduce this status (Bourdieu's notion of 'social capital'); what sort of healthcare will be available to the members of the working class, if any; how extended will be the pension system in the society; etc.

I do not think it would be a very difficult exercise to try to extend the model in these directions. However, in order to do it, inevitably it would be necessary to bring into play problems of sex and gender; of biological age; and of the genetic lottery allocating potential for skills and acquirement of knowledge. All of these interact with the 'simple' class model to produce a far more complicated picture: it would be necessary to consider whether and how to apply the notion of exploitation within the traditional man-woman household partnership; how gender inequality is reproduced within the society and what implications this has for the social status of men and women when their classand gender-status diverge, in the sense of possessing high status in one dimension and low in the other; how biological age interacts with the societally conventional 'social age' (with students, productive workers and pensioners playing the roles of the societally young, mature and elderly); to what extent is the development of skills the result of social and genetic advantages

respectively, etc. These issues are of course enormously interesting, however there is simply no way they can all be considered within the scope of this work. All I would like to do is to provide the conceptual tools for analysing the questions of class in its simplest form, which might then serve as at least a part of the toolkit for the more detailed analysis.

I will confine myself to noting that we can think of the class structure of society as more or less rigid depending on how much intra-class reproduction there is. If an individual is fated to be born and die in the same class, never having left it, and if this is the same class as that their parents lived in, then this is effectively a *caste* society. To such a society, my analysis would apply best, since leaving and entering classes and the costs and benefits associated with these processes do not complicate the picture — so while classes may shrink or swell somewhat over time depending on their rates of natality and mortality, the abstraction that they remain exactly the same is reasonable. With extreme changes in their natality/mortality, this would no longer be true — but then this would very likely mean a change in the mode of production, since the old order could probably not accommodate such drastic changes.

On the other hand, if there is zero intra-class reproduction, this is still consistent with individuals ending up in the same position as their parents — as long as the probability of arriving at the position is independent of the the agents' origins. In other words, it is not intra-class reproduction that causes such an outcome; it may be the result of the agents' own, genuinely free choice, or some other influences — but not of the dead weight of class. This would be a society of what we could justifiably call *perfect social mobility*. Of course, no society on Earth is really like this, although some may be closer to this ideal than others.

intra-class reproduction

0	100%
perfect	caste
social	
mobility	

However, it needs to be pointed out that even if such perfect social mobility existed, this would not render the society classless. Let me discuss the issue first with respect to unchanging technology and then with technological progress bringing increases in productivity.

First, absent change in the technology of a given society, social mobility is a zero-sum game: if the same jobs need to be done tomorrow as are done today, then whoever manages to climb up to a better position must necessarily push someone else down to their own previous place. It is simply not possible for *everyone* to escape degrading class positions; someone *has to* be 'taking out the trash'. Thus, this would still be a society of class conflict, since the inferior places would always be occupied by someone.

Secondly, if there is technological progress, this does indeed mean that people as a whole could, in theory, escape the inferior positions, as those positions would be simply 'left behind' as no longer necessary. However, if such technological progress benefits all class positions equally, then this means that the *relative* class structures would remain exactly the same – the same hierarchy of classes would continue to exist, even if all of the classes in this hierarchy would be better off than before. To this relative class structure, the same applies as above: the only way to move up on the class ladder would be to knock someone else down. On the other hand, if technological progress did *not* benefit all the classes equally, it is hardly too much to expect that it would benefit the

higher classes *more* than the lower ones, rather than the other way round. It would be of course nice if a society decided to try to become more classless and thus, analogically to Rawlsian inequality (Rawls 1971), would devote itself to technological progress which benefits those at the bottom the most. However, if a society really *could* do that and *would* decide to do it, then it already lacks perhaps the most significant features of a class society – namely, that classes attempt to at least maintain their position, if not improve it.

The gap between the rich and the poor in the developed countries, especially the ones with the most pronounced capitalist features, which seems to be widening despite all the promises and even real measures of various governments, could be thought of as embodying precisely this process. The rules of the game are such that while there is indeed a constant stream of technological innovations, all these increases in productivity benefit those already advantaged the most; those with little claim on society's resources are thus being left relatively ever further behind. As a simple corollary, unless there is a very uncompromising sort of progressive taxation, ensuring after-market redistribution of incomes, this process can be expected to continue as a matter of logic: the control over the technological progress is in the hands of the wealthy, and thus it is inevitable that the fruits of this progress (absent strong class struggle of those below) will also be falling mainly into their laps. No amount of 'improved education' and 'workfare reforms' can change the fact that ultimately, society progresses by the development of productivity, and unless those gains in productivity accrue to different classes in a more balanced way, the top will be moving ever further away from the bottom.

Distinctions Regarding the Division of Labour

One of my main themes is the role played by the division of labour in class determination. I have mentioned some of the relevant factors in the earlier chapters. However, I have not yet provided a complete description of what I believe are all the characteristics of the division of labour which are significant

for class relations. This is what I will do now. At this point, these descriptions will necessarily have a feel of a kind of 'laundry list', since I will only be able to tie them properly together on the basis of later analysis – although even now a partial reduction to some common bases can be achieved.

Of course, just because the analysis has not yet been supplied does not mean that the list should be simply accepted. I will not provide far-reaching arguments for inclusion of particular features, but I hope that the reader will find my choices intuitive enough to be seriously considered.

In order to make the selection less arbitrary, I will start off by presenting examples of two class positions, a miner and a CEO of a large corporation, which are meant to represent polar opposites. The description will be somewhat stylised; it is likely, for example, that some education as well as quite a high level of skill is required in reality in the miner's job, unlike what will be the case in my specification. The point is that my description is only intended as a concentrated illustration of certain characteristics, an ideal type rather than a precise description of reality. After describing the two examples, I will try to come up with an abstract formulation of the relevant characteristics.

A miner, then, is engaged in hard labour, strenuous physical activity, whose purpose is to move matter. They have no subordinates to order around. No higher education is required for the job. In general, miners could be skilled or unskilled; let us for the purposes of the argument say they are unskilled. In a harshly exploitative society, the miner would be at or near the subsistence level of wages. Finally, the miner works in a dirty, dark, unpleasant environment, characterised also by a significant element of physical danger.

The top manager is involved in predominantly mental activity, interspersed with human interaction (attending meetings and giving out orders). By definition, they are at the top of the organisation hierarchy. Generally speaking, higher education is a must; equally we can assume quite a high level of particular skills. The top management can not only award themselves massively large salaries and bonuses, but also may actually own shares in their own or other

companies. Finally, the working environment is pleasant to the point of luxury. There is no physical danger, although there usually is a fair amount of stress involved.

The relevant characteristics can be described on a high level of abstraction as falling under five headings:

- 1. Objective of the job
- 2. Power of the agent
- 3. Requirements on the agent
- 4. Environment in which the job is performed
- 5. Responsibility carried by the agent

I would like to further analyse these highly abstract terms. To begin with, let me tweak the names of the five headings as follows:

- (1) Objective of activity
- (2) Capacity to act
- (3) Personal requirements
- (4) Conditions of the job
- (5) Weight of burdens

These terms are not particularly significant in themselves – they are simply a useful way of organising the salient characteristics themselves. These are enumerated below in terms of a series of polar opposites, with the exception of the very first heading.¹

It is important to note that the names given to the characteristics are by way of orientation only; they are to be understood in the technical sense described below, which does not necessarily correspond perfectly with their everyday use.

Objective of Activity

Material Transformation

Symbolic Manipulation

Human Interaction

From the materialist point of view, of course, *all* work is really transformation of matter. However, from the point of view of human society, the objectives of various activities may be significantly different. *Material transformation* proper can be defined as that activity whose main purpose is to change the physical characteristics of the environment — house-building, transport, factory work, etc. *Symbolic manipulation*, on the other hand, is that sort of work whose purpose is to operate on and with meaning — ranging from data entry through business planning to pure mathematics. Finally, *human interaction* is work whose objective is to provide a service by being directly involved with another person or persons — customer service, nursing, coaching, politics, etc.

Of course, all work really probably contains all three facets just described. However, it is nevertheless useful to distinguish between them, since their mix in various jobs will be quite different and frequently one or another will be dominant. Thus, the labour of a factory worker at the conveyor belt may be thought of as a paradigmatic case of material transformation; the work of the pure mathematics is a paradigmatic case of symbolic manipulation, while the activity of a call-centre operator may be understood as a paradigmatic case of human interaction.

Capacity to Act

Authority vs. Subordination

Power vs. Impotence

Autonomy vs. Rigidity

Authority vs. subordination, in the technical sense used here, refers to the direct personal relationship of command and obeisance, or in other words, the respective positions of two agents in a hierarchy.

On the other hand, power vs. impotence refers to the general scope of activities available to an agent. This is not power in the Weberian sense of being able to force others to bend to one's will; the former includes the latter, but it is not limited to human relationships. For this reason, 'authority' and 'power' in my sense do not stand in the traditional Weberian relationship to each other. An agent may have quite extensive power without having any authority over anybody, and conversely, it is possible for an agent's power to be much greater than their circumscribed authority. As an example of the first possibility, consider a driver of a bulldozer; they possess quite a lot of power, in the sense of being able to transform material reality in much more extensive ways than a generic individual. Yet they have no human subordinates at all. On the other hand, the prime minister of a representative government has the authority over their subordinates, but does not qua prime minister have authority over a generic individual citizen. For example, they cannot command an individual person in a restaurant to stop smoking (even though they may possess the power to push through legislation which forbids smoking in restaurants generally).

Finally, autonomy vs. rigidity refers to the degree of freedom an agent has in the performance of their job. Here I would like to refer to Wright's (1985, p. 55) example of the contrast between an airline pilot and a janitor – as Wright claims, the former has much less autonomy than the latter. That is the technical sense of autonomy that I want to use. Again, note that the relationship between authority, power and autonomy may be quite complex. Wright's pilot may have little autonomy, compared to the janitor; yet the power at the disposal of the former is far, far greater than is the case for the latter; and equally, the authority over the pilot is presumably much more circumscribed than in the case of the janitor. Rigidity may in fact occur in many situations where the agent in fact

possesses a great amount of power, and precisely because of that power – if it can

be easily misused, even by simple negligence, then the autonomy of the agent

may well be greatly circumscribed. Hence there is little space for autonomy not

just of airline pilots, but also surgeons, nuclear plant workers, etc.

Personal Requirements

Routine vs. Creation

Primitive vs. Skilled

Ignorance vs. Knowledge

All of these distinctions are fairly self-explanatory – routine vs. creation refers

to the issue of how far does the activity allow for creative self-actualisation;

primitive vs. skilled concerns the level of physical skill involved, or more generally

'knowledge how', while ignorance vs. knowledge is intended to describe the level of

cognitive 'knowledge that' which is required for the activity.

Conditions of the Job

Exertion vs. Ease

Clean vs. Dirty

Danger vs. Safety

Exertion vs. Ease refers to the degree of physical strenuousness of the

activity. Clean vs. Dirty concerns the quality of the environment in which the

activity takes place; it is intended not just literally, but also metaphorically – a

'dirty' environment is thus meant to include not just the possibility of the

presence of 'dirt', but perhaps also other sorts of unpleasant environmental

features, such as noise, noxious fumes, blinding light etc. Danger vs. Safety is

meant to include the degree of the direct physical danger present – other,

indirect types of threats are considered below.

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Weight of Burdens

Risk vs. Security
Responsibility vs. Non-Involvement
Stress vs. Calm

Unlike above, there is a problem here that there is a certain degree of overlap between these distinctions; at the same time, however, they refer to sufficiently different features to merit their separation. Thus, risk vs. security is the non-physical equivalent of the distinction just mentioned – a high degree of risk involves the possibility of great non-physical losses, while security entails the opposite. Responsibility vs. Non-Involvement concerns how many 'assets' and of what sort a person is obliged to maintain; although obviously this may entail a degree of risk, as defined above, this is not necessarily the case. It is possible to be responsible for fairly valuable assets which nevertheless are not normally threatened by many adverse circumstances – think of a shepherd in charge of a large flock of sheep (abstracting from the possibility that a wolf lives in the woods!). Finally, stress vs. calm refers to the degree to which the circumstances of the job increase the person's internal tension; again, both risk and responsibility are clearly related, but again, do not exhaust the possible space of stressful conditions – stress can be caused by a large amount of low-risk, lowresponsibility tasks; on the other hand, responsibility may not disturb the person's calm – think of the shepherd again – and a situation which is inherently a high-risk one may not involve extreme levels of stress for someone highly trained for just such an eventuality.

As I have said at the beginning of this section, this list unavoidably appears to be somewhat arbitrary at this point. I beg the reader's patience; it will turn out that the distinctions made are significant and can be integrated nicely into a more general picture of what characteristics of the division of labour are relevant for class determination.

Two Questions

I started off with two problems embodying the difficulty of grasping the class structure of modern capitalism: the 'separation of ownership from control' and the 'embarrassment of middle classes'. The first causes difficulties because for the most part, there are no longer capitalists of the sort Marx was describing. The second is problematic because neither does the whole of the people nominally engaged in wage-labour resemble proletariat of the sort Marx was describing.

In a sense, the answers are obvious. In the first case, the single capitalist simply diverged into the stock owner on the one side and the top manager on the other side. In the second case, differences in access to income, education, opportunities for employment etc. created a cleavage between the middle and the working classes.

The problem is how to fit these 'obvious' answers into the Marxian framework – since, as I have argued earlier, as it stands the Marxian picture necessarily recognises only two polarised classes within a single mode of production; basically the exploited and the exploiters.

The Embarrassment of the Middle Classes

To the latter question, I want to give a short shrift at the moment. What I have to say on it is not particularly original; it is only in combination with the answer to the first question that matters become more interesting.

So, to begin with, let me say that the orthodox Marxian picture, under which it is only the exploiters who benefit from surplus labour, is clearly inoperative in modern society. In the advanced capitalist countries, almost no one engaged in productive labour can be regarded as being paid subsistence level wages, in the sense of wages that *just* suffice for reproducing their labour-power. Hence it must be the case that the vast majority of producers do actually share in the surplus they produce. For this reason, it is impossible to

differentiate the exploiters from the exploited purely on the basis of the appropriation of surplus vs. receiving subsistence.

Equally, it is not possible to simply divide the producing group into class-relevant subgroups on the basis of the *amount* of income/surplus that they receive. This would be a regression to the simple stratification view of classes, where division into classes depends on the arbitrary decisions of the theorist as to the relevant income bounds and where classes stand in no particular relation to each other.²

The relevant factor for this dimension of class is not what income the various groups of people achieve, but how they achieve it. In particular, I would like to distinguish between three different subgroups, roughly corresponding to 'capitalists', 'professionals' and the 'proletariat'.

Starting with the professionals, this is the group of people whose salary includes an element of rent. The reasons may be varied. It is possible that they possess a special natural talent which makes them exceptional and this is the reason for their favourable position in the labour market. On the other hand, they may have special skills which are acquired rather than inborn, or finally, the access to the resource due to which they extract rents is artificially restricted, so that the supply of the skill is lower than it otherwise would be.

This group of people could be quite appropriately termed the 'new petty bourgeoisie' in some respects, since it has one thing in common with those who had this label attached to them in the past. Namely, this stratum possesses the specific 'internal means of production' (talents, skills etc.) that makes it possible for them to extract the rents, whereas the old petty bourgeoisie possessed material means of production which allowed them to operate outside the mechanism of capitalist exploitation.³ In both cases, the important point is that

There may be a certain role for the income segmentation later on – given the different amounts of income, people have access to different consumption experiences, which in turn makes similarly earning individuals also similar in their experiences of life. This would mean that there is a relational aspect to income segmentation after all. Nevertheless, the question of boundaries would remain.

³ This idea of the (new) middle class as based on special skills or talents is of course

the possession of such means of production allowed a *relative* independence of the capitalists, but never a complete one. This is obvious in the case of the 'new'; but even the 'old', given that they had to operate within the capitalist market, where they were acted upon by forces of much greater magnitude, could hardly be understood as the proud independents of their own imagination.

Below the 'professionals' are the 'proletarians', who in this abstract picture by definition possess no special talents or skills whatsoever — they are to be thought of as able to perform only the lowest possible form of labour. This group thus cannot achieve rents through individual distinction in the market place. The only way in which they can partake in the surplus is then through collective action — extra-economic activity which allows them to negotiate with the employer from an improved position. Basically, it is only unionised activity and in particular the threat of striking that can guarantee them a share of the surplus.

Finally, the 'capitalists' are those whose portion of the surplus is neither due to their scarce personal characteristics nor due to collective bargaining, but simply to their claims of ownership of non-human resources (and in a monetary economy, access to finance).

Obviously, in real life there the dividing lines will not be as sharp as in the abstract picture. However, the concepts do provide us with a way of looking at the sources of income and thus deciding on the closeness of a particular position to one or another of the three extreme positions.

The point here is not that this is an exhaustive definition of the three classes. Such a full description still awaits us below. Rather, it is a suggestion of how a simple distinction of the sources of economic power can be made to work even within the context of Marxian exploitation to carve out three, rather than just two classes.

not anything new; it can be found e. g. in Giddens (1983, p. 107), where it is in fact inspired by the discussion of Weber's views.

Managerial Control: Operation of Power vs. Conceptual Activity

As I have argued above, the responses to this problem are all to do with the division of labour, or more precisely, with distinguishing managerial activity from the rest of production.

There are essentially two kinds of answers. One may either concentrate on the *power aspect* of the managerial position, or on its *conceptual aspect*. We may want to say that the managers and supervisors are actually engaged in functional and/or active exploitation, and thus 'really' either belong to the capitalist class, or at least to some third grouping. Or we may want to claim that the managers monopolise the decision-making, skilled intellectual activity, and/or coordination tasks in the enterprise and therefore arise above the workers themselves as a separate grouping.

I hope I am not misrepresenting anyone's position too much if I say that the first type of answer more or less corresponds to the views of Wright and Carchedi, while the second to the ideas of Poulantzas, Bahro and Albert & Hahnel.

While I think that conceptual or mental work is indeed a significant part of the managerial activity, I believe that the authoritarian nature of the capitalist organisation of production is far more significant. This is because the so-called 'mental labour' occurs in many capitalist contexts other than management, and hence cannot be thought to be *the* determining feature of this sort of position. On the other hand, the position of authority within capitalism pretty much defines the managerial position (notwithstanding the fact that authority also occurs in non-capitalist contexts; I promise that the issue will be dealt with below).

I will be using terms such as 'power', 'authority' etc. fairly loosely and interchangeably.

Authority: Nature, not Function of an Activity

I have already argued against Carchedi's position previously (Chapter I). Here I will briefly repeat that according to this author, the management intermittently performs both the 'function of labour' and the 'function of capital'; the first one corresponds to the necessary organisational tasks, while the second is the activity of creating surplus value, i. .e active exploitation.

My argument against this position was that authority cannot be identified with the activity of exploitation, both because it occurs in non-capitalist contexts and because the 'function of capital' requires the activity of others beyond the managers (such as accountants, secretaries, sales and marketing workers, etc). Here I want to generalise this argument and thus further extend it.

The basic objection to the view that the authoritarian direction is tantamount to the 'function of capital' is simply that it confuses the function, or the *purpose* of the activity, with its *nature* or *content*. To distinguish between authoritarian co-ordination and other sorts of work is to talk about *what* is being done, what characteristics the activity possesses. These characteristics are to a large extent independent of the purpose which they serve. That is why the managers in the former Soviet-type regimes did not perform actions significantly different from their Western counterparts, even though their function was not to achieve profits.

Equally, it could be argued that the function of *every* worker in capitalism is to contribute to the accumulation of capital. Granted, this may not be what the workers themselves wish to do, nor do the non-managerial strata need to identify with the company the way the management for the most part does; but these are side issues. The fact remains that in order for profit to be achieved, production must go on and every participant in it must put in their hours – and so each of them does contribute to the purpose of capital accumulation. That managers are somehow different from other workers is clear, but the distinction is hard to make in terms of purposes (other than subjective ones). This is also why Carchedi has been attacked for failing to explicate properly his distinction

between the function of labour and the function of capital (Cottrell 1984, pp. 84-87) – the former seems to not refer to function in the sense of purpose but rather in the sense of activity, which is not the case with the latter.

Moreover, there is even a more telling objection to the idea that authoritarian co-ordination can be identified with exploitation. This is that authority can be delegated, and it can be delegated even to the exploited themselves that is to those who undoubtedly do belong to the exploited classes and do not cease to belong to them in virtue of acquiring the authority. For example, slaves of antiquity apparently could be charged with the role of a supervisor (Marx 1966, pp. 384-385), without thereby ceasing to be slaves; they were still just a 'talking tool' to be dealt with as the master happened to wish at any point in time. They did not turn into masters in virtue of their authority over other slaves. Even more clearly – and gruesomely – from among the prisoners in the Nazi extermination camps, who most definitely were providing more labour than they were receiving back in the form of sustenance and thus were exploited in the technical sense, the camp officers had selected the so-called kapos, who were charged with responsibility for groups of other prisoners. While the kapos had certain privileges and the capacity to mete out punishment to their fellow prisoners, this did not make them equal to the SS guards; their fate for the most part was just as sealed as the fate of their 'underlings'.

Finally, authority can at least theoretically exist without any (parasitic) exploitation whatsoever. Think of the ideal-type Protestant Ethic type of capitalism, in which the bourgeois deprives his wife and children of everything but the most necessary subsistence in order to plough all the profits back into production; here, consumption of all the producers involved is more or less the same, and yet some possess authority over the others. We can even imagine a pure subsistence society – one in which nobody consumes above the level just necessary to survive and no surplus exists above the level of necessary inputs – in which nevertheless an internal hierarchy exists with the chief at the top. Traditionally the Marxist view would be that such a society is strictly speaking

impossible, primitive communism being the rule in the conditions of subsistence, but this requires an argument rather than just an assertion.

My view is that within the capitalist social formation, the managers both perform the function of capital, in that they organise, supervise and enforce production for the purpose of achieving profit, and that they do it by being engaged in an activity of an authoritarian nature. It is the coincidence of both of these features that is chiefly responsible for delineating their particular positions in production. As argued above, many if not all workers can be thought of as 'working in the interests of capital'; and conversely, authoritarian activities can occur in contexts other than capitalist production. It is when both of these features coincide in one locus of positions that we know we are speaking of managers.

Authority - in Production and Otherwise

Nevertheless, there is something very distinct about the specifically authoritarian nature of production, and it is hardly a coincidence that many division-of-labour theorists tended to gravitate towards it as a solution of the problem. Authoritarian relationship are very *class-like*, in that they create a polarised structure of the superiors and the subordinates (at least in their simplest form), which involves an obvious conflict.⁵

In fact, there are several such systematic conflicts tied to the authority-subordination relationship. On the one hand, the existence of authority can be taken as an indication that the subordinated are ordered to do things they would otherwise not do – things that they find distasteful. Hence there is a conflict that stems from the nature of the orders given. On the other hand, it may be the threat of harm, in case the order is not carried out, that the subordinated find

I should emphasise that throughout the discussion, I am *not* referring to the 'received view' of authority and power, due to Max Weber (1964) – although obviously no such discussion can avoid touching upon Weber's points, I do wish to use both 'authority' and 'power' in my own way, clarifying the relation to the received view where necessary.

psychologically harmful. This would give rise to a different sort of conflict, stemming from the desire to avoid the stressful experience. Finally, it may be that it is not the threat of being harmed, but simply the experience of being subordinated to another's will that causes friction. If humans possess an 'instinct for freedom' (Chomsky 1988, p. 155), then it follows that the position of subordination will give rise to conflicts even if the particular orders given are not particularly distasteful and even if the tacit threats are not causing great psychological discomforts.⁶

The trouble is that these conflicts show the relationship of authority to be different from the relationship of exploitation. In line with this, the conflict groups associated with the former – the rulers and the ruled – are by their nature different from the groups associated with the latter – the exploited and the exploiters. In particular, to generalise the objections used against Carchedi, authority relationships can exist within the parts of the society that rely entirely on the surplus and in which no actual production is taking place – the army is a prime example. So in a society with exploitation, there may be groups of superiors and subordinated that do not overlap in any way with the exploiters and the exploited. Conversely, the idea of a subsistence society with an authority structure suggests that authority conflict groups may exist even without surplus production and thus without any exploitation at all.

All this is very threatening for any theory which tries to claim that it is exploitation that underlies class structure. The need to illuminate the nature of

The idea that classes should be identified with 'conflict groups' arising from the relations of authority was propounded by Ralph Dahrendorf in his (1959). Dahrendorf, basing himself on the Weberian account of authority, claimed that these conflicts can be understood as conflicts over legitimacy of the authority. In fact, even a cursory glance at the sort of conflicts I have just described reveals that legitimacy is in fact called into question only after some sort of grievance is already in play; and conversely, that the conflicts described are present even j the authority in question is considered legitimate.

An assumption is being made here that the army is allocated its part of the produced surplus by the exploiters, without itself having any input either into its production or distribution; such an assumption can, in my view, be more or less justified in various places and periods of history.

the relationship between authority and exploitation, however, arises not just from the possibly dogmatic motivation of subsuming the one concept under the other. It may well be that the two phenomena are connected in another way – their relative position in the hierarchy of importance may be the other way round, or both could be just effects of a third cause. However, unless one is satisfied with a theory which simply declares every conflict-generating process within the material reproduction as creating a type of class relationship, one is simply bound to ask about the real nature of those conflict-generating relationships.

The classical Marxist view, of course, was for the most part that authority relations are *dependent* on the existence of exploitation. As Engels put it in the famous quote,

"men must first of all eat, drink, have shelter and clothing, and therefore must work, before they can fight for domination, pursue politics, religion, philosophy and so on" (Engels 2002, p. 69; bold emphasis added.)

from which it can be easily deduced that if the 'eating, drinking, having shelter and clothing' is primary, and everybody's time is fully taken up by making sure it is secured, then of course, there are simply no resources for the 'fight for domination'. This was fully in line with the widely-shared expectation within the socialist movement that the advent of communism would do away with all sorts of oppressions and social ills; the brotherhood of human race would have no need for authority structures and the State itself, as their most pronounced embodiment, would wither away.

However, a rather different view was expressed by a much later Engels in his On Authority (1951), written in polemic with the anarchist currents within the working-class movement and within the First International in particular. There, it is strongly claimed that a revolution – itself authoritarian in nature, in that it forces the will of one part of the population on another – would not do away

with authority at all; in fact, the modern factory would be impossible without it. It is fascinating (as well as depressing) to see how closely this argument resembled Lenin's views in the row with the Workers' Opposition within the Bolshevik Party after the Russian Revolution (Lenin 1965b); the Soviet leader was absolutely adamant that 'one-man management', in other words an authoritarian organisation of labour within a factory, was an absolute necessity, and rejected any idea of the trade-unions 'interfering' with the manager's prerogatives (Lenin 1966, pp. 188-189).

Thus it can be seen that the issue of authority was not at all an uncomplicated one for the Marxists, not least in the very real terms of government. The results are well-known and seem to strongly support the view that authority can in fact give rise to relations which are almost indistinguishable from the class relationship.

For all these reasons, I would like to examine more closely how authority stands in relation to exploitation, which is the purpose of the next section.

Authority in a Subsistence Society

The tool I want to use in this analysis is the notion already alluded to several times, namely, a subsistence society with an authoritarian hierarchy, just because its structure is relatively uncomplicated.

How could hierarchy arise in a society without surplus production? Well, it need not be such a society from the beginning. Authoritarian organisation is a specialised work-role, and as with all specialisation, it requires initial investment, so that the work undertaken whoever is becoming the specialist can leave their previous work without that disrupting production. In other words, imagine that a society reaches a stage where surplus becomes possible; this surplus is indeed produced and usurped by a chief; the chief then directs production in such a way that he forces people into unpleasant or dangerous activities that they

would not have undertaken before (mining, let's say). This changes the productive structure of the society (the technology used) in such a way that fewer people are now directly involved in producing food and more are in the 'dirty' production of 'capital goods' (tools etc., which are held in common). Next, imagine that all this leads to the result that the society does not actually produce more than the reproductive needs of its members – this is because the mining or even the tool production are more demanding than the activities undertaken before, and the agents involved in them require more nourishment – thus, despite an increase in productivity, there is in the end actually no surplus. Even the chief gets only just enough to survive. Finally, imagine that this situation reproduces itself over time, so that it becomes the stable mode of existence of this community.

Now, I claim that this is a society without surplus production, in which authority nevertheless exists. What was formerly surplus is now a necessary input – the chief must be fed, because he has become indispensable; without his authority, the unpleasant and dangerous activities would not be performed, or at least not to the sufficient degree, which would threaten the survival of the whole community. Therefore, while the chief's 'slave-driving' may not very much look like necessary labour, it is certainly, for this particular society at this equilibrium point, part of the necessary activities.

It would still be possible to declare the chief's activity 'non-labour', as for example Carchedi indeed does in his Class Analysis and Social Research (1987). The feeling behind such a declaration is obvious and easily shared. However, I still think that such a label should be attached to the activity as a result of the analysis, rather than become a premise of the argument by fiat. Just what is it that makes us feel the chief is not really working – if indeed we do feel that, which may not be the case for everybody.

Possibly by taking part of the usurped surplus and offering it to a few others who then perform the role of the enforcers – this possibility will be considered below.

The first thing to note here is that regardless of the validity of the particular example, there may be good reasons for at least some sort of authority to exist – and in fact, not only may that authority not be exploitative, it need not even be 'oppressive'! The point is that if the society requires things to be done which bring disutility and thus which are not done to the degree required, it may decide, say with the agreement of all its members, to create a driving authority that ensures things get done, with the proviso that it can also abolish the authority again if it so decides. In other words, as an individual, everybody is subordinated to the authority; all members collectively, however, have opportunities to decide to get rid of it.9 A different example closer to home would be hiring a personal trainer in order to get fit. The trainer is indeed an authority over the hirer in a particular dimension, and the authority is accepted even when it demands unpleasant things to be done, i. e. things the person would likely not undertake of their own free will. And yet, the trainer is not a dictator - if the trainee decides to step outside of the context of subordination (even just in their mind) and fire the trainer, they are free to do that any time.

Authorities of this sort might be claimed to not be 'authoritarian' in an important sense: while they do require obedience even against their subordinates' will, they are nevertheless accepted voluntarily, since the subordinates have the possibility and opportunity to abolish them if they so wish. This relationship is thus a special kind of 'authority game': while playing by the rules, the subordinates must obey the authorities — as in football and other games, the players are bound by the decisions of the referee. However, the subordinates have no problem deciding that they no longer want to play the game and therefore relieve the referee of their duties.

Modern representative democracy to some small extent resembles this structure, in that it is possible to change the personnel of the authority structure; however, that is a far cry from the situation being described here, for as the anarchists wittily remark, 'it doesn't matter who you vote for – the government always gets in.' To collectively decide to abolish the whole authority structure of a modern state is simply beyond the means of the populace – it cannot costlessly step outside the rules of the game.

The important point here is that the abolition of the authority is costless for the subordinates. It may be a hopeful view of human nature that no dictatorship can survive indefinitely, and so in a sense that there is always a possibility of stepping outside the rules of the game. But if the gateways leading out of the stadium are heavily guarded by merciless killers – to continue the metaphor – such an attempt exacts a very high cost. Contrariwise, the situation I am describing is one where the opportunity to abolish the authority structure is there as a matter of course, as a matter of living and lived right.

If this is the sort of authority that can exist in a subsistence society, then all is well. For while there is a notional, even real division into the rulers and the ruled, I would argue that there is no real division into classes. True, systematic conflicts do arise that arise from material production; but nevertheless, there is no obligation on the class of the 'subordinates' to accept their position if they do not so wish. It is obviously not a society of full equality, but still one where the differences between people do not *automatically* reproduce themselves, i. e. where there exists a stable class structure.

On the other hand, this situation – if it ever existed – seems clearly unstable and transitional. It may either collapse back into full egalitarianism, or the opposite may happen, something which I think we would find all too imaginable. That is, the authority may come to abuse its power, in that it cements its position in such a way that abolition becomes impossible (other than at a high cost, that is). How could this happen? This is where the paradoxical nature of the notion of 'abuse of power' comes in. Since all power involves bending someone else's will to one's own, then a single individual may be forced to obey even when the authority commands them to do more than they bargained for when, as the part of the collective, they decided to create it. In fact, if the authority is to work, then the individual *must* obey, since it is precisely the nature of authority relationship that despite their dislike of the order they are obliged to carry it out. Thus, the abuse of power is inherent in power itself; since power must not be challenged, a subordinate cannot

challenge it even when it 'oversteps the mark'. Thus, the initial 'non-authoritarian' authority may direct its subordinates to create conditions that will prevent them from carrying out the decision to abolish it.

If that is the case, then the Marxian picture *is* in trouble, because now we have a bona fide authority whose existence and role is nevertheless necessary, given the technology used by the given society, and thus which takes part in the necessary labour. Classes do seem to be developing without the presence of exploitation. What can be done about that?

Authority: Personal vs. Structural, Auxiliary vs. Commanding

There is a possibility of trying a kind of reduction ad absurdum, arguing that in fact, the description is deceiving and really, there *is* exploitation going on. In order to make the argument, let me first make a two-fold distinction: first between the *auxiliary* and the *commanding* authority, and second, between the *personal* and the *structural authority*.

The second distinction is fairly straightforward and commonly used. One can either be an authority because of a place they occupy in some larger social structure—like the officeholder of a government, or the manager of a firm—or, regardless of social relationships, because they personally possess some characteristics which make others 'sit up and listen'. This is not limited to Weber's 'charismatic authority'; a gang leader may not necessarily have a lot of charisma if they possess enough muscle to keep any individual subordinate in line.

The second distinction is really also quite familiar, despite the fact that we tend to almost always think of authority as commanding. Yet, it is one thing to say that somebody is 'in a position of authority', and quite another to say that somebody 'is an authority' on a particular question.

In this latter case, it is true that the person's view on that issue is more likely to be accepted than somebody else's (even if that somebody had

presented exactly the same arguments). In other words, being an authority on something gives reasons to follow the authority's ideas.

However, what it emphatically does *not* imply is *necessity* of following those ideas. As the anarchist Mikhail Bakunin put it,

"[i]n the matter of boots, I refer to the authority of the bootmaker; concerning houses, canals, or railroads, I consult that of the architect or the engineer. For such or such special knowledge I apply to such or such a savant. But I allow neither the bootmaker nor the architect nor savant to impose his authority upon me. I listen to them freely and with all the respect merited by their intelligence, their character, their knowledge, reserving always my incontestable right of criticism and censure." (Bakunin 1980, p. 233)

In other words, the proper meaning of the authority of an expert is that we accept their position as a trusted advisor. A famous scientist, a deep thinker, a seasoned practitioner are figures that are equal to the questioner who demands their opinion; they may be superior in knowledge, but that does not make them the questioner's superiors. In short, although authorities, they are not automatically 'in a position of authority'.

This is the type of authority I would like to call 'auxiliary' – since its main role is to assist rather than to give orders. It may come in the guise of purely *epistemological* authority, one that simply expresses opinions on a particular matter, or more involved *pragmatic* authority, which provides advice on actual courses of action.

This second type of auxiliary authority represents a step closer to the more familiar, vastly more widespread type of authority, the one I called 'commanding'. I think it is quite clear what I mean by that, especially in contrast to the auxiliary authority. A word of explanation is needed though to explain how a commanding authority is at all possible.

Unlike in the auxiliary case, here the wielder of authority is capable of changing either the subordinate's behaviour, or even their own internal will. The

first type of enforcement is external, the subject may still preserve the wish to act differently, but facing the consequences, decides not to. In other words, the authority must be able to wield a threat, some sort of *sanction*, which would result if their will were not obeyed.

The second case is in some ways more interesting. The authority here is capable of actually changing the subordinate's mind – but *in a very particular way*. It needs to be emphasised that it is *not* through rational argument, through appealing to the authority's superior knowledge, or any other means which might be considered rational. Those are hallmarks of auxiliary rather than commanding authority. The point is important, because this type of commanding authority is able to change the subject's will *even if* they cannot rationally convince them to do so. Instead, the authority is capable of evoking an emotion that it should be obeyed, regardless of the original wishes of the subject. In other words, the subject needs to feel an *obligation* to obey, and this regardless of what they were originally willing to do on their own, and regardless of whether they are convinced that the carrying out of the order is rational.¹⁰

In the real world, it is likely that purely commanding authority is rare; even in the best drilled army in the world, there are presumably times when it is simply more efficient to explain the orders given—in other words, to rely on the auxiliary rather than simply commanding aspect of authority. However, the important point is that the commanding authority does have the recourse to sanction and/or obligation, if need be.

There is a certain similarity between Weber's legitimacy and the concept of obligation used here, but only up to a point. For it is quite possible to imagine that someone feels a certain authority – such as a country's government, for example – is legitimate, without feeling any particular obligation to obey it. While legitimacy refers to whether the exercise of power is accepted, obligation concerns the question of whether the subordinates feel a duty to obey. Nor is 'sanction' exactly the same as Weberian 'power', despite appearances – since power refers to the ability to make the subordinate carry out the superior's wishes, which can be achieved by instilling obligation rather than threatening by sanction.

Rudimentary Authority vs. Authority Proper

Having made these distinctions, I would like to make the next step in the argument, which is to say that neither sanction nor obligation are available to the authority 'free of charge', so to speak. Given that commanding authority exists in order to make subordinates do what they do not feel like doing, I claim there is a natural tendency for it to decrease in efficiency over time. In other words, resentment and defiance build up over time and undermine the authority's strength – unless that strength is being maintained. This requires resources. I have already suggested this in my example above: that power cannot be held indefinitely without investing in the 'means of power'. Here, it becomes clear that either the means of sanctioning or the means of creating obligation must be available. In other words, if the sanction available is in the form of a guard of armed men who may be called upon to enforce orders or to quell any possible rebellion large or small (including crime), then resources must be devoted to their maintenance, as well as to the production and maintenance of weapons (weapons that cannot be used exclusively for the production of food, as might be the case in a hunter-gatherer egalitarian society). On the other hand, if the obligation takes the form of religious duty of obedience owed to a certain stratum of the society, then again, resources must be devoted towards the maintenance of priests and any other members of the religious structure, towards the physical maintenance of the places of worship, and to any rituals that are used to regularly strengthen the obligation within the subordinates.

The claim is, then, that in a society at a relatively unproductive stage of development, where there are relatively few resources available for maintenance of such groups of agents not directly involved in the production for immediate needs (food, clothing, shelter, etc.), no *structural commanding authority* can really develop. It is possible for a certain 'rudimentary' authority to exist. This is either auxiliary, as in fact is the case with the 'Big Men' described by Sahlins in his 'Poor Man, Rich Man, Big-Man, Chief' (1963), who acquire their authority through superior contribution to the overall production for the community; or

it can even be commanding, if it is personal authority of a 'strongman' who can enforce his will through his own sheer physical strength. However, anything beyond that is impossible, for the structure required – namely the specialisation in sanction and obligation – cannot be maintained; any such attempt would fall apart. David Graeber (2004), on the other hand, points out the examples of 'primitive' societies which instituted safeguard against the rudimentary authority ever becoming structural.

Finally then, the conclusion I would like to draw is that to have a structurally stable division into the ruling and the ruled, it is necessary for one group of people to provide the material means of subsistence not just for themselves, but also to provide enough maintenance for another group not directly involved in the production of these means of subsistence — and furthermore, the former group is likely to have to be able to produce even material goods which serve neither for consumption nor for subsistence production (such as weapons and temples).

Now, this is all very well, but what about the objection made earlier? It may sometimes or even often be the case that the military rulers/priests are in fact exploiters, in the sense that the direct producers of subsistence could easily carry on without them. But what if they are not? The possibility must be admitted, as before, that in order to overcome the disinclination of the direct producers towards unpleasant tasks, a structure of authority might become necessary; and so we are, it seems, no further towards the solution of the conundrum.

Against this, it might be argued that there are counter-examples in the forms of small communities of survivors from various disasters, where in fact quite clear lines of authorities had emerged even at the subsistence level. But this objection is easily rebuffed: for the people in these sorts of communities have been carrying the understanding of obligation with them, in their heads. After a lifetime of acculturation to the society organised along authoritarian lines, it is no surprise that the 'natural' way of organisation is authoritarian, too. This is quite similar to how the economist, Dean Baker (personal conversation), objected to the famous 'emergence of the market in a POW camp' paper of R. A. Radford (1945): the market did not in any way simply naturally 'emerge' under these conditions, it had been present in the POWs' minds from the beginning.

On the other hand, if instead of talking about necessity I simply described a society where a group of soldiers and priests made a mass of peasants work for them, hardly anyone of a Marxist persuasion would have a problem with seeing this society as clearly exploitative. How can this be possible?

The trouble is, there seem to be *two* conceptions of exploitation which may often coincide, but importantly sometimes diverge. The one I have been overwhelmingly using is the 'Sraffian' one, which is very well defined and counts as surplus labour only those activities which go into the production of the surplus over the necessary inputs (which include the maintenance for those who organise production, and any other inputs required for their continued existence, etc.) On the other hand, it could be argued that the proper 'Marxist' exploitation involves surplus *labour*, where labour is clearly understood not to include activities such as enforcing orders or making animal sacrifices in temples.

Of course there is something that feels right about this latter, narrower interpretation; however the whole reason why I originally adopted the Sraffian approach is that the intuitive idea of 'labour' does not work all the time, and in particular does not clarify the position of the troubling groups. Is it possible to decide which of these two views is the correct one?

Onwards to Complex Exploitation

I am convinced that the reasons for adopting the Sraffian approach are sound. To spell it out, I believe the Sraffian interpretation provides a very well defined understanding of what are both the necessary inputs and the surplus, and therefore also necessary and surplus labour. It gives us a very clear idea of what is exploitation and how it fits together with the particular form of the surplus in the capitalist society, namely profit. These are great virtues, compared to the vague, intuitive understanding that preceded it.

Therefore, instead of trying to save the allegedly 'Marxist' interpretation of exploitation, I propose to try to salvage what elements of truth are in it by

allowing that there is a phenomenon which is *similar* in its form to exploitation, while not possessing all its characteristics, and that it is *this* phenomenon which both explains our intuitive feelings about certain types of activities and underlies all the class-relevant characteristics.

What is it that prevents 'exploitation' from being a good characterisation of the relations between the rulers and the ruled in the sort of subsistence society described? I think it is clear by now that while there is a division of productive activities which seem relevant to the existence of class, there is no surplus for purely parasitic consumption. So, what if we tried to *generalise* the notion of exploitation in such a way as to cover similar cases?

Content and Function

In the course of discussion of Carchedi, I made a distinction in passing between the *content* of labour and the *function* that an activity plays in the economy. I would now like to make this distinction more precise and then try to theorise on the one hand, how the content of labour can be integrated within the wider theory using the concept of complex exploitation; while on the other hand, how the different functions allow for the consideration of agents outside of the direct exploitative relationship.

So, if we do believe that the exploitative relationship gives rise to a systematic, materially-based conflict between the two classes, then it follows that in order for the relationship to persist over time, there must be ways in which the conflict is being contained. In other words, the exploitative relationship can reproduce itself only under certain conditions. Certain *functions* must be performed in order for the exploiters to keep their position as exploiters, and for the exploited to remain exploited.

Now we have already seen Carchedi's attempt to theorise the 'function of capital' in terms of the 'non-labour' performed in order to extract surplus value; this 'non-labour' was characterised as the work of surveillance and control. Against this attempt, I argued that there is nothing intrinsic in such authoritarian

work role that makes it a 'work of exploitation'. An authoritarian division of labour can exist even under conditions of subsistence, if such a division of labour is the only way for the given society to survive.

The conceptual reason why Carchedi's attempt does not and cannot work is, as I have pointed out, that it tries to run together two different characteristics of the division of labour: the function and the content of the work activity. These characteristics are on different planes, so to speak. To be functionally necessary for a particular mode of production, an activity need not have any specific content – it might consist of authoritarian direction of labour, but also of pure manipulation of symbols, such as occurs within routine administrative work; or indeed of creative thinking, such as that of advertising professionals. All that is required of such activities is that they serve the purpose of preserving the existing mode of production; there is no prescription as to just how they should be doing this. On the other hand, neither does the content of the activity imply anything about its functional role – authoritarian direction of labour may have a place within two mutually conflicting modes of production (such as feudalism and capitalism), and thus certainly cannot be automatically said to be functional for one of them; similarly, both symbolic manipulation and creative pursuits may be functional, dysfunctional or indeed quite irrelevant to the prevailing mode of production (I leave the examples as an exercise for the reader).

I will now leave the functional division of labour aside for the moment and concentrate on the content of activities. Once this has been taken care of, I will return to the topic of functions.

Kinds of Work

The idea is that division of labour has consequences which can be modelled using a similar sort of mechanism to that of exploitation. In particular, the claim is that work, in the sense of productive activity generally, is not just running down the stock of labour-power – i. e. the consumption of the labour resource – but that it also may be bringing some positive, beneficial effects to

the agents. Generalised exploitation, or rather complex exploitation, then adds to this notion the postulate that these beneficial effects are distributed among the agents who all take part in production *unequally*, and that this inequality has a causal character – i. e., some are worse off *so that* others may be better off.

So the key idea is fairly simple: not all work is drudgery. Some of it may actually be quite fun. Or to put it less whimsically and more precisely, some sorts of labour include activities which are far from unpleasant, and on the contrary, are interesting, fascinating, amusing, empowering, fulfilling.

This is far from an original statement. Personally I happen to have been influenced by the way J. K. Galbraith formulated it in his Affluent Society (1976):

"[We] have barely noticed that the leisure class has been replaced by another and much larger class to which work has none of the older connotation of pain, fatigue or other mental or physical discomfort. And the continuing revolution in job quality being wrought by the computer is accelerating its growth. We have failed to appreciate the emergence of this New Class, as it may be called, largely as the result of one of the oldest and most effective obfuscations in the field of social science. This is the effort to assert that all work – physical, mental, artistic or managerial – is essentially the same. (...)

For (...) differences in what labor means to different people could not be greater. For some, and probably a majority, it remains a stint to be performed. It may be preferable (...) to doing nothing. Nevertheless, it is fatiguing or monotonous or, at a minimum, a source of no particular pleasure. The reward rests not in the task but in the pay.

For others, work, as it continues to be called, is an entirely different matter. It is taken for granted that it will be enjoyable. If not, this is a legitimate source of dissatisfaction, even frustration. (...) Pay is not unimportant. Among other things, it is a prime index of prestige. (...) But in general, those who do this kind of work expect to contribute their best regardless of compensation." (Galbraith 1976, pp. 260-262)

Also important for my view have been the ideas put forward by Albert and Hahnel in their complementary books *Looking Forward* (1991a) and *The Political*

Economy of Participatory Economics (1991b). And of course, last but not least, the ideas about how the different sorts of labour impact on the individuals' social being — in particular, how conceptual and planning labour extends human development — are an important theme of Bahro's The Alternative in Eastern Europe (1978).

Conversely, I also think that the idea behind Marx's exploitation was very much that the 'labour' of which the working class was providing a surplus was something hard, difficult, demanding, unpleasant and generally to be avoided. There was a reason why the workers had to *forced* into it! While Marx did believe that work was human 'life-activity', part of the species-being of humankind (Marx 1959, p. 75) and that under Communism, it would become liberated and human beings would engage in it freely and of their own accord, I think this clearly refers to the work liberated also from the constraints of low productivity — in other words, work as a creative, fulfilling activity, with the heavy and mechanical drudgery being left to machines.

But exploitation, as I have been taking it (and as it is explicated in the Sraffian model) requires that one group of people produces enough to provide not just their own needs, but also needs and/or luxuries of another group, which does not produce.

The reason this concept is unusable for the class effects of the division of labour is that these effects manifest themselves only on those agents who are *part of* the division of labour – in other words, they are *all* involved in production. By definition, then, it is impossible to identify a completely non-productive group here; all the groups are mutually interdependent.

The key to generalising exploitation – that is, to defining complex exploitation – is then to allow the possibility that the complex-exploiting group may be contributing to production in some way. This means that it might not completely live off the surplus, but rather contribute to its own upkeep. So to get from exploitation to generalised exploitation, what needs to be dropped is the requirement that the production activities produce a surplus which goes to

agents outside the production itself – or in other words, what needs to be dropped is the idea that the complex-exploiters are purely parasitic.

'Efficiency' and Exploitation

One way to clarify what this means is using a physical concept of efficiency. In physics, the second law of thermodynamics implies that it is impossible to build a machine which extracts heat from a source and then uses up all of this heat energy for work. In other words, some of the energy from the source will inevitably be lost. The efficiency of a machine, or a process, is the percentage of energy that it actually does manage to use for work. So, for example, a process with the efficiency of 10% is very wasteful, since most of the energy extracted from the source is dissipated; on the other hand, a machine with 90% efficiency is very efficient indeed, with only a small amount of energy escaping into the environment without contributing to work.

Now, let me take this concept of efficiency and apply it to work done by agents in an economy. Suppose that an agent receives a consumption/leisure bundle *b*. The efficiency of this agent is then the percentage of that bundle which is required to reproduce the labour-power used up in production (however much work they are doing). Or in other words, the question is how much does the agent *need* in order to be useful for the others in the economy – and how much is a luxury which, from the point of view of the others, is simply wasted on the agent.

Under parasitic exploitation, the efficiency of the parasitic exploiter is zero – that is, although they consume a bundle *b*, 100% of what this bundle would allow them to productively do is wasted – they perform no work at all. On the other hand, a parasitically *exploited* agent surviving on a pure subsistence level has an efficiency of one hundred percent – since they receive only just enough to be able to reproduce their productive capability, this implies that *everything* in the bundle is purely utilitarian, serving only to let them perform their productive work.

The canonical concept of exploitation is effectively one that only recognises these two extremes: agents *either* nearly starve on a subsistence level, transforming everything in the bundle they receive into productive work, *or* they are completely unproductive and the bundle they receive is 'wasted' on them.

The generalised concept of complex exploitation allows for all of the positions in between. Thus, we may say that an owner-manager of a company whose work consists in superficial supervision of the its running, with an occasional strategic decision to be made, and who otherwise spends their time playing golf, dining in premier restaurants, sailing on their yacht etc. *does*, indeed, contribute to production, and therefore would fail to be picked out by the canonical concept of exploitation – but their efficiency is very low, since most of what they consume is completely unnecessary for their productive role. On the other hand, a lowly office clerk on low pay may be getting somewhat more than is required for her to reproduce herself on her current level, since the work is not particularly demanding – but even though she may thereby fall into the category of the complex-exploiters, her efficiency is perhaps quite high and thus is pretty close to the the pure proletarian position of 100% efficiency.

Activities vs. Goods

The idea of efficiency, however, suggests that attention must be paid to a certain problem. I am introducing the concept of complex exploitation in order to deal with the consequences of the division of labour – which means that I want to talk about how various productive *activities* differ and how they are differentially distributed among agents. However, the example above used instead the concept of a 'bundle', which is usually understood as a set of *material goods* (even though leisure clearly also needs to be included in it and indeed explicitly was so included).

Since I am *not* trying to describe a mechanism *additional to* exploitation, but rather, to generalise the concept of exploitation, so that it includes both the involuntary unequal distribution in consumption *and* production, it is necessary

to find a way of reducing both to a 'common denominator'. This in turn means that canonical exploitation should come out as a special case of the generalised mechanism.

I claim that the 'reduction to a common denominator' can actually be done quite easily and will result in an understanding of complex exploitation purely in terms of activities. First, it is clear that consumption itself does include activities: the simplest possible example is eating, but in fact, as was commonplace in classical economics, *all* consumption can really be understood as production, with the consumption goods taken as inputs. The differential bundles of material goods can then be understood as the differential opportunities for consumption experiences: owning a sail-boat means one can go sailing, not owning one means one cannot¹²; owning a house means one can live inside it, not owning one means one cannot; owning a pair of shoes means one can walk in them, not owning them means one cannot, etc.

It may be objected that there is a difference in consumption and production in that while consumption bundles involve *opportunities* to perform some activities, they are not rigidly tied to them (sail-boats can be used to live in, rather than for sailing – and although houses cannot be used for sailing, shoes can be used, say, as paperweights, etc.) For the Sraffian model I am using, on the other hand, productive activities are indeed rigidly determined.

However, this objection results from an 'optical illusion', in a sense – or looking at it from a different way, from mixing up material goods as the elements of the model and as they occur in real life. For the production inputs in the model, such as coal, wood, stone, or machines and building, can *also* of course be used in many different ways in real life. Or to be more precise, their role is not rigidly determined in a disequilibrium situation, which is what 'real

Renting here is to be seen as a special case of part-ownership, limited in time and some of the ownership rights – or perhaps even better, ownership can be seen as a special case of rental, where the rental period tends to infinity – and this in itself means that the rights of use are expanded to e. g. the right to destroy the object owned.

life' represents. They are understood as being used in particular production techniques – and thus with particular production activities being tied to them – only because the Sraffian model is one of equilibrium. Once we see that, it is also easy to see that exactly the same reasoning can be applied to consumption – certainly, consumption goods can be potentially used in many different ways; but in the model, not only necessary consumption goods (that is, inputs into the renewal of labour-power), but also the surplus can be seen to be tied to particular activities – after all, agents *do* eventually decide what to do with them. We are at an equilibrium once all the relevant decisions have been made – whether there was any space for them or not (the latter being the case for necessary inputs).

Thus, my solution to the problem involves looking at *activities* on both sides of the production-consumption divide, with both production and consumption goods being taken for granted, i. e. treated as given. Then it is possible to compare the complete 'bundle of activities' available to an agent, their beneficial and/or degrading effects, and their distribution.

Comparison with Roemer and Further Development

Now the modification of the concept of exploitation that I have introduced, namely that the complex-exploited need not provide all the consumption goods for the complex-exploiters (since those may take part in production themselves) is in effect the same one as Roemer introduced in the first part of *GTEC*. At least, this is correct if it is agreed, as I have previously argued, that to every amount of exertion corresponds a specific volume of consumption that is required in order to reproduce the agents labour-power. For recall that according to Roemer's modified definition of exploitation, this phenomenon occurs when all the agents receive some bundle *b*, but some provide more than the average labour socially necessary to produce this bundle, while others provide less than this average amount – with both groups involved in production. If it is accepted that, as I have argued, 'an office clerk requires

fewer calories than a lumberjack', then it follows that Roemer's 'exploiters' in fact receive more than they need – since they receive the exact same bundle b as the 'exploited', for whom this is presumably the subsistence bundle.

However, ironically enough it turns out that if this argument is indeed accepted, then Roemer's variant of the modification is unmotivated, unlike the one I have presented. This is because Roemer came up with the definition because what he wanted to show was that exploitation can occur in a pure subsistence society. However my argument was that b is not in fact a subsistence bundle for the 'exploited' – in my terms, their efficiency is less than 100%, they do not need all of that bundle just to reproduce themselves, since they do not work as hard. In other words, Roemer is not describing a subsistence society.

On the other hand, I needed to modify the concept of exploitation in order to deal with the effects of division of labour, which would be impossible without allowing complex exploitation to occur *inside* production, or in other words independently of the existence of surplus.

Of course, since complex exploitation involves the idea of less than 100% efficiency — in other words, the ratio of the productively-used part of the consumption bundle to the whole — the possibility described by Roemer is not the only one. We can also have the opposite situation, in which a group A and a group B contribute equally to production, but group B receives a bigger bundle than group A. And lastly, it is of course possible to combine these cases to the situation in which group B *both* works less than A *and* receives a bigger bundle.

Characteristics of Complexploitation

Why should we believe that this concept preserves the essential characteristics of exploitation, however?

I would like to argue that there are three such essential characteristics which remain after the requirement of pure surplus consumption is relaxed. Namely, complexploitation occurs when

- 1. at least one of the groups A, B is dependent on the other for its reproduction
- 2. group A does more of activity β than B, and/or less of activity γ than B where β can be thought of as in some sense 'bad', while γ is in some sense 'good'
- 3. if B does the best they can under the social rules of the game, then A can do no better under these same rules than accept the situation described in 2.

The characteristic a) basically specifies that *either* there is pure parasitic exploitation, under which in this case group B depends on group A for providing its means of subsistence and/or luxury; *or* both groups are mutually interdependent, as under the relaxed conditions.

On the other hand, b) is really the crucial characteristic of exploitation. The idea here is that someone is exploited when they are forced into something they would rather avoid — while someone else reaps benefits from this unpleasant activity being undertaken. Of course, in itself this condition only describes an *inequality* between the two groups, and if presented on its own, I would not be justified in calling it exploitative. For inequalities may exist for many reasons, and in fact, there may be inequalities of this sort between groups that have never met, never heard of each other, and in fact have nothing in common at all. This is why the other two conditions are needed: a) guarantees that I am talking about a single, internally interdependent society, while c) is the final piece of the puzzle which anchors complex exploitation to the 'material base'.

The characteristic c) is really the generalisation of Marx's idea that the working class under capitalism is *forced* to accept the sale of its labour-power to the capitalist, if it wants to survive. In other words, under the laws of capitalist private property, the working class lacks the possibility of reproducing itself on its own. Unless the capitalists are so kind as to simply lend the proletarians their

capital for free – which, of course, they are not – the proletarians can do no better than to accept the miserable deal on offer.

The laws of capitalist private property are the 'social rules of the game' in this instance – they specify who can do what with which bits of what and under what conditions, and they have the backing of physical force behind them. These rules are social rather than 'natural', because of course, from the purely physical point of view, the means of production for the satisfaction of the working class needs do exist – they are right there, in front of their eyes. It is just that the way the society is structured, they will only gain access to these means of production if they accept the conditions of the capitalists. The only alternative is to go outside of these rules – individually break them, as in theft; or collectively abolish them, as in a revolution.

This applies more generally: complex exploitation means that if the present social rules are accepted, then the complex-exploited class will be complex-exploited even if all of its members 'maximise their utility', that is behave in the most rational way available to them — only assuming that the complex-exploiters also maximise their utility. This other condition is needed, because although such examples are unknown in history, it is always logically possible that the would-be complex-exploiters essentially give up their social position and/or redistribute their property. But if they behave as history suggests they do behave, then the complex-exploited have no chance under the social rules of the game to escape complex exploitation.

Again, the characteristic c) is interestingly mirrored in Roemer's work, since he demonstrates the existence of (his notion of) exploitation under precisely the conditions of utility maximisation on the part of all agents. While the superficial reading of his models may thus feel outrageous to orthodox Marxists, from this point of view it is exactly their great *virtue* that they use this procedure, since they thereby show that proletarians can in no way be accused of somehow 'freely choosing' their position. Their choice is perfectly

encapsulated in the title of the popular version of Roemer's work – under these conditions, they are only 'free to lose'.

However, for some reason Roemer did not choose to make this requirement a part of his definitions of exploitation, which may be one of the reasons why he veered far off course, from my point of view. For this condition is precisely what allows seeing complexploitation as an *actual*, rather than a counterfactual phenomenon. It is not the point, as Roemer would have it, whether the exploited would be better off if the social rules of the game *changed*, while the exploiters would be worse off. This may or may not be true, depending on the technology available as well as on the general stage of human mental and social development. Perhaps suffering under an authoritarian yoke really is the best the slaves can do – perhaps otherwise the society would fall apart completely. Who knows? I am not suggesting that this *must* be the case, only that an argument can be made to this effect.

Thus, the point is not that if everything changed, this might lead to an improvement. The point is that if nothing changes, improvement is impossible—regardless of whether it might happen otherwise. In other words, there is little point in wondering whether there might be a better distribution of labour which would make the complex-exploited better off—because even if there is, it is precluded by the current social rules. For all we know, there might not be one at the moment; but the point is that the existing social rules of the game simply do not allow for the exploration of this possibility anyway. To sum up, the point is that if the social rules of the game are preserved, then the complexploited are worse off so that the complexploiters can be better off.

Complexploitation, Disutility and Utility

Now, how does this help with dealing with the class features of the division of labour? As I have said above, what I want to model in the first place are beneficial aspects of the division of labour. On the other hand, there is an opposing conception, namely the neoclassical one, which sees labour as

synonymous with 'disutility'. In fact, there is no problem with admitting that labour admits of kinds stretching all the way from extremely disagreeable to extremely agreeable. And in fact, for the moment I am even willing to accept the talk of utility and disutility, even though I do not believe there is any such thing in the sense in which it was originally intended, because these well-known expressions are a useful shorthand for things I do want to talk about. I hope I will be forgiven for this sin against the materialist, objectively-minded worldview. A concept somewhat akin to utility will in fact persist even in the completed exposition, since it is true that there *are* pleasant and unpleasant experiences; it is just that there is also much more to be said.

Given these concepts, however, it is very easy to express the meaning of complex exploitation. Division of labour is complex-exploitative if of all the agents taking part in production, some involuntarily experience more than their fair share of disutility, so that other experience more than their fair share of utility. Which is nothing but a complicated way of saying that some people have bad jobs in order that other might have good jobs.

However, regarding the term 'beneficial' – it is easy to see how *creative* activities, for example, can be seen as 'good' or 'beneficial', bringing 'utility' – especially compared to the alternative, namely routine activities. But why should authority, which for the moment I am taking as 'the activity of authority', be 'beneficial'? To see authority as bringing pleasure is strange – certainly, there may be people who enjoy power, but this is commonly regarded as pathological rather than normal. In order to do this, we need to drop the idea of utility and develop a different account of what is relevant for complex exploitation.

The Sphere of Necessity vs. the Sphere of Freedom

The way I propose to do this is by using Marx's concepts of 'necessity' and 'freedom' in the 'realm of necessity' and 'realm of freedom'. To modernise the usage, but also to indicate my own take on these notions, I will be using 'sphere of necessity' and 'sphere of freedom' instead.

So, what is the meaning of these terms?

The idea of 'necessity' is that humankind as a whole, as well as the individual human beings, are subject to forces beyond their reach. This originally comes from the exposure of human beings to a hostile natural environment, in which they are the 'toys of the gods' (of lightning, sun, forests, rivers and seas...) – but then can be generalised to include other types of forces, like social ones – which means, inter alia, also market forces.

But the way Marx used these concepts is, in my understanding, fairly vague. To try to capture the intuition expressed in the concept of the Sphere of Necessity, let me say that it involves agents being exposed to the elements, at the mercy of arbitrarily hostile forces, of the generalised unknown, feared and capricious 'Other'; having very little knowledge or skill allowing the transformation of the environment, and possessing few if any tools to do it with. It is a picture of a 'dawn of humankind', with the humans cowering inside a cold cave while outside a storm is raging with its thunder and lightning.

Thus, the intuition is that the more an individual is constrained by the natural necessity, rather than determining their own fate, the more they are submerged within the Sphere of Necessity; conversely, the more they are capable to act simply of their own volition rather than being tied by the physical world, the more they are within the Sphere of Freedom. (Importantly, as long as humans remain humans, none can completely escape the material constraints, in that they are living beings and need to reproduce through the process of their internal metabolism).

To try to analyse the concept of the Sphere of Necessity in more detail, I would like to distinguish between how it applies to *activities*, the environment and to the individual's *capacities*.

First of all, I want to say that activities can be divided as between two poles: the *imposed* and the *self-determined* ones. This is a distinction that roughly corresponds to 'work' and 'play' – if by 'work' it is meant that the activity is undertaken not for its own sake, but rather to get to some other end (most

simply a material product), while 'play' is an activity that is indeed undertaken as an end in itself — even if a useful product does result from it. So the same activity might be alternately imposed and self-determined, depending on the context in which it is occurring — one agent may be employed in shipbuilding and take part in producing a boat, while another might build a boat over a number of years simply as a hobby.

Before I can make the next distinction in activities, I need to distinguish two different parts of the human 'co-ordinating mechanism'—it would be more suggestive to say two different parts of the human consciousness, but the trouble is that this co-ordinating mechanism is without slightest doubt partly unconscious. The distinction I need may seem a little *ad hoc*, since it is not really tied to the ideas of human reproduction that went on before. Nevertheless, I do believe a good case may be made for its existence on independent grounds, and so I will use it regardless—especially since it has been recently independently rediscovered by behavioural economists.

What I have in mind is basically a version of Freud's idea of a 'superego' and an 'id'. I hasten to add that I do not want to be committed to classical Freudian psychoanalysis by any means. What I find useful, however, is the distinction between the forward-looking, rule-bound, consistence-seeking, will-imposing part of the human mind, and the immediate-satisfaction-seeking, capricious, live-in-the-moment part—'a far-sighted *planner* and a myopic *doer*', as Thaler and Shefrin put it in their (1991). They actually do happen to mention Freud by name, but their purpose is to explain why people may deliberately constrain their future choices—which is why I would diverge from their concepts and talk about the internal 'hedonist' rather than the internal 'doer'. 13

¹³ Note that I do *not* claim the 'planner' is somehow the rational part, while the 'doer' is irrational; such a claim is quite untenable, in my view, given that many people's planners include completely irrational rules they happened to internalise while young – and contrariwise, enjoying the present moment to its fullest extent may sometimes be the most rational course of action available.

Given this distinction, I can now say that activities may be also divided between those that are *compelled* and those that are *voluntary*. This means that for an average human, some activities are repulsive to their internal hedonist, whilst others are on the contrary attractive.

The reason why I want to be able to use the distinction above is that the imposed activities are not identical with the compelled ones, and conversely, the voluntary activities are not identical with the self-determined ones. This is very significant for my discussion. This division allows me to explain how some 'work' can be also 'fun', even though it is not 'play'. The explanation is that while an activity may be imposed – necessary from the point of view of production of some good or other – it may nevertheless still be voluntary, at least up to a point. A journalist producing articles for a popular magazine; a food critic visiting a restaurant; a pop singer practising their act – they may all be involved in an activity which is imposed rather than self-determined, undertaken for reasons other than itself; and yet, they may be finding their work still quite satisfying, bringing them happiness, even. Granted, all activities are perhaps subject to diminishing marginal utility, and if they are imposed, at some point they may turn from voluntary to compelled; however, there is still a significant difference between jobs that are compelled from the beginning and those which do bring pleasure to the average human for at least some of the time.¹⁴

What this means that already there are at least *two* different dimensions in which an activity is to be evaluated from the point of view of necessity vs. freedom. At one pole, we have activities which are both totally imposed and compelled – that is, they are the worst kinds of labour available. At the other pole, we have activities which are both completely self-determined and voluntary – in other words, those activities outside of the world of work which bring the most actual pleasure.

¹⁴ Further, it is possible for the activity to be self-determined and yet compelled: think of working out in the gym. And of course, any 'fun' activity might be both self-determined and voluntary.

Next, there is the question of environment. Clearly, when talking about the world of work, the less accommodating the environment is towards the agent, the more the agent can be said to dwell within the Sphere of Necessity. It is not chosen, since it is part of the imposed activities; and if it is to be endured rather than enjoyed, then it fairly well expresses the vision of being 'exposed to the elements'. Thus, 'dirty' or dangerous work environments push the agent further into the Sphere of Necessity, while 'clean' and safe ones have the opposite effect.

Finally, I come to the consideration of individual capacities. Actually, let me come right out and say that I would like to talk about individual capabilities. Just as I had said before, this may be a little misleading, for although I deliberately use the term employed by Amartya Sen (1985), I am not entirely convinced that what I have in mind is exactly the same as his notion. For Sen, 'capability' refers to a set of 'functionings'; while functionings are things I would happily take on board, I do not really conceive of capabilities as sets.

Rather, capability should be understood within the context of my argument as just that — an ability that an individual possesses. Moreover, I would like to make a distinction between *internal* and *external* capabilities. The internal kind is what I believe is commonly understood under capability — the internal characteristics of an individual which allow them do achieve certain states of being, for example intelligence or physical strength. On the other hand, the external capabilities are those that are *not* part of the individual's body — yet serve the same purpose; in other words, they are *tools* which help them achieve certain ends. Thus, for example, owning a private jet increases one's external capability; and within capitalism, so does the possession of a great sum of money.

There are no prizes for guessing that agents with low capabilities, both internal and external, are pushed into the Sphere of Necessity – they can do very little to achieve whatever goals they might have and are subject to the activities of others, more capable than them. Contrariwise, the agents who

largely reside in the Sphere of Freedom¹⁵ are those who possess a lot of capability, both external and internal.

In particular, being in a position of authority or possessing much power, or enjoying great autonomy are all, *ceteris paribus*, shifting one towards the Sphere of Freedom. Similarly, exercising one's creativity rather than being bogged down by tedium, possessing a high degree of skill allowing one to work in an extraordinary way, or knowledge that produces similar effects, are all signs that there are significant dimensions in which the agent achieved mastery over their environment, rather than the other way round.

Environment, Activity, Capability

The analysis has now come full circle, in a sense. Recall that in the discussion of reproduction in Chapter III, I talked about those elements of reproduction that are significant for the quality of life. These can now be seen to capture precisely those elements that I have described as class-producing features of the division of labour.

So in particular, the capability of an agent – both external and internal – which I originally talked about as the set of options that they have available at the start of the reproductive cycle, in fact can be also understood as involving the categories under the headings of the 'Capacity to Act' and the 'Personal Requirements': power, authority, autonomy on the one hand, and creation, skills and knowledge on the other are features of the division of labour that expand the individual's capability – they provide an expanded universe of options – whereas their opposites shrink this capability.

From the discussion so far, it should be clear that the 'freedom' in the 'Sphere of Freedom' refers to a very specific sense of this word, distinct from 'free will', as well as 'political freedom'.

¹⁶ Note that Wright's highly autonomous janitor is not a counterexample – their fairly proletarian position is determined by the whole of the relevant properties, such as being low-skilled, working a tedious work-routine, etc.; while the fact remains that their high autonomy *does* make them better off than, say, a conveyor-belt worker.

In other words, when at the beginning of the reproductive cycle the individual faces the world, the degree to which they are endowed in all the dimensions just enumerated decides just how capable of achieving whatever they determine for themselves. With low capacity to act and low standard of personal requirements, they are likely to be a toy of fate; with high capacity and high standard, they are more likely to be able to impose their will.

Low capability is therefore one of the aspects of deeper submersion within the Sphere of Necessity, while high capability allows one to emerge more fully into the Sphere of Freedom. Of course, there is no reason why the individual should possess the same degree of capability along all the dimensions. Indeed, it is precisely differences in the endowments along different dimensions that turn the groups of agents between the exploited and exploitative pole into middle classes, rather than a single unified middle class. A professional academic is highly capable (in the technical sense) in the area of particular sort of knowledge and skills, but may not possess a great amount of power or authority; on the other hand, the position of a middle manager does endow them with such authority and power, but does not necessarily imply a great deal of intellectual knowledge, etc. And of course, when it comes to consumption, under capitalism capability is to a large extent determined by income and/or wealth – since it is those that allow choice from a great number of options; a high income coupled with low embodied personal capacities, say, is thus yet another differential middle class position.

The actual activities undergone, along with the environment in which they are undergone, determine the actual (as opposed to potential) experience of the agent. So if a high degree of physical exertion is imposed on the agent (as opposed to being self-determined by them), this means, *ceteris paribus*, a greater submersion in the Sphere of Necessity – it is a compelled experience of an unpleasant kind. The difference of working in a clean white office and on a dirty, noisy factory floor is also a difference between enduring environments that move one more deeply into the Sphere of Freedom and the Sphere of

Necessity respectively. All of the elements of the 'Conditions of the Job' can thus be understood as belonging either in the one or the other Sphere: Exertion vs. Ease, Clean vs. Dirty, as well as Danger vs. Safety.

The inner environment is affected mainly by the tension which corresponds to the features of the division of labour that were enumerated under the heading 'Weight of Burdens'. The level of stress, risk and responsibility has a direct bearing on how alert an agent must be, how much of their inner resources they must devote to maintaining the inner tension. The more this is the case, the deeper the individual can be said to be submerged in the Sphere of Necessity, and vice versa. Note that this allows us to explain why being 'on duty', whether as a doctor or as a security guard, is certainly work, even if in many respects of the least strenuous kind (until the call comes in): the agent is obliged to maintain a higher level of tension than otherwise would be the case; and of course their capability is also limited by the requirement to be present and available.

As far as activities are concerned, all of the class-producing features of the division of labour would not of course get their particular placement in the Sphere of Necessity if they were freely chosen, i. e. if they were self-determined. Working out in a gym is physical exertion, but does not fall into the Sphere of Necessity; neither does climbing mountains, despite involving a lot of risk, and nor does digging in the garden, although it may well be both tiring and tedious. All of these activities are self-determined and hence the question of placement in the Sphere of Necessity does not arise.

It is clear, therefore, that the division into the imposed and self-determined situations is primary; we have a kind of lexicographic ordering, under which the putatively class-producing features are only such if they belong to the sort of activity/experience that is imposed on the individual.

This does not apply to the notion of capability, however; which can be easily seen if it is simplified in the present context to 'wealth': wealth allows great possibilities for action in the consumption sphere, while poverty limits

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them down – thus capability is an issue of submersion in the Sphere of Necessity even in the area of freely chosen, self-determined activities.

What this means is that the original concept of exploitation, which only used the notion of homogeneous labour, can be effectively thought of as describing this one essential dimension of complex exploitation: if the activity does not fall under the rubric of 'labour', i. e. an imposed activity, then it is free; otherwise it is part of the Sphere of Necessity. What the notion of complex exploitation allows us to do, however, is to then make much more fine-grained distinctions among the imposed activities and their combinations (jobs), since when all the individual dimensions of the Sphere of Necessity are concerned, agents will turn out to have quite different overall positions. And yet, because the lexicographic ordering does not apply to capability, it is quite possible that an agent involved in imposed activities may nevertheless be much more free overall than one who is not, but possesses little capability: this is the class-like difference between a well-off white collar employee and a poor long-term unemployed.

Complexploitation in Terms of Necessity vs. Freedom

It is now possible to reformulate the notion of complexploitation as follows:

- a) at least one of the groups A, B is dependent on the other for its reproduction
- b) the total potential experience of group A lies further in the Sphere of Necessity than is the social average, while the total potential experience of group B lies further in the Sphere of Freedom than is the social average
- c) if B does the best they can under the social rules of the game, then A can do no better under these same rules than accept the situation described in b)

Let us see what this highly abstract definition means in terms of canonical exploitation. What is assumed is simple homogeneous labour – which is thus the activity that pushes agents into the Sphere of Necessity – and that the exploited class provides both the labour necessary for its upkeep and surplus labour for the exploiters, who do not work at all.

Under canonical exploitation, it is thus true that the labour content of the goods received by the exploited is smaller than the labour actually provided by them. In other words, the social average labour needed to produce their bundle is smaller than labour provided by them. The opposite is true for the exploiters: since they do not work at all, the average social labour necessary to produce their bundle is much greater than the labour provided by them.

If we assume 100% exploitation – that is, that the exploited do not receive any portion of the surplus whatsoever, and survive at the subsistence level – then the only activities the exploited perform with the goods they receive are compensatory ones, allowing them just to reproduce themselves to their original level. What this means, all in all, is that *all* of their activities are completely submerged in the Sphere of Necessity. On the other hand, aside from the necessity of satisfying their basic material needs, the exploiters are free to act as they will with whatever is left over; in other words, aside from the necessary physical reproduction, which is an unavoidable part of the human condition, they are completely within the Sphere of Freedom.

Putting these two together, it is now clear that for the exploited, their experience (in this case actual, since the assumption of homogeneous labour takes away the trouble with capability) is far more within the Sphere of Necessity than is the social average, while the opposite is true for the exploiters.

There is of course also the opposite case, where in fact everybody works equally – thus getting the same (potential) experience of the Sphere of Necessity within production – but some are better rewarded than others – i. e., getting more opportunities, and therefore greater and qualitatively better potential

experience within consumption. The disparity between the potential experience of the complex-exploited and the complex-exploiters, vis-a-vis the social average, arises again.

Lastly, when the two cases are combined, the same result follows.

Given this understanding of the Spheres of Necessity and Freedom, it is now possible to identify the *complex-exploited pole* of the society as the point which is in all the relevant respects most submerged within the Sphere of Necessity. In other words, it scores lowest along all the different dimensions of imposed activity, compelled activity, inhospitable environment, low external as well as internal capability. On the other hand, the *complex-exploitative* pole is the one which along all these different dimensions scores the highest: there is the least amount of imposed activity (perhaps just the necessary physical reproduction, i. e. no actual work), the most voluntary activities, the unchosen environment is pleasant and the agent wields the greatest internal and external capability available.

I would like to point out again the rationale behind calling these two positions complex-exploited and complex-exploitative: the idea is that these two poles are mutually dependent, in that the complex-exploited are in their position so that the complex-exploiters can be in theirs; and that this position is the best they can do if they want to survive.

Now it is quite possible that empirically speaking, there is no group of people at either end of this distribution. However, since the dimensions I am talking about allow for all sorts of intermediate positions, we can speak of being relatively complex-exploited and relatively complex-exploitative. So within capitalism, for example, the lower one scores on a particular dimension, the closer one is to the proletarian position on that dimension, and vice versa.

This picture not only allows for the description of the middle classes, but even for why it is indeed correct to call them middle classes, rather than a simple 'middle class'. The reason is that while the various presumed groupings score fairly high along certain dimensions and thus can be thought of as non-

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proletarian, they are not necessarily scoring along the *same* dimensions. In particular there is a clear distinction between the groupings that possess a lot of internal capability in terms of intellect, education and culture, but not a great amount of external capability in terms of income and money, and groupings that perhaps do not score so high along the internal capability dimension, but enjoy the sort of jobs which provide them with a healthy income. Similarly, there will be a difference between groupings that wield a lot of power and those who do not, etc.

Functional Division of Labour

What can be now said about the functional division of labour?

The simple model distinguishes between the *capitalists* and the *workers*, between whom there is the relation of *exploitation*. But the point is that exploitation doesn't just *happen*; it needs to be *mediated* somehow.

This is the basic idea behind the notion of the functional division of labour. It is in my sense functional *for a particular mode of production* – it serves to articulate it and also to protect it.

It would be easy to say that this function is performed by a particular group of people, who thus constitute a separate class (indeed, in a way this is the trap into which Carchedi fell). However, generally speaking, it would be more correct to say that the relationship is mediated through an *institution* rather than a 'group of people'. There are of course people serving the institution, i. e. its personnel. But there is nothing so special about any of them; it is the institution itself which is important.

So while there may be capitalists as beneficiaries, it is really the institution itself – the capitalist *firm*, the *corporation* – which in a certain sense does the exploiting. The workers do not have directly anything to do with the capitalists – the former enter into a contract with the corporation, and it is from the corporation that the capitalists get their profit.

This really was always the case – or we can at any rate abstractly generalise it to the earlier eras – in that the capitalist single owner was the full personnel of the institution; however, they were not *identical* with it, even then, which is precisely the point.

Analogously, and very significantly, even when there does appear to be a direct personal relationship between the exploited and the exploiters, such as was the case with the mediaeval nobility and its serfs, again the nobles were in fact the embodiments of an 'office', so to speak, a 'position', rather than persons in themselves. It was not the case that the peasants belonged to a particular individual X qua X — for if X died, the feudal exploitative relationship was not thereby immediately dissolved. The peasants were bound to the land, and the land had to belong to somebody — this was the way in which the serfs were tied to the landlords. So the exploitation relationship was again working structurally, through the institution of feudal land ownership, rather than directly.

Thus, exploitation is the work of an institution – and that institution can get internally complicated as much as one likes – it can be differentiated into as many specialised function as necessary. The point is that the personnel of the institution does not *qua* its personnel participate in production, *even if* it organises production for the purposes of exploitation.

Now the difficulty with the capitalist firm, the one that was defeating Carchedi, as well as other theorists, is that there is more than one thing going on in the capitalist firm. For although it is organised for the purpose of extracting profit, the way in which this is done is through production of goods generally, *including* the necessary production. Thus the capitalist managers organise *both* the surplus labour *and* necessary labour. Just like Marx said there was no bell announcing the end of the necessary labour time and the start of surplus labour time in a factory, so there is no bell announcing that up until that point, the authoritarian organisation of work is for the purposes of the production of necessary inputs and from that point on for the purposes of the production of the surplus. So it is not that the necessary labour is organised in a non-capitalist,

solidaristic, 'communistic', democratic way, only after which the capitalist managers come in to make the workers produce the surplus – crucially, it is the same sort of authoritarian organisation of labour that takes place. Which makes it clear that this authoritarian organisation is not identical with capitalist exploitation. Rather, it is a particular peculiarity of capitalism that the way in which exploitation works in this system is that the necessary production must be dominated by surplus production - without producing for (basic) need, the capitalist firm could not produce for profit. Thus, what is really going on is that a) there is capitalist exploitation, which forces b) the sort of division of labour which includes authoritarian complex exploitation of workers, and which is thus possibly c) e-inefficient. These things are conceptually distinct. Perhaps there is no e-inefficiency, in that labour could not be organised in any other way, at this stage of human development, and still produce the same amount of goods for direct producers. Then again, the authoritarian complex exploitation can very well occur in a non-capitalist context. And finally – and this is the sense in which Roemer is right - capitalist exploitation theoretically does not require authoritarian complex exploitation, in the sense that if the workers could be relied on to fulfil exactly their contractual duties and if there were no need for co-ordination, etc., then the capitalist would not have a need for this special institution to organise exploitation for them. It is the complicated confluence of all these distinct phenomena that creates the capitalist form as we know it.

Other Functions

The analysis of functions as it stands is incomplete. For just like the exploitative relationship needs to be mediated, it also needs to be protected from challenges. Since it is reasonable to suggest that at least some complex-exploitative dimensions will generate resistance on the part of the complex-exploited, if not downright attempts to overthrow the relationship, it is almost immediate that there are two main functions outside the sphere of production

proper that must be fulfilled if the exploitative mode of production is to persist: the *repressive* and the *ideological* function.

These two functions were of course theorised by Althusser (1971) and, following him, Poulantzas (1978) as being fulfilled by the 'Repressive State Apparatus' and the 'Ideological State Apparatus'. These identifications came under sustained attack over the years. I concur with the critics on this point; there seems little to be gained from an over-hasty compression of diverse institutional and social arrangements into the single self-contained mould of the State. Indeed, such an identification seems downright dangerous, in that it suggests a unity of causal mechanisms where there is divergence, identity of purpose where there may well be conflict.

Instead, I would simply say that the repressive and ideological functions are also carried out by particular institutions — perhaps a wide array of them. Within these institutions, we may even find agents who actually appear to be strongly complex-exploited, i. e. close to the lowest pole of the social relationship (consider, for example, the monks of medieval Church, who aside from prayers spent most of their time in the same back-breaking physical labour as ordinary peasants.) This is not really problematic, however, since it is easy to think of these agents as simply *directly* providing the surplus labour required for the maintenance of these superstructural institutions.

Given the understanding of complex exploitation and the functional analysis, it is now possible to shed some light on the questions of authority within a subsistence society, as well as the relationship between authority and canonical exploitation, that stood at the beginning of this discussion.

As should be clear by now, the notion of complex exploitation implies that the very existence of authority is complex-exploitative. Before authority arises, whatever compelled activities are performed in whatever horrible circumstances have to be self-determined. The existence of authority means that the will of the individual producer is *alienated* – they are now not exercising their own self-determination, but rather obeying orders of another will. This may be

considered justified by the complex-exploited because of increased material rewards and thus greater access to the Sphere of Freedom within consumption. So the subsistence society with authority may not be genuinely complex-exploitative, as long as the social rules allow for the abolition of authority—or in other words, as long as the submission to the authority is in some sense voluntary.

However, once authority exists, it is capable of cementing its own position, by directing the social production towards creating institutions of ideology and repression – or as I termed them earlier, obligation and sanction. Once this happens, the social rules have been changed and there is now genuine complex exploitation, since the producers can no longer be thought of as submitting to the authority voluntarily.

And finally, once the structural authority proper exists, there is nothing that is stopping it from requiring the production of the surplus of material goods, to be appropriated by itself solely for the purposes of luxury – or in other words, there is nothing preventing it from becoming at least partially parasitical. Thus canonical exploitation appears as a result of original complex exploitation.

Does This Cause Conflict?

I claimed at the beginning that classes are determined by a systematic conflict arising from the process of material reproduction. I have now described two different ways in which the basic Marxian model may be enriched: by arriving at a lower level of abstraction in the micro-direction (complex exploitation) as well as the macro-direction (functional analysis). In other words, I tried to describe how class-like features can arise from the differences in the actual and potential activities performed by various agents, and how the complex-exploitative mode of production demands the emergence of new institutions and thus new actors not belonging to the original classes. However,

the question now arises, to what extent do these lower-level abstractions have anything to do with conflict?

I claim that the conflicts can in fact be readily identified, objectively speaking. Along every relevant dimension, the complex-exploited are submerged into the Sphere of Necessity further than the social average *precisely* so that the complex-exploited can further emerge into the Sphere of Freedom. Less abstractly put, the complex-exploited experience subordination, unpleasant work conditions, hard physical labour, etc., just so that the complex-exploiters may have more fun and less be demanded of them.

Importantly, however, this fact alone does not mean that the conflicts are actually perceived as such. There is no necessity dictating this. In fact, today it is probably true that the large part of the working class serving the needs of Western capitalism does not live in the Western countries at all, and has no contact whatsoever with its exploiters. Whatever conflicts it experiences on a day-to-day level are highly indirect from this point of view. That does not make the conflict any less real, objectively speaking.

In other words, just as I claimed at the beginning, the existence of structural conflicts does not necessitate class formation along the lines of those conflicts. The question of whether, how and when the conflicts become manifest and formative of actual class agencies has much more to do with empirical study than with conceptual analysis. This, however, does not invalidate the latent-conflict based analysis.

This applies even more strongly to the functional analysis. Here I would say that it is likely that functionally-based conflicts only become relevant after the classes have already become fairly well articulated. The fact that the police and the army are repressive forces whose main function is to preserve the existing order may not be obvious to the mass of population in a relatively peaceful society; it is brought home much more powerfully when the working-class institutions reach the thresh-hold of power and threaten the established order — as was the case in Chile in 1976, for example.

Complexploitation, Functions and the Two Questions

I believe I am now in a position to answer the two questions that were among the chief motivations of this work.

First, as to the question of the separation of ownership from control:

The top management of a capitalist corporation is a part of its personnel – and what is more, its directing part. Its function is thus the function of capital, properly speaking, since it is the 'brain' of the institution whose purpose is the extraction of surplus. Moreover, the work that the top management performs is highly complex-exploitative, given its environment, its creative nature, but most of all, given the external capability – the *power over resources*, both dead and alive, that it holds. Thus, this group of agents is certainly a certain aspect of capital personified, even if not capital as a whole (for that the analysis of the banking system and the financial markets would be required, which unfortunately is beyond the scope of this essay).

The middle management, on the other hand, is in many ways similar, but always with the radical difference in that it not only wields authority, but also experiences subordination, and also its autonomy may well be circumscribed. These agents are certainly performing the function of capital, but they are properly understood as a layer of the 'middle classes', since they are further down along particular dimensions from the very pinnacle of the complex-exploitative pole.

This allows us to move to the question of the 'embarrassment of the middle classes'. Now, generally speaking, the 'middle classes' are distinguished by the fact that they are not completely exploited in material terms – they receive a portion of the surplus – and this is functional for the system. This may be either because in order to give them authority over the workers, it is also necessary to provide them with higher incomes, so as to create a sense of hierarchy. This would be the case for the positions of authority. On the other hand, as regards the 'professionals', they reap the rents of scarcity, for which there may be many reasons – genuinely rare skills, talents and knowledge;

artificially restricted supply, such as through the limited granting of professional credentials; limited number of exalted positions combined with asymmetric knowledge (high incomes serve to attract the 'best' applicants and allow the employers the choice among them), etc. These are in effect somewhat reminiscent of the position of earlier artisans who possessed their own special tools of production (as well as skills); so although these groups are often a dependent part of the capitalist production, there is some justification in calling them the 'new petty bourgeoisie'.

Of course, it must not be forgotten that these strata are to a certain degree also complex-exploiters, in that their conditions of work and its nature are far better than at the proletarian pole. In fact an argument can be made that it is *this* rather than incomes that defines their position as 'middle class'.

Finally, for the 'workers', these are the groupings of agents that are closest to the proletarian pole of the complex-exploitative relationship. With technological progress their role may not be quite as bad as in the more distant past; however it is their relative standing at the bottom of the complexexploitative hierarchy that defines them. Furthermore, it is very important to note that since their achievement of the surplus proportion of the wage is dependent on their collective (trade-union) action, their advancement is dysfunctional from the point of view of the system. This is because the existence of trade-unions and their actions go 'against the grain' of the complex-exploitative system, rather than 'with the grain', as was the case with the groupings described above, where the increased incomes were the result of the workings of the system itself. In the case of the 'workers', the ideal situation for the system is maximal complex exploitation. This is precisely what the trade-unions arise to prevent. No wonder that from the very beginning they were decried as interfering with the 'natural workings' of the market and the economy. In an important sense, this is precisely correct: these are defensive associations that prevent the complex exploitation from being as thorough as it otherwise would be. Thus, whatever the situation at a given instant in time, there is a constant incentive on the part

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of capital to do away with such working-class organisations, no matter what the official ideological position of the day.

On no account should it be thought that I believe everything relevant on the topic of class has been discussed. Far from it. The very existence of 'dysfunctional' institutions in the guise of trade-unions mentioned above leads to many questions regarding *other* possible dysfunctional institutions, such as working-class based political parties. Furthermore, this leads also to the thorny question of the State and its personnel; and of course, nowadays there is also the wide array of non-state organisational actors. All of this before we even start to consider the questions of biological and sociable-educational reproduction, abstracted from in this work. There is thus no shortage of problems to pay attention to. However, I hope that within the parameters of the problem as it was set out, at least some progress can justifiably be claimed to have been made.

Chapter IX

Conclusion Building Anew on Old Foundations

At the beginning of this thesis, I posed myself the questions of how to explain the existence of apparent 'middle classes' of the new sort, as well as the existence of non-capitalist functionaries of capital. I have claimed that most solutions to this problem invoked the idea that class division is at least partly based on the division of labour – the view with which I agree. Hence the problem of integrating the two disparate bases of class division.

Before this solution could be attempted, however, the very foundation of the 'old' Marxian notion of class as based on exploitation had to be reexamined. I argued that the idea of surplus labour provides in fact the only good explanation for the 'deep', ontological question of the existence of profits. Moreover, although I accept much of the critique advanced against the Labour Theory of Value, my analysis led me to conclude that it actually represents a 'dual theory of exploitation and price' — and that not only does the Sraffa-based critique not invalidate the former part, but on the contrary, it represents a good explication of the very notion of exploitation.

The solution to the problem of integration of Exploitation and the Division of Labour could then finally be proposed. This solution, described in the previous chapter, is achieved in two stages. First of all, exploitation has been traditionally thought about as the process of production and *appropriation* of material goods. On the other hand, the class-producing effects of the division of labour are straightforwardly the effects of the actions performed during the process of production. To integrate the two, it is therefore necessary to come up with a 'common denominator'. This can be achieved once it is realised that the material goods appropriated in the process of exploitation are themselves used as inputs in the process of consumption — or in other words, that the processes

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of production and consumption *both* involve exactly same two types of entities: on the one hand, material inputs, and on the other hand, activities that use these inputs. Thus, it is possible to abstract from the material goods on both sides of the input-output schema and consider purely the activities: productive ones and consumptive ones. Both exploitation and division of labour class-processes in fact involve both kinds: with exploitation, involuntary productive activities are undergone in order to allow for the occurrence of unearned consumptive activities, whereas both the productive and consumptive activities have effects on the reproduction of human beings, depending on what the characteristics of these activities are.

Secondly, since the effects of the division of labour are felt inside the production process, in the sense that *all sorts* of empirically differently-class-positioned agents take part in production, whereas the canonical notion of exploitation strictly separates the producing agents from the exploiting agents, it is somehow necessary to relax this canonical notion. This is done by postulating that inequality in the amount of productive activities undergone, as well as inequality in the consumptive activities undergone, can be thought of as akin to the canonical notion of exploitation, as long as there is a causal connection between the respective amounts of productive and consumptive activities — or in other words, as long the better-off are only better-off due to the worse-off being worse-off — and as long as the worse-off only agree to this bargain because under the social rules of the game, that is the best position in which they can be.

This integrated notion of complex exploitation can be then refined in order to provide a more realistic picture of class relations. This is done by analysing 'production' and 'consumption' into more fine-grained sets of activities, such that each activity possesses different dimensions (aspects) along which it can be evaluated. For a given combination of productive activities (i. e. for a given 'job') with its corresponding combination of consumptive activities (i. e. a given

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'pay'), it is then possible to evaluate the total effect on an individual human being, and thus to find their relative position on the class map.

I hope that the concept of complex exploitation or 'complexploitation' might prove to be a useful conceptual tool for studying class societies. I am clearly aware that such a concept is only a starting point, rather than the end result of real class analysis. What I have tried to accomplish was to integrate two different aspects of conflictual social existence - exploitation and division of labour – into one theoretical structure; however, this conceptual preparation can only be judged as successful or unsuccessful depending on the test of experience. This is even more so, because what I have been doing was using the tools of analytical philosophy; but these cannot answer the historically significant questions of just why particular types of complexploitation arise in different periods of time. It is one thing to say, for example, that the simple two-class model of capitalism is inadequate, because it fails to take into account the great array of agents who are far from the proletarian pole on many different complexploitative dimensions. It is quite another to try to come up with a description of a historical development of capitalism that gave rise to precisely such an array of 'middle-class positions'.

Another fruitful avenue for further research is of course the problem of interactions between the material and the biological type of reproduction, which includes the rich themes of gender, age, socialisation, education, etc. It is likely that even the concepts used in this work might be modified in the course of such research.

Despite all the unanswered questions and limitations, I hope that the attempt proved at least somewhat illuminating – especially for those who try their best to overcome the existence of classes, to move beyond the persistent conflicts generated by the material necessity and towards a fruitful sharing of our diverse and yet common humanity.

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