



DIALECTIC IN MARX

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SYNOPSIS

This thesis is a study in the interpretation of Marx's Dialectic. Its aim is to show that Marx has a model of the structure of what might be termed 'organic systems' which is employed to explain constancy and change in social structures. This model constitutes Marx's 'dialectic'. I propose to show that failure to understand this model has led many critics of Marx's theory of society into a fundamental misunderstanding of Marx's theory of historical materialism, his theory of capitalism and his theory of social revolution. Once this misunderstanding is exposed, it becomes clear that a central theme of the philosophical critique of Marxism has no substance. Many of the objections to Marxism, such as those recently rehearsed in Jon Elster's book, *Making Sense of Marx*, are shown to be baseless. The importance of this project is that it shows that a viable Marxist research program remains once simplistic interpretations are cleared away.

In the first chapter of the thesis, I discuss the question of whether Marx's dialectic involves the claim that there are contradictions in reality in some sense or other. I argue that this question is relatively unimportant in Marx's philosophy. What is important to Marx is the causal postulate that there are systems constituted as 'identities of opposites' which have a tendency to become other than what they are as a result of conflicts inherent in their nature. In the second chapter, I show that Hegel and Marx have different conceptions of an identity of opposites, with Hegel's conception shaped by his 'speculative' standpoint, and Marx's shaped by his materialism. I show that Marx sees the elements of organic systems as opposites, united not by an Hegelian teleology which they serve to realize, but by each being a systematic presupposition and result of other, opposite, elements. In the third chapter, I compare and contrast Marx's model of an unity of opposites with those of Kant and Hegel. The last three chapters use this model to clarify and develop Marx's theory of historical materialism, his theory of capitalism and his theory of revolution.

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CHAPTER ONE

DIALECTIC IN MARX: INTRODUCTION

1.1 Marx's sketch of Historical Materialism rests on two key distinctions. One is the distinction between productive forces and social relations of production; and the other is the distinction between the economic basis of society and its legal and political superstructure. When we consider his more developed theory of the capitalist mode of production we then have two more important distinctions: between the circulation and production of commodities, and between commodity-prices and values. Marx's intimations of a theory of revolution introduce a further distinction between conscious class-struggle and its objective material conditions.¹ It is not too difficult to spell out in a provisional way what some of these distinctions amount to.

Taking the productive forces/relations of production distinction first, the following can be gleaned from Marx's text. The productive forces are the various factors, elements, or 'conceptually specific components' of the production process in a society, 'considered

¹ This is intended to be representative rather than exhaustive. The first two distinctions come from Marx's sketch of historical materialism, see K. Marx, "Preface to A Contribution to the Critique of Political Economy", Marx and Engels, *Selected Works*, vol 1, (Moscow: Progress Publishers). The third belongs to Marx's theory of capitalism, see K. Marx, *Capital*, vol 1, ch.3, trans. Ben Fowkes (Harmondsworth: Penguin Books, 1976), and the last to his theory of revolution, see for example, his "Theses on Feuerbach, III", *Selected Works*, vol 1.

from its real side' as a process in which useful things are created by labourers using instruments on raw materials.² The productive forces include labour-power, skills, tools and machines, product-components and resources,³ taken as elements of the relationship between producer and product. The social relations of production are the factors of the production process which determine the aim of production, or the interests served by it. They involve the 'social position of the agents of production in relation to each other'.⁴ They are the relations through which control over production is exercised so that it serves its social purpose, and they thus constitute the specific social character, or social form, of the production process. Social relations of production include 'property relations' and their attributes, such as the managerial authority of a capitalist.⁵

A rejection of this distinction has been a central strand in the philosophical critique of Marx's theory. First, some critics have claimed that the distinction cannot be made 'clearly'. Taking the productive forces to be anything which contributes to production in any way, Acton suggests that social relations of production must be included among the productive forces, and so cannot be said to be determined by them.⁶

Second, critics have argued it is incoherent to suppose that productive forces and social

² K. Marx, *Capital*, vol. 1, p. 981, and *Selected Works*, vol 1, p. 503, p. 518.

³ Marx, *Capital*, vol. 1, pp. 980-981.

⁴ Marx, *Capital*, vol. 1., p. 1065, and *Selected Works*, vol 1, p. 503, p. 519.

⁵ Marx, *Capital*, vol. 1, pp. 450-451.

⁶ H.B. Acton, *The Illusion of the Epoch*, (London: Cohen & West, 1955), p. 167.

relations of production could be causally related in the way Marx claims. Plamenatz asks how the social relations of production can 'correspond' to the forces of production, and also be said to 'fetter' them.⁷ Further, the social relations of production surely have promoted the development of the productive forces, an example discussed by Marx being the transition from manufacture to mechanised production under capitalism.⁸ It also seems impossible to determine the productivity of tools, resources or people independently of the social form of production. The very same machine will be more or less productive depending on whether it is used in capitalist production, or in petty commodity production. A worker may be motivated to work harder as part of a factory team, than as an independent peasant.⁹ Given that the social relations of production thus determine the specific character and development of the productive forces, how can the productive forces then be said to determine the social relations of production?

Taking now the distinction between social relations of production, that is, the economic basis of society,¹⁰ and the legal and political superstructure, parallel criticisms have been made of it. Marx's intentions are not so clear in this case. However, given that the social relations of production are relations through which control over production is exercised so that it serves its social purpose, the superstructure, as its 'expression', is plausibly the

⁷ J. Plamenatz, *German Marxism and Russian Communism*, (London: Longmans, 1954), p. 29.

⁸ Marx, *Capital*, vol. 1, part iv, and appendix, pp. 1034-1036.

⁹ See *Capital*, vol 1, pp.441-7, and see also the related points made by H. Braverman in *Labor and Monopoly Capital: The Degradation of Work in the Twentieth Century*, chs 7-9, and W. Suchting,

"'Productive forces' and 'Relations of production' in Marx", *Analyse & Kritik*, 4, 1982, p. 168

¹⁰ Marx, 'Preface', p. 503.

structure of rights and constraints which coercively sustain and regulate the system of property in society, whether by legal, political, or other means, such as moral custom.

Once again, critics have attacked the clarity of this distinction. Plamenatz, for example, at one stage could not imagine what social relations of production might be. Subsequently, having accepted the possibility that the social relations of production might include 'property relations' and their attributes, Plamenatz argued that they could not be specified independently of 'rights' of one kind or another. If a capitalist exercises control over the use of means of production, this is at least partly because others 'respect' that control, or regard the capitalist as being 'entitled' in some sense to it.¹¹ We thus cannot specify the base and superstructure independently of each other.

This in turn has provided the ground for denying that base and superstructure are causally related as Marx supposes they are. For example, Plamenatz claims that, since the economic basis of society cannot be conceived independently of the legal and political superstructure, it cannot 'determine' the superstructure. And, if we do we allow that some distinction may be drawn between base and superstructure, the superstructure must exert an enormous influence over the base, since it sustains and regulates the base.¹² From

¹¹.See *German Marxism...*, pp. 21-7, p. 34, and then J. Plamenatz, *Man and Society: A Critical Examination of Some Important Social and Political Theories from Machiavelli to Marx*, vol two, (London and Harlow: Longmans, Green & Co., 1963), pp. 281-2.

¹² For an exposition of this view, see G. Cohen, *Karl Marx's Theory of History: a Defence*, (Oxford: Oxford University Press), p. 231.

this also it is supposed to follow that the base cannot 'determine' the superstructure.

The parallel between these criticisms suggests there is a common theme underlying them. And it seems the theme of this critique can be extended beyond the distinctions considered so far to other key distinctions in Marx's theory. Thus, for example, recent criticisms of Marx's value theory have made two points, among others. The first is that values cannot be defined independently of prices.¹³ The second is that prices must determine values since capitalist technology is the result of efforts to cut costs, and the values of commodities are determined by the technology used to produce them.¹⁴ The supposed consequence of these points is that values cannot be said to determine prices as Marx claims they do.

In summary, the theme of the critique is this: first, what Marx attempts to distinguish cannot be separated conceptually, which appears to preclude causal relationships between them. Second, to the extent that the distinctions Marx requires can be made, it is clear that each of the aspects thus distinguished causally influences the other. They therefore cannot be related *asymmetrically*, as Marx implies they are, when he says that one 'determines' the other. The theory in historical materialism that productive forces determine relations of production, and that the base determines the superstructure, cannot be sustained inasmuch as the relations of production equally determine the productive forces, and the super-

¹³ J. Roemer, 'New Directions in the Marxian Theory of Exploitation and Class' in *Politics and Society*, 11, (1982), p. 272, p. 273.

¹⁴ I. Steedman, *Marx After Sraffa*, (London: New Left Books, 1977), pp. 64-5.

structure equally determines the economic base. This last problem is what van Parijs calls 'the central puzzle' of Marxism.¹⁵

My thesis is that this philosophical critique rests on a fundamental misunderstanding of the various distinctions drawn by Marx. I shall argue that Marx adopts a causal model of social systems which treats productive forces and social relations of production, the economic basis of society and its superstructure, and other such distinctions, as 'identities(unities) of opposites', or as distinct elements of 'organic wholes'. The critics, on the other hand, have tended to analyse the distinctions and the causal connections which Marx posits from within a Humean framework, in which all distinctions and causal connections hold between 'distinct existences', or things which are 'separable in the imagination'.¹⁶ At the very least, they have failed to grasp the 'dialectical' framework required to understand the causal model and the distinctions which Marx employs.

1.2 Having presented the overall theme of this work, I shall now set out briefly how that theme is to be developed.

1.21 In the first part of this work, I shall articulate Marx's concept of an 'identity(unity) of opposites' by comparing and contrasting it with related concepts in the idealist philo-

¹⁵ P. van Parijs, 'Marxism's Central Puzzle' in T. Ball and J. Farr (eds.) *After Marx*, (Cambridge: Cambridge University Press, 1984).

¹⁶ D. Hume, *A Treatise of Human Nature*, ed. L.A. Selby-Bigge (London:Oxford University Press, 1888), p.10.

sophies of Kant and Hegel. The affinities and contrasts between Marx and his idealist predecessors will be found to revolve around three basic questions:

- (1) Are there 'contradictions in reality'?
- (2) What is an 'identity(unity) of opposites'?
- (3) What connection among the elements of a system constitutes it as an 'organic whole'?

These questions arise from the attempts of Kant, Hegel, and Marx to make sense of the connection between the material world and consciousness, in both its theoretical and practical forms.

Each of these questions will be explored in a chapter. In the first chapter, I discuss the question of whether Marx's dialectic involves the claim that there are contradictions in reality, in some sense or other. This question derives its significance from Kant's attempt to reconcile two apparently inconsistent pictures of human nature: the 'mechanistic' picture of human beings as part of the system of nature; and the traditional metaphysical picture of human beings as free, conscious, and rational agents. Since, for Kant, each of these picture is compelling, the result is that our reason is led into a 'dialectic', or a process in which the source of reasons for one position gives rise to reasons for the opposite position. Kant presents an example of this dialectic as follows:

All men attribute to themselves freedom of will. Hence come all judgements upon actions as being such as *ought to have been done*, although they *have not been done*.....On the other side it is equally necessary that everything that takes place should be fixidly determined according to laws of nature....

There arises from this a dialectic of Reason, since the freedom attributed to the will appears to contradict the necessity of nature....

Philosophy must then assume that no real contradiction will be found between freedom and physical necessity of the same human actions, for it cannot give up the conception of nature any more than that of freedom....¹⁷

Kant's strategy for dealing with such a 'dialectic' is to show that the contradiction in reality is only apparent. Kant believes that the distinction between *things as they appear to us* and *things as they really are* resolves the contradiction in supposing that our actions are both determined and free.

Therefore it is an inescapable task of speculative philosophy to show at least that its illusion about the contradiction rests in the fact that we think of man in a different sense and relationship when we call him free from that in which we consider him as a part of nature and subject to its laws. It must show not only that they can very well co-exist but also that they must be thought of as necessarily united in one and the same subject; ... For there is not the least contradiction between a thing in appearance (as belonging to the world of sense) being subject to certain laws of which it is independent as a thing or being in itself. That it must think of itself in this two-fold manner rests, with regard to the first, on the consciousness of itself as an object affected through the senses, and with regard to

¹⁷ Immanuel Kant, *Foundations of the Metaphysics of Morals*, trans. Lewis White Beck, (New York: Macmillan, 1959), p. 75.

what is required by the second, on the consciousness of itself as an intelligence...(belonging to the intelligible world).¹⁸

I then show that Hegel adopts a different strategy. Hegel accuses Kant of 'an excess of tenderness toward the things of the world'¹⁹ in attempting to show that the contradictions of life and consciousness are apparent only. For Kant attributes the source of contradiction to reason, or rather to 'illusions' of Reason, instead of to reality itself. Hegel, on the other hand, claims that thought at the level of the 'Understanding' is necessarily led to affirm the truth of contradictory statements. The contradictions result from abstracting or isolating aspects of reality, such as freedom and necessity, which necessarily belong together.

To resolve these contradictions we must use 'dialectical' thought. At the level of 'dialectical' thought a contradiction can be seen as the expression of the mutability of a finite thing, that is, of the necessary tendency of a finite thing to become other than itself inasmuch as its nature is at odds with itself. Thus Hegel may be seen as affirming the truth of contradictory statements, but may also be regarded as providing some sort of ultimate resolution of them. In both Kant and Hegel, a dialectic, or perhaps a 'dialectic'²⁰ in the case of Hegel, arises from the connection between consciousness and its

¹⁸ Op. cit., p. 76-77

¹⁹ G.W.F. Hegel, *Hegel's Logic*, trans. William Wallace (Oxford: Oxford university Press, 1975), p.77.

²⁰ A 'dialectic' position maintains that there are true contradictions. 'Dialectic' is the process whereby

material expression.

I then argue that the question of whether there are contradictions in reality is relatively unimportant in Marx's philosophy. For Hegel, contradictions in reality express the fact that to understand life adequately is to grasp it not only as it is but in the process of becoming something other than it is, in virtue of the contradictions intrinsic to its nature. This *dynamic* role of the idea of 'contradictions in reality' makes it significant for Marx. What is important for Marx is the causal explanatory postulate that there are systems constituted as identities of opposites, where such systems have a tendency to become other than what they immediately are as a result of the conflicts inherent in their nature.

Whether Marx may or should be taken to affirm the truth of contradictory statements, i.e., to maintain a *dialectic* position, is a question which I shall canvas but do not propose to settle here. Marx may be taken simply as asserting that the connection between the elements of certain natural systems constitutes an entity which is appropriately described in apparently contradictory terms. The elements of such systems are, as such, opposites, and are really distinct. However, the elements of such systems are also united in the system in such a way as to warrant their being declared identical, though not in a sense

a discussion of grounds for a position leads into grounds for the opposite position. Hegel understood the dialectic of the finite to be the process whereby the finite, as implicitly other than it is, is forced out of its immediate nature and transformed into its opposite. When Hegel says the ground of Dialectic is the radically self-contradictory nature of the finite, he may be interpreted as maintaining a dialectic position. See *Hegel's Logic*, trans. W. Wallace (Oxford: Oxford University Press, 1975), §81.

strictly inconsistent with the distinction between them. Thus the 'identity of opposites' must be understood as a connection between opposite elements of a whole, but not as overriding the distinction between those elements. I shall argue that this position suffices to make intelligible the causal model which Marx employs whatever may be the independent merits of a 'dialectic' position.²¹

In the second chapter, I show that Hegel and Marx have different concepts of the identity of opposites. Hegel's concept is shaped by his 'speculative' standpoint. Thus, when Hegel considers the relationship between, on the one hand, the manners and customs of a nation, and on the other hand, its constitution and laws, he claims that to view them as being mutually dependent and mutually supporting is inadequate. Both the customs and the manners of a nation and its constitution and laws must be seen as derived from the 'Spirit' of the nation. They are thus to be seen as the means whereby the reason for the nation's existence is to be both defined and realised.

²¹ The dynamic of Marx's dialectic implies that systems intrinsically tend to become other than what they are, to transform themselves, in given conditions, into their opposite. And it implies that this is due to their being an 'identity of opposites', that is, to their nature involving the presence of an inescapable conflict of forces. It seems that this position may be stated without affirming a contradictory statement. On the other hand, it may be found that the most appropriate vehicle for describing systems as 'identities of opposites' is a language with a dialectic logic. Graham Priest, for example, persuasively canvasses the merits of a dialectic logic. However, if we are not convinced, the dynamic of Marx's dialectic may still be grasped in other terms.

I argue that Marx rejects the 'speculative' identity of the elements of organic wholes.²²

Marx sees opposites as being united, not by an Hegelian teleology which they both subserve, but by each being understood simply as a causal presupposition and result of the other. Such a unity of opposites results in the whole thus constituted tending both to propagate itself and to pass over into a new systematic whole.

In the third chapter, I compare Kant and Hegel's idealist theories of 'natural teleologies' with Marx's materialist theory of the dynamics of 'organic wholes'. I show that there is an isomorphism between the models of the unity of organisms in the theories of Kant, Hegel and Marx. I also show that there are important differences between them.

A central theme of German idealism is the claim that the materialism of the enlightenment fails to account for life. Kant is quite clear on the point: to see something as a living organism is to see it as being more than a mere mechanism.²³ The elements of a living organism are connected in a special way. While the elements of a mechanism are separable conceptually, the elements of an organism are inseparable. In addition, the elements of an organism are all 'organs', that is, are interdependent. Finally, each element of an organism is not only a means by which the others exist and function, but each also brings into being the others. The living organism is thus seen as acting for a purpose - for the sake of its own existence. However, having thus analysed the concept of a natural

²²K. Marx, *Grundrisse*, trans. Martin Nicolaus, (Harmondsworth: Penguin Books, 1973), pp. 93-4.

²³ Immanuel Kant, *Critique of Teleological Judgement*, trans. James Creed Meredith, in *Great Books of the Western World*, vol 42, (Chicago: Encyclopaedia Britannica Inc., 1952), pp. 557, 567, 579.

teleology, Kant claims that it is not objectively instantiated. We impose a subjective though heuristically necessary interpretation on phenomena when we see some natural thing as acting for a purpose.²⁴

Hegel takes over and develops Kant's concept of a natural teleology. Hegel agrees that what unites the elements of an organic whole is the purpose they all serve. However, Hegel asserts that the teleological aspect of living things is as objectively real as their mechanical aspect. While the teleological and mechanical aspects are opposites, with one involving conscious striving for an end, and the other the blind outcome of prior causes, a living organism is a 'unity' or 'identity' of these opposites.

The mechanical working of an organism is the embodiment of the organism's purpose for being, and it is necessary for the realisation of that purpose. However, the embodiment of the purpose of the living thing in its mechanical working not only furthers but also limits the realisation of its purpose for being. A 'finite' organic whole, as Hegel conceives it, has not only its own existence as its end, but equally works toward its own dissolution and supersession. The subjective and objective sides of an organic whole are not only mutually supporting, but in contradiction. While Kant emphasises the self-perpetuating constitution of organisms, Hegel emphasises their tendency to develop and to transform themselves into something new.

²⁴ Kant, *Critique of Teleological Judgement*, pp. 568-578.

I shall argue in this work that Marx's concept of an organic whole has affinities and differences with the concepts of both Kant and Hegel. Marx agrees with both Kant and Hegel that organic systems are more than 'mechanical'. Marx would agree with Hegel against Kant that the extra-mechanical aspect of organic systems is objectively real. Marx, however, rejects the view shared by Kant and Hegel that when we see a thing as an organic whole, we see it as acting for an end in the way that human agents may consciously act for an end. Marx's view, I shall argue, is that many natural systems have a tendency to undergo a process of simultaneous self-propagation and self-transformation. Such a process may have affinities with acting for a purpose, but is nevertheless unconscious, and is material, not ideal.

The first part thus concludes with the solution to a familiar problem: can there be a *materialist* dialectic? Some writers have asserted that dialectic can be accepted only from an idealist standpoint. Others have claimed that only manifestations of consciousness may be described as a 'unity of opposites'. Engels, on the other hand, suggests that a dialectical method can be shared between materialist and idealist philosophies.

I shall conclude that there can be both a materialist and an idealist dialectic, but that they must be interpreted as having different contents. The organicism of Hegel's philosophy of Absolute Spirit, for example, is different from the organicism of historical materialism, not only because organic processes are held to be expressive of Spirit in one case, and to be material systems in the other, but because the nature of an organic unity in Hegel's idealism differs from its nature in Marx's materialism.

1.22 Having established in the first part of this work what Marx's concept of an 'identity of opposites' is, and thus set out his model of organic wholes and their causal structure, I shall employ that model in the second part to articulate the key distinctions on which Marx's theory of historical materialism and his theory of capitalism rest.

I shall show that when historical materialism is properly understood, the idea that forces of production asymmetrically determine social relations of production, and that the latter in turn asymmetrically determine the legal and political super-structure, is not at all incompatible with reciprocal interactions between them. It will turn out that there are, in fact, perfectly familiar models of the sort of relationship Marx has in mind.

Further, in looking specifically at the question of the relationship between the economic base and the legal and political superstructure, it will be clear that the theory of the economic base determining the superstructure has frequently been interpreted far too vaguely to enable a precise understanding of the causal link between base and superstructure. Marx makes a quite specific claim that social relations of production determine the superstructure of rights and constraints through which the social relations of production are socially sustained and regulated. This must not be confused with further claims about the social determinants of ideology and culture.

It can also be shown that, while Marx's theory is a sort of technological and economic determinism, it is neither a technological nor economic *fatalism*.²⁵ Marx's causal model

implies that conscious class struggle is no more an epiphenomenon of objective material conditions than social relations of production and the superstructure are mere epiphenomena of productive forces and the economic base. Of course, once it is established that Marx's theory is coherent, it is a further task to show that it is plausible.

Turning to Marx's theory of capitalism, I shall employ the concept of an 'identity of opposites' to present a new interpretation of Marx's labour theory of value. The circulation and production of commodities will be analysed as 'identities of opposites' in Marx's sense, as will the prices and values of commodities. When understood in this way, it can be shown that Marx's labour theory of value can be sustained against the usual neo-classical critiques, and against those based on Sraffa's analysis of the production of commodities by means of commodities.²⁶

I shall conclude the second part, and the work as a whole, with a discussion of 'Utopian' versus 'Scientific' socialism. I believe that a proper understanding of Marx's concept of

²⁵ Fatalism is the view that some change, or no change, will occur regardless of what humans individually or collectively decide to do to affect the outcome. Economic determinism has often been interpreted as a fatalism. Such an interpretation rests on two arbitrary assumptions. The first is that individual, or collective, conscious agency is not among the phenomena of the economic sphere. And the second is that, in any case, what we decide to do cannot even significantly accelerate or retard economic change, let alone alter its direction.

²⁶ See Steedman's *Marx after Sraffa*, (London: New Left Books, 1977), Steedman, et. al. (eds), *The Value Controversy*, (London: Verso Editions and New Left Books, 1981), P. Samuelson, 'Understanding Marxian Exploitation' in *Journal of Economic Literature*, 1971.

an 'identity of opposites' can throw new light upon what Marx understood to be the present basis for a social revolution leading to a classless society. This, in turn, may provide for an evaluation of the failures and prospects of working-class politics.

CHAPTER TWO

CONTRADICTIONS IN REALITY

2.0 INTRODUCTION

Dialectic has been understood to involve the claim that reality is in some way contradictory. This has been taken by some as a sufficient reason to dismiss dialectical thought as senseless.¹ For others, dialectic exposes the limitations of the conventional 'laws of thought'. Dialectic thus uncovers principles which, though rationally acceptable, require us to affirm the truth of contradictions, and thus to deny the law of non-contradiction.² There are a number of positions between these two extremes. These claim in

¹ Popper, for example, takes pains to show that any proposition follows from a contradiction if the following inference rules are given: (1) from a conjunction infer either conjunct; (2) from a statement infer the disjunction of that statement with any other statement; (3) from a disjunction of two statements and the negation of one of those disjuncts, infer the other disjunct. Any statement will be provable in a system which has these rules of inference and contains a contradiction, ie, the conjunction of a statement with the negation of that statement.

² Graham Priest argues that the best way to represent a continuous change from day to night, say, is to assert the truth of 'It is day and it is night' at the point where it is just as true to say it is day as it is to say it is night. Thus a two-valued logic with absolute truth and absolute falsehood is replaced with a three-valued logic in which a proposition can be both true and false as well as true or false, or alternatively, it is replaced by a many-valued logic in which there are degrees of truth from absolute truth to

various ways that an attempt to do justice to reality in terms supplied by certain conceptual schemes will lead us to affirm contradictory statements. It is claimed that these contradictions can, however, ultimately be resolved within another conceptual scheme.³

In this chapter, I discuss the question of whether Marx's dialectic involves the claim that there are contradictions in reality in one or other of these senses. I begin by showing that the question of whether there are contradictions in reality derives its significance from Kant's attempt to reconcile two equally compelling but apparently inconsistent pictures of human nature: the 'mechanistic' picture of human beings as part of the system of nature; and the traditional picture of human beings as free, conscious, rational agents. I then show that Kant's salient strategy is to point out that these pictures of human nature contradict each other only if what each claims is taken to be true of the same entity in the same respect, and that the contradiction may be resolved by denying this.

absolute falsehood. Such logics can enable one to affirm truth without affirming absolute truth, and can allow the assertion of contradictions, provided they restrict the scope of the inference rules which permit the deduction of any statement from a contradiction.

³ A conceptual scheme which employs the concept of rest and motion, but which does not contain the concept of relative motion, may produce the contradiction that an object is both at rest and in motion. This contradiction may be resolved in a scheme employing the concept of relative motion with the assertion that the object is at rest with respect to one object, but in motion with respect to another. Charles Taylor argues that Hegel's view is that a conceptual scheme at one level, say at the level of reporting what is or is not, may produce contradictions which are resolved at another level, in which we recognize what is as a process of becoming something else.

I then show that Hegel adopts a different strategy. For Hegel, the inconsistent pictures of human nature which Kant attempts to reconcile are the necessary product of thought at the level of the 'understanding'. The 'understanding' is thus led to affirm the truth of contradictory statements. To resolve these contradictions, we must use 'dialectical' thought. At this level of thought, a contradiction can be seen as the expression of the mutability of a finite thing, that is, of the necessary tendency of a finite thing to become other than itself, inasmuch as its nature is at odds with itself. Thus Hegel may be seen as affirming the truth of contradictory statements, but also may be regarded as providing some sort of ultimate resolution of them.

I conclude this chapter by showing that the question of whether there are contradictions in reality is relatively unimportant in Marx's philosophy. What is important for Marx is the causal postulate that there are systems constituted as 'identities of opposites', where such systems have a tendency to become other than what they immediately are, as a result of conflicts inherent to their nature. An attempt to describe these dynamic systems within a given conceptual scheme may prompt contradictory statements if the resources of the conceptual scheme are not adequate to the complexity of the systems. Whether the emergence of contradictory statements within a conceptual scheme is handled by limiting the scope of the law of non-contradiction, or by resolving the apparent contradictions of one conceptual scheme within another, richer scheme is a matter so to speak of conceptual taste, which leaves untouched the substantive causal postulate.

2.1 KANT'S TRANSCENDENTAL DIALECTIC

In the Third Antimony of Pure Reason,⁴ Kant outlines grounds for supposing that causality according to the laws of nature is insufficient to account for natural phenomena, and that an autonomous causality must also be supposed to operate before we can be said to have a sufficient reason for phenomena. He then argues that, on the other hand, 'everything in the world takes place solely in accordance with laws of nature'.⁵

The grounds which Kant employs to argue that phenomena must have an original cause in addition to natural causes are a recapitulation of the Cosmological argument, but it is clear that he has in mind not just the agency of God, but the agency of human beings acting in 'complete freedom'.⁶ The conflict of human autonomy with the determination of human actions according to the laws of nature is considered from the standpoint of 'Speculative Reason' in the *Critique of Pure Reason*. However, Kant makes the further point that we also encounter a practical conflict between the claims of desire and the commands of duty, or between our happiness and self-respect as moral beings. As Kant puts it:

Man feels in himself a powerful counterpoise against all commands of duty which reason presents to him as so deserving of respect; this counterpoise is his needs

⁴ Immanuel Kant, *Immanuel Kant's Critique of Pure Reason*, trans., Norman Kemp Smith, (London: Macmillan, 1963), pp. 409-415.

⁵ Kant, *Critique of Pure Reason*, p. 409.

⁶ Kant, *Critique of Pure Reason*, p. 414.

and inclinations, the complete satisfaction of which he sums up under the name of happiness...From this a natural *dialectic* arises i.e., a propensity to argue against the stern laws of duty and their validity, or at least to place their purity and strictness in doubt, and where possible, to make them more accordant with our wishes and inclinations.⁷

2.2 THE CONTRADICTION BETWEEN OURSELVES AS FREE AGENTS AND AS BEINGS BELONGING TO NATURE

So we have both a conflict within our conception of ourselves, and a practical conflict. One way of resolving both the practical and the theoretical conflicts would be to opt for one side or the other. Thus we could regard ourselves as purely belonging to nature. The disposition to argue against the 'laws of duty' would then be one natural inclination pitted against another, the inclination to observe those laws. The dialectic of practical reason would then be a case of conflicting desires, with our desire to be morally worthy, that is, strictly to obey the laws of duty whatever the cost, being inconsistent with our desire for happiness. Or rather, since Kant defines the desire for happiness as the desire to have all our inclinations fulfilled, there would be an internal incoherence in that desire, so that happiness is then an unattainable end, requiring both self-respect and contentment in a world where foregoing one is the price of attaining the other.

⁷ Immanuel Kant, *Foundations of the Metaphysics of Morals*, trans. Lewis White Beck, (New York: Macmillan, 1959), p. 21.

Alternatively, we could hold that our freedom means that phenomenal events are not entirely determined by preceding natural causes, or as Kant puts it, when I decide to act 'this resolution and act of mine do not form part of the succession of purely natural effects, [and] in respect of its happening, natural causes exercise over it no determining influence whatever'.⁸ Thus, if it is conceivable that the natural universe should have an absolutely original beginning, then later phases of the natural universe will not only inherit the consequences of the first original event, but may also be determined in part by further original events. Moreover, original events need not be entirely arbitrary. An original event may be in accord with rather than inconsistent with our principles, without it being the inevitable result of some prior event, such as our last commitment to those principles. And, though Kant suggests that our belief in freedom must give way before experiences which confirm the principle that all natural events are successors of other natural events according to universal laws,⁹ there are surely as many examples of experiences confirming the idea that we are free.

However, Kant thinks that both the freedom of our actions and their determination according to the causal order of nature 'must be thought of as necessarily united in one and the same subject'.¹⁰ But Kant gives no reason for supposing that this is so, other than that the assumption of a causal order of nature best serves the 'speculative purpose' of reason, while for reason in its 'practical purpose', the assumption of freedom in our

⁸ Kant, *Critique of Pure Reason*, p. 414.

⁹ Kant, *Metaphysics of Morals*, pp. 74-75.

¹⁰ *op cit*, p. 75.

actions provides the only ground for the use of reason in determining our conduct. That is, Kant claims that the assumption of freedom is a necessary precondition of practical moral reasoning, while the assumption of a lawlike nature is a precondition of causal reasoning. However, Kant does not show that both causal reasoning and moral reasoning are necessarily united in the same subject, and therefore does not show that there must be a contradiction in our being both free and subject to the laws of nature.

2.21 KANT'S RESOLUTION OF THE CONTRADICTION

Let us grant, though, that there is a contradiction between our being free and subject to the laws of nature, and that it must be resolved. Kant claims that the contradiction may be resolved once we recognize that it is not the same thing in the same respect which is both free and causally determined:

Therefore it is an inescapable task of speculative philosophy to show at least that its illusion about the contradiction rests in the fact that we think of man in a different sense and relationship when we call him free from that in which we consider him as a part of nature and subject to its laws.¹¹

Kant elaborates on this resolution to the contradiction as follows:

...there is not the least contradiction between a thing in appearance (as belonging

¹¹ *ibid.*

to the world of sense) being subject to certain laws of which it is independent as a thing or being in itself. That it must think of itself in this two-fold manner rests, with regard to the first, on the consciousness of itself as an object affected through the senses, and with regard to what is required by the second, on the consciousness of itself as an intelligence...(belonging to the intelligible world).¹²

There are three possible ways of interpreting Kant's attempt to resolve the contradiction. One is that Kant supposes that there are two entities, a 'phenomenal man' and a 'noumenal man'. This interpretation is suggested by the idea that 'man' belongs to two worlds, one being the phenomenal world and the other the intelligible world, or as Kant puts it in the *Critique of Pure Reason*., the world of 'noumena'.¹³

The second interpretation is that Kant means that there are two ways a thing can be thought of, or two points of view from which it may be regarded.¹⁴ One is to think of a thing as it appears to us, or is represented to us by our senses, while the other way is to think of the object as it is in itself. This is a sort of 'dual-aspect' theory, according to which we have both a phenomenal and a noumenal description of one and the same thing. In phenomenal terms, we locate the thing in space and time, and attempt to discover the phenomenal description under which it may be subsumed by a universal law. Every condition of a temporal event is of necessity itself conditioned by a prior event. In

¹² op cit, pp. 76-77.

¹³ Kant, *Critique of Pure Reason*, p. 266.

¹⁴ Kant, *Metaphysics of Morals*, p. 71.

noumenal terms, we say whether an action is right or wrong, or a person morally worthy or unworthy. And we may say that our reason leads us to act one way rather than another, without thereby being committed to the idea that the use of our reason is itself in turn determined by prior events.

According to the third interpretation, Kant means to distinguish between two discourses, one dealing with how things appear, and the other with how things really are. The first discourse is of causally determined things and events in space or time. Within this discourse, a distinction can be drawn between an illusory or observationally conditioned phenomenon, for example, a rainbow, and what really occurs, that is, sunlight refracted through a shower of rain. However, for Kant, the totality of reports of what we sensibly experience state only the relation of the object of experience to the subject of experience, and say nothing about those objects 'as they are in themselves', or 'really' are. The second discourse, according to Kant, includes claims concerning the morality (or rationality) of the means and ends of actions, and of agents.

Now it can be said that no contradiction can arise between these discourses because, while the same term may be employed in both, it necessarily refers to different things in the different contexts. In discourse about things as they really are, when we say something, for example, about ourselves, the term 'I' refers to the self as the one making a statement. In contemporary terminology, the occurrence of the term 'I' in this statement is referentially transparent.¹⁵ On the other hand, in discourse about things as they appear

¹⁵ Quine defines a referentially transparent context as one in which any terms referring to the same

to our senses, we refer to sensory representations and not to the objects represented.¹⁶ A statement about an object 'as represented' thus says something about the way the object is represented, and tells us nothing about the object except that it is represented in that way. The occurrence of the term 'I' in such a statement does not make a reference to the self, but signals a self-representation.

2.22 PROBLEMS IN KANT'S RESOLUTION

Taking the first interpretation of Kant's resolution of the contradiction between our being simultaneously free and subject to laws of nature, that is, the idea of two distinct entities belonging to two different worlds, the sensible world subject to natural laws and the supersensible world of freedom, there is certainly no contradiction between saying one is determined while the other is free. However, a problem emerges as to how these two worlds can be connected.

According to Kant, knowledge of particular instances of types of thing is confined utterly

 object may be substituted for one another without altering the truth-value of the context. See W.V. O. Quine, *Word and Object*, (Cambridge Mas.: The M.I.T. Press, 1960), pp. 141-146.

¹⁶ According to Davidson's theory of intentional contexts, a statement of the form "It appears to my senses that..." is about the statement following the demonstrative term "that". See Donald Davidson, 'On Saying That', *Synthese*, 19, (1968-9), pp. 130-46. Thus any reference in the language of appearances is to the sensory appearance of the self, and not the real self. Another way of making the point, is to say that in the language of appearances, "I" refers to the self as an 'intentional object'. See Elizabeth Anscombe, *Intention*, (Oxford: Basil Blackwell, 1959).

to the sensible world. A particular instance of a type must be given by a sensible intuition. Knowledge of the rightness of actions and the worth of persons is factual, but it is knowledge only that this or that **type** of action or person is right or worthy. In a remarkable aside,¹⁷ Kant admits that 'the real morality of actions, their merit or guilt, even that of our own conduct, thus remains entirely hidden from us'. We can know that the type of action called 'murder' is really wrong, but we cannot know that a particular act of murder committed by a person is really willed by the noumenal counterpart of the person, even when that is oneself. Likewise, with a particular instance of keeping a promise, we can know that is in *accordance* with the laws of duty, but we cannot know whether it is done *from* duty,¹⁸ as Kant puts it. To know the first is just to know, for example, that we ought to keep promises. To know that it is done from duty is to know that the promise is kept because the agent wills that this is the right thing to do. We thus would have to know whether, in regard to that particular action, 'the person as belonging to the world of sense is subject to his own personality so far as he belongs to the intelligible [supersensible] world'.¹⁹ But, since that involves a particular fact about the intelligible world, which to be known would have to be given in an 'intuition', we cannot know whether this or any action is done from duty.

Now, of course, Kant cannot be satisfied with this position. Kant asserts that we are con-

¹⁷ Kant, *Critique of Pure Reason*, p.475, footnote.

¹⁸ Immanuel Kant, *Critique of Practical Reason And Other Writings in Moral Philosophy* trans., Lewis White Beck, (Chicago: University of Chicago Press, 1949), p. 188.

¹⁹ *Op cit.*, p. 193.

scious of acting out of duty, and that this amounts to acting through a '*prior*[my italics] (objective) determination of the will and the causality of reason'.²⁰ This resolve of the will can 'thwart all our inclinations',²¹ that is, counteract what the causal outcome of our inclinations would have been in the absence of its action. An action which is done out of duty in this sense must be contrary to the laws of nature. For the laws of nature can only say what the inevitable consequence of a given stock of inclinations will be, without making allowance for another outcome when those inclinations are thwarted by our will.

Kant thus vacillates between two conceptions of our noumenal self. According to one, the natural world is self-contained, and the noumenal self can be considered the cause of phenomena only as a whole. On the other conception, the noumenal self engages in a struggle for supremacy in our lives with the natural self, as represented by our inclinations. Here the noumenal self is responsible for particular actions, and may divert nature from its spontaneous course. Under one conception, our better half is the transcendent condition of our lives, but is utterly unknown. While the phenomena of our lives 'represent' ourselves as we really are, we cannot know whether real virtue is represented by a phenomenal virtue, as we would 'naturally' assume, or is 'perversely' represented by a phenomenal evil. With the other conception, evil comes from our better halves letting loose our worst natural appetites, and good is the result of our acting from duty, quite independently of our natural inclinations. One concept is tied up with Kant's distinction between phenomena and noumena, the other with the commonsense belief that we have a

²⁰ Kant, *Critique of Practical Reason*, p. 188.

²¹ *Op. cit.*, p. 181.

moral history, with moral principles playing a part in our lives as we know them.

On the second interpretation of Kant's resolution of the contradiction between freedom and determination according to natural causes, there are two viewpoints from which a human being can be described. On the one hand, human beings may be described with a view to explaining why they did what they did in terms of its natural causes. Pursued to a conclusion this will lead to a description of their actions, in terms of which those actions may be subsumed under a law of nature. On the other hand, human beings may be described with a view to judging whether their actions are right or wrong, and whether they are morally worthy or not in terms of the intentions behind their actions. In one case, we look for causes, and in the other, for *reasons* for actions. Insofar as an action under one description may be subsumed under a law of nature, the action is determined. The action can only be autonomous in the sense Davidson²² makes clear, that it may not be subsumable under a law of nature when described in other and morally significant terms. That is, acting from duty is autonomous in the sense that it is anomalous.

However, with this interpretation, it is not clear that the line of the autonomous is to be drawn just where Kant wants it, with human desire on the natural and determined side, and acting from duty on the autonomous, or anomalous side. Davidson argues that the mental in general is anomalous, that is, the descriptions of our mental working in terms of which we are accountable to others, and to ourselves, are not subsumable under laws of

²² See Donald Davidson, *Essays on Actions and Events*, (Oxford: Oxford University Press, 1980), p.

nature. On this view, we are just as autonomous with respect to our most base desires as we are with respect to our moral conscience. Certainly, on this interpretation, the distinction Kant draws between the natural and the intelligible worlds need not coincide with the distinction between what appears and what really is, or with the distinction between what is or is not knowable, and so cannot be sustained.

The third interpretation possibly comes closest to articulating what Kant had in mind with the distinction between phenomena and noumena, though not in terms of his choosing. Here, the distinction is taken to be between representations and the objects represented. What we say about a representation may clearly be compatible with denying the same thing of the object represented. For example, a representation may be made of paper while the object represented is not. Or, to take an aspect of representations closer to what Kant was concerned with, a two dimensional map may represent a three dimensional terrain. Thus what the object is represented as may not coincide with what the object is. In fact, although common sense allows that an object may be the way it is represented, it strictly never can be. In common sense, a map may accurately represent the distance between towns. However, although a three dimensional model will tell us more about a three dimensional terrain than an ordinary map can, it will still miss or misrepresent aspects of that terrain. Roads will be straighter on the model than in reality, and the colour of the model and the terrain will never be in detail the same.

What an object is represented as, and what it is, can completely coincide only in the case of a complete and absolutely accurate representation, which would be Kant's *'intuitus*

originarius', where the object exists, or is created just as it is thought. That such a complete coincidence can occur in this case only strongly suggests that Kant's distinction between phenomena and noumena is based on the distinction between what a thing is represented as, and what it is.²³ This is confirmed by Kant's resolution of the first antinomy of pure reason, which poses the dilemma of choosing between a finitely or infinitely extended world. Kant avoids this dilemma by claiming that the natural world is neither finite nor infinite. The noumenal cause of the world is, for Kant, beyond space and time, and so is neither of finite nor infinite extent. The natural world is spatially extended, but Kant claims it is not *represented* as either finitely or infinitely extended.²⁴ We can make sense of this in terms of the way terrain is represented on a map. The terrain will be either flat or uneven, but on a map lacking contour lines, it is not represented as either flat or uneven. Thus the law of excluded middle does not apply to the way an object is represented.

Kant thus can claim consistently that although actions are represented in perception as belonging to a system of nature, in reality they do not. Kant can claim that the spatio-temporal order is an artifact of representation in the way that the relative sizes and connectedness of continents mapped according to the Mercator projection is an artifact of that form of two-dimensional representation. Similarly, Kant may claim that the order of nature is an artifact of our apprehension of phenomena in something like the way a grid

²³ Kant, *Critique of Pure Reason*, p. 90, and also p. 157, where Kant refers to 'an understanding ... through whose representation the objects of the representation should at the same time exist'.

²⁴ Kant, *Critique of Pure Reason*, pp. 447-449.

overlying a map is an artifact of map-reading.

However, on this interpretation as well, there is no guarantee that the cleavage between the discourses of representations and things as they really are will coincide with the division between causally explanatory and moral discourses. Hare's distinction between 'describing' and 'prescribing', for example, links moral discourse with freedom and rationality, and separates it from discourse simply concerned with phenomena, i.e., descriptive discourse, but it hardly accommodates the idea that moral discourse involves statements concerning things as they are in themselves.²⁵

Moreover, while there is a difference between representations and the things represented, there is also a connection which is inconsistent with Kant's claim that knowledge of representations, or by their means, tells us absolutely nothing about the things represented. This is what Kant himself half admits: 'We have to take their strictly empirical character as the supreme ground of explanation, leaving entirely out of account their intelligible character (that is, the transcendental cause of their empirical character) as being completely unknown, *save in so far as the empirical serves for its sensible sign*[my italics].'²⁶

On all three interpretations of Kant's resolution of the contradiction between our freedom and our place in the natural order, there is a problem in reconciling the distinction Kant

²⁵ R.M. Hare, *Freedom and Reason*, (Oxford: Oxford University Press, 1963), pp. 21-29.

²⁶ Kant, *Critique of Pure Reason*, p. 472.

draws between the phenomenal and noumenal worlds, with the connection there must be between them in order for the appearance of a contradiction to arise. Before going on to consider Hegel's way of dealing with the contradiction between freedom and determinism, I shall examine Kant's attempts to resolve two further contradictions: the contradiction between the mechanistic conception of nature and the teleological account of living things; and the contradiction involved in self-consciousness.

2.3 KANT'S DIALECTIC OF TELEOLOGICAL JUDGEMENT

Kant's dialectic of teleological judgement involves a conflict between two principles which set out conditions of the possible existence of material things. The first principle claims that all that is necessary for the production of any material thing is the action of natural causes under 'mere mechanical laws'. The opposing principle claims that the existence and form of some material things, for example, living things, depends on the action of 'final causes' which cannot be subsumed simply under merely 'mechanical' laws.²⁷ By natural causes under 'mechanical' laws, Kant clearly means causes subsumable under the laws of classical or Newtonian physics. By a 'final cause' of a thing, he means the purposes served by its form and existence.

On the face of it, this conflict may be resolved simply by opting for one side or the other.

As Kant says, we cannot see so far into the workings of nature as to be sure that any

²⁷ Immanuel Kant, *Critique of Teleological Judgement*, trans. James Creed Meredith, in *Great Books of the Western World*, vol 42, (Chicago: Encyclopaedia Britannica Inc., 1952), pp. 562-3.

given phenomenon cannot be produced by merely 'mechanical' causes. So there seems to be insufficient ground for the claim that 'final causes' cannot be subsumed under 'mechanical' laws only. Yet Kant goes on to assert that we have to assume the operation of an 'intelligent' cause to account for phenomena such as those of life. The reason for this is that we can only imagine how life is produced on the basis of an analogy with the way we act with an intelligent purpose to produce human artifacts.

If we exclude the possibility that the laws of classical physics are objectively limited in their scope, as Kant did, we are left with an apparent scientific imperative to attempt a mechanical explanation of life, alongside an explanatory necessity to appeal to 'final' causes in order to account for its distinctive features. Kant conceives the latter explanatory necessity as having only a subjective force. It fills a gap in our understanding pending the development of an adequate mechanical explanation, which, however, Kant thinks we shall never arrive at. For, in the final analysis, Kant believes that finality is due to intelligent causes which are unknowable to beings with human limitations.

2.31 PROBLEMS WITH KANT'S RESOLUTION OF THE DIALECTIC OF TELEOLOGICAL JUDGEMENT

Kant thus resolves the dialectic of teleological judgement in a manner different from his resolution of the contradiction between freedom and nature. The principles of mechanical and teleological explanation are both taken to be regulative principles applicable to things

as they appear to us, the former being objectively instanced, while the latter has only subjective validity. However, Kant believes that if we could have a speculative knowledge of things in themselves, we would know that intelligent causes are required to explain life, and that these are the action of things in themselves. With this knowledge, the contradiction between teleology and mechanism would then be resolved in the same way as Kant resolved the contradiction between our freedom and our place in nature.

What Kant does not explore is the possibility that explanation under 'mechanical' laws is objectively limited, if we take 'mechanical' laws to be the laws of classical physics. Since the classical laws of physics are time reversible, they cannot even account for the irreversible processes dealt with under the second law of thermodynamics,²⁸ let alone the more complex processes of life. So we have good reason to suppose that causes additional to 'mechanical' causes must be appealed to in order to account for life. The idea that such additional causes are required in this case is 'objectively' valid, rather than being a 'subjectively' valid heuristic or regulative principle of inquiry.²⁹

However, even if we accept that the laws of classical physics are objectively limited, we can still resurrect the dialectic of teleology by taking 'mechanical' laws to be any laws of nature. We can then sensibly adopt the principle that all phenomena, including life, can be accounted for 'mechanically', or to make clear the widening of the scope of natural laws, **materially**. And against this materialist principle, we have the idealist claim that the

²⁸ See Ilya Prigogine and Isabelle Stengers, *Order Out of Chaos*, (London: Fontana, 1985)

²⁹ See Alicia Roqué, 'Self-organisation: Kant's Concept of Teleology and Modern Chemistry' in *Review of Metaphysics*, 39 (September 1985): 107-135.

concepts of conscious agency are required to make sense of life.

Should we understand this claim to have only subjective validity? According to Kant's distinction between phenomena and noumena, the natural world must be understood to be totally subsumable under laws of nature. And the experience of free agency in moral decisions does not suggest to Kant that there is an intelligible cause acting alongside natural causes. So why are we tempted to introduce an extra-mechanical explanation of the behaviour of living things? If we **must** make such an appeal, this would be because there is some objective difference between the behaviour of living things and the behaviour of things which we do not feel compelled to explain in terms of conscious agency. Yet, it would be surely as difficult to conceive how this difference might be spelled out in mechanical terms as it is to conceive how the behaviour of living things can be accounted for in just those terms. So, it seems we are compelled to grant objectivity to conscious agency, if only to spell out the difference between phenomena which are and are not explicable in 'mechanical' terms.

The model for the resolution of the dialectic of teleology would then be the dual-aspect model, which was considered as one interpretation of Kant's claim that we must conceive of things from two points of view in order to reconcile our freedom with our natural existence. Under one sort of description, anything would be subsumable under a law of nature, and in that sense, completely explained by the law. However, under another type of description, certain things would be explicable in teleological terms, which Kant as-

sumes are the concepts of conscious agency. Only the rigours imposed by Kant's extreme distinction between phenomena and noumena lead him to grant the idealist principle only subjective validity.

The resolution of the dialectic of teleological judgement can thus take the familiar form of opting for one side of the dilemma or the other. Alternatively, it can be resolved by taking the position that there is no conflict between the completeness of mechanical explanations in one sense, and their incompleteness in another sense. Thus, on the dual-aspect model, every event is subsumable under natural laws, which therefore are complete in the sense that nothing happens which they leave unaccounted for. However, since there are other aspects to certain events in terms of which some explanation of those events can be given, it follows that explanation through natural laws is incomplete in as much as it is not the whole story.

2.4 KANT'S DIALECTIC OF SELF-CONSCIOUSNESS

In one sense, Kant cannot have a dialectic of self-consciousness. For Kant, a dialectic involves an 'illusion' of pure reason. However, in the case of self-consciousness alone, Kant claims there is a contradiction, but never suggests it is an illusion of reason. Thus Kant says:

How the 'I' that thinks can be distinct from the 'I' that intuits itself (for I can represent still other modes of intuition as at least possible), and yet, as being the

same subject, can be identical with the latter ; and how, therefore, I can say: "I, as an intelligence and *thinking* subject, know myself as an object that is *thought*, in so far as I am given to myself [as something other or] beyond that [I] which is [given to myself] in intuition, and yet know myself, like other phenomena, only as I appear to myself, not as I am to the understanding"--these are questions that raise no greater nor less difficulty than how I can be an object to myself at all, and, more particularly, an object of intuition and of inner perceptions.³⁰

Can this contradiction be resolved by opting for either of the opposites only? Kant is quite emphatic that the self is not known as it in itself. And he is equally emphatic that the term 'I' in any account of what I am thinking refers to a transcendental subject of consciousness, and not to an empirically given subject. The term 'I' referring to a transcendental subject is supposed to be 'indeterminate', that is, not to specify any particular fact about the self. But in a specific self-report the term 'I' would also have to refer to the empirical self, or the self as it is represented. It is not clear how the term 'I' differs in function from other referring terms, which presumably must do a similar double duty in referring to both the empirical object of observation, and the 'transcendental object X', which is the thing-in-itself represented by phenomena.

Let us first of all consider the grounds Kant might have for saying that we do not know ourselves except as we appear to ourselves. Now it is clear that self-consciousness is a puzzle. Hume says:

³⁰ Kant, *Critique of Pure Reason*, p. 167.

For my part, when I enter most intimately into what I call *myself*, I always stumble on some particular perception or other, of heat or cold, light or shade, love or hatred, pain or pleasure. I never catch *myself* at any time without a perception, and never can observe anything but the perception.³¹

Thus when I introspect, I seem not to 'catch myself', and certainly not myself as the introspector as opposed to what is introspected. Kant seems to take seriously this point of Hume's, that self-consciousness is like viewing a theatre in which 'several perceptions successively make their appearance, pass, re-pass, glide away, and mingle in an infinite variety of postures and situations.'³²

Yet for all that, there is a continuity in our self-consciousness, which Hume says leads us to feign 'some new and unintelligible principle that connects the objects together.'³³ The 'simplicity' of the mind at one time and its identity over time are, for Hume, misrepresentations of the unity of an association:

I cannot compare the soul more properly to anything than to a republic or commonwealth, in which the several members are united by the reciprocal ties of

³¹ D. Hume, *A Treatise of Human Nature*, ed. L.A. Selby-Bigge, (Oxford: Oxford University Press, 1888), p. 252.

³² *Op. cit.*, p. 253.

³³ *Op. cit.*, p. 254

government and subordination, and give rise to other persons, who propagate the same republic in the incessant changes of its parts.³⁴

However, Hume cannot give this analogy full play, as he is committed to reducing the 'reciprocal ties of government and subordination' in the 'commonwealth' of the mind to mere relations of likeness and succession. So, in Hume's own terms, the objective foundation of our tendency to ascribe unity and continuity to ourselves seems too thin. Kant, whose own position seems to follow the analogy Hume draws between the mind and a 'commonwealth', has a more satisfactory analysis of what might constitute its unity.

Wolff³⁵ argues that Kant's principle of the unity of consciousness is the synthesis of mental representations in imagination according to the 'categories', taken as 'something universal which serves as a rule'.³⁶ A multiplicity is thus also an unity, inasmuch as each mental representation is referred to every other through its place in the application of a single universal rule. So, if Wolff's interpretation is correct, Kant's unity of consciousness is indeed analogous to the unity of a commonwealth, though taken as being unified not so much by commerce between its members, as by the scope of its laws.

To take an alternative analogy, the unity of consciousness may be compared with the

³⁴ Op. cit., p. 261.

³⁵ Robert Paul Wolff, *Kant's Theory of Mental Activity*, (Cambridge Massachusetts: Harvard University Press, 1963), pp. 121-131.

³⁶ Kant, *Critique of Pure Reason*, p. 135.

unity of a product of human activity. A product may be made of varying materials and interact with its surroundings in such a way that neither relations of likeness among its parts, nor commerce among them, distinguish the product from its surroundings. What marks a product off from its surroundings is that its parts are organised according to a single design.

With this analogy, it is clear how the self to which all my experience belongs may not be among the contents of my experience. In the case of a commonwealth, the body which lays down the law of a land may come under the scope of its own laws. On the other hand, the artificers and their designs are never among the materials incorporated into human artifacts. An artifact merely 'reflects' and does not incorporate its design. And, as Hume points out, even the 'reflection' of a design in a product need not always or ever be univocal, as we may be able to 'read' the design behind an artifact in a number of ways.³⁷ The self to which the contents of consciousness belong is thus that which, we know not what, determines the systematic interconnection of phenomenal experience.

In the first edition of the *Critique*, Kant claims that this unity of consciousness is, in fact, compatible with the experience being that of a number of persons. So, Kant considers that just as a billiard ball may impart all of its momentum to another, so one consciousness may be the result of one person handing on all its experience to another, and so on, so that all the experience of previous persons is accumulated in the consciousness of the last

³⁷ David Hume, *Dialogues Concerning Natural Religion*, ed., John Price (Oxford: Oxford University Press, 1976), Part 7.

person in the series.³⁸ The unity of an intellectual metabolism, which for Locke implies the unity of the person,³⁹ signifies for Kant only the appropriation of all the contents of consciousness into one consciousness. Kant claims that this appropriation implies nothing as to the nature of the self performing it.

Yet this claim is surely wrong. That the self has appropriated such-and-such contents tells us a great deal. There seem to be three crucial things we need to know about an intelligence: one is what the contents of its consciousness are; the second is what intellectual operations it can perform on those contents; the third is how the intelligence thus specified interacts with its surroundings. To know that the self has appropriated certain contents of consciousness tells us the first of these things. And the idea that we know ourselves through an inner sense may be compatible with this sort of self-knowledge. For an inner sense may simply refer to experiences, such as emotions, which are not spatially localized or refer to other things. And this merely specifies what in fact are some of the contents of our consciousness.

Kant's claim that we know ourselves only as we appear to ourselves suggests, however, that we cannot know what in fact the contents of our consciousness are, but only that it appears to our inner sense that we have certain phenomenal experiences. This is incompatible with self-knowledge, threatens a regress, and is inconsistent with the claim that we do not in fact have knowledge of other things as they are in themselves. For surely, given

³⁸ Kant, *Critique of Pure Reason*, first edition, trans., Norman Kemp Smith, p. 342

³⁹ John Locke, *An Essay Concerning Human Understanding*, vol 1, (New York: Dover Publications, 1959), pp. 448-470.

that we cannot know that we have certain contents of consciousness, but only that it appears to us that we have them, then, since these appearances are contents of consciousness in turn, it follows that it can only appear to our inner sense that it appears that we have those contents, and so on. Further, if it only appears to our inner sense that we have phenomenal experience of other things, and if this tells us nothing about ourselves as we really are, then we do in fact, for all we know, have knowledge of other things as they are in themselves.

Once again, the absolute divide which Kant sets between phenomena and noumena threatens the intelligibility of the claim that they are connected. Yet the intuitive feeling remains that ourselves as subjects of self-consciousness are not included in the scope of our self-consciousness, and yet that what we are conscious of is nothing but ourselves. The contradiction that works its way through all three of the contradictions which Kant considers is the tension between conceiving of ourselves as conscious agents, able actively to determine changes in both ourselves and our situations, and ourselves as having a given nature in given circumstances. Thus, taken as a *subject* of self-consciousness we consider ourselves from the standpoint of what we may be, while taken as an *object* of self-consciousness, we confront the limits of what we are.

As we have seen, Kant's resolutions of the dialectics between freedom and nature, teleology and mechanism, and subject and object, are all vitiated. They are vitiated firstly by the division between phenomena and noumena being taken to coincide with the division

between the known as it appears to us, and the absolutely unknown, and secondly, by the consequent denial of any conceptual relationship between the two points of view from which Kant suggests that human nature may be viewed.

Now, it can be granted that anything we know is subject to revision in the light of further experience, and is never complete. However, it is hardly acceptable that knowledge of a thing which is not absolute constitutes no sort of knowledge, or is no better than complete ignorance. Leibniz's distinction between obscure and confused and clear and distinct perceptions is, perhaps, closer to the mark after all, than the distinction which Kant draws between the phenomenal and the noumenal. Indeed, we cannot have complete ignorance of the noumenal if the phenomenal is, as Kant says at one point, its 'sensible sign'. There must be some sort of conceptual connection between a sign and what it signifies. Thus, some sort of conceptual incoherence is involved in supposing, for example, that people show all the signs of friendship when and only when they are hostile.

Hegel's criticism of Kant is, I believe, along these lines. Hegel maintains that there can be neither an epistemological nor a conceptual gulf between the phenomenal and the noumenal.⁴⁰ However, if this is so, Kant's claim that apparent contradictions are resolved by recognising that things are viewed from two different points of view no longer provides a clear-cut resolution. If thinking of ourselves as free is not to be utterly different from thinking we are part of the system of nature, then it is no longer clear that we can be determined in one respect, but not in the other. I now propose to consider Hegel's adopt-

⁴⁰ G.W.F. Hegel, *The History of Philosophy*, pp. 453-454.

ion of dialectical thought, and his rejection of Kant's view that the contradictions of dialectic are the result of illusions of reason.

2.5 HEGEL'S AFFIRMATION OF CONTRADICTION

In this section, I shall first give an account of Hegel's critique of Kant's attempt to resolve the instances of dialectic which arise from the clash between the conception of human beings as rational agents, and the conception of human beings as subject to the laws of nature. I then consider whether Hegel's position is simply that these dialectics show that some contradictions must be accepted as true. I conclude that, while Hegel employs a concept of contradictions in reality as opposed to contradictions merely in thought, it is not clear that he thinks contradictory statements must be considered true without qualification.

2.51 HEGEL'S CRITIQUE OF KANT

First of all, Hegel rejects Kant's claim that we can have knowledge only of phenomena, claiming that the limits of phenomenal knowledge can be intelligible only by contrast with knowledge which transcends those limits:

It argues an utter want of consistency to say, on the one hand, that the understanding only knows phenomena, and on the other, assert the absolute character of this knowledge, by such statements as 'Cognition can go no further';...No one

knows, or even feels, that anything is a limit or defect until he is at the same time above and beyond it.⁴¹

Hegel agrees that phenomenal knowledge, or thought which employs only 'the categories of understanding', falls short of the truth. However, according to Hegel, Kant errs in ascribing the limitations of phenomenal knowledge to their being valid just for our form of consciousness, as though '...what we think is false, because it is we who think it.'⁴² The limitations of phenomenal knowledge must be inherent in the concepts it employs. For Hegel, the limitation of phenomenal knowledge is that it uses concepts which stick 'to the fixity of characters and their distinctness from one another', and treats each thing thus characterised as self-sufficient, 'having a subsistence and being of its own'.⁴³

Now, this limitation of phenomenal knowledge is supposed to emerge from within itself. When the understanding attempts to pin down the fixed and discrete nature of phenomena, its characterisations of phenomena 'supersede themselves, and pass over into their opposites.'⁴⁴ Thus, what Hegel calls the 'dialectical stage' of thought is supposed to emerge from the understanding. Kant's achievement, according to Hegel, is that he restored the significance of dialectic by posing the antinomies of reason. Rather optimistic-

⁴¹ G.W.F. Hegel, *Hegel's Logic*, trans. William Wallace, (Oxford: Oxford University Press, 1975), pp. 91-92.

⁴² Op. cit., pp. 93-94.

⁴³ Op. cit., p.113.

⁴⁴ Op. cit., p. 115.

ally, Hegel claims that Kant showed that:

The problem of these Antimonies is no mere subjective piece of work oscillating between one set of grounds and another; it really serves to show that every abstract proposition of understanding, taken precisely as it is given, naturally veers round into its opposite.⁴⁵

Hegel, however, rejects Kant's general strategy for resolving the contradictions which result when the claims of 'the understanding' veer round into their opposites. The antimonies are not limited to the four which Kant singles out: 'they appear in all objects of every kind, in all conceptions, notions, and ideas.'⁴⁶ Further, Kant treated these contradictions as 'illusions of reason', so that reason and not the world itself is to be their source. This, Hegel claims, is to betray 'an excess of tenderness for the things of the world'.⁴⁷ And this in turn leads to a 'dualism', in which:

... the fundamental defect makes itself visible in the inconsistency of unifying at one moment what a moment before had been explained to be independent and therefore incapable of unification. And then, at the very moment after unification has been alleged to be the truth, we suddenly come upon the doctrine that the two elements, which, in their true status of unification, had been refused all inde-

⁴⁵ Hegel, *Logic*, p. 117.

⁴⁶ Op. cit., p. 78.

⁴⁷ Op. cit., p. 77.

pendent subsistence, are only true and actual in their state of separation.⁴⁸

This can be illustrated by the dialectic of freedom and nature, in terms of both moral statements and moral policy. To say that a person has committed murder, for example, we need to say that a murder actually happened, and that it was done on purpose. The murder, as a natural event, must be subsumable under laws of nature, while, according to Kant, the murderous intention involves an unconditioned resolve of the will either to murder, or to give free reign to an inclination to murder. Thus human action can be understood only as free conscious agency, and as a particular phenomenon subject to the laws of nature. Yet, as we can know no particular fact about ourselves as free conscious agents, we cannot recognize any particular action to be the result of our willing it be so, as well as being the inevitable outcome of prior events. The phenomenal action of a human being is at once the 'sign' and inscrutable mask of the intelligence behind it.

Now, with moral policy, Kant claims that if we strive for what is best for us, we must strive for both virtue and happiness, where virtue is acting from duty, and happiness is the fulfillment of our desires. Moreover, virtue and happiness are not just two quite unrelated components of a package containing what is best for us. They presuppose each other. For, if we are virtuous, we deserve happiness. And we cannot be truly happy, that is, happy consistently with self-respect, unless we are virtuous. However, Kant also claims that acting from duty has nothing to do with seeking happiness, and is often at odds with it. The two can only be reconciled in an after-life in which happiness is nothing

⁴⁸ Op. cit., p. 91.

but the enjoyment of freedom, with the satisfaction of needs no longer being necessary to it. Thus, in both moral statement and moral policy, we cannot discard either nature or freedom, although, when properly understood, nothing of either enters into the nature of the other.

With the dialectic of teleology and mechanism, Hegel notes that Kant recognizes the significance of the internal teleology of living things, in which the purpose of their existence is not something imposed on them from outside, but an immanent formative principle which constitutes every part of an organism as both the means and end of the existence and form of every other part. That is, in organisms, means and ends are the precondition and result of each other. However, having recognised this, Kant goes on to deny any objective basis to this interconnection of means and ends. For Kant, objectively speaking, we must recognize that a means always precedes an end, and that an end cannot bring its own means into being, but must wait on their being thrown up out of a conjunction of prior events.

As Hegel says:

Such an idea evidently radically transforms the relation which the understanding institutes between means and ends, between subjectivity and objectivity. And yet, in the face of this unification, the End or design is subsequently explained to be a cause which exists and acts subjectively, i.e., as our idea only: and teleology is...purely personal to *our* understanding.⁴⁹

⁴⁹ Hegel, *Logic*, pp. 89-90.

In general, Hegel's complaint is that, while Kant recognizes that we can make sense of the phenomena of rational agency only by seeing it as involving two opposite constituents, the natural and the rational, the contradictions involved in rational agency are resolved by separating the two aspects so that they can be seen to be consistent, but with the result that they are no longer visibly connected.

2.52 DIALECTIC OR DIALETHIC?

Hegel rejects the claim that human nature may be viewed from two different, utterly independent, points of view. The conscious, rationally purposive and natural aspects of human nature are mutually implicated in each other. Now, if we speak of the same persons in the same respect when we call their actions both autonomous and causally determined, then the contradiction between freedom and nature remains unresolved. To accept this is to take the position that there are true statements in the form of a contradiction. Graham Priest terms this a 'dialethic' position.⁵⁰

In a way, the simplest way of thinking of reality itself as contradictory is to take a dialethic position. The contradictory nature of the world is then reflected in the truth of contradictory statements. This is suggested by such formulations as:

...the Antimonies are not confined to the four special objects taken from Cos-

⁵⁰ Graham Priest, 'Contradiction, Belief and Rationality', in *Proceedings of the Aristotelian Society*, 86, pp. 99-116, especially pp. 99-102.

mology: they appear in all objects of every kind, in all conceptions, notions, and Ideas...to know objects in this property of theirs makes a vital part in a philosophical theory. For the property thus indicated is...the Dialectical influence in logic.⁵¹

However, Hegel appears to retract this claim when he claims that contradiction is the peculiar mark of the finite, or of things whose 'notion' and 'existence' are at odds with one another:

God alone is the thorough harmony of notion and reality. All finite things involve an untruth: they have a notion and an existence, but their existence does not meet the requirements of the notion. For this reason they must perish, and then the incompatibility between their notion and their existence becomes manifest.⁵²

The tendency to contradiction then appears as a peculiarity of concepts of finite things:

...by Dialectic is meant the indwelling tendency outwards by which the one-sidedness and limitation of the predicates of understanding is seen in its true light, and shown to be the negation of them. For anything to be finite is just to suppress itself and put itself aside.⁵³

⁵¹ *Hegel's Logic*, p. 78.

⁵² *Op. cit.*, §42, *zusatz*, p. 41.

⁵³ *Op. cit.*, §81, p. 116.

According to this ontological interpretation of the dialectic, all finite things are modelled after human subjects conceived as autonomous rationalities to be realized in an embodied life. This embodiment is at once both a necessary means and an obstacle, or limit, to the realization of an autonomous rationality's projects. Now, we cannot separate a *determinate* free rationality from its embodiment, and suppose that it might have some sort of ideal, perfect embodiment, instead of its actual, but limiting life. For Hegel thinks that a rationality takes its determinate definition or finishing touches from its actual embodiment, and thus is inseparable from it. My projects take their definite form from their realization in my embodied life. This is not just because they have to be adapted to the means which that embodiment makes available, such as the number of hands one has. It is also a consequence of the fact that my values and experience are not ready made, but must be progressively developed on the basis of the results of living out their initially given forms in every stage of an embodied life.⁵⁴

However, when Hegel says finite things contain an untruth, though this may have an ontological interpretation, it suggests at the same time that whatever we attempt to say about finite things is both true and false. And, once we admit the idea that truth and falsity do not exclude one another, except perhaps when they are absolute, it is an easy step to adopt a dialethic logic, in which contradictions are both true and false.

⁵⁴ See Charles Taylor, *Hegel*, (Cambridge, Cambridge University Press, 1975), chapter III, for a thorough and illuminating discussion of this model.

Thus, a statement about a finite thing is, while true, also always a distortion of the truth. It seems then that its negation should be seen to be true insofar as it corrects the distortion in the statement it negates, even though it is also false to the truth in that statement. Now, since both the statement and its negation are true, it seems that the conjunction of the statement with its negation can also be true. In most cases, however, this conclusion can be avoided by taking a statement to be true not just when it has an element of truth, but is mostly true, and false when it is mostly false. Even so, the position that the conjunction of a statement with its negation is true will be plausible when there is a rough balance between the truth and falsity of a statement, so that it is both mostly true and mostly false.⁵⁵

Moreover, although an ontological interpretation of the dialectic captures Hegel's dismissal of subjective resolutions of contradictions, it nevertheless constitutes an inversion of his fundamental position. For Hegel, it is not the case that there are true contradictions because only they can accurately reflect the contradictory nature of finite things, but the case that finite things are contradictory because they are the product of the necessarily contradictory character of the concepts of understanding. One of the marks of Hegel's idealism is that concepts are not the internalisation in thought of the nature of things, but rather things are the externalisation of the nature of concepts.

⁵⁵ This all depends in a rather disconcerting way on whether 'mostly' is taken as 'strictly more than a half', or as 'at least a half'. Taken the first way, a statement in which truth balances falsehood is neither true nor false overall, which in some ways is more counterintuitive than its being both true and false, which is the consequence of the second interpretation.

However, a dialectic position takes a contradiction as the only adequate statement of the truth, rather than seeing it as a reflection of the inadequacy of conceptual schemes which must resort to affirming both a statement and its negation in order to approach truth. Hegel frequently suggests something like the latter position, although the dialectic position seems at first sight to accord better with Hegel's idea that we cannot avoid using the contradiction-making categories of the understanding, and that contradictions are preserved in their resolution .

The various positions can be compared through an examination of the contradictions of motion. The simplest statement of Zeno's arrow paradox is as follows. An arrow in flight occupies its own space at every instant. Anything which occupies its own space is at rest. An arrow in flight moves. Therefore the arrow in flight both moves and is at rest. This contradiction can be resolved by interpreting it as the result of an attempt to treat 'moves' and 'rest' as intrinsic rather than relative concepts. If we replace 'moves' with 'moves with respect to', then the arrow in flight moves with respect to the archer, but as it occupies its own space at every instant of the flight, is at all times at rest with respect to itself. This resolution treats the contradiction as symptomatic of an inadequacy in the concepts which generate it.

A deeper interpretation of the arrow paradox takes the contradiction to lie in an attempt to describe its state at any instant. No matter how fast the shutter speed of a camera is, the picture it takes of the arrow in flight will always be slightly blurred. This reflects the

conceptual fact that there can be no exact statement of its position in any finite interval of time. Any estimate we take of the arrow's position always takes a finite time, and in that time we can locate the position of the arrow only within a certain range of positions, no matter how narrow. Within that range, it is equally in and not in every position. The contradiction can be resolved by distinguishing between the arrow's estimated and theoretically postulated position, and between its positions in discrete and continuous spaces. If space and time are real continua, the arrow has a postulated position on the spatial continuum at any instant in time. This position is not, and cannot be, a member of the series of more and more exactly estimated positions. Instead it is the limit of that series as the interval of time taken for an estimation of position tends to zero. Alternatively, we can take the arrow's position in a discrete space as a spread across the discontinuities between discrete positions, which corresponds to a continuous sequence of different positions in a continuous space. Once again, an enrichment of the conceptual scheme employed to describe the arrow's motion can be taken to resolve the initial contradiction.

Graham Priest suggests a further level to the paradox.⁵⁶ Suppose motion is intrinsically different from rest. Such a difference, it seems, can only be in the way space is occupied by the arrow at rest and the arrow in motion. However, there is no intrinsic difference at any instant between an arrow in motion and at rest. The difference between an arrow in motion and at rest at a given time is simply a difference in the relationship of its position at that time to its positions at other times. Thus an arrow at rest with respect to an object has

⁵⁶ Graham Priest, 'Inconsistencies in Motion' in *American Philosophical Quarterly*, vol. 22, no. 4, October 1985, pp. 339-346.

the same position in relation to that object at all times, while an arrow in motion with respect to an object differs in its position with respect to that object at different times. However, if this is all that the difference between rest and motion amounts to, then there is no difference at all between an object in motion, and an infinite series of objects at rest, where, for any two objects in the series there is a third object between them. Graham Priest suggests that this contradiction can be resolved in favour of an intrinsic difference between motion and rest if we follow Hegel's view that a body in motion at a given time both is and is not at the corresponding position in its path of motion. That is, according to this model, we can regard a body in motion as carrying its past and future with it, so that just before it reaches a given place it is moving into that place, and just after it has left the place it is moving out of the place. Moving into and out of a place amount to being both in and not in the place.⁵⁷

However, a determined defender of ultimate consistency can account for the intuition that there is a difference between a state of motion and a state of rest by proposing that a conceptual shift may resolve the paradox.⁵⁸ Thus, on this view, there is no difference *in kinematic terms* between an infinitely dense series of objects at rest and an object in motion, but there is a *dynamic* difference in that an object moving with respect to another

⁵⁷ Priest, 'Inconsistencies...', p. 343.

⁵⁸ Although the account to be given will not represent the difference between rest and motion as an *intrinsic* difference, as Graham Priest thinks it should be, it does distinguish between a single moving object and an infinite and dense series of stationary objects, which seemed impossible when accounting for the distinction between motion and rest merely in terms of differences in relative positions at different times.

has non-zero momentum with respect to that object, while any object at rest has no momentum. The difference between a series of objects at rest and an object in motion then can be expressed in terms of what would have happened if an object with equal and opposite momentum encounters the object in motion, as compared with what would happen if such an object encounters one of the objects at rest, which are indistinguishable kinematically from the object in motion. In the case of the continuous series of objects at rest, the encounter will result in both the moving object and the object it collides with sharing the original momentum, while in the case of the moving object, both it and the object it encounters end up with no momentum in an inelastic collision, and opposite momenta if the collision is elastic.

2.53 HEGEL'S 'AUFHEBUNG' OF CONTRADICTIONS

We thus have two approaches to the resolution of the paradoxes of motion. One approach is to take each paradox as a sign of conceptual inadequacy at the level at which the paradox occurs, and to show how two antithetical statements emerge in a more adequate conceptual scheme as an affirmation of a state of affairs in one respect, and a denial of that state of affairs in another respect. However, when one paradox is resolved, the basis for another emerges, and this has to be resolved within a still richer conceptual scheme. The other approach is to take a paradox as showing that there are equally good grounds for asserting a statement and its negation, so that an affirmation of a contradiction is the 'resolution' of the paradox. This 'resolution' does not necessarily lead to another conceptual scheme in which a further paradox may emerge.

Now, a third approach is suggested by Charles Taylor. Hegel, according to Taylor, holds that all concepts of finite things are necessarily instantiated but criterially incoherent.⁵⁹ Thus, at the level of verifiable description, we must employ the concepts of motion even though they are criterially inconsistent, that is, the criteria for saying an object is in motion is in a certain place at a certain time also constitute criteria for saying it is not in that place at that time. This state of affairs is a necessary stage in the comprehension of motion, which nevertheless must be transcended. To be both in and not in a place at any time is a self-cancelling state of affairs which can exist only as a transcended aspect of motion. This approach combines the first approach of resolution through conceptual shift, with the claim that a concept which resolves a contradiction at one level is fully intelligible only in terms of the concept, or concepts, it transcends. The concept which resolves the contradiction thus includes among its criteria the transcended concept or concepts. For example, on this view the concept of one body being in motion with respect to another can be understood only if it is seen as including or implying the contradictory statement that the body is both in motion and at rest, where 'motion' and 'rest' in this context are not explicitly relational.

As Taylor shows, his interpretation of Hegel's affirmation of contradictions corresponds to the structure of Hegel's ontology.⁶⁰ All finite things are contradictory because their

⁵⁹ Taylor, *Hegel*, pp. 229-230.

⁶⁰ Op. cit., p.230: 'A given categorial concept is indispensable yet incoherent. This means that the partial reality it designates both must exist and yet destroy itself, But this can only be because...this

'notions' contradict their embodiments. For example, the 'notion' of a living thing is the concept of an activity which strives to continue itself in all circumstances. This is in contradiction to an embodiment which sustains the activity only in given conditions, and only with the result that continued activity undermines the conditions necessary for that activity to continue. This contradiction is resolved but preserved in the concept of a *reproductive* living thing. A reproductive living thing both presupposes individual embodiments as both means and barriers to continued life, and the overcoming of those barriers in the activity of individuals passing their lives on to others. All limited concepts are ultimately resolved and preserved in the concept of the absolute.

As we might expect, Hegel's view is neither a straightforward dialectic, nor a straightforward attempt to ascribe contradictions to the conceptual inadequacy of a given form of thought, such as the 'understanding'. Its distinctive features when compared with Kant's position are firstly, that contradictions are 'objective', inasmuch as they are externalised in the 'going under' of all finite things. And secondly, although in Hegel's view a contradiction partial reality is kept in being by its inherence in [a] higher reality. A partial reality which continually destroys itself can only go on existing if it is continually posited by the larger order of which it is a part. Thus the fact that we move through the chain of conceptual necessity by contradictions and their resolutions means that the lower terms are related to the higher as posited by them (because they depend on them to exist), yet necessarily posited (for these terms are indispensable), and yet as necessarily disappearing, (because they are contradictory). But this exactly mirrors Hegel's ontology, where the larger whole, or absolute, necessarily issues in a partial, external reality, which qua expression of the absolute is contradictory and must go under.'

diction may be resolved through transcending the concepts from which it derives, the superceded concepts still constitute criteria for the application of the concepts which transcends them, so that the contradiction is still a necessary, although bracketed, part of a complete description of reality. In this way, the immediate unity of the rational and natural aspects of human nature survives the resolution of the resulting contradiction between human freedom and subjection to the laws of nature. Hegel's view has turned out to be complex. Contradictions in lower levels of thought are resolved at higher levels, and thus dispelled, but the resolution at a higher level presupposes, and thus preserves, the contradictions generated at a lower level.⁶¹

If we turn now to Marx's 'inversion'⁶² of Hegel, the question arises as to whether what has come to be called 'dialectical materialism' can affirm the objectivity of contradictions.

2.6 MARX AND 'CONTRADICTIONS IN REALITY'

The problem of reconciling Marx's avowedly materialist standpoint with the claim that there are objective contradictions has produced a range of interpretations of what Marx ultimately means in passages such as the following, in which he seems to refer to 'contradictions in reality':

⁶¹ Graham Priest uses the term 'dialethic' to include what I have called a 'qualified' dialethic position when contradictions at one level of language are not only resolved but preserved, so that the concepts generating the contradiction cannot simply be discarded as inadequate. Perhaps the appropriate terminology is governed by whether the resolution or preservation of contradictions is stressed.

⁶² K. Marx, *Capital*, vol. 1, trans., Ben Fowkes, (Harmondsworth: Penguin Books, 1976), p. 103.

The further development of the commodity does not abolish these contradictions, but rather provides the form within which they have room to move. This is, in general, the way in which real contradictions are resolved. For instance, it is a contradiction to depict one body as constantly falling towards another and at the same time constantly flying away from it. The ellipse is the form of motion within which this contradiction is both realised and resolved.⁶³

Within a materialist framework, there are at least three possible ways of interpreting the claim that there are contradictions in reality. The first is to take it as the position that reality is truly describable in contradictory terms. This can be a straightforward dialectic position, with contradictory statements taken as the appropriate internalisation of a contradictory reality, or it can be a qualified dialectic position, in which contradictions arise only as the result of limitations in the conceptual resources available for a description of reality at a given level. This can also be combined with the position which Charles Taylor ascribes to Hegel, namely that the contradictions of limited forms of thought are presupposed in the more adequate forms which resolve them. In each version of a materialist dialectic, concepts would be considered more or less adequate internalisations of reality.

The second way to understand contradictions as real is to suppose that this amounts to relations between the intentions or beliefs of individuals which make impossible, for purely logical reasons, the simultaneous realization of all those intentions or beliefs. Thus

⁶³ Marx, *Capital*, vol. 1, p. 198.

Jon Elster proposes a theory of 'social contradictions' which explores the necessary conditions and consequences of this sort of incoherence in social practices.⁶⁴

The third concept of real contradiction is a descendent of Kant's concept of real contradictions as conflicting tendencies in nature.⁶⁵ Colletti insists that only this notion of real contradictions can possibly be coherent in materialist terms.⁶⁶ Sean Sayers appears to argue against this, and for a dialectic position. However, although his position is probably a dialectic one, the concrete account he gives of contradictions is consistent with a rejection of dialectic. Thus his view is that real contradictions are not merely accidentally opposed tendencies in nature, but opposite tendencies which cannot exist separately.⁶⁷

Interpreters of Marx have rejected each of the above versions of 'real contradiction' as either not faithful to the text, or not the most viable reconstruction of it. Mussachia is a good example of those who claim that Marx does not in any sense adopt a dialectic position, although Engels and other Marxists have lapsed into that. Suchting⁶⁸ shows

⁶⁴ Jon Elster, *Making Sense of Marx*, (Cambridge: Cambridge University Press, 1985), pp. 44-45.

See also his *Logic and Society*, (Chichester: Wiley, 1978), chs., 4 and 5.

⁶⁵ Kant, *Critique of Pure Reason*, p. 284.

⁶⁶ Lucio Colletti, *From Rousseau to Lenin*, (London: New Left Books, 1972), pp. 120-128.

⁶⁷ See Richard Norman and Sean Sayers, *Hegel, Marx and Dialectic: a Debate*, (Brighton: The Harvester Press, 1980), especially pp. 98-99.

⁶⁸ W. Suchting, *Marx: an Introduction*, (New York and London: New York University Press, 1983), p. 184.

that Marx, as well as Engels, goes beyond the view that contradictions must be related to consciousness. And Hegelian Marxists have rejected the idea that 'real contradictions' are merely conflicting tendencies.

In this section, I shall argue that what was proposed as an ontological interpretation of Hegel's dialectic, and rejected as not faithful to Hegel's idealism, best captures the theoretical intentions of Marx's dialectic. This provides an account of 'real contradictions' along the lines sketched by Sean Sayers, combined with a qualified dialectic position. Whether Marx held a straightforward dialectic position is not clear, but is not essential to Marx's theory of society.

2.61 MUTABILITY AND CONTRADICTION

Marx's point of departure in 'discovering the rational kernel within the mystical shell' of Hegel's dialectic is that:

it includes in its positive understanding of what exists a simultaneous recognition of its negation, its inevitable destruction; because it regards every historically developed form as being in a fluid state, in motion, and therefore grasps its transient aspect as well; and because it does not let itself be impressed by anything, being in its very essence critical and revolutionary.⁶⁹

⁶⁹ K. Marx, *Capital*, vol. 1, p. 103.

Marx clearly is here alluding to Hegel's ontology of the 'finite', which Hegel outlines in very similar terms:

...everything finite, instead of being stable and ultimate, is rather changeable and transient; and this is [the] Dialectic of the finite, by which the finite, as implicitly other than what it is, is forced beyond its own immediate or natural being to turn suddenly into its opposite...[Dialectic's] principle answers to the idea of [God's] power...All things...are doomed; and in saying so, we have a vision of Dialectic as the universal and irresistible power before which nothing can stay, however secure and stable it may deem itself.⁷⁰

Hegel says that in every finite thing its 'notion' is in conflict with its existence. In living things this emerges as the conflict between an unconditional striving for life, and the mortality inherent in the bodily realization of that striving. Now, if the categories of consciousness used to pose the contradiction in this way may be discarded as so much mystical wrapping, the contradiction between 'notion' and 'existence' in living things emerges as the conflict between a living thing's tendency to maintain its life, and its tendency to die.

Does this mean that real contradictions when demystified are nothing but Duhring's '...antagonism of forces measured against each other in opposite directions', which 'is the basic form of all actions in the life of the world', but which has nothing to do with

⁷⁰ *Hegel's Logic*, §81, zusatz, p. 118

'contradictions in things'?⁷¹ In reply to Duhring, Engels gives a somewhat eclectic list of the ways that things themselves, from motion, through life, to numerical magnitudes, are contradictory. Engels identifies a living thing's self-maintenance, or life, with its metabolism, the process of ingestion and secretion whereby proteins are built and rebuilt. Death is identified with the cessation of that process.⁷² For Engels, life itself is the contradiction, as metabolism is supposed to involve a thing being both itself and something else.

Though Engel's reply is not very illuminating, and even departs from Hegel's dialectical insight that 'life, as life, involves the germ of death',⁷³ and 'is the constant battle against' the powers of 'objectivity'⁷⁴ in its own constitution, the vehemence of his dismissal suggests something is indeed missing in Duhring's idea. Somehow, the 'contradictory' must be intelligible as a category applicable to reality, and not just to thought.

Now, in themselves, two opposite tendencies have nothing to do with the mutability of things, to which both Hegel and Marx refer. In fact, the tendency of a solid to fall, counteracted by the equal and opposite tendency of the earth to resist solids passing through it, suggests stasis rather than mutability. To say that the opposition here must be essential rather than accidental, as Sean Sayers suggests, takes us further. A solid resting against

⁷¹ As quoted in F. Engels, *Anti-Duhring*, (Peking: Foreign languages Press, 1976), p. 150.

⁷² Engels, *Anti-Duhring*, p. 103.

⁷³ *Hegel's Logic*, p. 117.

⁷⁴ *Op. cit.*, p. 281.

the earth is only one possible relationship into which either may enter, so that the opposition in this case is to that extent not essential. So the elements of the system in which the opposing forces operate must be more than accidentally configured, if we are to speak of the operation of a dialectic. Thus, in the case of life, the tendency to self-maintenance and the tendency to mortality which make up the dialectic of life must more than accidentally coincide. The very same powers from which life flows must also lead to death. That is, what is necessary for maintenance must ultimately be sufficient for dissolution.

What warrants us speaking here of 'contradictions' is that essential oppositions, in this sense, lend themselves to contradictory description. Thus, if the potential for life is ultimately realised in death, we are entitled to say, in a sense, 'living is dying', which is a contradiction. We are not, however, compelled to take an unqualified dialectic position. For we have a flat contradiction only when 'living' and 'dying' are treated as a-historical categories. The contradiction is resolved in the life-history of a living thing. Yet the flat contradiction does reflect the fact that death has its immediate antecedents in life. Though life is before death, elements of the latter are 'interwoven' with those of the former, as Lenin puts it in another context,⁷⁵ and the contradiction between 'living' and 'dying' as atemporal categories may best reflect that fact. However, while a materialist dialectic of finite things may be reflected partially in contradictory statements which are resolvable, this is clearly not necessary. As an internalisation of a 'real contradiction', a contradictory statement is a reflection of that contradiction, and not its necessary precondition.

⁷⁵ See V.I. Lenin, 'Two tactics of Social-Democracy in the Democratic Revolution', in *Selected Works*, vol. 1, (Moscow: Progress Publishers, 1970), pp. 517-18.

When we look at Marx's theory of society, it is clear that the idea of 'real contradiction' developed here meets any theoretical requirements which Marx might want to place upon it. A society's 'notion' is here the social structure through which a society perpetuates itself with that structure. Its 'existence' is the sum-total of activity through which the social structure is realised. It is then pure Marx to go on to assert that the activities through which a society with a given structure needs to perpetuate itself ultimately prove sufficient for the dissolution of that society.

Thus, although Colletti and others assert that a denial of 'contradictions in reality' is necessary for a coherent materialism, it is clear that Hegel's idealism and Marx's materialism may coincide in maintaining the objectivity of contradictions. A dialethic interpretation of Marx's position is also possible but not obligatory, as it is with Hegel.⁷⁶ However, if the difference between a materialist and an idealist dialectic does not turn on the affirmation of contradictions, or even of logical contradictions in reality, what then is the difference, if there is one? It is to that question that the next chapter is addressed.

⁷⁶ My own preference is for the version of a qualified dialethic position in which contradictions at one conceptual level are resolved at another level, but also preserved, as concepts which generate contradictions remain as criteria for the application of the concepts which resolve those contradictions. It is also acceptable that the dialethic aspect of this position be stressed, as a dialethic logic must be employed to limit the implications of contradictions which are resolved but also presupposed by re-description at another level.

CHAPTER THREE

HEGEL'S 'SPECULATIVE' DIALECTIC AND MARX'S 'IDENTITY OF OPPOSITES'

3.0. INTRODUCTION

We have seen that both Hegel and Marx maintain that there are real contradictions. However, while it is Hegel's view as an idealist that a contradiction in being has its source in a conceptual contradiction, Marx's position is that, although a real contradiction may be reflected in a conceptual contradiction when it is recognized as such, real contradictions can exist independently of conceptual contradictions. It is consistent with Marx's view that real contradictions may never be reflected in consciousness, or recognized only in non-contradictory terms.

Is there a more fundamental difference between idealist and materialist versions of dialectic? One view is that dialectical versions of idealism and materialism differ only in their ontologies. Thus Engels suggests that a dialectical method can be shared between materialist and idealist philosophies.¹ Hegel, on the other hand, claims that his dialectical method is inseparable from the content of his philosophy.²

¹ F. Engels, *Anti-Dühring*, (Peking: Foreign languages Press, 1976), p. 12.

² Hegel, *Logic*, § 243.

Now, although Hegel's dialectic and the Marxian dialectic are different, to describe both philosophies as dialectical is justified because of three theses they have in common. These theses are:

1. That to understand something adequately is to understand it, not only as it is, but in a process of becoming something other than what it is.
2. To understand something adequately is to see it as a 'unity of opposites'.
3. A thing necessarily becomes something other than it is by virtue of its being 'a unity of opposites'.

Further, as we saw in the previous chapter, a dialethic, or qualified dialethic position, is just as compatible with the dialectic of Marx as it is with that of Hegel. In this chapter, I shall argue that, despite these similarities, the organicism of Hegel's Philosophy of Absolute Spirit is different from the organicism of historical materialism because Hegel holds that organic life forms are expressive of a rational spirit, whereas the materialist view is that they are material systems.

I shall first give an outline of those aspects of Hegel's philosophy which are 'speculative'. I then show that it is the 'speculative' aspect of Hegel's dialectic which reflects its idealist character, and which therefore constitutes a crucial difference between the

Hegelian and Marxian concepts of a 'unity of opposites'. Having examined Hegel's commitment to the role of consciousness in providing an ultimate explanation of life as a unity of opposites, I shall conclude this chapter by sketching a materialist account of a 'unity of opposites', and attempt to show that the resources of systems theory can provide the abstract conceptual framework needed for the materialist theory.

The difference between the Hegelian and Marxist dialectic is thus, in the first instance, shown to be an ontological difference. However, although this vindicates to some extent Engels' view that the Hegelian and Marxist dialectics have the same form and differ only in their ontologies, I believe that the ontological difference is reflected in a difference in form also. I take this issue up in the next chapter by showing that, although a Marxian material 'unity of opposites' is analogous to Hegel's 'unity of opposites', the two differ in ways reflective of the difference between materialism and idealism.

3.1 THREE VERSIONS OF THE 'SPECULATIVE' IN HEGEL

In this section, I shall explore the various senses in which Hegel regards his philosophy as being 'speculative'. There are broadly three such senses, and I shall devote a subsection to an account of each. Hegel firstly uses the term 'speculative' to describe a way of thinking which recognizes that every particular thing exists only as a transient aspect of a sustaining totality, so that everything existing is interconnected with everything else. Secondly, Hegel uses the term 'speculative' to describe a stage in the presentation of the

system of concepts in the *Logic* where the whole system is recognized as providing an adequate conception of reality. Thirdly, the term 'speculative' is used for those concepts which grasp the teleological foundation of reality as a whole, and especially the teleological foundation of life in nature and human history.

While these three senses of the term 'speculative' are related, I believe that one aspect of Hegel's philosophy in particular, the *teleological* aspect, gives his philosophy of Spirit its idealist stamp. After this exposition of Hegel's use of the term 'speculative', the next main section attempts to show how Hegel's teleology rests on the categories of conscious agency, and thus presupposes an idealist ontology.

3.11 SPECULATIVE REASON VERSUS THE UNDERSTANDING

Hegel initially uses the term 'speculative' to describe a way of thinking which he contrasts with two others: the 'understanding'; and 'dialectical' thought.³ According to Hegel, the 'understanding' conceives of things as they are, without conceiving them as changing or connected with other things. The understanding thus grasps the immediate or given existence of things when conceived as such. The formulas of traditional logic have unqualified validity at the level of the understanding: a horse is a horse, it is either a mammal or not a mammal, and it cannot be a mammal and also not a mammal. Dialectical

³ Hegel, *Logic*, § 79 ff.

thinking, on the other hand, sees that things cannot be taken at face value. According to Hegel, dialectical thinking veers from the thing's immediate existence to the underlying basis and impermanence of that existence. Thus a thing is no longer intelligible on its own, and no longer simply what it is. While it is what it is, a thing is simultaneously tending to become what it is not. Life is not cut off by death, as though life were sufficient in itself. Life is a struggle with death from beginning to end. Thus, while the understanding counterposes life to death, dialectical thought sees that the first moment of a thing's life is also the first moment of its death.

Now, according to Hegel, thinking in a speculative way is a synthesis of the kinds of thinking involved in the understanding and dialectical thought. To think speculatively is to grasp that a thing is what it is in virtue of its relationship with and transformation into its opposite. Speculative reason sees things as essentially a unity of opposites. This form of thought is thus closely linked with dialectical thought. Speculative thought *explicitly* expresses the insight which dialectical thought gives implicit expression to. Thus dialectical thought makes the negative claim that things *cannot* exist either independently or indefinitely, while speculative thought makes the positive claim that things *can* and must exist through their opposites. As such, their conflict ridden existence is necessarily transient, but is nevertheless sustained in that transience. Speculative thought thus puts in a positive way what dialectical thought affirms negatively. In its degenerate form, dialectical thought expresses scepticism as to the reality of finite things, while speculative thought corrects this scepticism by showing how finite things can exist as part of a

sustaining totality.

Hegel also equates speculative truth with what is called 'mysticism' in connection with religious belief.⁴ 'Mysticism', Hegel points out, is commonly taken as the view that reality is ultimately incomprehensible. Hegel accepts this appreciation of mysticism, so long as the abstract understanding is taken as the measure of comprehension or intelligibility. Thus speculative thought is 'mystical' inasmuch as it 'lies beyond the compass of understanding'. It is clear, though, that a number of philosophies may go beyond the bounds of 'understanding' when it is interpreted as a way of thinking which abstracts from the interconnection and impermanence of things.

For example, Spinoza's view that reality is ultimately one substance, of which thought and extension are aspects, surely transcends the bounds of understanding in this sense. However, Hegel claims that his 'mysticism' does not amount to a turning away from finite, particular things in the way of Spinoza.⁵ Hegel goes beyond given things by taking them to be the expression of rational principles, which as a system constitute the ultimate explanatory principle of reality as a whole. He thereby denies the self-sufficient reality of finite things, while claiming that their existence is necessary to that of the infinite, or reality as a whole.

⁴ Hegel, *Logic*, §82, zusatz

⁵ Hegel, *Lectures on the History of Philosophy*, Vol.III, pp. 286-287.

3.12 THE SPECULATIVE STANDPOINT IN HEGEL'S LOGIC

In the second place, Hegel speaks of a speculative aspect or moment of the Logic. Now Hegel's Logic is concerned with showing that each of the categories through which we make sense of reality is implicit in the most abstract and general of them, which is the concept of Being. These categories constitute a system of concepts called the Absolute Idea, which for Hegel is the ultimate explanatory principle of reality. The systemic status of the concepts generated in the Logic is recognized in its conclusion. Hegel says that this recognition is the culminating 'speculative' insight of the Logic.

The 'speculative' idea is thus not the last stage in a series of ever more adequate explanatory principles, but is rather an overview of the series as a whole. Hegel compares this end-point of the Logic to the end of a life:

The same may be said to be the case with human life as a whole and the occurrences with which it is fraught. All work is directed only to the aim or end; and when it is attained, people are surprised to find nothing else but just the very thing they had wished for [i.e. that a life had been lived through]. The interest lies in the whole movement. When a man traces up the steps of his life, the end may appear to him very restricted, but in it the whole *discursus vitae* is comprehended. So, too, the content of the absolute idea is the whole breadth of

ground which has passed under our view to this point.⁶

The speculative idea is thus the recapitulation of a process of conceptual development seen from just that standpoint of recapitulation. Looking forward from the beginning of the process in the *Logic* of making explicit what is implicit in the concept of Being, we see the necessity of the emergence of each concept, culminating with the Absolute Idea, and looking backward from the end of the process, we see that the whole process is needed so that the Absolute Idea recognizes itself as such, and thus achieves self-consciousness. So Hegel's recapitulation in the *Logic* of the passage from Being to the Absolute Idea is an attempt to express and realize the self-consciousness of the Absolute Idea. The Speculative Idea is therefore nothing but the Absolute Idea considered as having achieved self-consciousness.⁷

We thus have the same entity conceived from different perspectives.⁸ The entity is the

⁶ Hegel, *Logic*, §237, zusatz

⁷ As Graham Nerlich points out in correspondence, this raises some questions of self-reference. The *Logic* is about the Absolute Idea, but the activity of comprehending the *Logic* is at once an expression and realisation of the self-understanding of the Absolute Idea. So the *Logic* refers to the Absolute Idea, and thereby to itself as an expression of the self-conscious Absolute or Speculative Idea.

⁸ Graham Nerlich suggests that this is the best way to make sense of the different conceptions Hegel has of the Absolute Idea. The use of capital letters in terms referring to Hegel's Absolute is not just a stylistic rendering of German in translation, but serves as a signal of the system-dependent meaning of the terms used.

Absolute Idea, which is a complex of formative principles, none of which is self-sufficient, or fully intelligible apart from the others, and which is real only in and through the activity in which those formative principles are expressed. Seen as a universal, the entity is the Concept or Notion, as a developing universal it is the Logical Idea, and as a self-conscious, self-determining being, it is the Speculative Idea.

3.13 SPECULATIVE REASON AS TELEOLOGY

In the third place, Hegel claims that it is only through 'speculative' reason that we can grasp the need for teleological principles of explanation, which surfaces in the transition from the *Doctrine of Essence* to the *Doctrine of the Notion*. The need for teleological principles is shown by the insufficiency of causal explanation, even when it takes the form of specifying how the aspects of an organism or organic whole are involved in 'reciprocal' causal interaction.

Thus 'reciprocity' is supposed to give an inadequate grasp of the interconnectedness of the elements of an organic whole. The strength of a causal explanation in terms of the reciprocal interaction of the elements in a system is that it runs in a self-contained circle, instead of attempting to anchor a given event in an endless chain of contingently related events. The process of reciprocal causation, in which a whole produces its parts which in turn produce the whole, is thus self-contained. However, Hegel claims that the principle

of explanation in setting out how the parts of a thing reciprocally interact is less than fully adequate.

If we take, for example, the customs and manners of a nation, and understand them to be reciprocally dependent on the constitution and laws of the nation, the two sides of the dependence remain as 'given facts'. According to Hegel, we have an adequate explanation only when both the customs and manners, on the one hand, and the constitution and laws of a nation, on the other hand, are shown to be expressions of the Concept under which the life of that nation falls, or to be expressions of its 'Spirit':

To make, for example, the manners of the Spartans the cause of the constitution and their constitution conversely the cause of their manners, may no doubt be in a way correct. But, as we have comprehended neither the manners nor the constitution of the nation, the result of such reflections can never be final or satisfactory. The satisfactory point will be reached only when these two, as well as all other, special aspects of Spartan life and history are seen to be founded in [the Concept of Spartan Life].⁹

Hegel's 'Spirit' of a nation is constituted by the formative or guiding principle of the nation's culture. It includes what might be called the nation's 'historical mission', that is,

⁹ Hegel, *Logic*, §156 zusatz, p. 219., By the *Concept* of spartan life, Hegel means the formative principle which gives Spartan Life its coherence and purpose

the principal cultural achievement for which the nation is subsequently renowned, and on the basis of which subsequent cultural progress takes place.¹⁰ For Hegel, the deficiency of an explanation in terms of the way the parts of a system interact is that the reciprocally determined elements of the system are thus taken as givens, instead of being taken as posited by its purpose for being.

This deficiency, Hegel claims, can only be made good by seeing what purpose is served by the way the elements of the system reciprocally determine one another. This purpose, or guiding principle, freely realizes and fulfills itself through the operation of the system. To see that it is for the sake of this that the system exists and functions is to make it intelligible. The perfected form of a system whose parts causally presuppose and produce

¹⁰ This is spelled out by Hegel in G.W.F. Hegel, *Hegel's Philosophy of Right*, trans. T.M. Knox, (Oxford: Oxford University Press, 1967), §§346,347, *zusatz*, pp. 217-218: 'History is mind clothing itself with the form of events or the immediate actuality of nature. The stages of its development are therefore presented as immediate natural principles each [of these] is assigned to one nation in the external form of its geographical and anthropological conditions The nation to which is ascribed a moment of the Idea in the form of a natural principle is entrusted with giving complete effect to it in the advance of the self-developing self-consciousness of the world mind ... the history of a single world-historical nation contains (a) the development of its principle from its latent embryonic stage until it blossoms into the self-conscious freedom of ethical life and presses in upon world history; and (b) the period of its decline and fall, since it is its decline and fall that signalizes the emergence in it of a higher principle as the pure negative of its own. When this happens, mind passes over into the new principle and so marks out another nation for world-historical significance.'

one another is thus a whole '... which though self-repulsive into distinct independent elements, yet in that repulsion is self-identical, and in the movement of reciprocity still at home and conversant only with itself'.¹¹ Speculative reason is the function of thought through which distinct elements are grasped as one. The doctrine of the Concept thus turns out to be that aspect of the system in the *Logic* which calls upon and is in turn the result of the application of speculative reason.

The system of concepts in the *Logic* is supposed to be generated by a movement of thought from one concept to another. Now, Hegel claims that this movement of thought, or 'dialectic' takes on different forms, so that a transition in the form of the 'dialectic' corresponds to each transition from one range of concepts in the system of the *Logic* to another range of concepts.¹² Thus, in the range of the concepts of Being, the Concept makes a 'transition' from one concept to another. In the range of the concepts of Essence, the movement of thought is 'reflection', or 'showing or reflection in the opposite'.¹³ In the range of the Concept itself, 'the onward movement of the Concept is no longer either a transition into, or a reflection on something else, but **Development**'.¹⁴

¹¹ Hegel, *Logic*, §158, p. 220.

¹² One feature of the *Logic* worth noting is that each range of concepts exhibits especially, although not exclusively, the movement of thought, or aspect of the dialectic, which corresponds to it.

¹³ Hegel, *Logic*, § 240.

¹⁴ Op. cit., §161, zusatz, p. 224.

The introduction to the doctrine of the Concept explains 'development' as the process whereby 'the elements distinguished are without more ado at the same time declared to be identical with one another and with the whole, and the specific character of each is a free being of the notion'¹⁵. This explanation is not immediately transparent, but Hegel's meaning is made clearer in the following *zusatz*, where he says:

The movement of the Concept is *development*: by which that only is explicit which is already implicitly present. In the world of nature it is organic life that corresponds to the grade of the Concept. Thus e.g. the plant is developed from its germ. The germ virtually involves the whole plant, but does so ideally or in thought...in the process of development the Concept keeps to itself and gives rise to alteration of form, without making any additions in point of content.¹⁶

That is, Hegel sees development in idealist terms as the realisation of an inner, implicit essence, which pervades each and every aspect of its realisation, and which thereby gives the development its coherence and aim. It may seem strange to say that the conscious purpose or design behind the development of a plant is a form of consciousness. Nevertheless, it is clear that Hegel does consider it a form of consciousness, even though it is nothing like the most developed form of consciousness which Hegel recognizes, the male personality.¹⁷ In more developed forms of consciousness, not only is the design ex-

¹⁵ Hegel, *Logic*, §161, p. 224.

¹⁶ *ibid.*, *zusatz*.

pressed in reality, but as a result of this, the design is itself filled out, or rendered more concrete. Thus Hegel claims that the idea of freedom, which is the guiding principle of politically organized society, has a content which develops over time from its bare, abstract form in the freedom of a despot, to a richer, more complex form in the freedom of individuals subject to the rule of law constitutive of modern society.

The conscious purpose behind forms of life can thus be doubly implicit. It is always implicit in the form in which it is expressed in its embodiment, and it may be implicit in a more complex or articulated form of its content. For Hegel, this development from a more abstract to a more concretely articulated content is a consequence of the way the existence of a thing conflicts with, while it expresses, its guiding design. In order to overcome the deficiencies of earlier forms of its existence which express a more abstract design, a new, more elaborated design emerges to guide subsequent forms of existence.

The peculiar mark of speculative reason in Hegel's *Logic* is thus the transition from the range of concepts of Essence to the teleological standpoint underlying the range of concepts which peculiarly express the Concept, together with the corresponding transition in the movement of thought from 'transition' and 'reflection' to 'development'. Develop-

¹⁷ To specify the highest form of personality as 'male' is necessary, since Hegel thinks that the female is to the male personality as plant is to animal. See G.W.F. Hegel, *Hegel's Philosophy of Right*, trans., T.M. Knox, (Oxford: Oxford University Press, 1967), §166, p. 114, and especially addition 107, pp. 263-264.

ment, therefore, may be termed the speculative aspect of Hegel's dialectic.

3.2 THE SPECULATIVE IS THE IDEAL IN HEGEL'S DIALECTIC

As has just been shown, Hegel's speculative standpoint involves taking teleological explanations, that is, explanations in terms of a thing's development or part in a process of development, as fundamental and adequate. I shall now show that Hegel understands development to be a form of conscious agency, which he says is most fully exemplified in nature by living things. Hegel thus has an idealist theory of development. I shall conclude this section by suggesting that Hegel's teleology draws on human productive activity as a paradigm of conscious agency, in much the same way as Aristotle draws on the same paradigm with his theory of the 'four causes', or the four principles which account for change.

Hegel claims that there are three levels of understanding a living organism as an organic unity. The first two levels of understanding employ the concepts involved when we engage in the projects of recognising the thing in perception or causally explaining it. The third level involves using the concepts of rational purposive activity to understand the struggle of a living thing to perpetuate itself. In this way, a living organism is seen as realizing its purpose for being as it lives out the stages of its life.

Thus, at a perceptual level, a living organism presents itself as a differentiated unity in which grasping one element of the organism leads on to a grasp of its other elements. To take Aristotle's familiar example,¹⁸ to perceive a hand as a hand is to see its place in the whole body, to see how it is related to organs which are not hands, to see how it, as an extremity, is related to internal organs, and so on. Hegel generalizes this feature of organic systems by arguing that there cannot be any such thing as perception of a bare particular, or a sense-datum. To perceive 'this' object 'here' and 'now' is to relate it to other objects. 'The here pointed out, which is kept hold of, is likewise a *this* Here which, in fact, is not *this Here*, but a before and Behind, an Above and Below, a Right and Left.'¹⁹

At a causal explanatory level, an organism presents itself as a causally interdependent system of elements, or organs. No part of the body can survive or function on its own but depends for its existence and function on other parts of the body. An extremity is thus mediated by internal organs, and *vice-versa*. Each literally feeds the other.

At Hegel's speculative level, an organism presents itself as the realisation of an internal teleology. The perpetuation of the organism is, for Hegel, not just a causal result of the reciprocity of its parts. It is what Hegel terms 'the conclusion of a practical syllogism', which amounts to the realization, or explicit expression, of the self-imposed aim of the

¹⁸ For a *resumé* of Aristotle's example, see Hegel, *Logic*, §216 zuzatz,

¹⁹ For a discussion of this, see Richard Norman, *Hegel's Phenomenology*, pp. 29-38

organism to live its own form of life:

This is the realisation of the End: in which, while it turns itself into the other of its subjectivity and objectifies itself, thus cancelling the distinction between the two, it has only closed with itself, and retained itself. . . The End therefore in its efficiency does not pass over, but retains itself, i.e. it carries into effect itself only, and is at the end what it was in the beginning or primordial state.²⁰

Hegel rejects an account of the teleology of organisms which represents the aim or design realised in the life of the organism as externally imposed, as when 'things are supposed not to carry their vocation in themselves, but merely to be means employed and spent in realizing a purpose which lies outside of them'.²¹

Hegel also rejects a quasi-materialist account of internal teleology. On such an account, the end result is produced by some sort of miniature version of itself hidden in the initial stages of the organism's development. For Hegel, the end of a development is *ideally* and implicitly contained in its beginning:

The germ virtually involves the whole plant, but does so only ideally or in thought, and it would therefore be a mistake to regard the development of the

²⁰ Hegel, *Logic*, §204, pp. 267-269.

²¹ Op. cit., §205 zusatz, p. 270.

root, stem, leaves and other different parts of the plant as meaning that they were *in realitas* present, but in a very minute form, in the germ. That is the so-called 'box-within-box' hypothesis; a theory which commits the mistake of supposing an internal existence of what is at first found only as a postulate of the completed thought.²²

The unity and end-directedness of an organism is accounted for by Hegel in terms of the unity of its subjective and objective aspects, or moments. The 'subjective' aspect of an organism is its inner, or underlying guiding principle, from which its life proceeds, while the 'objective' aspect is its outer or manifest nature, which other things confront. A teleology proceeds from a subjective or ideal content, or inner essence, through a process of realisation in productive activity (that is, through a combination of *purposive action* or working activity on the one hand, and *means* of productive activity on the other hand), to the objectification of the ideal content in the final result. The ideal content is 'present' or 'expressed' throughout this process.

²² Op. cit., §161, zusatz, p. 224. This amounts to a rejection of any materialist account, as Hegel's reason for rejecting the 'box-in-box' hypothesis is not anything peculiar to that theory in particular, but the assertion that the plan of a thing such as a plant can be present in it only in *thought*. In fact, Hegel thinks that the 'box-in-box' hypothesis at least has the merit that it represents the plan of a thing as pre-given and untouched by its development. This, though, would not be a merit presumably in the case of history, or persons, whose current purposes, it seems, can and must undergo qualitative change.

The interaction of the elements of an organic whole thus expresses or makes explicit a design implicit in every part and stage of development of the organism. The design as implicit is the 'subjective End' or 'inner essence' of the developmental process of the organism, and the completed unfolding of the whole process is the 'objective End', or goal of the process. The unity of the process is nothing but the ideal presence of the design in all its parts and stages:

The teleological relation is a syllogism in which the subjective end coalesces with the objectivity external to it, through a middle term which is the unity of both ... The development from End to Idea ensues by three stages, first Subjective End, second End as process of accomplishment; and third, End accomplished. First of all we have the Subjective End; and that as the Concept in independent being, is itself the totality of the elementary functions of the Concept. The first of these is self-identical universality, as it were the neutral first water, in which everything is involved, but nothing as yet discriminated. The second ... is the particularity of this universal, by which it acquires a specific content. As this specific content again is realised by the agency of the universal, the latter returns by its means back to itself ...²³

As Wal Suchting argues, essentialism, 'expressivism' and teleology are three marks of Idealism in Hegel's dialectic.²⁴ The 'subjective end' of an organism is its essential

²³ Hegel, *Logic*, §206 and §206 zusatz, pp. 270-271.

nature, the perfected realization of which is the end, or conscious goal of its life. The 'end accomplished', or purpose of the organism's existence, is what the essence aims to realize. That is, the essence and the purpose of an organism can only be understood as each other's complement. Essentialism and teleology are thus complementary principles. 'Expressivism' is the idea that every element of an organism expresses the whole in the way that any fragment of an hologram contains the whole image. This is implied by Hegel's conception of an organism's life as simply the unfolding of an essence toward its realisation, thereby doing nothing other than making explicit, in more or less adequate forms, what is implicit in the essence.

This conception of the unity of the stages of development of a thing as the result of each stage making manifest the design, but at varying and related levels of adequacy, calls for an account of how these stages are related. One way of relating the stages is to take the inadequacy of the realization of the design at any stage to be corrected, at least partially, by a subsequent stage, until the most perfected form of realization possible is reached. Another way of relating the stages, is to take the design to be most adequately realized in the complete running through of a succession of forms, whose interconnection overcomes what is inadequate in each and every stage by itself. The connection, or continuity and

²⁴ W.A. Suchting, *Marx and Philosophy*, especially pp. 90-91. Suchting notes that 'expressivism' is Althusser's critical term for Hegel's assumption that conscious life is organised at any stage around a single principle, which Hegel sometimes terms 'the Spirit of the time'. See footnote 10 above for an application of this theme in the conscious life of nations.

difference of the various stages of development of an organism is thus accounted for as the result of a striving to replace less adequate with more adequate realizations of the organism's design.

Hegel's appeal to the notion of a design to account for the coherence of a living organism may seem on the same footing and to achieve the same result as an appeal to the notion of a gene, or genotype. However, the two concepts involve different explanatory strategies. The concept of a genotype is a promissory note for an explanation of the continuity and differentiation of the parts and stages of an organism in terms of some mechanism. The continuity is accounted for by the mechanism of replication through which every cell of an organism is derived from an original cell. The differentiation of the cells can, perhaps, be accounted for in terms of a model of a graduated field of 'morphogens', which provide spatially separated cells with different chemical environments, thereby inducing the synthesis of different proteins to produce differentiated cells.²⁵ On the other hand, Hegel's use of the concept of design in accounting for the coherence of the parts of an organism blocks any demand for an explanation of how the design manages to impose itself on the matter it organizes.

We can say only that a design imposes itself on matter in the way Aristotle says a form is

²⁵ See Prigogine and Stengers, *Order out of Chaos*, pp. 172-173. The use of the idea of self-organizing processes in far-from-equilibrium conditions to explain the order of an organism largely remains, however, a promissory note to be filled out. *Op. cit.*, pp. 175-176.

imposed on matter in human action and perception. In craftwork, according to Aristotle, the form which is in the artisan's mind passes into and is realised in the material being worked on.²⁶ In seeing, the form passes from the object through the eye, and is impressed on the mind. The mind and its object are identical in the way that a piece of wax impressed by a seal is identical in form, though not in matter, with the seal.²⁷ This simple model of causal determination as the passing of a form from ideal to real instantiation is taken over by Hegel as the way reality works when understood at a fundamental level, although with the difference that Hegel sees ideal causes as primarily *immanent* to what they explain.

Aristotle's concept of causal determination as purposive action is modelled on the dynamics of the production process. This may seem strange, as Aristotle viewed artifacts as a secondary, derivative sort of substance. Nevertheless, the production of artifacts is clearly Aristotle's paradigm of causality. Aristotle gives as a reason for suggesting that natural substances work toward an end, the fact that human activity is for the sake of an end. And Aristotle then claims that the activity of nature at large must be like human activity:

Now surely as in intelligent action, so in nature; and as in nature, so it is in each action, if nothing interferes. Now intelligent action is for the sake of an end;

²⁶ Aristotle, *The Basic Works of Aristotle*, ed. Richard McKeon, (New York: Random House Inc., 1941), *Metaphysics*, 1032a and 1032b.

²⁷ Aristotle, *Op. cit.*, *On the Soul*, 424a, 15-25, p. 580.

therefore the nature of things also is so.²⁸

Moreover, Aristotle differentiates four causes or explanations of why a thing is the way it is along lines which precisely would answer an inquiry into the nature of an artifact with a view to its production. Such an inquiry would ask what purpose an artifact serves, or what use it has; what design it must have to be used in that way; and by what operations and materials it is to be made.

It is clear that the parallel between Aristotle and Hegel extends to the role of human production as a paradigm. The central model on which Hegel bases his concept of development is also the process of conscious production. Thus the Idea, or 'subjective end', corresponds to the plan or design of the product, the negation of the Idea, or 'end in the process of accomplishment', corresponds to the construction of the product out of materials, and the negation of the negation, or 'end accomplished', corresponds to the product, or result of production itself.

The strangeness of viewing the production process as Aristotle's paradigm of causality is mirrored in Hegel's teleology. Except insofar as it coincides with self-cultivation, producer and product, design and result, are separated in human production.²⁹ Hegel con-

²⁸ Aristotle, *Basic Works, Physics*, 199a, 10-20, pp. 249-250.

²⁹ The making of artifacts, when seen from the side of the subject of production, not only results in a

siders that this sort of teleology is only on the threshold of teleology proper, where the design is internal to the thing designed, and the thing is therefore self-determining. And Hegel claims that external teleology is thus in a way most removed from the true form. Yet for Hegel, as with Aristotle, production as an end-directed activity is nevertheless the actual paradigm of teleology.

With Aristotle, human production can serve as a paradigm because Aristotle views living organisms, and, by extension, natural things generally, as 'self-moving'. They act so as to maintain themselves, or are 'self-producing'. The mode of organisation of living things, or their 'form', is thus seen as the primary cause of their existence, as what guides their self-maintaining activity, and as being what their self-maintaining activity is aimed at. The efficient, formal, and final causes of a living organism are thus identical. And the four causes, although separated in human production, collapse fundamentally into two in the case of living things. So, just as one might see an independent producer as 'self-employed' after the socially dominant model of the employer/employee relationship, Aristotle in effect sees a living organism as a self-producing artifact, and thus reveals the paradigmatic role of production in his theory of causal determination.

product, but also produces a skilled human being with a measure of independence from the vicissitudes of nature. Production of things thus involves the self-production of the producer. Nevertheless, seen from the standpoint of the object of production, human production is what Hegel terms an 'external' teleology.

Similarly, the paradigmatic form of 'external' teleology is preserved in Hegel's concept of the Absolute as self-determining Spirit. While the design of the world is identical with its realization in the rationality of the real, the subjective and objective aspects of teleology are for all that differentiated within the speculative declaration of their identity with one another.³⁰

3.3 CRITIQUE OF HEGEL'S IDEALISM

I have three major criticisms of Hegel's absolute idealism. The first is that by ascribing the unity of an end-directed system to an ideal purpose which realizes itself in it, Hegel tends to transpose what are merely results of the working of a system into its underlying purpose for being, and thereby to reverse what is fundamental and derivative. This is instanced by Hegel's conception of the role which human labour plays in the development of forms of consciousness, where Hegel supposes that human labour is derived from the need for consciousness to develop from limited to more adequate forms. It is further exemplified by Hegel's conception of 'love' in marriage, where Hegel supposes that our sexual and reproductive needs at any stage of history are vehicles for the realization of the institution of marriage and its spiritual principle, rather than the other way round.

³⁰ As is clear from the passage quoted above (page 10): 'This is the realisation of the End: in which, while it turns itself into the other of its subjectivity and objectifies itself, thus cancelling the distinction between the two, it has only closed with itself, and retained itself'. In dialectics, the distinction thus cancelled is also preserved.

Secondly, it turns out to be essentially arbitrary how any aspect of a process of development contributes to the perfected realization of its guiding principle, although it should be a matter of conceptual necessity in Hegel's absolute idealism. Hegel thus tends to interpret features of a system as expressions of the system's purpose, and thereby arbitrarily invests them with rationality and necessity.

This is instanced by Hegel's supposition that the relation between master and slave and the subordination of women in marriage make different contributions to the development of free individuality. In one case, Hegel sees the lack of freedom of the slave as a stage which is left behind in history on the way to the emergence of a more complete form of free individuality. In the other case, Hegel sees the subordination of women in marriage as a permanent condition of the free individuality of men in society. I shall argue that each of these relations could be conceived as contributing to the realization of free individuality in the way the other does, and that it is perfectly arbitrary which conception is chosen, although Hegel's theory should have it otherwise.

In the third place, I shall argue that Hegel's account of the unity of the elements of a system subordinates their differences too much. Hegel tends to place an undue conceptual and explanatory emphasis on the supposed commonality or 'identity' of the elements of a system. He thus overlooks the way elements of a system may not work 'to form', or may operate relatively independently of their functionality for the system as a whole. This is

exemplified by the way Hegel tends to obliterate necessary distinctions between individuals in a nation state, and between husband and wife in marriage. I shall provide a filling out of these criticisms in the next three subsections.

3.31 HEGEL'S TELEOLOGY INVERTS CAUSE AND EFFECT

Human labour frees us more and more from the demands of nature in the course of progressively satisfying those demands. An unintended consequence of this collective work of providing for our material existence is a culture of co-operation, and involved in that are forms of self-consciousness in which members of the collective enterprise give each other recognition. However, Hegel represents human labour as the unwitting instrument of the development of self-consciousness, or as 'wasting' itself in the service of that development.³¹

Hegel thus gives human labour a crucial place in the development of human self-consciousness. This development starts from the unbounded egotism of a self aware of itself, but recognizing only itself as a person, or as Hegel puts it, 'self-consciousness in its immediacy'.³² This egotism is a desire to make use of other things which knows no

³¹ Hegel, *Logic*, pp. 272-273. 'Reason is as cunning as it is powerful...while it permits the objects to follow their own bent and act upon one another until they waste away, and does not itself directly interfere in the process, is nevertheless only working out its own aims.'

³² G.W.F. Hegel, *Hegel's Philosophy of Mind*, trans., William Wallace, (Oxford: Oxford University

limit, and undoes itself when it encounters other selves with equally boundless, and therefore incompatible, desires. Hegel may only be speculating when he conceives the situation of these selves in collision is initially something like Hobbes' 'war of all against all', with an accompanying 'life-and-death' struggle between individuals. However, it is plausible that through its encounter with other egos, egotism will develop into a consciousness of one's self as needing recognition by others, and especially, as requiring from others respect for one's freedom.

Now Hegel claims that egotism asserts itself and at the same time obtains recognition by subjugating other selves, and thus constitutes the master/slave relation. Although Hegel considers that an advance is thereby made from egotism, the master/slave relation is not an adequate form of self-consciousness. The advance on egotism is a consequence of the the compulsion that the slave experiences to labour for the benefit of the master. Through labour, the slave learns to look after needs other than his or her own, so that the egotism of the slave is put down, which for Hegel is an advance on freedom to do as one pleases. Further, the slave, though denied freedom by another, acquires independence from the compulsion of need through work and self-denial. On the other hand, the master, though obtaining recognition of his freedom, obtains it only from one who is forced to give it, and who is not the master's equal. And the master's freedom remains dependent on circumstance, as the master has not made himself self-sufficient, but relies on the work of

slaves.

That freedom to do as one pleases has inherent limits is a plausible claim. Thus, if one is free to do as one pleases, the self and its boundless appetites remain dependent for their satisfaction on favourable circumstances, while the busy whirl of desire tends to absorb the time and energy necessary for ensuring that circumstances are favourable as required. Hegel clearly has these limits of caprice in mind, for which, I think, there is no better illustration in literature than that provided by George Elliot in describing the situation of Gwendolen Harleth in *Daniel Deronda*.³³ Notwithstanding the merits of Hegel's claim that to be free merely to do as one pleases is a negation of freedom, and that individuals

³³ Her description is as follows: '...the set of the head does not really determine the hunger of the inner self for supremacy: it only makes a difference sometimes as to the way in which the supremacy is held attainable...especially when the hungry one is a girl, whose passion for doing what is remarkable has an ideal limit in consistency with highest breeding and perfect freedom from the sordid need of income. Gwendolen was as inwardly rebellious against the restraint of family conditions, and as ready to look through obligations into her own fundamental want of feeling for them, as if she had been sustained by the boldest speculations...but her horizon was that of the genteel romance where the heroin's soul poured out in her journal is full of vague power, originality, and general rebellion, while her life moves strictly in the sphere of fashion; and if she wanders into a swamp, the pathos lies partly, so to speak, in her having on her satin shoes. Here is a restraint which nature and society have provided on the pursuit of striking adventure; so that a soul burning with a sense of what the universe is not, and ready to take all existence as fuel, is nevertheless held captive by the ordinary wirework of social forms, and does nothing particular.' George Elliot, *Daniel Deronda*, (New York: Harper and Row, 1966), pp. 36-37.

must transcend egotism to be free in a fully developed form, his conception of this transcendence in being helpful to others comes close to servility, which Nietzsche no doubt would have appreciated:

Since the slave works for the master and therefore not in the exclusive interest of his own individuality, his desire is expanded into being...the desire of another. Accordingly, the slave rises above the selfish individuality of his natural will, and his worth to that extent exceeds that of his master who, imprisoned in his egotism, beholds in the slave only his immediate will and is only formally recognized by an unfree consciousness. ... This quaking of the single, isolated will, the feeling of the worthlessness of egotism, the habit of obedience, is a necessary moment in the education of all men. Without having experienced the discipline which breaks self-will, no one becomes free, rational, and capable of command.³⁴

It may be plausible, as Hegel claims, that freedom as the power to shape one's own life thus involves a subjection of egotism, and some measure of independence from one's circumstances. However, it does not follow that we should accept that self-will must be broken through discipline, in the way Hegel imagines. Nor, surely, need we be enchanted into supposing that it is for this end that we labour.

³⁴ Hegel, *Philosophy of Mind*, §435 zusatz, p. 175.

Clearly, the true and straightforward aim of human labour is to provide for the needs of our material existence. This process leads to the development of relations among people which enable the development of more adequate forms of freedom than doing as one pleases. However, by representing what are thus the results of human development as its purpose, Hegel commits an error not far from the one he derides in the case of 'external' teleology, where the teleologist divines that the purpose of cork trees is to supply us with sufficient cork.³⁵

This characteristic of Hegel's teleology emerges even more strikingly in his account of the institution of marriage. The empirically encountered features of nineteenth century monogamous marriage are swept up into a higher purpose, and are thereby invested with a spiritual halo. As Hegel puts it:

The physical difference of sex thus appears at the same time as a difference of intellectual and moral type. With their exclusive individualities these personalities combine to form a *single person*: the subjective union of hearts, becoming a 'substantial' unity, makes this union an ethical tie- *Marriage*. The 'substantial' union of hearts makes marriage an indivisible personal bond- monogamic marriage: the bodily conjunction is a sequel to the moral attachment. A further sequel is community of personal and private interests.³⁶

³⁵ Hegel, *Logic*, p. 270.

So, the relations which provide the real basis of marriage, such as the 'bodily conjunction' and 'community of personal and private interests' of the partners, come to be seen rather as a 'sequel' and as a means to a purely spiritual project of combining two individuals into one person. The material interest in procreation which underpins and is regulated by the institutional principles of marriage is thereby represented as a result of the true aim of marriage, which for Hegel is to make manifest the spiritual principle of love.

Hegel's infinite teleology is especially seductive in these inversions of the foundation and result of forms of life. For, of all purposive activity, it, and it alone, is ultimately unlimited in its capacity to produce the means whereby its purposes may be realised. So, while our imagination might well balk at the idea of some finite teleology being capable of utilizing a multitude of lives for some purpose of its own, with an infinite teleology anything is possible. Hegel's infinite teleology thus promotes the error of construing outcomes of activities as their underlying purpose, and tends to disarm as churlish any request for the mechanisms through which such a purpose might work.

³⁶ Hegel, *Philosophy of Mind*, §519, p. 255.

3.32 HEGEL'S TELEOLOGY IS ESSENTIALLY ARBITRARY

The problem with Hegel's idealism is not just that it too easily interprets the results of processes as their underlying purposes. Another problem is that these interpretations have an irreducible element of arbitrariness in them when they ought not to. The arbitrariness lies in the different possible ways in which, for example, less than perfect embodiments of freedom can be seen as contributing nevertheless to its complete realization. It was noted above that an imperfect realization of freedom could be seen, on the one hand, as a stage in a series of progressively more perfect realizations, and on the other hand, as making an essential contribution to a whole which fully realizes freedom, even though the contributing factor considered in isolation is an imperfect embodiment of freedom.

I shall show how these different models can be applied in two cases, the first being the development of the free personality as a member of civil society, and the second being the role played by women's subordination in marriage. After showing that Hegel employs one model in one case and a different model in the other, I shall argue that the choice between the models is arbitrary, when it should be a matter of conceptual necessity, at least within Hegel's idealism.

With the master/slave relation, Hegel makes the point that it is only the *beginning* of

freedom. The master has recognition from others, while the slave is subjugated and is thus not captive to egotistical desire. However, Hegel claims that neither is fully free until the slave is free, or rather, until both are subjugated to the will of God:

...servile obedience forms only the *beginning* of freedom, because that to which the natural individuality of self-consciousness subjects itself is not the truly universal, rational will which is in and for itself, but the single contingent will of another person. Here, then, only one moment of freedom is manifested, that of the negativity of the egoistic individuality; whereas the positive side of freedom attains actuality only when, on the other hand, the servile self-consciousness, freeing itself both from the individuality of the master and from its own individuality, grasps the absolutely rational in its universality which is independent of the particularity of the subjects; and when, on the other hand, the master's self-consciousness is brought by the *community* of needs and the concern for their satisfaction existing between him and the slave, and also by beholding the suppression of the immediate individual will made objective in the slave, to realize that this suppression is the truth in regard to himself, too...³⁷

Full freedom is attained only with what Hegel calls 'universal self-consciousness'. This comes about when each individual is independent, yet identifies with others, and takes others' interests as on the same footing as his³⁸ own. Hegel clearly has in mind here the

³⁷ Hegel, *Philosophy of Mind*, §435 zusatz, pp. 175-176.

free and independent individuals of Bourgeois civil society, but subjected to a political constitution, or the state as a power exercised according to law. However, if we look at this society of free individuals more closely, the interest that is taken in other individuals is only the spontaneous result of self-interest acting through market institutions, and the labourer working for a capitalist is as much subjected to the will of another for the purpose of labour as is the slave. As a worker, the labourer is therefore unfree.

One may argue, therefore, that the freedom of bourgeois society remains a negative form of freedom. A more complete form of freedom would have individuals consciously co-operating with one another, and thereby achieving conscious control over their relations with one another as well as their material needs. Then neither nature nor the culture of their society would confront individuals as an inescapable given. On the other hand, it could be argued that in order to achieve complete freedom, the subordination of some individuals to others must not only be cancelled but also preserved in some form. The institutional givens of market relations and the managerial prerogative of the capitalist over wage-labourers can then be seen as necessary limitations to freedom, ensuring that individual egotism is not replaced, say, by the egotism of the 'mob'.

The point here is that either argument seems equally sustainable at the level of conceptual

³⁸ See Hegel, *Philosophy of Mind*, §436, p. 176. The gender of the pronoun here is deliberate and necessary, as will be evident below.

analysis. There is thus no way of knowing how a given social arrangement truly realizes Absolute Spirit. While everything is seen as a means to an ultimate end, there is no way of deciding between the various ways in which limited forms of freedom may nevertheless be seen as necessary means to the full realization of freedom. On the one hand, the limitations of the current form of freedom may be seen as a signal that this form is to pass over into a more adequate form, so that the current form of freedom is seen as a *diachronic* means to its full realization. On the other hand, the limitations of the current form of freedom may be taken as a sign that some elements of domination are *synchronically* necessary means to complete freedom overall.

This ambiguity of interpretation can be seen most strikingly in the case of the family. Hegel here takes the subordination of a wife to her husband as a permanently necessary means to the realization of the spiritual purposes of marriage. In this context, it is important to note that whereas in the master/slave dialectic, the master is said to be incapable of true freedom so long as the slave is unfree, Hegel fails to make the same observation with regard to husband and wife. But why should not love in its fully realized form demand mutual respect and a union of hearts between equals?³⁹

³⁹ Hegel himself recognizes love as the first form of mutual recognition between individual intelligences, see G. W. F. Hegel, *The Phenomenology of Spirit*, trans. J.B. Baillie, (New York: Harper & Row, 1967), p. 474, and in an earlier piece claims that: 'True union, or love proper, exists only between living beings who are alike in power...'; G.W.F. Hegel, *Early Theological Writings*, (Chicago: Chicago University Press, 1948) trans., T.M. Knox, p. 304.

Of course, it can be argued that the male must be free to enter public affairs and to achieve a disinterested moral standpoint, and that this presupposes that the female preside over the feelings and special interests of family life, that is, be imbued with 'family piety'.⁴⁰ Equally, however, it can be argued as Aristotle does, that the master must be free to enter into and contribute to the essential spheres of art, religion and philosophy, and for the sake of this the slave must shoulder the burden of toil.

So, although Hegel's Spirit is supposed to reveal its presuppositions out of conceptual necessity, the crucial point in both cases is that it fails to do so. With reference to the concept of freedom, we can show that slave and wife are unfree. However, we cannot show whether their lack of freedom is, on the one hand, a permanently necessary condition of the full development of freedom, or on the other hand, a necessary but passing phase in its progressive unfolding toward full realization.⁴¹ This difference may be of no import-

⁴⁰ Op. cit., §166. See also the sneer at women's intellectual capacity in the addition to this section.

⁴¹ Benjamin Barber, 'Spirit's Phoenix and History's Owl or The Incoherence of Dialectics in Hegel's Account of Women' in *Political Theory*, Vol., 16, No. 1, February 1988, pp. 5-28, draws attention to what amounts to the same difference in the way of taking the rational limitations of any part of reality as contributing to reality, and thereby being cancelled in it as a whole, but interprets this as a difference between dialectic as the engine of history, and dialectic as interpretation of completed history. Barber notes that the onward motion of spirit to full freedom leaves women behind. However, it is not just that women's position in what Hegel's presumes is the last epoch of history must be seen from the standpoint of history completed. Since the same arbitrariness of interpretation applies to the master/-

ance from the standpoint of the infinite teleology, but is of the utmost importance to individuals.

3.33 HEGEL'S TELEOLOGY IS TOO 'EXPRESSIVE'

At this point, another explanatory limitation of Hegel's idealism emerges. Hegel's immanent teleology unites all the elements of its realization, so that the particular characteristics of those elements appear relatively insignificant. The absolute itself seems to be a sort of fusing together of individual personalities. To use Aristotelian categories, the Absolute is to all finite intelligences as form is to matter, formal and final causes are to material and efficient causes, and actuality is to potentiality. That is, the Absolute is the result of a certain spirit, or rationality, informing human subjects, and is not a separate, more knowing, powerful, intelligence with which they might be compared. Ordinary human intelligences are the vehicles through which the Absolute expresses itself:

...we have the violent diremption of mind or spirit into different selves which are both for and in themselves and for one another, are independent, absolutely impenetrable, resistant, and yet at the same time identical with one another, hence not independent, not impenetrable, but, as it were, fused with one an-

slave dialectic, the slave could equally well have been left behind in the progress to freedom. The only 'argument' in favour of seeing the unfreedom of the slave as a passing stage, rather than as freedom's permanently necessary condition, is that slavery did in fact pass.

other. The nature of this relationship is thoroughly *speculative* ... The speculative, or the rational and true, consists in the unity of ... subjectivity with objectivity. This unity ... forms the substance of ethical life, namely of the family, of sexual love (there this unity has the form of particularity), of patriotism, this willing of the general aims and interests of the State, of love towards God, of bravery too, when this is the risking of one's life in a universal cause, and lastly, also of honour, provided that this has for its content ... something substantial and truly universal.⁴²

The conceptual effects of the speculative fusing together of individuals is best illustrated in the sphere of 'ethical life', in which the rational agency of persons is objectified in institutional forms which give to life its meaning. Hegel here assumes that the lives of individuals are most adequately understood as being deployed by the institutions of ethical life in order that those institutions may live and endure:

The ethical order is freedom or the absolute will as what is objective, a circle of necessity whose moments are the ethical powers which regulate the life of individuals. To these powers individuals are related as accidents to substance, and it is in individuals that these powers are represented, have the shape of appearance and become actualised.⁴³

⁴² Hegel, *Philosophy of Mind*, p. 177.

⁴³ Hegel, *Philosophy of Right*, §145.

Thus, while it is important to remember that for Hegel substance is not something apart from the connection of its accidents into a substantial unity, so that individual particularities are preserved as well as annulled in a given social institution, individuals serve fundamentally merely to 'witness' the principles which regulate their lives.

Once again, this feature of Hegel's idealism is most easily drawn out of his concepts of love and marriage. For Hegel, sexual union is the 'external' manifestation of love, that is, it physically or naturally represents intercourse between two lives, which makes those lives one.⁴⁴ Marriage is the public declaration of the love between two individuals, and of their participation in the process of human reproduction.⁴⁵ Thus it is:

... precisely a contract to transcend the standpoint of contract, the standpoint from which persons are regarded in the individuality of self-subsistent units. The identification of personalities, whereby the family becomes one person and its members become its accidents is the ethical mind.⁴⁶

To say that the members of a family become 'its accidents', is to say that it is for the sake of marriage that its members live out their conjugal life together. Thus Hegel takes the

⁴⁴ Hegel, *Philosophy of Right*, §165.

⁴⁵ Op. cit., §164, zusatz, p.113.

⁴⁶ Op. cit., § 163, zusatz, p. 112.

view that love as a spiritual principle is most aptly manifested in an arranged marriage, or any way to matrimony 'whereby the decision to marry comes first and the inclination to do so follows.'⁴⁷ From the individual point of view, marriage is a restriction of freedom, as it involves the curbing of individual caprice, and the vicissitudes of desire. However, seen from the standpoint of its ultimate purpose, marriage is a 'liberation', because individuals rise above their bodily existence to 'witness' the principle of love. Hegel characteristically adds:

But those works of art...in which the love of the sexes is the main interest, are pervaded by a chill despite the heat of the passion they portray, for they associate the passion with accident throughout and represent the entire dramatic interest as if it rested solely on the characters of *these individuals*; what rests on them may indeed be of infinite importance to *them*, but is of none whatsoever in itself.⁴⁸

Although Hegel allows that marriage has the seeds of dissolution within it, inasmuch as the individuals who are party to it may die, or may alter their sentiments, his standpoint involves taking the joining of individuals into one person in deadly earnest, so that it appears inevitable and appropriate that this unity is expressed by having one individual,

⁴⁷ Op. cit., § 162, zuzatz, p. 112.

⁴⁸ Hegel, *Philosophy of Right*, §162, zuzatz, p. 112.

the husband, represent both. Hegel thus gives philosophical substance to the idea that marriage is a mystical union. It is only as a reflection of its tendency to dissolution, and as an element foreign to it, that the parties to a marriage may be legally recognized as separate persons.⁴⁹

Hegel's concept of love is thoroughly dialectical. There is a mediated identity between the individuals in love, inasmuch as each individual feels incomplete without the other and finds him or herself in the other.⁵⁰ As Hegel says, love is thus 'the most tremendous contradiction'. It is an identity of different individuals, or the making of one life out of different lives. However, love is not only a tremendous contradiction for Hegel, it is spirit in the form of feeling perpetually resolving (and re-posing) that contradiction. The lives of the lovers become 'vanishing moments' of their union, mere vehicles for the embodiment of the principle of marriage, which is Love.⁵¹

⁴⁹ Hegel, *Philosophy of Mind*, §522, p. 256.

⁵⁰ Hegel, *Philosophy of Right*, p. 261.

⁵¹ Of course, the opposite view of love to Hegel's is arguably equally mystical. In that view, marriage is simply the result of preformed individual preferences. Each party has already 'found' him or herself before marriage, and in the marriage contract are simply making a public declaration of and commitment to the coincidence of their private interests. This idea of marriage as the result of 'love at first sight' is surely as mystical as Hegel's idea that two personalities may, as if by magic, merge into one, inasmuch as it overlooks the hard, self-transforming work of living out a marriage. Or rather, it mystically pictures the outcome as having been ever-already-present in the individuals taken separately.

As Marx says in relation to another couple,⁵² 'thereupon, nothing simpler for a Hegelian than to posit production and consumption as identical'. The point here is that Hegel places greater conceptual and explanatory emphasis on the identity of the elements of a whole, than on their differentiation.⁵³ Hegel's position amounts to a methodological license to gloss over the particular differences which are annulled (although also preserved) when husband and wife constitute a married couple, or in general, whenever the elements of any organic totality are forged into a whole. Yet it is the real difference in personalities between husband and wife which accounts for the dynamic of their relationship, and for the contradiction inherent in it, stemming from the violence of attempting to make two lives into one. Hegel's expressivism cannot properly recognize this, since the merging of distinct personalities into one is a realization of their essential oneness rather than a violence done to a real distinction.

Hegel's idealism utilizes the categories of purposive agency to explain the unity and end-directedness of organisms. It attributes the self-formative power of an organism to the

⁵² K. Marx, *Grundrisse*, trans. Martin Nicolaus, (Harmondsworth: Penguin Books, 1973), p. 93.

Marx here considers the way production and consumption merge with one another, depend on one another, and complete and produce one another. That is, he outlines their immediate identity, mediation, and mediated identity.

⁵³ Chris Arthur, 'Hegel, Feuerbach, Marx and Negativity', *Radical Philosophy*, 35, Autumn 1983, p. 17, points out that Marx's 'identity of opposites' should be seen rather as a 'unity of opposites' when compared with Hegel's claim that reality is Spirit in its otherness.

presence of a conscious design striving for its own realization through all the elements and stages of development of the organism. I have argued that this sort of explanation mystifies the workings of end-directed systems. Whether it is possible to give a materialist theory of such systems is the question to which the next section is directed.

3.5 TWO CONCEPTS OF AN 'IDENTITY OF OPPOSITES'

At a minimum, the dialectical viewpoint involves a repudiation of the limits of the 'Understanding'. It puts an emphasis on the interconnection and merging of things in opposition to breaking down reality into self-contained 'things' with properties. However, I have tried to show that Hegel's 'mysticism' involves more than this. When Hegel overcomes the fixing and separating force of 'Understanding' in the concept of life, he does so by giving an essentially idealist construal of the unity of living organisms.

It is at the third, and speculative, stage of the dialectic that a materialist 'revision' of Hegel's organicism is possible. Development, the self-formative and self-transforming process which an organism undergoes, can be understood, I think, as a particular form of causal interaction. It is clear, of course, that in a system exhibiting organic unity, each element not only depends on but *produces* every other. However, while the existence and functioning of each element is thus the result of the activity of other elements, we need not suppose that the existence and activity of any element is the *aim* of the others, or the aim of the whole organism. The feature of an organism which we call development can be understood as an effect of the reciprocal interaction of its elements without appealing to the notion of a design which the development adheres to, or strives to realize in as perfected a form as possible.

When Hegel makes the claim that no adequate explanation of either the manners and customs or the laws and constitution of the Spartans can be provided from the standpoint of seeing them in causal interaction, he is doing more than claiming that a descriptive and explanatory gloss may be added, if we so desire, from what Dennet terms the 'intentional' standpoint.⁵⁴ From the standpoint of 'reciprocity', we can articulate a coherence between the customs of the Spartans and the principles of their legal and political system. Thus, without customs and manners to regulate, the laws and constitution of the Spartans would be a dead letter, and without laws and a constitution to protect them, the traditions observed in Spartan customs and manners could be overwhelmed in the cross-currents and clutter of individual activity. However, Hegel's 'spirit of the Spartan nation' functions as more than a metaphorical rendering in terms of rational agency of this sort of coherence between customs and legal and political principles. It postulates Spartan life as the unwitting vehicle of ends which make use of it for a time, but finally abandon it as inadequate to their perfect realization. Hegel thus sees an 'identity of opposites' in terms of a conflict between providential ends and inescapably inadequate material means to such ends.

The alternative is to see an 'identity of opposites' as a system in which the interconnection of elements simultaneously constitutes both the self-propagation and self-transformation of the system. The point of calling such a system an 'identity of opposites' is that the

⁵⁴ Daniel Dennett, *The Intentional Stance*, (Cambridge, Mass.: M.I.T. Press, 1987), Chapter 2.

system interactions which constitute its continuity simultaneously give rise to its transformation, at first within the bounds of its continuity, but ultimately, by giving rise to something else. Hegel's 'standpoint of reciprocity' thus becomes abstract systems theory.

Oscar Lange provides abstract systems theory with most of its conceptual requirements, and shows how the concept of a simultaneously self-propagating and self-transforming system can be articulated in materialist terms.⁵⁵ A system is constituted as such through the interaction or 'coupling' of its elements. Each element has a 'mode of action', given by the transformation of its inputs into outputs. Inputs and outputs can be represented numerically, whether they are physical quantities or not. The presence or absence of a quality in inputs or outputs can be represented by 1 or 0 in the input or output vectors, while quantities are given by their numerical measures. If \mathbf{x} is the vector of all inputs, and \mathbf{y} is the vector of all outputs, the mode of action of any element is given by:

$$\mathbf{y} = T \mathbf{x}$$

One element is 'coupled' with another if the input of the one element is related to a definite output of the other. If $\mathbf{x}^{(s)}$ is the input of element s , and $\mathbf{y}^{(r)}$ is the output of element r , then the coupling is given by:

$$\mathbf{x}^{(s)} = C_{rs} \mathbf{y}^{(r)}.$$

The network of element couplings is the structure of the system. A system with a given

⁵⁵ See Oscar Lange, *Wholes and Parts: a General Theory of System Behaviour*, (Oxford: Pergamon Press, 1965).

structure follows a path of development if the total inputs at any time are related to the total outputs at a later time through the modes of action of the elements and their couplings.⁵⁶

Now, let \mathbf{X} be a composite vector consisting of all the input vectors $\mathbf{x}^{(s)}$ for all the elements s in the system at a given time t , and let \mathbf{X}' be the composite vector of all input vectors $\mathbf{x}^{(s)'}$ at a later time t' , and let \mathbf{Y} and \mathbf{Y}' be the corresponding output vectors. The mode of action of the system at any time t can then be represented by the following equations, in which R and P are operators which transform the input and output vectors of all elements at a given time t into the composite input and output vectors at a later time t' :⁵⁷

$$\mathbf{X}' = R (\mathbf{X})$$

$$\mathbf{Y}' = P (\mathbf{Y});$$

If the couplings between the elements are such that the system cannot persist in equilibrium, with the equilibrium of some elements 'vetoing' or negating the equilibrium of others, then the system has a 'contradiction' which produces continuous motion in it.⁵⁸

This motion can lie along a path of development. The path of development of the system

⁵⁶ Lange, *Wholes and Parts*, chapter VII.

⁵⁷ Oscar Lange shows that these operators are equivalent to the product of matrices which give the transformations of inputs into outputs for all elements of the system, and the relations between the outputs of each element and the inputs of all other elements, that is, the 'couplings' of elements in the system. *Op. cit.*, Chapter VI.

⁵⁸ Lange, *Wholes and Parts*, chapter X.

from an initial time $t = 0$ to a later time $t = t'$ is given by:

$$\mathbf{X}' = \sum_0^{t'} R(\mathbf{X}_t, t)$$

$$\mathbf{Y}' = \sum_0^{t'} P(\mathbf{Y}_t, t),$$

where $R(\mathbf{X}_t, t)$ and $P(\mathbf{Y}_t, t)$ give the mode of action of the system at time t , or the transformation of the composite input and output vectors at time t into the input and output vectors at time $t+1$.

The interaction of the elements of a developing system constitutes self-propagation if it leads to a process of transformation along a path which the system tends to 'stick' to. To say the system 'sticks' to its path of development is to say it tends to react to actual or potential deviations from that path by generating a barrier to potential disturbance, or by returning the system to its path from an actual disturbance.⁵⁹ To say that the system's tendency to self-propagation is simultaneously a tendency to self-transformation is to say, firstly, that its continuity as a system involves disequilibrium or development, and sec-

⁵⁹ Lange sketches the concept of an 'ergodic' system in chapter IX of *Wholes and Parts*. An 'ergodic' system has a 'self-steering' mechanism, or feed-back coupling between its elements which tends to bring the system back to its path of development from a disturbance or deviation from that path, at least within a range of disturbances occurring within a section of the path which defines the system's 'duration' and 'domain' of ergodicity (Lange, Op. cit., pp. 62-64.) The concept I am employing here is stronger than that of an ergodic system, as a system which is 'self-propagating' has an anticipatory 'self-steering' mechanism, which tends to prevent potential disturbances or deviations from the system's path of development, as well as tending to bring it back to the path when an actual disturbance occurs.

ondly, that its path of development finally overwhelms its capacity to propagate itself through actual and potential disturbances, so that it enters a phase of dissolution, and passes over into a new system.⁶⁰

Thus construed in a materialist way, dialectic becomes the study of process, and the conditions of transformation of systems. It embraces the 'speculative' in the sense of regarding things in their interconnection and mutability as well as in their separateness and fixity, while eschewing it in the sense of regarding the peculiarities of organic development as the mystical outcome of the workings of rational agency. Apart from the possibility of a quantitative model of organic systems which is provided by systems theory, a qualitative materialist model of their working as an 'identity of opposites' is provided by Marx. This model can be compared with that of his idealist predecessors. Its outline, however, is the task of the next chapter.

⁶⁰ That is, a necessary consequence of the 'self-propagation' of the system is that it eventually leaves its domain of ergodicity.

CHAPTER FOUR

IDEALIST AND MATERIALIST MODELS OF ORGANIC WHOLE

4.0 INTRODUCTION

In this chapter, I shall give a concrete account of what Marx means by a unity of opposites, by way of comparing Marx's model of the organisation of an organic whole with those of his idealist predecessors, Kant and Hegel. I shall argue that Marx's model has both affinities and differences with theirs. While all of them agree that organic systems are more than mechanisms, at least if mechanisms are taken to exemplify nothing but the laws of Newtonian physics, they disagree in their understanding of the way organic life amounts to more than the activity of a mechanism. I show that while Kant and Hegel have a basically idealist interpretation of organic life, the account which Marx gives is materialist.

Despite the difference between these idealist and materialist models of organic systems, I show that there is an isomorphism between them. Each of the models singles out three features distinctive of the structure of an organic system. Firstly, in each model, an element of an organic system is what it is in virtue of its relation to counterpart elements. Secondly, each element depends for its existence and functioning on counterpart ele-

ments. Thirdly, each produces its own counterpart elements, and so takes part thereby in its own production, or is thus partly self-determining.

I base my account of Marx's model of the causal dynamic of organic wholes on his discussion of production and consumption in the *Grundrisse* draft. I show that this model also captures the structure of the capitalist mode of production as Marx presents it in his essay on *Wage Labour and Capital*, and in *Capital*, vol 1. I then show that the model is capable of generalization by using it to articulate the dialectic of love, which we encountered in the discussion of the speculative aspect of Hegel's dialectic. I conclude this chapter by comparing Marx's model with the 'unity of opposites' found in Mao's essay 'On Contradiction'.

4.1 MODELS OF ORGANIC STRUCTURE IN KANT AND HEGEL

Both Kant and Hegel take to be distinctive of organic systems the way their elements work toward an end, as though it were their conscious purpose to act that way. However, while both Kant and Hegel make sense of organic life in terms of conscious agency, Kant refuses to grant objective existence to the purposive behaviour of organic systems. According to Kant, to make sense of organisms we are forced to think of their behaviour as the result of conscious agency. However, Kant confines natural explanations of events in organic life to pointing out the mechanisms whereby such events can be seen to follow previous events according to universal laws of nature. Not only is the role of conscious agency in making sense of organic life relegated to subjective interpretation, but Kant also

has a somewhat narrow conception of the purpose of organisms, seeing it as simply their own propagation in the same form over time.

Hegel, on the other hand, claims that the purpose of an organism is as objectively real as the mechanisms through which that purpose is realized. Moreover, Hegel considers that organic systems not only propagate themselves over time by virtue of the way each part of the system furthers the working of every other part, but more importantly, undergo a process of development and transformation. According to Hegel, organic systems develop because the working of each element of the system tends to frustrate as well as further the realization of the system as a whole, so that eventually and inevitably its development escapes the bounds of self-propagation, and something new comes into being.

While Kant and Hegel differ in these ways, there is an isomorphism between their models of organic systems. As we noted in Chapter Two, Kant considers that there are three peculiarities of organisms, or things which work toward physical ends. In Kant's own words, these are as follows:

the *first* requisite of a thing, considered as a physical end, is that its parts, both as to their existence and form, are only possible by their relation to the whole...[a]*second* requisite is...that the parts of a thing combine of themselves into the unity of a whole by being reciprocally cause and effect of their form....In such a natural product as this every part is thought as owing its existence to the

agency of all the remaining parts, and also as existing *for the sake of the others* and of the whole, that is as an instrument, or organ. But this is not enough [ie, a third requisite is that]...the part must be an organ *producing* the other parts- each, consequently, reciprocally producing the others....Only under these conditions ...can such a product be an *organised* and *self-organised being*,...an organised being possesses inherent *formative* power...a self-propagating formative power ...¹

Kant also notes that living things can be singled out by their distinctive activity. Living things actively work to maintain themselves. They do work to maintain their own separate internal environment, to ensure their external environment is supportive of their internal environment, and to repair any breakdown of their elements, or organisation. As Hegel puts it, living things struggle with the forces of objectivity to maintain their own existence. Or, as Richard Dawkins puts it, living things exhibit a proficiency in staving off death and reproducing themselves, which is highly unlikely to have been acquired by random chance alone.² Now the three features of an organized, or rather, self-organized whole which Kant sets out in this account parallel what Hegel in the *Logic* says are the three aspects of 'the Idea', or the whole complex system of concepts through which reality can be grasped. That is, Hegel represents the categories of the logic as constituents of an organism (the Notion), and as being connected in the systematic way which Kant claims is definitive of the interconnections among constituents of an organism.

¹ Kant, *Critique of Judgement*, pp. 556-557.

² Richard Dawkins, *The Blind Watchmaker*, (Harmondsworth: Penguin Books, 1988), p. 9.

Thus the first connection between elements of an organic whole in Kant's account corresponds with what Hegel says in the doctrine of Being is the connection between quality and quantity in measure. Here Hegel attempts to show that quality is implicitly quantity, and quantity is implicitly quality. In the process of measure, quality and quantity 'pass into each other'.³ A quality cannot be fully grasped without reference to the quantitative limits within which that quality can be found. Water in its liquid state is to be found between the quantitative limits of the freezing and boiling points of water. And a quantity cannot be grasped fully without reference to the quality quantifiable in that way. The temperature of anything in degrees centigrade involves an implicit comparison between how hot that sort of thing is with how hot the freezing and boiling points of water are. Anything is so much hotter or colder than the freezing point of water in degrees centigrade given that, by definition, at sea level the boiling point of water is a hundred degrees centigrade hotter than its freezing point. Quantity and Quality can thus be fully understood only by their relation to the whole, Measure, which includes them.

Hegel notes, however, that in 'the sphere of Being the reference of one term to another is only implicit', while in the sphere of Essence, 'on the contrary, it is explicit'.⁴ The unity between quality and quantity in the sphere of Being is *immediate* as compared with the explicitly relational connection between them which can be articulated in the sphere of Essence, and similarly, the difference between them is also equally 'immediate'. Thus,

³ Hegel, *Logic*, §111, zusatz, p.161.

⁴ *ibid.*

when we conceptualize a hand, say, in terms of its phenomenal features, the reference to other parts of the body is there, but only implicitly. To fully grasp what a hand is, we must refer to its somewhat indeterminate quantitative relations as a particular extremity to other parts of the body as a whole. On the other hand, when we conceive of the hand as a *bodily organ*, the reference to other parts of the body is explicit.

So Hegel agrees with Kant that a part of an organism, such as a hand, is conceptually related, in the first instance, to other parts of the body, and can only be understood in its relation to the whole of which it is a part. However, Hegel also takes care to specify that the unity of the hand with other parts of the body is, at this level, merely 'immediate'. The conceptual connection is only implicit, and has not yet been made real. This first 'conceptual' connection of the parts of an organic whole with each other is thus qualified, and differentiated from the equally conceptual, but explicit connection the hand has with other parts of the body, when it is conceived as a bodily organ.

Kant's second feature of organisms, that each element is related to other elements as an 'organ', that is, depends on others for their existence and function, and exists for the sake of others, points to the causal realization of the implicit conceptual inter-connection of the parts of an organic whole. It thus corresponds with the explicitly relational concepts, such as the concepts of inner and outer, whole and part, cause and effect, which Hegel deals with in the doctrine of Essence. Here the terms 'are always mere pairs of correlatives', so that their unity is 'only postulated by reflection'.⁵ When the hand, say, is conceived as

a bodily organ, we see that its function causally depends on the mechanical support of tendons, the arm and other structural parts of the body, on the circulation of blood, the operation of nerves, and so on, and that the function of these other parts of the body in turn causally depends on the function of the hand. To conceive of the hand as an organ involves more than conceiving of the hand as a bodily part. The former subserves the explanatory project of grasping in causal terms how a body comes to be realized, whereas the latter subserves only the perceptual project of its recognition as part of an organism. 'Reflection', which for Hegel is the 'movement of the Idea' characteristic of the sphere of Essence, thus involves grasping how one thing owes its existence to, or is 'mediated' by another.

The third feature of organisms which Kant sets out is that its parts not only depend on each other, but *produce* each other so that the whole has a self-formative, self-propagating power. This corresponds with what Hegel claims is distinctive of the relations among the elements of a whole which are dealt with under the doctrine of the Notion or Idea. Kant's self-propagating formative power of an organism corresponds with what Hegel terms its capacity for development, that is, with its teleology as it is realized in the interaction of its elements. For Hegel, the elements of an organism, when their unity is grasped 'speculatively', are identical with each other and the whole itself, insofar as each element is informed by the same guiding aim, and in essence is nothing but the expression of the aim which informs it. Each element of an organism has as its aim that it and every other element functions so as to realize progressively the end of the organism as a whole.

⁵ Hegel, *Logic*, §162, p. 162.

Hegel's claim that the concepts of teleology transcend the concept of causal reciprocity⁶ parallels Kant's claim that the self-formative power of an organism 'cannot be explained by movement alone, that is to say, by mechanism.'⁷ However, the correspondence with Kant's view is not exact since Hegel takes the action of conscious purpose to involve a struggle to harness the objective forces of nature, so that development is not only self-propagation, as Kant maintains, but involves a process of transformation.

4.2 MARX'S MODEL OF ORGANIC STRUCTURE

In this section, I show how Marx takes over Hegel's emphasis on the way organic systems develop and pass over into something new. In opposition to Hegel, Marx takes this to be the result of an incoherence within the material conditions of the reproduction of the system, rather than the result of a conflict between the ideal ends of the system and the manner of their material realization. For Marx, the material interactions between the elements of a system which are necessary for its survival, also prove sufficient for its dissolution, and the emergence of something new.

The only explicit source of Marx's account of the nature of organic wholes is an example which Marx gives in a draft of an introduction to the critique of political economy.⁸

⁶ Hegel, *Logic*, §156, zusatz.

⁷ Kant, *Critique of Judgement*, p.557.

⁸ See K. Marx, *Grundrisse*, trans., Martin Nicolaus, (Harmondsworth: Penguin Books, 1973), pp. 88-98.

There are a number of implicit sources, including, for example, the account Marx gives of the relationship between capitalist and wage worker in *Capital* and elsewhere.⁹ In this section, I shall give a reconstruction of Marx's explicit account in the *Grundrisse* of the structure of an organic whole, and in the course of that compare Marx's model with those of Kant and Hegel. In the following section, I shall consider how the resulting model fits the relationship between capitalist and wage-worker, and then test its capacity to model other organic structures by employing it to articulate Hegel's dialectic of love.

In the *Grundrisse* introduction, Marx is concerned with giving a general account of the relations between production and consumption, taken as aspects of a human metabolism with nature. Our metabolism with nature begins with our appropriating from nature what we need. We do not simply take what nature provides, but consciously act on things, transforming them so that they meet our needs. Even when we pick fruit from a tree and put it in our mouths, this involves a transformation of the fruit from an object tied up in the reproductive processes of the tree into one which can be broken down into nutrients for us. There are thus two aspects of our metabolism with nature. We act on nature to produce what we need, then we get those products to satisfy our needs by consuming them.

Marx first of all makes the point that there is an immediate identity and opposition between production and consumption, which corresponds with the immediate identity and

⁹ See K. Marx, *Wage-labour and Capital* in *Selected Works*, vol 1, (Moscow: Progress Publishers, and Marx, *Capital*, vol 1, Chapter XXIII.

difference Hegel posits between quantity and quality, or being and nothing. In a simple sense, production and consumption are opposites inasmuch as each undoes the effect of the other. Consumption breaks down the products we build up in production, and is thus 'the destructive antithesis' of production, while the latter uses up the physical and mental capacities built up in consumption. On the other hand, there is an 'immediate identity' between them, inasmuch as production is the consumption of raw materials and the energy of the producer in the course of 'productive consumption', and consumption is nothing but the production of the producer in what Marx suggests may be termed 'consumptive production'. Thus the 'immediate unity in which production coincides with consumption and consumption with production leaves their immediate duality intact'.¹⁰

Secondly, Marx points out that production and consumption mediate each other, or are in a relation of mutual dependence. Consumption depends on production for material objects to consume. We cannot eat food unless it has been produced, except in a fable such as the Biblical story of manna from heaven. Therefore, as Marx says, 'without production, no consumption'. On the other hand, the production process is consciously directed to bringing into being objects we have a need for, or objects we want to consume. Consumption thus provides production with its ideal object, or guiding aim. And so, 'without consumption, no production'. Thus by producing food we give ourselves something to eat, while hunger directs us to produce food. Production and consumption are thus co-relative

¹⁰ Marx. *Grundrisse*, pp. 90-91. Compare this with: '...in measure quality and quantity are only in immediate unity [and] their difference presents itself in a manner equally immediate', Hegel, *Logic*, p. 158.

terms, production being the process of making objects for consumption, and consumption being the use of products to satisfy needs. In terms which echo Hegel's description of categories from the sphere of Essence, Marx says that between production and consumption there is a 'movement which relates them to one another, makes them appear indispensable to one another, but still leaves them external to each other'.¹¹

In the third place, Marx claims that 'consumption accomplishes the act of production' and 'production produces consumption'.¹² On the one hand, consumption produces production in a two-fold way. Firstly, production would be incomplete without consumption inasmuch as a product is fully such only when it is consumed. Marx says that a product, for example, a railroad, is only potentially a product if it is never made use of.¹³ The manner of use of a thing also determines, not only that it has some use, but what its

¹¹ Marx. *Grundrisse*, p. 93. Compare this with: '[the categories of Essence] are products of reflective understanding, which, while it assumes the differences to possess a footing of their own, and at the same time expressly affirms their relativity, still combines [them]...without bringing [them] into one...', Hegel, *Logic*, p. 166, and 'In this motley play of the world, if we may so call the sum of existents,...everything bears an aspect of relativity, conditioned by and conditioning something else. The reflective understanding makes it its business to elicit and trace these connections running out in every direction; but the question touching an ultimate design is so far left unanswered..', op. cit., p. 180.

¹² Marx. *Grundrisse*, p. 93.

¹³ Of course, a product can be such in a secondary sense if it was made with the intention to be used, even if that intention is never fulfilled, just as a gift can be such in a secondary sense if it is sent with the intention that it be received, even if it never is. Wal Suchting makes the same point, based on conversation and correspondence with me, in 'Marx on the Dialectics of Production and Consumption in the Introduction to the Grundrisse' in *Social Praxis*, 3, (1975), pp. 291-314.

specific use is, and so determines its specific nature as a product. A block used for sitting is a seat, but when used for resting books, it is a table. Secondly, consumption not only completes production but also provides the stimulus for it. It depletes our stock of the product so that renewed production is required to restore its supply. And it reinforces the incentive to produce the product by showing the satisfaction which can be derived from making use of it. To eat food, for example, simultaneously does away with what we shall need when we become hungry again, but provides the energy we need for production of food to meet our future needs. It thereby provides both the incentive and means to overcome any present deficiency of food through further production.

On the other hand, production also produces consumption in a two-fold way. Firstly, consumption would be incomplete without production, inasmuch as our taste is a taste for certain products, and is thus made determinate by the possibilities of consumption which production provides. Consumption of a meal cooked after a specific cuisine, using finely crafted cutlery and dinnerware is a different act of consumption from consuming raw food with tooth and nail. Production also constitutes the stimulus for consumption, firstly by making a product available for our use, and secondly, by expending energy needed for further activity, it 'brings to readiness the need' to consume.

This last identity between production and consumption clearly results in their constitution as more than isolated acts. One act of production is completed in consumption of its product and provides the incentive for a further act of consumption. This act of consumption is completed in its being a consumption of specific products, and in turn pro-

vides the stimulus for a further act of production, and so on. By each providing the stimulus for and fashioning the other, production and consumption become ongoing processes. Each produces itself as an ongoing process through its opposite. Production and consumption thus produce in their counterparts some of the principal pre-requisites of their own continued existence. However, as ongoing processes, production and consumption not only continue their original form, but develop new forms through the determinate finish each gives to the other. Unsatisfied needs lead to the production of new products for consumption and as means of production, and new products produce new needs. So we have production and consumption not only incorporating each other in their own reproduction, but involving each other in their own transformation over time.

Thus the third identity between production and consumption corresponds with Hegel's third aspect of the dialectic, development. Marx uses the following form of words to summarise this identity: 'Each ... creates the other in completing itself, and creates itself as the other'. This echoes some of Hegel's formulations in the *Logic*; for example: 'Every function and 'moment' of the Notion is itself the whole notion...'; 'This is the realization of the End; in which, while it turns itself into the other of its subjectivity and objectifies itself, thus cancelling the distinction between the two, it has only closed with itself, and retained itself.'; '...its[the idea's] 'real' content is only the exhibition which the notion gives itself in the form of external existence, while yet, by enclosing this shape in its ideality, it keeps it in its power, and so keeps itself in it.'¹⁴

¹⁴ Hegel, *Logic*, §163, p. 227; §204, p. 268; §213, pp. 274-275. Also note in particular the extended

The striking parallel between Marx's outline of the dialectic of production and consumption and the form of Hegel's dialectic has led Martin Nicolaus to construe Marx as displaying a parody of the Hegelian method.¹⁵ Nicolaus notes that the 'immediate identity' between production and consumption parallels Hegel's claim that '...Being, as it is mere abstraction, is therefore the absolutely negative: which, in a similarly immediate aspect, is just **Nothing**.'¹⁶ This, together with Marx's observation that there is 'nothing simpler for a Hegelian than to posit production and consumption as identical',¹⁷ is supposed to

appraisal of Leibniz's Monadology as the 'highest form of contradiction': 'The monads are each an object, but an object implicitly 'representative', indeed the total representation of the world. In the simple unity of the monad, all difference is merely ideal, not independent or real...none the less, this simple totality parts into the absolute multitude of differences, each becoming an independent monad...In the monad of monads, and the Pre-established Harmony of their inward developments, these substances are in like manner again reduced to 'identity' and unsubstantiality.' §194, p.260.

¹⁵ Marx, *Grundrisse*, introduction by Martin Nicolaus, p. 36. Wal Suchting sets out the correspondence between Marx's three 'identities' between production and consumption and Hegel's dialectic in 'Marx, Hegel and Contradiction' in *Marx and Philosophy: Three Studies*, pp. 81-103. Wal Suchting emphasises the way each of the opposites 'acquires its identity only through its part in determining the other' (p. 95), whereas I consider emphasis should be put on the way each opposite *produces* the other, so that each can be seen to bring into being some of the preconditions of its own existence, and to determine in part the path of its own development. This is worth emphasising because it connects this third aspect of the 'unity of opposites' with Kant's 'self-formative' power of organisms, and with Hegel's emphasis on the capacity of an organism for self-development.

¹⁶ Hegel, *Logic*, p. 127.

¹⁷ Marx, *Grundrisse*, p. 93.

render Marx's account of the 'identities' of production and consumption an ironic display of *idealist* dialectics. However, Marx clearly is only making the point that while the unity of production and consumption provides an apparent basis for the Hegelian claim that there is a 'speculative' identity between them, the reality is that they are strictly neither 'immediately' nor 'speculatively' identical in the Hegelian sense.

This, as Nicolaus claims, in part follows from the fact that production and consumption are only conditionally, and not necessarily, 'identical', whereas an Hegelian 'immediate' or 'speculative' identity between opposites in the final analysis presupposes that they are absolutely and conceptually inseparable. That is, while production is consumption, and vice-versa, and while each produces the other in completing itself, production involves consumption only in certain given conditions. Production itself would not involve consumption of raw materials and the energy of the producer if it could happen by magic, and consumption would not involve production of a living being if it were not the means by which that being lived, but was only, for example, a process of storing things inside. Moreover, neither production nor consumption would promote the development of the other if there were no real conflict between our desires and our capacities to fulfill them, or if there were no 'scarcity', as Cohen puts it.¹⁸ When nature is 'too prodigal',¹⁹ our needs and methods of production stagnate.

¹⁸ G. A. Cohen, *Karl Marx's Theory of History: a Defense*, (Oxford: Clarendon Press, 1978), pp. 23-24.

¹⁹ Marx, *Capital*, vol 1, p. 649.

In addition to its contingency, the 'identity' between consumption and production is strictly not an identity at all, such as would imply that they are indiscernible. Rather, the 'identity' is a similarity, or an equivalence relation between counterparts. Production and consumption are equivalent inasmuch as both involve transforming an initial object into a new object through a process of dismantling and reassembling its components. What differentiates production from its equivalent in consumption is the counterpart relation between them. That is, production and consumption cannot be differentiated in terms of any of their intrinsic features, but only in terms of their counterposed functions in the metabolism between human beings and nature. Thus production proper is the process whereby given objects are transformed into objects fit for human consumption, and consumption proper is the process whereby products are incorporated into human life.

It is thus clear that opposites are not related in the way of Leibniz's monads, where a complete description of the essence of one can be read from a complete description of the essence of the other. The unity of opposites is rather the result of their mode of interaction, so that they constitute a system which can create its own prerequisites, can make good its own functioning when it is disturbed, and can counteract tendencies for it to be disturbed. These are what Kant considers the differentiating activities of an organism, except that Kant presumes that they presuppose conscious agency, and does not include any process of transformation in the process of self-formation. Thus as Marx says of production, distribution, exchange and consumption:

The conclusion we reach is not that production, distribution, exchange and con-

sumption are identical, but that they all form the members of a totality, distinctions within a unity...Mutual interaction takes place between the different moments.

This the case with every organic whole.²⁰

Moreover, in an Hegelian 'speculative identity', in which the end of a process of development is recognized as the self-realization of what it is to begin with, the beginning and end of the development are also related in the way of Leibniz's monads, so that the end of the process can be conceptually read out of its beginning, and the beginning read from its end. Hegel's teleology of self-realization thus has the features of a conscious teleology, where a conscious agent begins a course of action with a goal in mind, and ends it with the recognition that the goal has been realized. As Marx puts it:

'...what distinguishes the worst architect from the best of bees is that the architect builds the cell in his mind before he constructs it in wax. At the end of every labour process, a result emerges which had already been conceived by the worker at the beginning, hence already existed ideally.'²¹

On the other hand, in the reproduction and transformation of Marx's identity of opposites, the process works more or less blindly to its conclusion. That is, we need not suppose with Hegel that the conclusion of an end directed process is 'ideally present' in the beginning, and involves no change in content but only a change in form. For Marx, the

²⁰ Marx, *Grundrisse*, p. 100.

²¹ Marx, *Capital*, vol. 1, p. 284.

conclusion of a process of development need not be a return to its beginning, nor even a more explicit and concrete form of the beginning, but is merely the point of departure to a new process. As Roy Swan and I have pointed out, Hegel's dialectic moves in a circle, or rather a circle of circles, in which the concluding act of a process of development always takes up and encloses its beginning:

'Hegel...conveys the movement of his dialectic in an apt metaphor: philosophy, and therefore reality, is a 'circle of circles', a 'circle which close with itself' ... In terms of Hegel's metaphor of the circle, there is a change from an emphasis on the circle 'closing on itself' to an emphasis in mature Marxism on 'bursting out' of the circle, which while completing, more fundamentally brings to dissolution one process and begins another. Whereas Hegel sees a 'circle of circles', that is, every 'bursting out' [of an existing form of reality] as in turn a circle enclosed in the Absolute, ... Marxism sees an endless progression, a spiral movement (i.e., a 'bursting out' of a circle) which does not close on itself, but is open ended. ... If then Hegelian idealism is ultimately a dialectical monism, in that all processes are ultimately taken up and grounded in the single process of Spirit, as a diversity within a unity, ... Marxism is ultimately a dialectical pluralism, where reality is seen as an interlocking whole of separate aspects or processes, as a unity within a diversity.'²²

²² Ian Hunt and Roy Swan, 'A Comparison of Marxist and Hegelian Dialectical Form', *Radical Philosophy*, 30, Spring 1982, pp. 36-37.

As Chris Arthur points out, Marx should be seen as claiming that organic wholes are constituted as a *unity* rather than an 'identity' of opposites, so as to signify that an organic whole is strictly neither an 'immediate' nor a 'speculative' identity of opposites in the Hegelian sense.²³ What makes Marx's account of the unity of opposites materialist is that, as Marx conceives them, organic systems need involve material causes only, whereas the features of Hegel's identity of opposites can be made intelligible only on the supposition that its elements are conscious contents, while the whole constituted of those contents undergoes a self-formative process of development, as an internal *conscious* teleology.

We can now consider whether the relations involved in the unity of production and consumption hold generally in systems constituted as a unity of opposites in the way Marx conceives it.

4.3 WAGE-LABOUR AND CAPITAL, HUSBAND AND WIFE.

It is clear that between capital and wage-labour there is not even the semblance of an Hegelian 'immediate identity'. We cannot say 'capital is wage-labour' or 'wage-labour is capital', and explicate this in the way of 'production is consumption'. However, while a simple, unvarnished statement of identity is not available, the point of saying there is an 'immediate identity' of opposites, or the point of saying each 'passes over into the other', is that each is indiscernable from the other in terms of their immediately given features,

²³ Chris Arthur, *Dialectics of Labour*, (Oxford: Basil Blackwell, 1986), pp. 132-133.

and can be distinguished only through their relation to one another. That is, the immediate unity of opposites signifies that the opposites fall under an equivalence relation, such that when the relation of one to the other is abstracted from, we are left with the resemblance only, and cannot properly draw the distinction between them.

In volume 1 of *Capital*, Marx makes the point that in the sphere of circulation capitalists and wage-labourers both appear merely as vendors and purchasers of commodities. Wage workers appear on the market to sell their sole productive asset, a capacity for human labour, and to purchase consumption goods. Capitalists appear on the market to sell products produced through the employment of their capital, and to purchase consumption goods, means of production, and the labouring capacity of wage workers. Both capitalists and wage-labourers contract of their own free-will, and for their own advantage. As Marx says, they are *equal*, 'because each enters into relation with the other, as with a simple owner of commodities, and they exchange equivalent for equivalent.'²⁴ The sense in

²⁴ Marx, *Capital*, vol 1, p. 280. The following passage from the *Appendix* to this edition puts the point clearly, provided Marx's claim that an *illusion* is involved in the conception of capitalists and wage-workers as commodity owners who differ only in the type of goods they own, is understood as a reference to the false impression that this is all there is to the matter: 'This destroys the last vestiges of the *illusion*, so typical of the relationship when considered superficially, that in the circulation process, in the market-place, two equally matched *commodity owners* confront each other, and that they, like all other *commodity owners*, are distinguishable only by the material content of their goods, by the specific use-value of the goods they desire to sell each other. Or in other words, the *original* relation remains intact [that is, capitalists and wage-workers are both vendors of commodities], but survives only as the *illusory* reflection [that is, a superficial feature generating illusions as to the real content] of the

which there is an 'immediate identity' between capitalist and wage-labourer is precisely that they are indiscernable when considered only as owners of commodities. To distinguish these 'simple owners of commodities' as capitalist and wage-worker, each must further be considered in their distinctive relation to one another.

When capitalist and wage-labourer are considered in relation to one another, it is clear that they stand in a relation of opposition as immediate as their relation of identity. The capitalist attempts to purchase the workers' labouring capacity as cheaply as possible, while workers strive for the highest possible wages. Thus the equality of capitalists and wage-labourers as owners of commodities constitutes their immediate unity, and the conflict between them over the level of wages, their immediate opposition. This opposition is 'immediate' as it presupposes nothing other than the capital wage-labour relationship itself, or is quite consistent with it, as Marx explains in *Wage, Price and Profit*, where he contrasts the 'conservative' trade union slogan of 'A fair day's pay for a fair day's work' with the revolutionary slogan of 'Abolition of the wage system!'²⁵

Now it is obvious even at a superficial level of analysis that capital and wage-labour also mediate each other, or are mutually dependent. In *Wage Labour and Capital*, Marx makes the point that an 'amount of commodities' becomes capital when it is used to employ wage labour with means of production to produce commodities worth more than the initial

capitalist relation underlying it.(pp. 1062-1063).

²⁵ K. Marx, *Wage, Price and Profit*, in *Selected Works*, vol 2, (Moscow: Progress Publishers, 1969), p. 75.

amount of capital.²⁶ Wage labour is the means whereby capital increases, and is thus the means whereby commodities become capital. And Marx also makes the point that it is by means of capitalist employment that wage labourers survive as such. For a wage worker to appear as such on the market there must already be a division between 'the objective conditions of labour and subjective labour-power',²⁷ so that the worker is compelled to sell his or her labour-power for wages in order to survive. So, without wage labour there could be no capital, and without capital there could be no wage labour.

Capital and wage labour do not merely condition each other's existence, each brings forth, or produces the other. As Marx argues in *Capital* vol 1, wage labourers not only produce a product, but produce wealth for their employers, and so produce wealth which can employ wage-workers, that is, wealth as capital. In turn, the employers produce wage labour by paying wages sufficient only for the immediate living needs of the workers, who, once they have finished working for the capitalist, are compelled by their circumstances to sell their labour-power to an employer once again:

Therefore the worker himself constantly produces objective wealth, in the form of capital, an alien power that dominates and exploits him; and the capitalist just as constantly produces labour-power, in the form of a subjective source of wealth which is abstract, exists merely in the physical body of the worker, and is sep-

²⁶ K. Marx, *Wage Labour and Capital* in *Selected Works*, vol 1, (Moscow: Progress Publishers, 1969), pp. 161-162.

²⁷ Marx, *Capital*, vol 1, p. 716.

arated from its own means of objectivation and realization; in short, the capitalist produces the worker as a wage-labourer.²⁸

Moreover, capital and wage labour give each other their determinate form. The immediate conflict between workers and capitalists over wages and conditions of employment, coupled with the deeper conflict between them over the alienation of the workers from their labour as a direct consequence of their employment by capital, transforms the merely formal subsumption of labourers into the real subsumption of labour under capital. Wage-labour thereby not only produces capital, but produces capital in a progressively more concentrated, mechanized, and rationalized form,²⁹ which tends to displace labourers from employment at least as rapidly as it accumulates. On the other hand, capital produces 'means for the development of production' which in turn are:

means of domination and exploitation of the producers; they distort the worker into a fragment of a man, they degrade him to the level of an appendage of a machine, they destroy the actual content of his labour by turning it into a torment; they alienate him from the intellectual potentialities of the labour process in the same proportion as science is incorporated in it as an independent power...³⁰

So capital not only produces wage-labour and wage-labour capital, each produces the

²⁸ *ibid.* See also the *Appendix*, pp. 1060-1061.

²⁹ Marx, *Capital*, vol 1, *Appendix*, p. 1055.

³⁰ Marx, *Capital*, vol 1, p. 799.

other in an extended, intensified form. As Marx puts it:

...labour produces on a constantly increasing scale the conditions of labour in opposition to itself in the *form of capital*, ...capital produces on a steadily increasing scale the productive wage-labourers it requires...The world of wealth expands and faces [the worker] as an alien world dominating him, and as it does so his subjective poverty, his need and dependence grow larger in proportion. His *deprivation* and its *plenitude* match each other exactly.³¹

The antagonism between capitalist and wage worker is thus at once the presupposition and result of the reproduction and transformation of their relationship. The relationship between capitalist and wage worker sketched above summarizes one of the central themes of volume 1 of *Capital*, and clearly fits the model of a unity of opposites set out by Marx in the introduction to the *Grundrisse*. It is a striking demonstration of the power of the model that it enables us to extract such a central theme of Marx's theory of capital. To further demonstrate the continuity and difference between this model and Hegel's model of an identity of opposites, I return to the unity of opposites which for Hegel is the manifestation of the principle of Love in marriage.

Hegel calls Love the 'most tremendous contradiction'. That is, each lover is incomplete and finds him or herself only through the other. In terms of Marx's model of a 'unity of opposites' this is essentially a matter of their 'mediated identity'. I wish now to show that

³¹ Marx, *Capital*, vol 1, *Appendix*, pp. 1061-1062.

Love in Marx's dialectic, or rather the 'normal' case of husband and wife in marriage, is a 'unity of opposites' in the way that the metabolism between human beings and nature in production and consumption is a unity of opposites. This involves showing how there is not only a 'mediated identity' between husband and wife, but also showing their 'immediate identity and opposition' and how each 'mediates' the existence of the other.

Of course, in the case of marriage, we cannot say that the husband *is* the wife, or that the wife *is* the husband, and interpret that as an immediate identity between husband and wife in the sense that production is consumption, or consumption is production. Taking Hegel's view that marriage is in essence an agreement between husband and wife to make themselves one person, the husband, and assuming that such an agreement represents not only a mystical stance toward their relationship, but can be realized in fact, we can then perhaps say 'the wife *is* the husband', although we still cannot say 'the husband is the wife'. However, outside the conceptual framework of Hegel's idealism, the agreement between husband and wife to make themselves 'one person' can only be understood as a mystical gloss on what Hegel terms the 'community of personal interests' of husband and wife in marriage.

This community of interests constitutes an immediate equality between husband and wife as marriage partners, and members of the same family, which parallels the equality between capitalist and wage worker as owners of commodities. So the 'immediate unity' of husband and wife is constituted by the merging of their lives as a couple. They can be distinguished within marriage only by their contrasting roles. Thus, in relation to their

community of interests, they are one person, but in relation to the different parts they play within that community of interests, they are distinct persons.

On the other hand, the lives of husband and wife are also 'immediately' opposites. Hegel recognizes this in the obvious sense that they belong to opposite sexes.³² However, as I claimed when criticizing Hegel's tendency to invest the mystical union of husband and wife with objective reality, husbands and wives stand in 'immediate' opposition through conflicting interests as individuals. Despite their commitment to living together, husbands and wives are more or less self-interested, and more or less independent. In a patriarchal marriage conflicts of interest are to be resolved in favour of the self-interest of the husband. If they both have careers or needs for individual enjoyment the wife is expected to sacrifice hers in favour of her husband's.

³² Hegel, *Hegel's Philosophy of Right*, §165, p. 114. 'The difference in the physical characteristics of the two sexes has a rational basis and consequently acquires an intellectual and ethical significance. This ...is determined by the difference into which the ethical substantiality...internally sunders itself in order that its vitality may become a concrete unity consequent upon this difference.' This is not to suggest that Hegel only recognizes the 'immediate' opposition between the sexes. He also argues that male and female have distinct moral outlooks, the male bearing 'self-conscious spirit' and human law, the female bearing 'unconscious spirit' and the divine law, so that womankind 'changes by intrigue the universal purpose of government into a private end', and the male raises natural feelings to the level of consciousness and universally binding principles. See G. W. F. Hegel, *The Phenomenology of Mind*, trans. J.B. Baillie, (London: George Allen & Unwin, 1949), pp. 466-506, especially p. 496, and the discussion of this theme by Genevieve Lloyd, *The Man of Reason*, (London: Methuen, 1984), pp. 80-85.

The lives of husband and wife are not only immediately united and in opposition, but are also interdependent. In a traditional patriarchal marriage, the wife depends on the husband as breadwinner, and the husband depends on the wife as housekeeper and child-rearer. Each life is carried on with the presupposition that the other is playing its part.

Further, each life in a marriage not only presupposes the other, but also produces its counterpart. Each life completes the other inasmuch as each would be defective and incomplete without the other. Each life is what it is through the other, for, as Hegel says, in love I 'win my self-consciousness only as the renunciation of my independence and through knowing myself as the unity of myself with another and of the other with me'³³

Now, the lives of husband and wife not only complete each other, but each provides the impetus for the development to maturity of the other. On the one hand, the incentive for one partner to become a 'good husband', and for the other to become a 'good wife', comes from the need each has for the other, and underpins the continuity of their relationship. On the other hand, the one-sided merging of personalities in a traditional patriarchal marriage develops a deeper antagonism out the conflicting individualities of husband and wife. Women's resistance to their nullification, subordination and exploitation as wives within patriarchal marriage leads to the dissolution not only of individual relationships, but of the institution of patriarchal marriage itself.

It is characteristic of Hegel's dialectical monism and his emphasis on the way an original

³³ Hegel, *Hegel's Philosophy of Right*, p. 261.

identity is reaffirmed at a higher level through a contradiction and its resolution, that he sees the development of a social institution as leading in the end to a reaffirmation of its founding spiritual principle. For Hegel development takes the form of perfecting the form of expression of the spiritual principle of an institution rather than its displacement by another principle. Thus the mutability of marriage is expressed in the dissolution of individual marriages resulting from the death or defection of one of the partners, rather than through any significant transformation or dissolution of its institutional form.

Marx, on the other hand, has a dialectical pluralism which tends to emphasize the transforming power of contradiction. On this view, it is more appropriate to regard continuity as preserved in the course of transformation than to regard difference as being preserved in identity, and Marx's concept of a 'unity of opposites' comprehends changes in the structural principles of organic systems, as well as and as a consequence of changes in their form of embodiment.

Before leaving this section it is worth emphasizing one feature of the Marxian model of a unity of opposites as exemplified in the marriage of husband and wife. In a patriarchal marriage we have an instance of a unity of opposites in which a mutual interaction between the opposites establishes not only the symmetry of their mutual dependence and mutually formative influence on one another, but is consistent with an asymmetry between them. In a sense, the life of each partner to a marriage determines the other as much as it is determined. Yet, in a patriarchal marriage there is a clear sense in which a

husband's life determines the wife's in a way which is not reciprocated. The husband determines where both shall live, and what associations members of the family may enter into. The husband speaks for the wife and the family as a whole, and, in general, represents and is responsible for them in legal and financial affairs. If a clash of interests should occur, it is the husband's interest which generally prevails. In short, the husband dominates the wife. The fact that the model allows an *asymmetry* between the elements in a 'unity of opposites' as well as implying an obvious symmetry will prove vital later in resolving what Phillippe van Parijs calls 'the central puzzle of Marxism'.³⁴

In this section I have examined the dialectic of capital and wage-labour, and reformulated Hegel's dialectic of love. I think this has shown that the model of dialectic extracted from Marx's exposition of the dialectic of production and consumption is capable of illuminating the structure of other key relationships in Marx's social theory, as instanced by the relationship between capital and wage labour, and may be regarded as extracting what Marx terms the 'rational core' from the 'mystical shell' of Hegel's dialectic. In the next section, I complete this exposition of the structure of Marx's dialectic by comparing it with the model implicit in Mao's writings on dialectic, and developed by Mussachia.³⁵

³⁴ Phillippe van Parijs, 'Marxism's Central Puzzle' in *After Marx*, eds., T. Ball and J. Farr, (Cambridge: Cambridge University Press, 1984)

³⁵ See Mao Zedong, *On Contradiction and On Practice*, in *Selected Works*, vol. 1, (Peking: Foreign Languages Press, 1965), and M. Mark Mussachia, 'On Contradiction in Dialectical Materialism' in *Science and Society*, 41, No.3, 1977, pp. 257-280, and 'On Materialist Contradictions: a Reply', *Science and Society*, 42, No.2, pp. 191-198.

4.4 MAO AND MUSSACHIA ON CONTRADICTION

All processes and things are constituted of 'unities of opposites' for Mao, with simple processes having one pair of opposites, while complex processes have many.³⁶ The opposite aspects in any process 'struggle with' or 'exclude' one another. However, this exclusion and struggle does not simply amount to annihilation. While each aspect undoes the effects of the other, they coexist in the same entity because each is the condition of existence of the other.

While all distinct terms are in a sense in opposition for Mao, it is only 'in given conditions' that opposing terms constitute a concrete 'unity of opposites':

...in given conditions two contradictory things can be united and transform themselves into each other, but in the absence of these conditions, they cannot constitute a contradiction, cannot coexist in the same entity...³⁷

In Mao's account of the 'identity of opposites' and its conditionality, the emphasis falls on the 'transformation of opposites' rather than their coexistence in the same entity. Mao equates the 'transformation of opposites' with each aspect changing 'its position to that of its opposite'.³⁸ Thus when peace is transformed into war, the balance between mutual

³⁶ Mao Zedong, *On Contradiction*, op. cit., p. 337.

³⁷ *On Contradiction*, p. 342.

³⁸ *On Contradiction*, p. 338.

accommodation and conflict tips in favour of conflict. Mao envisages an unity of opposites as a coexistence of opposites in which one dominates the other, except in momentary and exceptional circumstances. This is a reasonable, even a necessary position, as a coexistence of exclusive, but equally balanced opposites would appear to result in each cancelling the other out, so that neither has any effect.

The *conditionality* of the transformation of opposites amounts to a limitation on the opposites which can coexist and transform into one another. Mao contrasts the imaginary transformations of legend with those having objective reality.³⁹ Only the mythical philosopher's stone can transmute lead into gold in the conditions we live under, although such a transmutation might be possible in a supernova. On the other hand, graphite can be transformed into diamonds in technologically feasible conditions of high temperature and pressure. As Mao puts it: 'Why can an egg but not a stone be transformed into a chicken?'⁴⁰ And he adds that it is only after a certain interval of time and in certain conditions that a change can take place:

Before it explodes, a bomb is a single entity in which opposites coexist in given conditions. The explosion takes place only when a new condition, ignition, is present. An analogous situation arises in all those natural phenomena which finally assume the form of open conflict to resolve old contradictions and produce new things.⁴¹

³⁹ *On Contradiction*, p. 340-341.

⁴⁰ *On Contradiction*, p. 341.

According to Mao's model of a 'unity of opposites', a process begins with two opposites coming to coexist in certain conditions, and it ends with the subordinate aspect becoming the 'principle' aspect,⁴² whereupon a new process with a new pair of opposites begins. There is a suggestion in Mao's account that the new process consists of the former pair of opposites in reversed positions. One way of making sense of this is to suppose that the conflict of opposites is always between what a process is and what it is tending to become. Thus life is a struggle with death, which is what life passes into. However, out of death any number of processes can arise, depending on the conditions. A body in the sea becomes part of the metabolism of fish, and on the land it becomes part of the metabolism of bacteria and worms. Thus, while a process always concludes with a reversal in the position of the forces of continuity and change, this does not specify the specific form which the forces of change acquire once they are dominant.

Another way of making sense of the way the 'transformation of opposites' in Mao's account tends to do double duty for the dissolution of an old process and the emergence of a new process, is to say that the dissolution and end of a process is constituted simply by opposites changing their places, and a new process will then begin with a new pair of opposites. However, in some cases, such as the case of peace and war, the new dominant aspect will be continuous with, or resemble the subordinate aspect of the previous process.⁴³ Thus when peace is transformed into war, the end of the peace occurs when

⁴¹ *On Contradiction*, p. 343.

⁴² *On Contradiction*, pp. 331-337.

'peace changes its place with war', and this emergence to the fore of conflict with which a period of peace concludes also constitutes, or is continuous with the new process of war. That is, peace ends when conflict becomes dominant, and the new process of war is also characterized by the dominance of conflict, while the conflicts around which war is fought are often continuous with those which had been present, although suppressed, during peacetime.

This model of Mao's dialectic closely corresponds with Mussachia's, especially with the points he makes about the principle aspect of a contradiction, the unity and aspects of a contradiction, and the resolution of contradictions.⁴⁴ Mussachia also points out that we cannot expect this model to be universally applicable. Apart from showing that it cannot be applied to 'plus and minus' in mathematics without stretching its sense to breaking point, Mussachia also notes that the model has a complexity which may exceed that of simple processes:

for a process to be fully dialectical it must consist of at least two, relationally constituted, essentially (i.e., non-accidentally) opposing, variable elements (aspects). Since opposition and variability require a minimum of 16 structural bits (two elements with at least one two-valued variable, an oppositional interaction, and at least binary interactional states), we can say that in general the more

⁴³ Ian Hunt and Roy Swan, 'A Comparison of Marxist and Hegelian Dialectical Form' in *Radical Philosophy*, 30, pp. 33-40, and especially pp. 37-38.

⁴⁴ Mussachia, 'On Contradiction in Dialectical Materialism', p. 259.

complex the process the more likely it is to possess part or all of the...general characteristics of a dialectical process. Very simple or elementary processes may contain 'dialectical seeds' without being fully dialectical themselves.⁴⁵

The model derived from Marx's dialectic of production and consumption is even more complex than Mao's model. Stripped to its bare essentials, the 'unity of opposites' in Mao is a matter of the joining of two opposing aspects, their continuity and struggle, and finally, the dissolution of their unity and its replacement with a new 'unity of opposites'. Of the three 'identities' between opposites which Marx notes, this only explicitly captures 'mediation'.

It does not capture the difference between the 'immediate' identity and difference of opposites at the 'surface' of reality, and the 'mediated identity' between them which underlies and produces the 'immediate identity'. This was strikingly illustrated in the case of capitalists and wage workers with the contrast between, on the one hand, their superficial relation as owners of commodities, and on the other hand, the reproduction and transformation of their relationship in the production process over time. At the 'surface' level, capitalists and wage workers have the same interests insofar as they are both commodity owners, but are in conflict over wages and conditions of work. At a deeper level, the position of each in the property system is the presupposition and result of the other's position, and leads to the reproduction of the capital/wage labour relation in an intensified and antagonistic form. However, as Roy Swan and I have argued, this

⁴⁵ Mussachia, 'On Contradiction...', p. 261.

aspect of the dialectic can be constructed as a special case within Mao's dialectic.⁴⁶ Thus when a contradiction and its resolution initiate an essentially similar contradiction, as is clearly the case with the unity of theory and practice as set out by Mao,⁴⁷ the repetition of particular cycles constitutes a more universal ongoing contradiction between theory and practice, in which each aspect considered as a relatively universal aspect of the ongoing process reproduces and transforms itself through its opposite.

It is thus clear that Marx's dialectic of production and consumption does not embody a universal form of reality. However, I think it is also clear that Marx need not claim that all things are unities of opposites. His dialectic need only capture the universal form of organic systems. Simpler processes may also exhibit this form in an embryonic way. What differentiates Marx's dialectical standpoint from mechanical materialism is not the universality of contradiction in all processes and things, but rather the claim that there are organic systems whose complexity and developmental tendencies cannot be captured in models which reflect only the basic laws of Newtonian physics. Thus, as Stengers and Prigogine show,⁴⁸ the 'constancy' of organic systems is not analogous to a state of dynamic equilibrium, but is a manifestation of the order that dissipative structures can

⁴⁶ Ian Hunt and Roy Swan, 'A Comparison of Marxist and Hegelian Dialectical Form', p. 39.

⁴⁷ Mao, *On Practice*, in *Selected Works*, vol. 1, pp. 295-309, and especially p. 308: 'Discover the truth through practice, and again through practice verify and develop the truth...Practice, knowledge, again practice and again knowledge. This form repeats itself in endless cycles, and with each cycle the content of practice and knowledge rise to a higher level.'

⁴⁸ See Stengers and Prigogine, *Order Out of Chaos*.

maintain in conditions far from equilibrium.

In the following chapters, I shall employ the model extracted from the dialectic of production and consumption to resolve various puzzles surrounding Marx's theory of historical materialism and his theory of the capitalist mode of production.

CHAPTER FIVE

MARX'S THEORY OF HISTORICAL MATERIALISM

5.0 INTRODUCTION

Marx's sketch of the theory of historical materialism rests on two key distinctions, one being the distinction between productive forces and social relations of production, and the other the distinction between the economic basis of society and its legal and political superstructure.

The productive forces are the various factors of the labour process, 'considered from its real side'¹ as a process in which useful things are created by labourers using instruments on raw materials. As such, they include knowledge, skills, work organisation, tools and machines, and raw materials of production. The social relations of production are not as clearly specified by Marx, but I suggest that they are relations among the agents of production through which control over production is exercised, so as to determine the aim and interests served by production. Social relations of production orient the production process to specific social ends. They include 'property relations' and their attributes, such as ownership of capital and the managerial authority of the capitalist, and thus constitute

¹ Karl Marx, *Capital*, vol. 1, p.981.

the social form of the production process. The legal and political 'superstructure', which is raised on the foundation of the social relations of production, or the 'economic base', is also not very clearly defined by Marx. However, as it involves the legal 'expression' of the social relations of production,² it is plausible to suggest that it is the structure of rights and constraints which regulate and sustain the property system of society, whether by legal, political, or other means such as moral custom.

Marx's theory of historical materialism is that an epoch of social revolution, involving a radical change in the social relations of production, or the property system of society, and a substantial transformation of the legal and political superstructure, follows upon the social relations of production becoming a fetter on the development of the productive forces of society. Thus changes in the principles whereby members of a society consciously govern their actions are consequent on changes in the way society provides for its material existence. This, of course, is only a sketch of the theory, but it is sufficient to indicate the role played in it by the distinction between productive forces and social relations of production on the one hand, and the distinction between the economic base and superstructure of society on the other hand.

The philosophical critique of historical materialism has been focused firstly, on a rejection of these two distinctions as being unclear or unsustainable, and secondly, on the claim that insofar as the distinctions can be made, the aspects of each distinction cannot be

² Karl Marx, 'Preface to *The Critique of political Economy*, in *Selected Works*, vol. 1, p. 503.

related causally in the way Marx suggests. Critics of historical materialism have argued that the social relations of production determine the productive forces as much as they are determined by them, and similarly, they have argued that the legal and political superstructure cannot be seen as an epiphenomenon of the economic basis of society, and conceptually cannot be separated from it. In this chapter, I show that this critique collapses when Marx's distinctions are made dialectically in accordance with the model of a 'unity of opposites' drawn from the dialectic of production and consumption.

5.1 PRODUCTIVE FORCES AND RELATIONS OF PRODUCTION

In this section, I shall define and distinguish productive forces and relations of production. There has been considerable argument over just what the distinction is, largely revolving around the question of whether productive forces should be defined broadly or narrowly. The problem here has been to reconcile an intuitive understanding of 'productive forces' as anything which contributes to the productivity of labour in production, with the distinction Marx draws between these and the social relations of production. For property relations, and other influences from outside productive activity proper, such as religious and moral beliefs, surely contribute to the productivity of labour in production, but appear to be excluded from the productive forces by Marx.

In addressing this question, I shall begin with Marx's classic summary of the theory of historical materialism in the Preface to *A Contribution to the Critique of Political*

Economy:

In the social production of their life, men enter into definite relations that are indispensable and independent of their will, relations of production which correspond to a definite stage of development of their material productive forces. The sum total of these relations of production constitutes the economic structure of society, the real foundation, on which rises a legal and political superstructure, and to which correspond definite forms of social consciousness...At a certain stage of their development, the material productive forces of society come into conflict with the existing relations of production, or -what is but a legal expression for the same thing- with the property relations within which they have been at work hitherto. From forms of development of the productive forces these relations turn into their fetters. Then begins an epoch of social revolution. With the change of the economic foundation the entire immense superstructure is more or less rapidly transformed.³

Marx does not explicitly define the 'productive forces' and 'relations of production' referred to in this passage. I shall argue for a more inclusive definition of 'productive forces', taking issue with Cohen's arguments for a more narrow definition, and reconciling the broader definition with the distinction Marx draws between forces and relations of production.

³ Karl Marx, 'Preface', op.cit., pp. 503-504.

By a productive force could be meant anything which contributes either to the quantitative or qualitative extent of the output of goods, or even more generally, anything which contributes to production 'in any way'. A number of commentators, both sympathetic and hostile to Marx, have taken this wide interpretation of 'productive force'. The wide interpretation plausibly would include, for example, religious and moral beliefs which motivate producers, and would certainly include property relations, which in class divided societies provide the incentive for production of a surplus.

This wide interpretation has generally been tied to a rejection of the idea that productive forces 'determine' social relations of production. For, it has been claimed, if productive forces include social relations of production, then productive forces cannot 'determine' or 'explain' them.⁴ And this has led some among both sympathetic and hostile interpreters to reject the inclusive definition of productive forces.⁵

In support of this rejection, Elster quotes a passage where Marx refers to the *Dialectic of*

⁴ See, for example, Jon Elster, *Making Sense of Marx*, (Cambridge: Cambridge University Press, 1985), p. 244.

⁵ See for example, G. A. Cohen, *Karl Marx's Theory of History*, pp. 32-34, who argues for a narrow definition of 'productive forces' on the ground that they 'must be capable of use by a producing agent' so that production occurs as an intended result. Cohen accepts that other factors may promote, enhance, facilitate, or stimulate production, but points out that Marx objected to viewing as 'productive' various conditions or stimulants of production.

the concepts productive forces (means of production) and relations of production, a dialectic whose boundaries are to be determined, and which does not suspend the real difference'.⁶ However, this passage from the draft Introduction to the *Grundrisse* actually supports the opposite view. In the immediately preceding exposition by Marx of the dialectic of production and consumption, Marx claims there are three 'identities' between production and consumption, though this does not 'suspend the real difference' between them. Thus Marx explicitly says that production *is* consumption, even though consumption proper is the 'destructive antithesis' of production, and causally conditions it.⁷ If the dialectic of productive forces and relations of production has the same form, then there will be three 'identities' between productive forces and relations, and the claim that relations of production *are* productive forces can be maintained consistently with productive forces proper being the causal condition and 'antithesis' of relations of production.

What then are productive forces, taken as antithetical to social relations of production?

Cohen places three constraints on what can count as productive forces proper.⁸ Productive forces are defined as facilities which 'may be used' by an agent as means to a productive end. Their use must be part of the activity of production. And they must be

⁶ Marx, *Grundrisse*, p. 109.

⁷ Marx, *Grundrisse*, pp. 90-93.

⁸ That is, three definitional constraints apart from what Cohen cites as the four theoretical constraints involved in the productive forces fitting what Marx has to say about the role of the development of the productive forces in history. See G. A. Cohen, *Karl Marx's Theory of History*, p 41.

capable of being owned. These three criteria lead Cohen to claim that productive forces include knowledge, skills, labour-power, instruments of production (including tools, machines, places of work, and instrumental materials), raw materials of production, and spaces. However, Cohen excludes from the productive forces 'labouring activity' itself and work organization, which he says consists of 'material' or 'technical' relations of production. To exclude technical relations of production from the productive forces is, Cohen admits, pedantic, but he claims that it is theoretically useful nevertheless.⁹ And he gives three tightly argued reasons for excluding labouring activity itself from the productive forces.

Cohen's three reasons for claiming that labouring activity cannot qualify as a productive force are as follows. Firstly, labouring activity is not *used* in production but *is* production. Secondly, inclusion of both labouring activity and labour-power among productive forces would be strange. And finally, Marx's distinction between labour and labour-power is vital, and shows that labour-power but not labour may be owned.

I think that these reasons do not stand up. First, Cohen's claim that productive forces are *used* in production seems plausible only if productive forces are identified with *means* of production, which Marx tends to do, but which Cohen does not allow. Now, productive forces include, but are not identical with the means of production, since labour-

⁹ G. A. Cohen, *Karl Marx's Theory of History*, pp.113-114. See also p. 93 for Cohen's initial specification of material relations of production

power is a productive force, but is not a means of production. Labour-power is identical with the practical knowledge and energy required to make productive use of means of production. It is therefore not itself an object of such knowledge, and so cannot be used in production in the way means of production, such as tools, are used. The criterion of being *used* in production is therefore too narrow for what counts as a productive force.

However, there is another sense in which something can be 'used' in production which may have misled Cohen into thinking labour-power could be 'used'. What might suggest this is the way labourers may be exploited as employees, and so count as though they were an instrument of production for the employer, just as a slave was counted among a slave-owner's instruments of production, as a 'talking beast of burden' or *instrumentum vocale*.

Second, the inclusion of both labour-power and labouring activity among productive forces is, on the face of it, no more strange than including both kinetic and potential energy under the heading of energy, or no more strange than the use of the term 'ability' to cover both the latent capacity anyone with typically human cognitive powers has to speak a foreign language, and the developed ability of those who have learnt a foreign language, even if they are not currently speaking it.¹⁰

And finally, the marketing of services shows that activities *are* ownable.¹¹ The distinct-

¹⁰ For a related use of this distinction, see W.A. Suchting, "'Productive forces' and 'productive powers'", in *Analyse und Kritik*, 4, 1982, pp. 159-181.

ion which Marx draws between labour-power, as what a worker exchanges for wages, and labour, as what creates value but does not have value, is a distinction between labour-power and *abstract* labour. Abstract labour is what Marx takes as the basis of the commensurability of concrete labouring activities or services when exchanged on the market as commodities. Thus abstract labour is averagely productive labour of any type, considered only with respect to its duration, while concrete labour is labour of a specific type. Therefore, if we observe Marx's distinction between concrete labour and abstract labour, we can allow that *concrete labours* can be owned and have value, consistently with a rejection of the idea that labour *as abstract labour* can be owned, or have value.

The outcome of this is that while Cohen's second and third constraints on what can count as a productive force proper are acceptable, the first constraint is not. The question then is how do we distinguish productive forces from relations of production, if Cohen's attempt to provide a narrow definition is rejected? I suggest that the solution is to be found by starting from the fact that productive forces must be internal factors or components of the labour process.¹² This constraint initially distinguishes a productive force proper from

¹¹ For a detailed discussion of the issue see Ian Hunt, 'Labour and Labour-power', *Radical Philosophy*, 52, Autumn 1989. See also, Marx on services in *Capital*, vol 1, *Appendix*, p. 1047.

¹² An 'internal factor' of a process is a feature of any part of the process. This poses a problem of having criteria of identity for a process and its parts. I propose to follow Donald Davidson, *Essays on Actions and Events*, chapter 8, in taking event A to be identical with event B just when they have the same causes and effects. The internal factors of the production process are all the parts of that

anything which contributes in any way to production. Influences from outside the production process such as religious or moral beliefs, are excluded because they determine labour productivity only through their effect on work capacities and motivation for work, which are intrinsic factors of the production process.

Now, relations of production can be included among the intrinsic factors of the labour process. Nevertheless, productive forces proper can be distinguished from relations of production since, although both are factors of the labour process, productive forces are antithetical to social relations of production in the way that the matter of a thing is antithetical to its form. Cohen himself provides the reason for looking at productive forces in this way with his distinction between the 'social form' and 'matter' of production.¹³ Cohen draws an analogy between Marx's distinction between relations and forces of production and the Aristotelian distinction between 'form' and 'matter'. What makes clay the 'matter' of a brick is that it has the potential to be fired in the shape of a brick. As potentials for production, the productive forces thus clearly qualify as the 'matter' of production. The shape and hardness of a brick is its 'form' or design because these properties enable clay to serve as a building material. Social relations of production, or socially grounded relations of control over the use of the productive forces, also clearly

composite process which has the same causes and effects as the production process. This composite process consists of particular bodily movements, together with such of their effects and causes as are required to constitute them as an act of production.

¹³ Cohen uses this distinction brilliantly to illuminate Marx's distinction between the 'formal' and 'real' subsumption of labour under capital. See Cohen, *Karl Marx's Theory of History*, pp. 101-102.

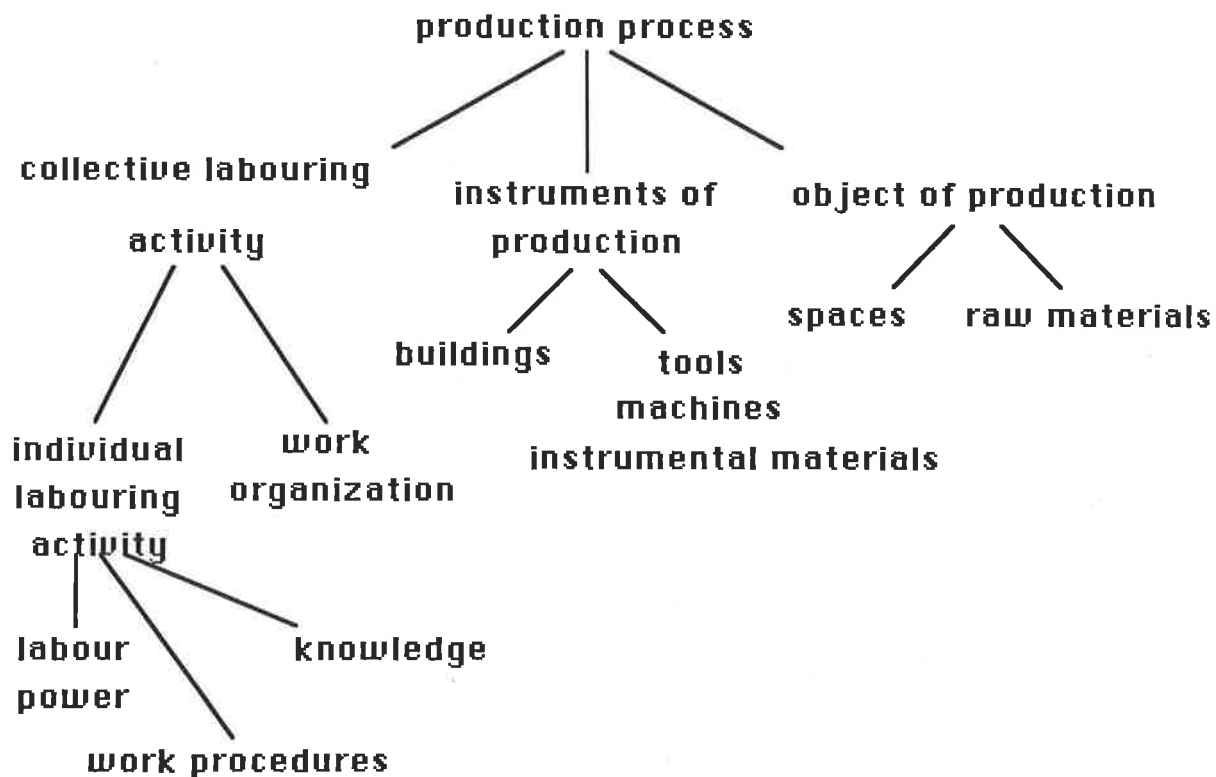
qualify as the 'social form' of the production process as a whole, because they determine the application of the productive forces to ends such as the production of a surplus.

Of course, labour-power is related to labouring activity, and organizational principles are related to work organisation, as constituent clay is related to its organisation into the form of a brick. This might suggest that Cohen is correct after all in claiming that work organization, or 'technical work relations', and labouring activity itself are not productive forces, since they are the result of 'forms' imposed upon organizational principles and labour-power as 'matter'. However, the Aristotelian distinction between form and matter is relative. Clay is the matter of a brick, but bricks are in turn the matter of a wall. So, although the labour-power of individuals is realized in labouring activity, and the organizational principles by which they act are realized in work organization, these in turn are the constituents, or the 'matter' of collective labouring activity. Collective labouring activity, instruments of production, and the object worked on together constitute productive forces in their most assembled form, which in turn are realized under social relations of production in the *fully articulated* production process.

The social relations of production are thus the 'final' social form, or the social form of the fully articulated production process, determining those interests, and in particular, those class interests, which are served by the production process. The productive forces, taken as components of the production process which determine its productivity, have their use controlled through social relations of production, and can be specified at higher or lower

levels of composition.

Therefore, considered from its technical side, the production process can initially be disarticulated, at least in thought, into labouring activity, instruments of production, and the object of production. These in turn may be disarticulated into their components. A collective labouring activity, for example, may be decomposed into individual activities and work organisation. Individual working activity may be decomposed in turn into specific skills together with the knowledge and procedures required for their application. All of the components of the production process from the initial level of decomposition down to the lowest, can be included among the productive forces of society. The following diagram presents this decomposition of the productive forces into its components at different levels:



To summarize, the productive forces are internal or intrinsic factors of the production process which contribute to its productivity. Specifically, they are those factors of the production process whose application in productive activity is directed to specific social ends through social relations of production.. This means social relations of production are not productive forces proper. For, while relations of production are internal factors of production and influence its productivity, they do so by orienting the productive application of forces of production in the strict sense. In terms of its scope, this definition of the productive forces is essentially the same as that given by Richard Miller, except that his account makes no provision for distinguishing social relations of production from productive forces proper.¹⁴

We now have the task of giving some account of the social relations of production. I follow Cohen in not at this stage attempting to separate relations of production from the normative principles which sanction those relations.¹⁵ Social relations of production are taken as socially grounded relations of control over the productive forces of society. As such, they constitute what may be called 'real property' in the productive forces. I use the term 'real property' so as not to confuse social relations of production with 'property' taken merely in its legal sense.

¹⁴ See Richard W. Miller, 'Productive Forces and the Forces of Change: A Review of *Karl Marx's Theory of History* by Gerald Cohen', *The Philosophical Review*, XC, 1981, pp. 91-117, for a similar account, and especially pp. 102-105.

¹⁵ G. A. Cohen, *Karl Marx's Theory of History*, p. 63.

Godelier, for example, takes property in its legal sense when he claims that 'property' consists of a set of rules 'governing access to and control, use, transfer, and transmission of any and every social reality which can be the object of a dispute'.¹⁶ Since rules are normative principles, this effectively identifies property with the normative principles which regulate, sanction, or 'govern' control over 'goods', or 'social realities which can be the object of a dispute', and so identifies property with its social grounding. However, Godelier also shifts toward the position of identifying property with a 'concrete appropriation of reality', which amounts to what I have termed 'real property', and almost disowns his previous identification of property with a set of rules:

Property only really exists when it is rendered effective in and through a process of concrete appropriation. Property can only be reduced to a body of abstract rules at the cost of making it a set of velleities condemned to play the part of individual and collective fantasies.¹⁷

Godelier's somewhat repetitive list of practices governed by property rules reduce to 'control over' or 'use' of property in a general sense, but has the virtue of spelling out some of the various dimensions of using or exercising control over property. Thus, a rule governing access to an object regulates that aspect of the control or use of the object concerned with its interface with social agents. A rule governing transfer of property

¹⁶ Maurice Godelier, *The Mental and the Material*, (London: Verso, 1986), pp. 75-76.

¹⁷ Godelier, *The Mental and the Material*, p. 81.

regulates second-order control over a change in the owners who exercise control over the property. Rules governing the 'use' of property regulate control over ways of enjoying it, that is, ways of making it serve human wants and needs. The amount and kind of control over property which may be exercised by agents varies. 'Possession', for example, includes control over the use of a thing, but excludes control over access to it, control over its transfer from one owner to another, and control over its disposal. As Godelier points out, the idea of an individual invested with complete control over access, use, transfer and disposal of a thing to the exclusion of all other agents is an ideal limit of private property, which is only ever at most approximated to in any actual society.¹⁸ Property rights are always *social* rights, never merely 'natural' rights. As Marx puts it, 'an isolated individual could no more have property in land and soil than he could speak'.¹⁹ Since an individual as such is never the source of property rights, it is not surprising that property is never absolutely private, even in those societies which most vehemently proclaim the ideology of private property.

Property rules also sanction which sorts of agent may exercise some form of control over any given item of property. Societies can define, for example, what men and women may own. In tribal societies, genders often have exclusive rights to practice and pass on the rituals and livelihoods peculiar to each. Even under capitalism, although anyone may in principle own any form of property, property may only be acquired by 'lawful' means.

¹⁸ Godelier, *The Mental and the Material*, p. 85.

¹⁹ Marx, *Grundrisse*, p. 485.

For example, the limited form of ownership that parents have over their children normally can be had only by natural parents or by legal adoption, and usually cannot be transferred by private contract alone.

Social relations of *production*, of course, are sanctioned by rules governing the use of the productive forces, where productive forces are a subset of all possible 'social realities'. So, although Godelier stresses the wide range of things material and cultural which may be owned, the ownership of productive forces is a special case. Control over productive forces primarily involves control over how they are to be used, that is, control over the techniques of production, and control over the appropriation of the fruits of their use. Social relations of production thus cover all relationships through which production is oriented to particular social ends.

As capitalist society is founded on *private* property, control over production might seem to be exercised primarily by individuals. However, since even private property is in reality a social attribute of individuals, involving relationships with others such as their respecting what is considered a private matter, control over production is always exercised through social relationships.

It is important that our vision not be dazzled by the exemplary capitalist relation of production, ownership of capital, so that we fail to recognize other significant instances. For example, market relations such as those involved in competition clearly orient production toward economy in the use of resources, and thus can be included among social relations

of production. Yet such relations are in no sense 'property'. The point of using the term 'social relations of production' is that it enables us to get away from the misleading connotations of the term 'property'. Nevertheless, I shall use the term 'property system' interchangeably with 'social relations of production', since relations other than property relations in the strict sense, such as competitive buying and selling, belong to the property system of society, even if they are not themselves property.

This analysis of productive forces and relations confirms the analogy with form and matter which Cohen points out. The Aristotelian contrast between matter and form is a twofold contrast between firstly, the range of potentials in a thing and their pattern of realization, and secondly, the elements which make up a thing and their organization into a whole able to serve specific ends. Productive forces and relations clearly are contrasted in these ways. That is, the productive forces include the technical ingredients or factors of production, while relations of production cover the way these are organised and directed to specific social goals. In the next section, I shall show how productive forces and social relations of production constitute a 'unity of opposites' in the way that production and consumption were shown to be a 'unity of opposites' in the previous chapter.

5.2 THE DIALECTIC OF PRODUCTIVE FORCES AND RELATIONS

In showing that productive forces and relations of production fit the model of a unity of opposites as exemplified in the dialectic of production and consumption, I am fleshing out Marx's allusion to the '*Dialectic of the concepts productive forces...and relations of production*' in the *Grundrisse* Introduction. My hypothesis is that when Marx refers to a dialectic of productive forces and relations of production, he means something analogous to the dialectic of production and consumption which is sketched in an earlier part of the Introduction draft. To summarize, according to this model of a unity of opposites, two opposites constitute a unity if they are related in a three-fold way. First, there is a significant respect in which the opposites are indiscernable (or fall under an equivalence relation), and each can be discerned from the other only in terms of the relation between them. Second, each opposite depends for its existence and functioning on its counterpart. Third, each opposite determines the specific form of its counterpart, and reproduces (and transforms) itself through producing its counterpart. It can be shown that each of these points is satisfied in the case of productive forces and relations of production.

As indicated in the previous section, there is an 'immediate identity' and an 'immediate opposition' between productive forces and relations of production. To take the basis of their opposition first, it is clear that agents appropriate productive forces and employ them to definite ends through social relations of production. In this way, control is exercised

over productive capacity in order to bring about and enhance the expression of some potentials for production, while limiting or negating the expression of others.²⁰ Conversely, the unrealized potentials of the productive forces provide the direct producers with objective, but unfulfilled, possibilities of production. These possibilities can be fulfilled only by negating, or doing away with the fetters imposed by maintaining social relations of production which direct the use of productive forces to certain ends to the exclusion of others.

Corresponding to this 'immediate opposition' between productive forces and social relations of production is their 'immediate identity' as intrinsic factors of the production process. As such they are indiscernable, and neither can be grasped fully except in relation to the overall production process, which incorporates both. Further, productive forces and relations merge with one another as intrinsic factors of production.

In realizing and suppressing productive potentials, the social relations of production are a factor of labour productivity, and to that extent are also productive forces. One illustration of this is the labour discipline imposed by capital on wage workers. The prospect of such labour discipline provided a major incentive for the transition from the 'letting-out system' of cloth manufacture. In the 'letting-out' system, cloth-weaving was organized in households, which contracted to weave quotas of wool allotted by a wool merchant. This

²⁰ This is why neo-classical theory speaks of the opportunity *cost* of producing anything.

Production involves opportunity cost since to produce one thing is to forgo production of other things.

system collapsed in the face of the greater productive potential of weavers working in a factory on looms owned by a capitalist, and under the supervision of the capitalist.

The role played by social relations of production contrasts with that of other features of social life which have an impact on labour productivity, such as culture, religion, the legal form of property, or the state. As Cohen notes, Marx points out that soldiers are not producing use-values even though they may supply security to those who do. Relations of production are not thus ancillary to the production process, but intrinsic to it. This is illustrated by the conventional, if not Marxian, belief in the productivity of capital. Marx argues that the productivity of capital is an illusion, but one fostered by the fact that the productive power of co-operative labour in the capitalist system is only realized through capitalist relations of production.²¹ As Marx puts it:

*...these...productive forces of social labour, came into being historically only with the advent of the specifically capitalist mode of production. That is to say, they appeared as something intrinsic to the relations of capitalism and inseparable from them.*²²

We can see capitalist ownership as a social relation of production rather than a productive force proper only by contrasting social co-operation in labour with its specifically capitalist form. We can thus separate control exercised for the sake of productive efficiency

²¹ Marx, *Capital*, vol. 1, p. 451.

²² Marx, *Capital*, vol. 1, *Appendix*, p. 1052.

from control exercised for the sake of class interests. This is especially difficult but still possible when they happen to be bound up with one another, as in the supervision of labour:

Through the co-operation of numerous wage-labourers, the command of capital develops into a requirement for carrying on the labour process itself, into a real condition of production. ... All directly social or communal labour on a large scale requires, to a greater or lesser degree, a directing authority, in order to secure the harmonious co-operation of the activities of individuals, and to perform the general functions that have their origin in the motion of the total productive organism as distinguished from the motion of its separate organs. A single violin player is his own conductor: an orchestra requires a separate one. The work of directing, superintending and adjusting becomes one of the functions of capital, from the moment that the labour under capital's control becomes co-operative. As a specific function of capital, the directing function acquires its own special characteristics...the control exercised by the capitalist...is...a function of the exploitation of the social labour process...²³

The 'immediate identity' of productive forces and relations of production accounts not only for the illusion that relations of production are productive forces in the strict sense, but also for the illusion fostered within political economy that all production requires

²³ Marx, *Capital*, vol. 1, pp 448-449.

'capital'.²⁴ Under capitalism, the conditions of production are endowed with a certain social character²⁵ because they belong to the capitalist. Thus capital includes plant and equipment, and it appears that all production which requires plant and equipment therefore requires capital. This illusion is based on the fact that productive forces are property, and within capitalist production, the property of a capitalist, or capital. Strictly speaking, productive forces are property, or social relations of production, only in the sense that they are things owned, or have their employment directed to certain ends.²⁶ Productive forces fall under social relations of production, but are not the relations themselves. Nevertheless, productive forces *are* relations of production in the perfectly acceptable extension of the primary use of the term to cover not only relations as such, but things which fall under them.

The connection between relations of production and productive forces closely parallels the relation between quantity and quality as set out by Hegel. Just as a quantity must be a quantity along a given qualitative dimension, so productive forces constitute a capacity for production of a definite magnitude only in relation to some given productive end. Thus a certain combination of means of production, say of dough and heat applied over several hours, may be highly productive of small black discs of material, but utterly unproductive in the baking of scones. Although the range of possible applications of any specific set of

²⁴Marx, *Grundrisse*, pp. 86-87.

²⁵ Marx, *Capital*, vol. 1, *Appendix*, p. 1052.

²⁶ See Cohen, *Karl Marx's Theory...*, pp. 89-90.

productive resources is less far reaching than neoclassical theory imagines, some comparisons can be made between the outputs of different goods produced from a given set of resources.²⁷ That is, a given set of productive resources varies in its productivity depending on what mix of outputs is aimed at. And just as molecules of hydrogen and oxygen take the form of water only between certain temperatures at a given atmospheric pressure, so a given goal of production at any technological stage presupposes given means of production. Thus a high quality luxury car requires for its production more time, engineering and better materials than do ordinary cars.

It is clear that the 'immediate unity' between productive forces and relations of production just examined provides the basis for the claim made by sympathetic and hostile critics alike, that relations of production and productive forces are inseparable. Hostile critics have stressed that relations of production are productive forces, but a sympathetic critic such as Thomas McCarthy can be seen as stressing both sides of the equation, or in his terms, stressing the fact that technical relations between human beings and nature are inseparable from 'communicative relations'²⁸ between human beings.

²⁷ See Walsh, V., and Gram, H., *Classical and Neoclassical Theories of General Equilibrium*, (Oxford: Oxford University Press, 1980), pp. 185-201, where they discuss the allocation of given resources between competing ends, and define the 'opportunity cost' of producing an additional unit of commodity X with respect to commodity Y, as the quantity of commodity Y which must be given up when resources are reallocated to produce the additional unit of commodity X.

²⁸ Thomas McCarthy, *The Critical Theory of Jurgen Habermas*, (London: Hutchinson & Co., 1978), pp. 16-40, especially pp. 26-27.

It is evident also that productive forces and relations of production mediate each other. Thus the implicit conceptual connection between forces and relations of production is realized as a causal connection. Productive forces and relations of production are mutually dependent. Productive forces supply relations of production with their material object, that is, provide proprietors with their property, while social relations of production provide the goal for the employment of productive forces. Without productive forces there would be nothing for relations of production to appropriate, and without a property system, the use of the productive forces would lack orientation. Thus a capitalist, for example, 'risks' capital in production in return for the product of production, while production under capitalism will not take place without an expectation of profit.

Moreover, specific relations of production presuppose the availability of a definite range of productive forces. Capitalist production could not take a foothold without the possibility of economies of scale, and could not become entrenched without the availability of mechanized production. And specific productive forces presuppose specific relations of production. Large scale factory production cannot take place under feudal guild relations, or within the relations of simple commodity production, where the individual direct producer is also owner of the means of production.

However, relations of production and productive forces not only depend on each other, each produces the other in a twofold way. The first way in which relations of production

and productive forces produce one another is by each completing, or putting the 'finishing touches' to the other. So, on the one hand, relations of production determine the specific character of the productive forces by determining how they are combined in production, and promoting changes to their form required by their specific combination. As Braverman argues, mechanized production under capitalism bears its peculiar stamp.²⁹ And Wal Suchting distinguishes between 'productive forces' and 'productive powers', taking 'productive powers' as factors of production prior to their combination in the production process, that is, as factors of production only potentially, and 'productive forces' as factors of production in their finished state, once they are combined under social relations of production.³⁰ Suchting then notes that social relations of production 'are partly responsible for the character of the specific productive forces'.³¹ In making this distinction between productive 'forces' and 'powers', Suchting is noting, in effect, that relations of production put finishing touches to the productive forces by determining the specific form which means of production and labour power must have when subject to the control of capital.

²⁹ H. Braverman, *Labour and monopoly Capitalism: The Degradation of Work in the Twentieth Century*, (New York: Monthly Review Press, 1974), especially pp. 194-233. This point is made with more sophistication by Moishe Postone, 'Necessity, Labor, and Time: A Reinterpretation of the Marxian Critique of Capitalism' in *Social Research*, vol 45, No 4, 1978, pp. 748-788, and especially pp. 776-779.

³⁰ Wal Suchting, "'Productive Forces' and 'Relations of Production' in Marx", pp. 166-168.

³¹ *ibid.*, p. 168.

On the other hand, productive forces complete or put the 'finishing touches' to the social relations of production. It is the productive forces involved which determine the difference between agricultural, mining, and manufacturing capital. Dynamically, the development of co-operative labour, division of labour in the workshop, the use of machinery, and the conscious application of science to specific ends, or large-scale mechanized production, transforms what Marx calls the 'formal' subsumption of labour-power under capital, or capital as manufacture, into the 'real' subsumption of labour-power under capital, or capital as machinofacture.³² That is, in manufacture, productive forces pre-dating capitalism come to be applied under the managerial prerogative of the capitalist, whereas in machinofacture, the productive forces come to be substantially adapted to their employment under capitalist management. Further, a progressively enlarged scale of production results in the expropriation of many capitalists by a few, or the centralization of capital.³³

The second way in which productive forces and relations of production produce each other is by each reproducing and transforming itself through the other. Every economic crisis forcibly brings home how the productive forces of a capitalist society are reproduced through capitalist relations of production. Capitalist employment is the vehicle through which workers and means of production are used, reproduced and transformed through the forces of capitalist competition. Conversely, it is through production that

³² Marx, *Capital*, vol. 1, Appendix, pp. 1019-1025, and p. 1025 ff

³³ Marx, *Capital*, vol. 1, pp. 776-777, and pp. 928-929.

capital is reproduced, and increased, through ploughing back the profits of production.³⁴

This reproduction and transformation of productive forces and relations of production turns their immediate opposition into an antagonism, that is, the opposition between them is not only a pre-condition of their co-existence, but produced in a progressively intensified form. In the case of capitalism, Marx gives a vivid picture of the way capitalist relations of production progressively fetter the subjective forces of production, that is, the knowledge, skills, and motivation of the direct producers:

In handicrafts and manufacture, the worker makes use of a tool; in a factory, the machine makes use of him. ... In the factory, we have a lifeless mechanism which is independent of the workers, who are incorporated into it as its living appendages...Factory work exhausts the nervous system to the uttermost; at the same time, it does away with the many-sided play of the muscles, and confiscates every atom of freedom, both in bodily and in intellectual activity. Even the lightening of the labour becomes an instrument of torture, since the machine does not free the worker from the work, but rather deprives the work itself of all content...The special skill of each individual machine-operator, who has now been deprived of all significance, vanishes as an infinitesimal quantity in the face of the science, the gigantic natural forces, and the mass of social labour embodied in the system of machinery, which together with those three forces, constitutes the power of the 'master'.³⁵

³⁴ Marx, *Capital*, vol. 1, pp. 711-714, and especially pp. 716-718.

Further, in a remarkable anticipation of some contemporary concerns over the way modern industry and agriculture pollute and undermine their foundations in nature, Marx notes that the drive for profit stunts not only the worker but degrades the soil and other natural springs of wealth:

In agriculture, as in manufacture, the capitalist transformation of the process of production appears as a martyrology of the producer; the instrument of labour appears as a means of enslaving, exploiting, and impoverishing the worker; the social combination of labour processes appears as an organized suppression of his individual vitality freedom and autonomy ... Moreover, all progress in agriculture is a progress in the art ... of robbing the soil; all progress in increasing the fertility of the soil for a given time is a progress towards ruining the the more long-lasting sources of that fertility. ...Capitalist production, therefore, ...[undermines] the original sources of all wealth - the soil and the worker.³⁶

The antagonism not only lies in a stunting of the development of human and natural productive capacities, but also lies in the contradiction between the implicit aim of the use of productive capacities, which is to meet human needs and wants, and their use under capitalism to provide great wealth and power for only a few.³⁷

³⁵ Marx, *Capital*, vol. 1, pp. 548-549.

³⁶ Marx, *Capital*, vol. 1, p. 638.

Conversely, Marx envisages that there will be a radical increase in the socialization of the labour process and the productive power of social co-operation in labour if production comes to be based on the free development of the direct producers and on their free, consciously pursued co-operation.³⁸ And he supposes that such co-operation can only be founded on the collective ownership of the productive forces of society by the direct producers, which will in turn initiate a more equal distribution of the fruits of production, and ultimately make possible distribution according to individuals' needs. The capitalist form of ownership of the means of production and employment of wage workers precludes this potential development of the productive forces, and this change in the ends for which they are used.

It is clear that the dialectic of productive forces and relations of production fits the model of a 'unity of opposites' provided by the dialectic of production and consumption. Moreover, it is clear that the dialectic of capital and wage labour includes the dialectic of

³⁷ In the literature, these two forms of the way in which productive forces may be fettered have been termed 'development fettering' and 'use-fettering'. See G.A. Cohen, 'Forces and Relations of Production' in *Marx, 100 Years On*, edited by Betty Matthews (London: Lawrence & Wishart, 1983). While agreeing with the distinction, I do not agree with Cohen's way of counterposing the two, as though the fettering of the productive forces must be exclusively one or the other type. I propose instead that productive forces come to be fettered by productive relations in both ways.

³⁸ Moishe Postone, 'Necessity, Labor, and Time..', spells out this aspect of the contradiction between capitalist forces and relations of production, p. 748, p. 752, p. 758.

productive forces and relations of production under capitalism. Thus one aspect of the antagonism between wage workers and capital is that wage workers, as owners of a productive force fettered by capital, and possessors of a capacity for free, conscious co-operation in productive activity, have a stake in the liberation of the productive capacities of socialized labour³⁹ through the overthrow of capitalism. Another aspect of the antagonism is that relatively impoverished wage workers belong to a society capable of producing great wealth overall, and thereby have a stake in a form of ownership which allocates a greater share of that wealth to the direct producers. In the next section, I shall look at how the dialectical model of the relationship between productive forces and relations of production bears on the issue of the so-called 'primacy' of the productive forces.

³⁹ It is worth noting that when the productive force of free, conscious co-operation among producers is specified as such, it is with reference to the social relations of production. Strict managerial prerogative is incompatible with workers co-operating of their own accord, using their own ideas. To say that workers co-operate *freely* is to say they control their own labour, which is possible only under social relations of production which do not result in control over labour being taken from the labourers.

5.3 PRIMACY OF THE PRODUCTIVE FORCES

In *The Poverty of Philosophy*, Marx says that:

'Social relations are closely bound up with productive forces. In acquiring new productive forces men change their mode of production; and in changing their mode of production, in changing the way of earning their living, they change all their social relations. The handmill gives you society with the feudal lord; the steam mill, society with the industrial capitalist.'⁴⁰

This has been taken to imply that the specific productive forces employed in a society determine its particular social relations of production, or property system. Hostile critics of Marx have taken this to mean that variance in the productive forces accounts for all, or nearly all, variance in the social relations of production.

Among sympathetic expositors and critics of Marx, there has been a wide range of interpretations of such passages. Perhaps William Shaw comes nearest to a forthright embrace of 'technological determinism'. However, Shaw significantly qualifies this position. Productive forces are at most the 'long-run determinant' of historical change, and that role is compatible with 'reciprocal influence and dialectical interplay between the relations of

⁴⁰ K. Marx, *The Poverty of Philosophy*, (New York: International Publishers, 1963), p. 109.

production and the productive forces.⁴¹

Cohen is seen as the leading exponent of a technological determinist interpretation⁴². Yet Cohen takes his basic contribution as offering the only possible explanation of how the 'primacy' of the productive forces can be reconciled with the enormous influence which social relations of production have on technology and its use. Cohen construes Marx as at least implicitly holding the functional theory that a society has a certain set of social relations of production at a given stage because those relations are functional or optimal for the development of the productive forces from the level they have then attained. Thus '[productive] Forces select [economic] structures according to their capacity to promote development [of the productive forces].'⁴³

Alternative interpretations are legion. Some, taking their cue from Althusser, maintain that although there are many passages in Marx which may bear a technological determinist interpretation, the best or most viable interpretation is that Marx considers social relations of production, or class struggle perhaps, to be decisive in accounting for historical

⁴¹ William Shaw, "'The Handmill Gives You the Feudal Lord": Marx's Technological Determinism' in *History and Theory*, vol XVIII, No 2, 1979, pp. 155-176, and especially p. 160.

⁴² See his *Karl Marx's Theory of History*, and for a review which notes his pre-eminence even over Plekhanov in expounding a technological determinist interpretation of Marx, see Richard Miller, 'Productive Forces and the Forces of Change'.

⁴³ Cohen, *Karl Marx's Theory...*, p. 162.

change.⁴⁴ Richard Miller puts forward a 'mode of production' interpretation which holds that 'both stable social structure and dramatic social change are ultimately based on the mode of production, the activities, facilities and relationships, material and *social*, through which material goods are produced.'⁴⁵ Different features of the mode of production are taken to be primary in explaining social stability on the one hand, and the occurrence and direction of change on the other hand. That is, Miller ends up with a theory according to which there is a 'zig-zag', or alternating primacy of social relations and forces of production.

Sean Sayers⁴⁶ also puts forward a zig-zag model of the relationship between productive forces and relations, but based on Mao's views. Mao claims that generally the forces of production play the 'principal' role in history, but that in certain periods, the social relations of production can play the 'principal and decisive' role. Mao illustrates this possibility with a stage of social development in which the relations of production fetter the productive forces:

⁴⁴ For the class struggle view, see Charles Bettelheim, *Class Struggles in the USSR*, (New York and London: Monthly Review Press, 1978), pp. 507-517, and Suchting, "'Productive forces'...", p. 172

⁴⁵ Miller, 'Productive Forces and the Forces of Change', p. 106. This view is subsequently expounded at length in Richard W. Miller, *Analyzing Marx*, (Princeton, N.J.: Princeton University Press, 1984), and especially in the third part on history.

⁴⁶ Sean Sayers, 'Forces of Production and Relations of Production in Socialist Society', in *Radical Philosophy*, 24, Spring 1980.

'When it is impossible for the productive forces to develop without a change in the relations of production, then the change in the relations of production plays the principal and decisive role.'⁴⁷

On the face of it, what Mao says is confusing. On Mao's own theory, the principal aspect of the principal contradiction in a society determines the nature of society in those periods when there is relatively little, or only 'quantitative' change.⁴⁸ During a period of stability in a class society, the principal aspect of the contradiction between classes is the ruling class, as it mainly determines the nature of society, and exercises greater force on subordinate classes than they can exercise on the ruling class.⁴⁹ Its dominance ensures relative social continuity, including continuity of the existing property system. It seems to follow, therefore, that the property system or social relations of production play the principal role during periods of social stability, which in turn seems to contradict the thesis that the productive forces generally play the principal and decisive role.

This sense of confusion derives, I think, from a failure to specify the processes in which aspects of contradictions are supposed to play principal or secondary roles. Mao suggests that which role an aspect plays in a contradiction depends on which process, or phase of a process, we are concerned with.⁵⁰ Thus class struggle focuses on a change in the pro-

⁴⁷ Mao, *On Contradiction*, p. 336.

⁴⁸ Mao, *On Contradiction*, p. 342, and p. 342.

⁴⁹ Mao, *On Contradiction*, p. 335.

⁵⁰ See *On Contradiction*, pp. 331-332, and p. 333.

perty system of society, and is decisive in determining when such a change occurs. This is consistent with the possibilities of material progress being decisive in determining the broad sweep of history, and the overall balance of forces in class struggle. As Cohen suggests, we can consistently suppose, even if it is not true in fact, that military leadership is decisive in battles, while military technology is decisive overall in the broad sweep of a war.⁵¹

All of these theories and interpretations are attempts to solve a single problem. The problem is this. Once we accept that productive forces and relations of production have a thoroughgoing reciprocal, and to that extent, symmetrical causal influence on one another, how do we then account for the implied asymmetry in Marx's claim that social changes occur because social relations of production adapt to developments in the forces of production? This, together with an analogous problem with base and superstructure, is what Philippe van Parijs calls the 'central puzzle' of Marxism.

However, Cohen disagrees with van Parij's interpretation of the 'primacy puzzle', claiming that the problem is not one of reconciling the primacy of the productive forces with a two-way interaction between productive forces and relations, but a matter of reconciling their primacy with the 'massive control' productive relations exert over the forces of

⁵¹ See Cohen, *Karl Marx's Theory of History*, p. 148, his 'Forces and Relations of Production', p. 122, and G.A. Cohen, 'Reply to Four Critics', *Analyse & Kritik*, 5, 1983, pp. 195-222, and especially pp. 207-208.

production. The solution to the problem, as Cohen sees it, is that the productive forces are primary because the relations of production are functional for the development of the productive forces.⁵²

Cohen claims that this solution not only accounts for the asymmetry implicit in the primacy thesis, but reconciles that thesis with the 'massive' influence that the relations have on the productive forces. However, the claim that A is functional for B is not inherently asymmetrical. The heart is functional for the lungs, but equally the lungs are functional for the heart. In the case Cohen is concerned with, it is not only plausible to claim that relations of production are functional for the productive forces, but equally plausible to say that productive forces are functional for relations of production, insofar as the maintenance of existing relations of production depends on the productive forces for a supply of means of coercion, for example. So, if the fact that productive relations are functional for productive forces implies that the productive forces are primary, then the converse should imply that the relations of production are primary. So the problem of accounting for the *asymmetry* implicit in the primacy thesis remains.

Nevertheless, any interpretation of the asymmetry in the relationship must also account for the massive influence that relations of production have on the productive forces, such as the way capitalist relations of production provide an impetus for technological development, as exemplified in the industrial revolution. There are thus really two primacy

⁵² Cohen , 'Reply to Four Critics', p. 203.

puzzles, one concerned with reconciling the asymmetry of the primacy of one of a pair of factors with the symmetry of a reciprocal interaction between the pair, and the other, which puzzles Cohen, is concerned with reconciling the primacy of one factor with the 'massive' influence on it from the other, and supposedly subordinate factor. For the present, I shall be concerned with the problem as set out by van Parijs.

The way to solve this problem is to show first, that the reciprocal interaction between productive forces and relations of production is consistent with an asymmetry between them, and second, that this asymmetry is not just possible, but is factually plausible. A number of models of asymmetrical reciprocal interaction have been developed. These show that reciprocal interaction between two elements is consistent with an asymmetrical relation between them. However, it is difficult to define some of their key concepts, and they suggest implausible quantitative limits of the effects of one element on the other.

Geoffrey Hellman, for example, has a model of a reciprocal, but nevertheless asymmetrical relation between base and superstructure, which might be applied to the case of forces and relations of production. The interaction between two poles of a relationship is asymmetric in Hellman's model, because the number of adaptations of S-elements when conflicting with B-elements, is much greater than the number of adaptations of B-elements when these are in conflict with S-elements.⁵³ The problem with this solution is that it is not at all obvious how to go about counting adaptations. We need criteria for what would

⁵³ Geoffrey Hellman, 'Historical Materialism' in *Issues in Marxist Philosophy*, vol 1, eds., John Mepham and D-H Ruben, (Brighton: The Harvester Press, 1979).

count as the same adaptation, and we need to be able to show that any adaptation can only be finitely divided into component adaptations, so that there are only finitely many adaptations on each side. For, if there are infinitely many adaptations on each side, then each side must have the same infinite number of adaptations. Finally, it is not at all clear that the outcome of a comparison would always be that the number of adaptations of productive forces to relations of production is less than the number of adaptations the other way round.

Philippe van Parijs has constructed a model with a 'fast dynamics' in which relations of production adjust relatively rapidly to productive forces when they are in contradiction, and a 'slow dynamics' in which productive forces change relatively slowly when in correspondence with the relations of production.⁵⁴ In a more sophisticated version, this model has the rate of change of the elements dependent on the degree of correspondence or conflict between them. Thus with a high degree of non-correspondence, the productive forces hardly change at all, while the relations rapidly adjust to the forces. As forces and relations of production near correspondence, the rate of change of the relations slows down, and the rate of change of the forces is then comparatively rapid, or may speed up so as to become relatively rapid. In the first case, productive forces can be considered exogenously 'fixed', with the relations adapting to them, and in the second case, fixed relations of production 'correspond' with the productive forces', and promote their development. However, since changes in productive forces are not the same sort of thing as

⁵⁴ van Parijs, 'Central Puzzle', pp. 99-100.

changes in the productive relations, it is not clear how these heterogeneous dynamics can be compared as 'slow' or 'fast'.⁵⁵ And it is not at all clear that the rates of adaptation contrast in the way suggested. It is arguable, for example, that the adaptation of the social relations of production to the emerging productive forces of the industrial revolution is no 'faster' than the adaption of that technology to capitalist relations of production.

I have shown that the dialectic of productive forces and relations fits the model of an organic unity based on Marx's account of the dialectic of production and consumption. This model quite straightforwardly entails the rejection of a crude, 'mechanical' technological determinism, which treats changes in relations of production as some sort of 'barometer' of technological change. In the case of a barometer, while changes in weather have an effect on the barometer reading, the barometer reading has little or no effect on the weather. In fact, the barometer has no direct effect on the weather at all, although it may sometimes have an indirect effect by prompting attempts at cloud-seeding, for example. On the other hand, in the case of productive forces and relations, there is no limit to the

⁵⁵ Cohen makes the same point in his 'Reply to Four Critics', p. 204. We can, of course, consider the number of significant adaptations each process undergoes in any period and compare their rates of adaptation. This amounts to reducing the 'concrete' processes of technological development and transformation of property systems to 'abstract process', whose measure is simply the rate of significant change in a period, in much the same way that Marx reduces 'concrete' labour to 'abstract' labour. While this probably grounds the intuitions we have in comparing 'fast' with 'slow' processes, it reduces Parijs' proposal to something like Geoffrey Hellman's, and encounters the same difficulty of providing a criterion for enumerating changes or adaptations.

extent of the influence each has on the other, as each element is reciprocally means and result of the other. Therefore, any asymmetry in virtue of which one can be said to 'determine' the other, can only be found in a qualitative contrast in the causal influence of each on the other.

Marx employs the terms 'predominant moment' or 'over-riding factor' to suggest an asymmetry between elements of an organic system. For example, Marx claims that production is the 'predominant'⁵⁶ member of the organic unity of production, distribution, exchange and consumption. Here Marx makes the explicit claim that these elements reciprocally interact, but that there is an asymmetry between production and the other elements. If we can understand what the asymmetry amounts to in this case, we can then consider whether the unity of productive forces and relations of production is similarly asymmetrical.

However, Marx's reasons for claiming that production is the 'over-riding factor' are obscure. He claims that production is the over-riding aspect because it is the 'starting point' for the realization of the entire process. Yet it seems that any element of an organic system, in which elements not only presuppose but produce each other, may be considered the starting point for the realization of the whole system. Marx is, perhaps, suggesting that production is the starting point for realization of the system inasmuch as it acts as some sort of filter, selecting from among the potentially unlimited field of wants,

⁵⁶ Marx, *Grundrisse*, p. 99.

those which can actually be satisfied to some extent, and thus can form the basis of practical action. From another perspective though, the set of production possibilities from any resource bundle can be seen as relatively unlimited. Here, the actual, limited bundle of available resources and the specific desires of individuals act as a filter, determining which production process will be selected from among the various possibilities. This is how van Parijs models the situation, following the neoclassical model of production and consumption.⁵⁷ Although Marx's standpoint is, I believe, the more viable one, we still do not have a clear-cut case of predominance which can be used as a reference point in considering the case of productive forces and relations.

There is, however, a clear case of predominance in a 'unity of opposites' which may be used as such a reference point. In chapter four, the family emerged as a fundamental model of an organic unity of opposites. And it is clear that there can be a significant asymmetry between husband and wife in marriage, notwithstanding the reciprocal causal influence each has on the other. This asymmetry is signified by calling the family 'patriarchal'.

What makes a family patriarchal is not any limit on the reciprocity between husband and wife in terms of the relative quantity of effects each has on the other, or in terms of the relative speed of the adjustment of the behaviour of each to that of the other, but the form taken by the reciprocity between them. It is possible that the power of a patriarchal

⁵⁷ Philippe van Parijs, *Evolutionary Explanation in the Social Sciences: an Emerging Paradigm*,

(Totowa, N.J.: Rowman and Littlefield, 1981), pp. 162-163.

husband over a wife is manifested to some extent in the relative speed with which the behaviour of one adjusts to that of the other, so that wives, say, are quick to respond to husbands, but husbands are slow to respond to wives. However, it is more certainly manifested in the way conflicts between husband and wife are resolved.

Thus, although there is no restriction on the extent of the reciprocal influence which husbands and wives have on one another, the balance of social forces in a patriarchal society leans toward giving effect to the husband's interests rather than the wife's. In the interaction between husband and wife in the patriarchal family, the husband's interests are 'predominant', or 'over-riding', in that the husband's interests are more readily realized.

I suggest that the asymmetry of the reciprocal interaction within the family provides the reference point needed. It can, in fact, be used to cast light on the case already considered of the predominance which Marx thinks production has over distribution, exchange and consumption. When Marx says that production is the 'predominant moment' when compared with consumption, he can be understood as claiming that, in any clash between ends and means, specifically between our wants and our capacity to provide for them through production, the means of action we possess have a more powerful effect on the outcome than our desires have. Our wants cannot conjure up the means to give them effect, so that if those means are lacking, our desires must bow to that reality. This is so, even though we may eventually acquire the means to realize some forestalled desire by working from our presently available means to create those needed. In short, our desires

submit to reality more than reality submits to our desires. The objective standpoint is the correct one because reality is relatively intractable.

We have thus been able to interpret Marx's claim that production is 'predominant' over consumption in the light of the analogy provided by the 'predominance' of husbands over wives. To generalize, in the relevant sense, A is predominant over B over a given interval of time T, if and only if, A and B work in opposite directions, and the outcome of their interaction over the interval T⁵⁸ is closer to what it would have been if B had been working in the same direction as A, than to what it would have been had A been working in the same direction as B.

Of course, in attempting to explicate the meaning of 'predominance', I am not thereby claiming that the factual issues involved can be settled easily. In the case of a single quality such as colour, we can fairly straightforwardly measure how close the actual outcome is to one possibility or the other. However, in more complex cases, such as the patriarchal family, a number of quality spaces are involved, so that the actual outcome and the alternatives with which it is to be compared must be represented by vectors of positions in quality spaces. Here, we cannot straightforwardly determine how close the different outcomes are. This does not mean that these cases must be considered indeterminate. As in the case of the patriarchal family, there may be good theoretical reasons for

⁵⁸ As we shall see later, the nature of the outcome may depend on the interval of time T, so that, for example, the outcome in the short run may be the reverse of what it is in the long run.

postulating that the actual outcome is closer to one possibility rather another.

I suggest that the 'predominance' of productive forces over relations of production, which is implicit in Marx's theory of historical materialism, can be interpreted in the general sense just defined. Of course, the problem then remains of spelling out what this 'pre-dominance' precisely consists in. The only hint which Marx or Engels give of what such pre-dominance might mean is a suggestion that members of any society have an interest in the maintenance and development of the productive forces which is stronger, or more basic, than the interest they have in the perpetuation of the existing property system of society. Engels says that men must first eat, drink, obtain shelter, and otherwise provide for their bodily existence before they can engage in politics, art, religion or philosophy.⁵⁹ This is either a truism, signifying only that bodily existence is a necessary condition of other activities, or it is intended to imply that our interest in continued material existence takes *precedence* over other interests, or is a more powerful spring of action than those involved in politics or philosophy. Marx claims that society never surrenders the fruits of its past development of productive capacity, and will throw off existing relations of production to save them if need be.⁶⁰ This also suggests that our interest in material well-being is a more powerful spring of action than loyalty to existing forms of ownership and control over production. Marx's historical materialism thus seems to presuppose a hierarchy of human interests, in which the Promethean impulse stands out as

⁵⁹ Friedrich Engels, 'Speech at the Graveside of Karl Marx' in *The Marx Engels Reader*, ed., Robert C. Tucker, second edition, (New York: Norton and Co, 1978), p. 681.

⁶⁰ Karl Marx, 'Letter to Annenkov', excerpt in *The Marx-Engels Reader*, p. 137.

the most powerful spring of action.

It is thus clear that an asymmetrical relation between productive forces and relations is consistent with their reciprocal interaction, interpreting Marx's theory as the claim that productive forces are predominant over relations of production because, generally, when there is a conflict between developing society's mastery over nature and maintaining the existing property system, in the long run society will opt for developing its mastery over nature. Another way to put this is that, in general, more powerful and enduring coalitions of interest form around the development of the productive forces than form around the preservation of existing relations of production.⁶¹

This interpretation is similar to that given by Peter Railton, who interprets Marx to be claiming that success in class struggle over whether a new property system is to prevail in society depends firstly, on whether previous developments in society's production process make the change possible, and secondly, whether proponents of the new system can obtain sufficient support for the change. This mainly depends in turn on how well the new property system fits in with the use and development of existing forces of pro-

⁶¹ Jon Elster dismisses the possibility that anyone could have an interest in developing the productive forces in *An Introduction to Karl Marx*, (Cambridge: Cambridge University Press, 1986), p. 193.

However, the claim that coalitions of interest can form around the development of the productive forces does not imply that this is the end individuals involved consciously have in mind. For further discussion of interests and their translation into class conflict, see chapter seven below.

duction. Railton also considers how a Darwinian might paraphrase the theory of evolution after the style of Marx's 1849 Preface, and concludes that there is parallel between evolutionary theory and historical materialism.⁶²

It remains to be shown that, with this interpretation, it is at least initially plausible that the productive forces are predominant over the relations of production. I believe that this can be shown in the light of available historical evidence, provided we take the 'predominance' of productive forces over relations of production as having the same logic as the claim that a husband is predominant in a patriarchal family.

In this regard, it is important to note that not only is the asymmetry in a patriarchal family consistent with a thoroughgoing reciprocal interaction between husband and wife, it is also consistent with the asymmetry being uneven, so that, for example, the primacy of husbands in society overall is compatible with the primacy of wives in the home. Moreover, the primacy of husbands in the family is compatible with there being no unambiguous empirical measure of the dominance of husbands over wives. In general, there can be no straightforward quantitative comparison between the powers which husbands and wives have to give effect to their interests. Since interests are qualitatively heterogeneous, the power to realize one's interests has to be represented by a vector, and one vector is

⁶² Peter Railton, 'Explanatory Asymmetry in Historical Materialism' in *Ethics*, 97, October 1986, pp. 233-239. Cohen, on the other hand, takes the primacy thesis, as I have interpreted it, as one of two large gaps in his own argument in its favour, see Cohen, *Karl Marx's Theory of History*, p. 153.

unambiguously quantitatively greater than another only when any element of the one is at least as great as the corresponding element of the other. This implies that there is no clear cut comparison if the measures of powers on one side are not always at least as great as those on the other side.

It follows that the claim that a society or family is patriarchal is a theoretical claim concerning its underlying dynamic, rather than a claim which can be settled by direct observation. The claim that a society is patriarchal, while it is thus not susceptible to direct empirical confirmation, is nevertheless not true *à priori*. Families could in principle be matriarchal, with the wife's interests having precedence, whether they have ever been that way historically. And families could be egalitarian, with neither husband nor wife having precedence, or rather, with each taking turns in precedence when there is a conflict of interest, and when it is agreed that one interest or the other should be satisfied, rather than neither.

If we suppose that the logic of 'predominance' is the same in the case of productive forces and relations, it follows that if productive forces are dominant over relations of production, relations of production can be dominant over productive forces in some aspects or phases of their interaction. It is also clear that the predominance of productive forces need not have an unambiguous measure. And a consequence of this is that none of the easy refutations of the primacy of the productive forces which have been advanced actually refute the claim that the productive forces are the dominant element in the dialectic

of productive forces and relations.

For, under the interpretation given, the primacy thesis is compatible with phenomena which run counter to the predominance of the productive forces. Instances of more enduring and powerful coalitions of interest being prepared to surrender material progress for the sake of the existing property system, or being unable to achieve material progress even when there is no conflicting end being pursued, can be consistent with the claim that productive forces are predominant overall, and, in any case, will at most count as anomalies awaiting explanation within historical materialism, taken as a research program.⁶³

For example, the decline in society's capacity for large scale engineering works which accompanied the transition from reliance on slave labour in the Roman Empire can be reconciled with Marx's theory as I have interpreted it, by rejecting the assumption that changes in social relations of production can only be induced by the prospect of unambiguous technological progress, the index of which is a quantitative increase in the vector of productive forces, so that each and every component of society's productive capacity is at least as great after the change as it was before. If this assumption of uniform or absolute technological progress is rejected, we can still maintain that the transition from slave labour in the society of ancient Rome was based on a need for greater productivity, not in

⁶³ This is how William H. Shaw suggests it should be taken, see his "'The Handmill gives you the Feudal Lord...'", and 'Historical Materialism and the Development Thesis', *Philosophy of the Social Sciences*, 16, 1986, pp. 197-210.

all spheres, but especially in the key sector of agriculture. The price of increased productivity in agriculture, which was obtained through deep ploughing based on animal husbandry, and which required serf rather than slave labour, was a decline in those productive forces which still required slave labour for their full expression. It was only with the industrial revolution that the capacity for large scale engineering works could again exceed that based on slave labour in Roman society.

Of course, once an unambiguous index of technological progress is rejected, measuring technological progress is a problem. Perhaps the best index of technological progress available is an overall measure of labour productivity, even if in theoretical terms it is only an approximation. The components of this index have to be weighted according to the significance each type of production has in the economy overall.⁶⁴ In these terms it might then be possible to show that the progress in agriculture made possible by the transition from slave labour in Roman society outweighed the consequent decline in large scale engineering works.⁶⁵

⁶⁴ The measure of technological progress involves all the complexities involved in measuring the dominance of a husband over a wife in a patriarchal marriage. To assess whether a husband dominates his wife, it is necessary to take into account the relative weight or significance in marital life of each kind of power one partner has over the other. The idea of a relative 'weight' or 'significance' attaching to different factors in a situation is inherently vague at a general level, but can be made more precise in any specific case.

⁶⁵ For a good discussion of the technological and social basis for the transition from slavery to serfdom, see Perry Anderson, *Passages from Antiquity to Feudalism*, (London, New left Books,

From the fall of the Roman empire we also get another type of anomaly. The decline in science in north western Europe after 400AD was the consequence largely of social disruption stemming from wars and migrations of peoples. This cannot be explained as a case of uneven development. The theory of historical materialism must allow that the forces which generate social conflicts, and perhaps progress for some, can be sufficiently destructive to produce a temporary, and in some instances, a long term decline in society's productive capacity. This qualification will also cover those instances where short term progress can induce long term decline, as when irrigation leads to a fatal increase in soil salinity. Such cases show that the forces of social development have some of the 'blindness' noted in biological evolution, where a short term improvement in the fitness of a species can lead to its ultimate extinction. The fact that natural selection can lead to such consequences does not invalidate it as an explanation of the incredible adaptive features found in living things. Nor does the fact that short term progress may lead to long term economic decline show that the impetus for technological progress does not explain radical changes in property systems.⁶⁶

1974), and G.E.M. de St Croix, *The Class Struggle in the Ancient Greek World*, (London, Duckworth, 1983), Chapter VIII, especially pp. 464-465.

⁶⁶ Of course, a conflict between classes with an interest in preserving the existing property system of society and classes with an interest in technological progress is not the only determinant of social change. The fall of the Roman empire was accelerated and magnified by the effects of lead poisoning from Roman plumbing systems, plagues in the sixth century AD, and the rise of the Arabs under Islam. However, any scientific theory involves an abstraction from the operation of other factors which

Now, even though the outline of technological determinism has been significantly softened by the incorporation of anomalies such as those above, the supposed rigours of the theory can be reduced still further. We noted above that primacy is relative, so that the primacy of one factor in a system is compatible with the same factor not having predominance in all subsystems of the system. It follows that the overall primacy of the productive forces need not be construed as an absolute primacy, as Cohen seems to.

For Cohen, productive forces are primary because relations of production are functional for their development in the way that a snake's skin is functional for its growth. Thus, at any stage in the growth of a snake, further growth depends on its skin, as the skin retains needed moisture, provides a grip on the ground for movement, and so on. However, as soon as the skin can no longer accommodate further growth, it is sloughed off, and a new skin takes its place. However, although the snake's growth is dependent in part on the properties of its skin, the impetus for growth largely stems from other factors, and always overrides any barrier to further growth derived from properties of the snake's skin, such

might reinforce or counteract the relationships dealt with under the theory. Thus, while historical materialism posits that social change is brought about by a change in the balance of forces in the class struggle between ruling and subordinate classes, this is compatible with other factors, such as natural disasters, playing a part. Notwithstanding this, historical materialism does claim that factors other than the determinants of the balance of forces in class struggle generally play a minor role, and cannot bring about social change by themselves.

as its lack of elasticity.

The primacy of the productive forces in history overall can be quite unlike this, insofar as the development of the productive forces can be largely dependent on society's property system in certain periods, even if it is also dependent on other factors, such as the natural environment. In fact, even though Miller fails to grasp the point, the dominance of the productive forces over relations of production in history overall is consistent with their counterpart, the existing relations of production, being predominant in certain stages of social development, such as those in which the existing relations of production foster technological progress.

This predominance of the relations of production in some periods would explain why the 'massive control' relations of production have over productive forces might seem contrary to the interpretation of 'primacy' proposed here. For the productive forces do not have a straightforwardly stronger effect on the course of events than do the productive relations. They have only an overall predominance, which is consistent with the reverse holding in certain stages of history. If this model can be sustained, it solves Cohen's primacy puzzle.

In terms of the concept of 'predominance' I am using, the overall primacy of the productive forces just sketched can be spelled out as follows. Taking a relatively short time frame of several generations, there are two cases, one where the relations of production develop the productive forces, and the other where the relations fetter the forces. In the

first case, the relations of production are dominant, so that the outcome of the epoch is closer to what it would have been if the forces of production always worked in the same direction as the relations. The outcome of the second epoch is closer to what it would have been had the relations of production always adapted to the productive forces, so that in this case, the productive forces are dominant.

However, if we take a longer time frame involving several such epochs, the outcome over the period as a whole is closer to what it would have been had the relations of production always worked in the same direction as the productive forces. That is, over a number of epochs in which relations and forces of production alternate in primacy, in the long run, the productive forces turn out to be dominant overall. The overall direction of development of a process can thus emerge out of many constituent crosscurrents. This model of the relation between productive forces and relations is thus a synthesis of the models proposed by Cohen and Richard Miller.

The reason for accepting technological determinism, even in this fairly tenuous version, is the importance in the long run of the available means of action as determinants of what we can do. The maintenance of existing relations of production depends, in the final analysis, on the productive forces permitted under those relations being capable of providing both sufficient incentive and means for the defence the property system. The dilemma of the Japanese ruling class in confronting the power of the West in the nineteenth century is illustrative of the general point. The ruling class of Japan could continue to exclude the

influence of capitalism, and thereby maintain its existing social system, only if it had sufficient military power. This in turn depended on Japan developing industry, which was fettered by the existing property system. So, if the Japanese ruling class failed to develop industry, its existing property system would fall, and in any event, if it did develop industry, the outcome would be the same.

In this, I am emphasizing the role that the productive forces play in constituting what Levine and Wright have called 'class capacities' in contrast with class interests.⁶⁷ Levine and Wright point out that a class which has an *interest* in social change cannot be assumed to be able spontaneously to acquire a corresponding *capacity* to produce the social change it is interested in. Levine and Wright emphasize the role of ideology and power in constituting the capacity of a class to realize its interests, while I am emphasizing the role of the productive forces in determining whether a class can exercise power, and whether its interests are seen as the general interest of society. There is no readily available empirical evidence to decide the relative weight of consciousness as compared with material means in the formation of class capacities. I have tried to show that a dialectical framework enables all relevant factors to be taken into account, while permitting some to be posited as relatively weighty in determining the final outcome.⁶⁸

⁶⁷ Andrew Levine and Erik Olin Wright, 'Rationality and Class Struggle', *New Left Review*, 123, 1980, pp.47-68, and especially pp. 58-60.

⁶⁸ Cutler, et al., show some sensitivity in singling out the question of 'privileging' a causal factor as crucial to their break from Marxism, although they parody the 'privilege' which they think Marx gives

In the next section, I examine the distinction between base and superstructure, and in the section following, consider whether there is a dialectic of base and superstructure. I conclude this chapter with a discussion of the role of the production process in social life, as it appears within the framework of historical materialism.

5.4 BASE AND SUPERSTRUCTURE

Having articulated the dialectic of forces and relations of production, and shown in what sense Marx's position could be a 'technological determinism', I now turn to an analysis of base and superstructure. The problems involved in the distinction between base and superstructure parallel those concerned with forces and relations of production. Just as critics have had trouble separating relations of production from productive forces, so some have had trouble separating base and superstructure. And, just as the reciprocal interaction between forces and relations of production has seemed to preclude any asymmetrical relation in which forces *determine* relations of production, so it has seemed impossible for the economic base to be the foundation of the political and legal superstructure of society.

The problem of distinguishing between base and superstructure is both immediate and difficult. Marx provides even less help with this distinction than he does with forces and

to the economic base, Cutler, A., Hindess, B., Hirst, P., and Hussein, A., *Marx's 'Capital' and Capitalism Today*, (London: Routledge & Kegan Paul, 1977), pp. 128-132.

relations of production. The dialectic between the latter is at least implicit in the systematic theory of the dialectic of capital and wage labour in *Capital*, vol. 1. However, there is no comparably systematic treatment of base and superstructure. The nearest approach to a systematic treatment is Engels' 'Origin of the Family, Private Property and the State'. Although Engels' position is not contrary to Marx's, as some commentators maintain,⁶⁹ Engels does not have the grasp of dialectic displayed by Marx in *Capital*. The result is that the distinction between base and superstructure has to be construed without a great deal of direct textual evidence.

In making the distinction between base and superstructure, it is useful to follow Cohen in taking both 'base' and 'superstructure' in a narrow sense. While many interpreters of Marx take the economic basis of society to include both relations of production and productive forces, that is, to be society's production process as a whole, or the 'mode of production', as some put it, Cohen argues that the economic basis of society is strictly speaking nothing but the structure of the social relations of production.⁷⁰ Cohen also narrowly construes the superstructure as the political and legal system of society, whereas

⁶⁹ For an extreme example, see N. Levine, *The Tragic Deception: Marx contra Engels*, (Oxford: Clio Books, 1975), and for a moderate, more plausible account, see L. Colletti, *From Rousseau to Lenin: Studies in Ideology and Society*, (London: New Left Books, 1972), pp. 25-27.

⁷⁰ Godelier also defines them in this way, while including ecological conditions and the available productive forces within what he terms the 'infrastructure' of society, see *The Mental and the Material*, p. 130.

others have taken the superstructure to include all 'non-economic' institutions and practices. The advantage of the narrow interpretation is that there can be a quite definite causal connection between the relations of production, taken as socially sanctioned relations of control over production, and the legal and political system of society, through which relations of production are in the main sanctioned. If, on the other hand, the distinction is taken as coinciding with that between economic and non-economic institutions and practices, then the base and the superstructure will be both nebulously constituted and connected with one another.

However, when we thus distinguish base from superstructure, we immediately confront the claim that the social relations of production cannot be separated, either in fact or conceptually, from the sanctions and protection provided by legal and other socially coercive institutions and practices, and therefore cannot properly be distinguished from them⁷¹. Cohen calls this 'the problem of legality' for historical materialism, which can be stated briefly as follows: if the real property system cannot be separated from its 'legal expression' or from the state, how can it be distinct from and explain the legal and political superstructure of society?

Cohen's 'problem of legality' is, however, an illusion. When Cohen articulates the 'problem' more precisely, it emerges as the problem of historical materialism seeming to be committed to four allegedly inconsistent propositions, which are as follows:

⁷¹ This claim is made by Plamenatz, but also by a sympathetic commentator such as Steven Lukes.

- (1) The economic structure consists of production relations.
- (2) The economic structure is separate from (and explanatory of) the superstructure.
- (3) Law is part of the superstructure.
- (4) Production relations are defined in legal terms (that is, in terms of *property* in, or *rights* over productive forces)⁷².

Cohen's proposed solution is to abandon proposition (4), and in support of that he offers a *rechtsfrei* definition of relations of production. However, Cohen's proposal is unfounded, as the four propositions cited are no more inconsistent than the following four, which have the same logical form as those cited by Cohen, and are perfectly consistent:

- (1)' The adult section of a family consists of parents.
- (2)' The adult section of a family is separate from (and explanatory of) the dependent section of the family.
- (3)' Children belong to the dependent section of a family.
- (4)' Parents are defined in generational terms (that is, in terms of their having *children*)

The fact that relations of production must be defined in terms of the social rights which support them is no more inconsistent with effective control over production being distinct

⁷² Cohen, *Karl Marx's Theory*, p. 218. I have renumbered Cohen's propositions.

from social rights, than the fact that parents must be defined in terms of their having children is inconsistent with parents being distinct from their children, and indeed, being accountable for their existence. If relations of production are distinct from the *rights* which regulate them, then there must be at least one description of relations of production which is not also a description of corresponding property rights.⁷³ However, the fact that relations of production differ from rights in some ways does not show that we can *define* social relations of production *as such* independently of any reference to rights, or in general, independently of any reference to rules of conduct. Thus to describe some form of control over production as a social relation of production may logically imply that it is regulated by socially prescribed rules of conduct.

One hesitates to labour such an obvious point, were it not for the way analytical philosophers seem to adhere blindly to Humean confusions of ontological and conceptual issues. Thus the *ontological* issue of whether relations of production are distinct from property rights should not be confused with the *conceptual* issue of whether relations of production can be defined as such without reference to rights.

It is clear, I think, that the conceptual issue must be resolved in favour of the claim that social relations of production are defined in terms of rights. Thus, not just any sort of power individuals have over the productive forces is constitutive of social relations of production. For example, the power to destroy forces of production which a victor in war

⁷³ That is, supposing that indiscernables are identical.

might possess is not a social relation of production. The power to use and enjoy the fruits of the use of productive assets which have been obtained by theft is also not one. A social relation of production is a power to use and enjoy the fruits of the use of productive forces which is had by some sort of right, which, if not formally established, at least derives from accepted usage. The *reasons* agents have for acting out their roles as bearers of social relations of production are *normative*, and not merely prudential.⁷⁴ Normative principles shape, or fill in the details of the way control is exercised over production. In Steven Lukes' metaphor, concepts of powers and constraints considered in isolation from norms are too 'thin' to capture the determinate content of social relations of production.⁷⁵

So the superstructure consists of all rights which regulate the powers various social agents have over the use of the productive forces. And, although Cohen includes morality in the sphere of ideology,⁷⁶ I would argue that the superstructure properly includes moral rights as well as legal or statutory rights. Morality is not just a matter of belief. It is exercised and enforced through practices such as abuse and ostracism, which are as coercive, and may be just as institutionalized as legal forms of coercion. The superstructure then is society's structure of moral, legal and political rights and obligations.

⁷⁴ Stephen Lukes, 'Can the Base be Distinguished from the Superstructure?', *Analyse & Kritik*, 4, 1982, pp. 211-222, and especially p. 219.

⁷⁵ Stephen Lukes, 'Can the Base be Distinguished from the Superstructure?', p. 219.

⁷⁶ Gerald Cohen, 'Reply to Four Critics', p. 212.

Of course, in adopting such a narrow definition of the 'superstructure', I am not at all suggesting that ideology and culture have no significant impact on society. Neither the base nor the superstructure as I have defined them could survive for long without supporting ideologies and cultural practices. And while I have included its coercive aspect in the superstructure, morality itself is the paradigm of practices which combine coercion, ideology and culture so that they not only deter 'anti-social' conduct, but cultivate individual perceptions and values, and thereby enable individuals to carry out their 'proper' social roles. So, in adopting a the narrow definition of the superstructure, my intention is only to focus on the relation between the property system of society and its apparatus of coercion. A study of the dialectic of coercion and ideology, which Gramsci has touched on, is another project.

5.5 THE DIALECTIC OF BASE AND SUPERSTRUCTURE

We can define property in the means of production either as an effective right to use them, or as a legitimate power over their use. Real appropriation and rights merge in property in its complete form, and each can only be fully understood in terms of its role in property. This merging of rights and real appropriation in the property system of society constitutes the immediate identity between relations of production and the political, legal and moral superstructure. The failure of critics such as Plamenatz to make the distinction between relations of production and property in the legal, or more generally, normative sense, is testimony to that immediate identity. Cohen's attempt to match any property right over the

productive forces with a corresponding power is also testimony to it.

Some commentators have claimed that while forces and relations of production can be in conflict, the relation between the superstructure and the base is not one of contradiction, even if the anomaly sometimes arises of a new property system inheriting an old, and inappropriate superstructure.⁷⁷ However, while this claim may reflect the immediate identity between relations of production and the normative rules which regulate them, that identity does not abolish the immediate opposition between the two.

It is a mistake to take the superstructure as the normative mirror image of the economic base. Indeed, the superstructure would be merely an idle emanation of the economic base if normative principles of conduct simply registered actual practice. Rights and obligations take on an institutional form precisely because they contradict the spontaneous practice of individuals. Therefore the powers individuals have over production, which are constitutive of the economic base, do not *match* their corresponding rights, but rather are at odds with them. This does not render the corresponding rights *ineffective*, as Cohen suggests when he defines an effective right as one which is identical with its matching power. Rather, it is constitutive of the effectiveness of rights that they contradict the real powers possessed by social agents, if not their actual behaviour. The assumption that society is ideally utterly law-abiding is thus in a way unfounded. If society were absolute-

⁷⁷ Ramesh Mishra, 'Technology and Social Structure in Marx's Theory: an Exploratory Analysis', in *Science and Society*, Vol XLIII, No2, 1979, pp. 132-157, makes this claim explicitly, see p. 145, while it is implicit in Cohen's analysis, *Karl Marx's Theory of History*, p. 219.

ly law-abiding, there would be no point to having laws.⁷⁸

As Stephen Lukes points out, a slave, while having absolutely no *right* to withhold labour, does in fact have some power to withhold it, for example, by rebellion or escape.⁷⁹

Now, it is precisely because a slave does in fact have some power to withhold labour, that there is a point to society stipulating that the slave has no such right. By denying the slave any right to rebel or escape, society thereby diminishes or counteracts the power of slaves to withhold their labour. This follows from the fact, for example, that denial of the slave's right to escape promotes assistance from others to prevent escape, or to obtain recapture.

Again, in the case of the capitalist mode of production, the actual power that a capitalist has to direct a worker to perform labour of a given quantity and quality, stands in contradiction to the capitalist's rights, as encapsuled in managerial prerogative. The capitalist's actual powers are both greater and less than the corresponding rights. Under managerial prerogative, the manager has an absolute right to direct an employee's labour, subject only to the limitation that it may not harm the person of the labourer. Yet this absolute right outreaches the manager's actual powers, which are significantly limited by the possibilities of supervision, and the resistance put up by the workers. A manager cannot keep

⁷⁸ This point is similar to Kant's claim that moral reason takes the form of an imperative only for beings who are capable of wrong-doing. See Kant, *Foundations of the Metaphysics of Morals*, in *Critique of Practical Reason and Other Writings in Moral Philosophy*, trans. Beck, p. 73.

⁷⁹ Stephen Lukes, 'Can the Base be Distinguished from the Superstructure?', p. 217.

an eye on everything, and cannot afford to dismiss a worker for just any sign of slacking. On the other hand, while a manager has no right to harm the person or capacity for work of an employee, managers are often able to get away with dirty, noisy, unhealthy, and unsafe working conditions.

The powers which agents actually have thus negate their rights, and the actual constraints they are subject to differ from their obligations. Relations of production and normative principles are thus counterpart aspects of property, and can only be distinguished as such. So base and superstructure are opposites which are immediately identical. However, base and superstructure are not only immediately identical, they are also mutually dependent. Without rights and duties regulating the behaviour of social agents, the exercise of powers of control over production cannot be secure. As Cohen puts it, 'bases need superstructures' in the way that posts acting as roof supports might need to be connected by a roof in order to be stable in a wind.⁸⁰ On the other hand, if rights and duties are never manifested in the powers and constraints actually exercised in production, then those rights and duties are a dead letter. To be exercised securely, powers require rights, and to have substance, rights require powers which give effect to them.

Finally, base and superstructure are not only immediately identical and mutually dependent, they also produce each other in a twofold way. In the first place, social relations of production are determinately shaped and extrapolated from old to new situations under the

⁸⁰ Cohen, *Marx's Theory of History*, pp. 231-232.

regulation of superstructural principles. On the other hand, it is only in practice that the rights and duties of property owners and direct producers are made fully explicit and detailed. In the second place, relations of production and normative principles each provide the impulse for the other to develop. The expression in practice of certain relations of production prompts society to recognize them by formulating corresponding rights and duties. On the other hand, rights clear the field for the exercise of powers which give effect to them, and thereby prompt the expression in practice of relations of production. It is through the recognition afforded by rights and duties that corresponding powers and constraints come to be exercised as usages, or as on-going practices. It is through their exercise in effective powers and constraints that rights and duties come to be lastingly observed. Usages and their regulative normative principles are each bound up in the perpetuation of the other. Usages perpetuate themselves through rights, and rights perpetuate themselves through usages.

However, usages and normative principles are not only bound up in each others' continuing existence. Since the actual powers and constraints exercised in labour can never exactly coincide with the norms through which they are regulated, there is a continuing and mutually transforming tension between what agents in fact can do, and what they can do by right. This tension is just the process through which rights *regulate* usages, and usages *reform* rights and duties. The opposition between base and superstructure is therefore not just the immediately given fact of a discrepancy between principles and their application in practice, but is also the result of the function each plays in constituting and re-constituting the other.

The distinction between base and superstructure has thus been shown to fit Marx's model of a unity of opposites. One consequence is that the distinction between base and superstructure has been vindicated in a way which also accounts for standard objections to the distinction. That there is a conceptual connection between rights and relations of production is not only consistent with their causal interaction, but necessitates it. Another consequence is that their interaction is not only reciprocal, but may also be asymmetric. That is, while each is the precondition and result of the other, one may still be dominant. For Marx, the economic base is clearly the dominant aspect. In the next section, I shall consider what this involves.

5.6 PRIMACY OF THE ECONOMIC BASE

Of course, to say that the economic base is dominant is easy. It is not so easy to spell out what the dominance of the base amounts to. One, perhaps oversimple way of putting it, is that normative principles simply rationalize actual usages. I think this is partly true so long as normative principles are understood dialectically to be actively constitutive of the usages which they rationalize. What we have then is the claim that when the interest which a dominant class has in the real property system of society clashes with its rights and obligations over property, its stake in the way control is actually exercised over production has an effect on the outcome more powerful than that of the normative principles which regulate the property system of society. That is, more powerful and enduring

coalitions of interest form around the exercise of existing relations of production than form around adherence to society's current normative principles. The predominance which the economic base thus has over the moral, legal, and political superstructure is therefore the same as the predominance which I have suggested that the productive forces have over the social relations of production.

However, whatever its merits, this is an incomplete account of the way in which Marx supposes that the economic base, or rather, the mode of production is predominant in social life. It should be noted that Marx also employs the term 'predominant' in a sense other than the one so far considered. In the *Grundrisse*, Marx says that:

In all forms of society there is one specific kind of production which predominates over the rest, whose relations thus assign rank and influence to the others. It is a general illumination which bathes all the other colours and modifies their particularity. It is a particular ether which determines the specific gravity of every being which has materialized within it.⁸¹

When Marx says that a form of production is predominant over other forms in a social formation, it is clearly the 'orchestrating' element in a social formation in the way that a conductor with a musical score constitutes the orchestrating element of a musical performance. Its predominance is like that of an influence with the greatest range and significance

⁸¹ Marx, *Grundrisse*, pp. 106-107.

in a given situation, rather than like that of the strong over the weak. This sense of predominance is clearly different from the sense in which a husband is predominant in a patriarchal family.

The distinction between the two senses of 'predominance' has a biological illustration. The first sense of 'predominance' is like that of a dominant allele over a recessive allele at a given gene locus, exemplified by the way that an allele for brown eyes paired with an allele for blue eyes produces an eye colour closer to brown than to blue.⁸² The second sense of 'predominance' is analogous to the influence of the genotype in the metabolism of an organism. The genotype determines which proteins are synthesized. The proteins act as enzymes to catalyse specific chemical reactions in the organism's metabolism. The genotype thus determines the pattern of chemical reaction rates, and thereby the relative weight of each reaction in the metabolism as a whole.⁸³

In *Capital* vol. 1, Marx notes that politics in the ancient world, and religion in the feudal world, played the 'chief part' in society, but claims that the economic structure of society in each case explains why politics and religion play the roles they do.⁸⁴ Here the pre-

⁸² That is, in terms of the analysis I have given of the 'predominance' of one opposite over another, with the brown eye/blue eye pair of alleles, the outcome is closer to what it would have been had the allele for blue eyes worked in the same direction as the brown eye allele than to what it would have been had both worked in the same direction as the allele for blue eyes. See John Maynard Smith, *The Theory of Evolution*, (Harmondsworth: Penguin Books, 1975), pp. 43-46.

⁸³ John Maynard Smith, *The Theory of Evolution*, pp. 61-63.

dominance of the economic amounts to its having an orchestrating role in society by lending its peculiar stamp to each and every part of social life, and by determining the intensity and extent of its influence. That is, the role which the production process plays in social life as a whole seems rather like that of the conductor and composition in orchestrating a musical performance. The production process thus has the sort of dominance in social life as a whole which Marx says that the predominant mode of production has among other modes of production in a social formation.

So, we have not only the somewhat cynical point that, in general, the interest a ruling class has in the property system of society can be expected to triumph when it clashes with traditional principles, but also a claim about social organization to the effect that it has its focal point in the way society provides for the material existence of its members. Each of these claims may be challenged, but as we saw in the case of the primacy of the productive forces over relations of production, the claims are far more subtle and complex than some critics have allowed.

Once again, the primacy of the base over the superstructure is consistent with the reverse being true of some aspects and instances of the relationship. So, it is consistent with the overall primacy of the economic base that, in periods of social change, previously muted principles may play a decisive role in mobilizing the forces of change. And, within the overall field of influence of a society's mode of production, religious ideologies, for

⁸⁴ Marx, *Capital*, vol. 1, pp. 175-176, footnote.

example, may permeate the culture of society, so that it appears they are the focal point of social life, as Hegel supposed.

Cohen has recently wondered whether the way in which the members of a society define their own identity might not have at least as great an impact on history as the mode of production, or the manner in which a society provides for its material existence.⁸⁵ Cohen points out that the self-conception of members of a society may prevent certain technical possibilities coming to consciousness, so that what they consider their needs, and what they produce to satisfy them, depends not only on their material circumstances, but on what is appropriate and available to the kind of people they are.

Now, no-one can deny that the life of a community is affected by the conception its members have of who they are. Cohen himself admits that he does not have a reason for rejecting historical materialism, but claims only that he no longer knows how to assess its truth. Now, the tendency for the economic base to have greater weight in determining the outcome when it is in conflict with normative principles can be interpreted as a summary of empirical experience. As such, it is difficult to see how it could be known to be true.

If, on the other hand, it is considered a theoretical postulate concerning the overall drift of history, then it is clear that we cannot expect clear-cut empirical evidence favouring it over other alternatives. As a posit concerning the underlying orientation of a multitude of

⁸⁵ G. Cohen, 'Reconsidering Historical Materialism', *Nomos*, XXVI, 1983, pp. 227-251.

cross-currents in the practice of social individuals, it can only be assessed by seeing how fruitful the historical analysis which is founded on it turns out to be. This involves assessing how adequately apparent anomalies can be explained away. Thus, for example, the role of catholicism and protestantism in northern Ireland can be cited as apparent evidence that bonds and divisions set up by ideologies have a more powerful effect than those based on property interests. This case can be reconciled with the primacy of the economic base by showing how catholicism and protestantism have served as vehicles through which the conflict of class interest between English landlords and Irish tenants was fought out, in the context of, and compounded by a conflict between their respective allies over access to employment in skilled trades.

5.7 THEORETICAL BASIS OF THE DISTINCTION BETWEEN BASE AND SUPERSTRUCTURE

In this section, I shall attempt to explain Marx's theoretical *rationale* for the distinction between base and superstructure. This will provide a theoretical *rationale* for the narrow definition of base and superstructure which, following Cohen, restricts the economic base to relations of production, and the superstructure to the legal, political and moral principles through which relations of production are defended.

I suggest that Marx adopted the distinction between base and superstructure in the course of pursuing a critique of Hegel's *Philosophy of Right*. In his first attempt at a critique, Marx adopts the Feuerbachian standpoint of 'transformational criticism'.⁸⁶ Put in its

simplest terms, this involves showing that when he claims that the family and civil society are ultimately derived from the state, Hegel in fact *inverts* the actual dependence of the state on the family and civil society.⁸⁷ So, while Hegel subsumes the ends of the family and civil society under the state, Marx regards the state as the servant of civil society.

Pelczynski argues that in proceeding from the standpoint of 'transformative criticism', Marx makes a 'treble modification to the Hegelian conception of civil society'.⁸⁸ Thus Marx is supposed firstly to have 'narrowed down the meaning of civil society' to include only what Hegel called 'the system of needs', secondly to have reversed its relation to the state, and thirdly, 'de-historicised' the idea of civil society, that is, made civil society seem to be an element of all societies rather than a peculiarity of bourgeois society.

However, Pelczynski misinterprets what Marx has done to the concept of 'civil society'

⁸⁶ See Karl Marx, 'A contribution to the Critique of Hegel's *Philosophy of Right*', excerpt in *The Marx-Engels Reader*, ed., Tucker, p. 18.

⁸⁷ Marx subsequently tends to let the family drop out of sight, perhaps because he sees no difference in principle between the family and civil society, or perhaps because he tended to accept Hegel's conception of the family as 'natural'. Engels, of course, regards the family as socially constructed, rather than peculiarly natural, so that the likely explanation for Marx's lack of emphasis on the family is that he does not think it has the special status which Hegel supposes it has.

⁸⁸ Z. Pelczynski, 'Nation, Civil Society, State' in *The State and Civil Society: Studies in Hegel's Political Philosophy*, ed. Z.A. Pelczynski, (Cambridge: Cambridge University Press, 1984), p. 275.

by failing to see that Marx progresses from the standpoint of 'transformational criticism' of the relationship Hegel conceives between the family, civil society, and the state. While Marx starts from a position which questions the priority which Hegel gives to the formative principles of the nation over the formative principles of the family and civil society, he then proceeds to ask whether all of these may not after all depend in turn on the way society organizes the production process, which is the means whereby society secures its material existence. That is, instead of merely reversing the relation of Hegel's 'civil society' and 'state', Marx comes to see that both are normative expressions of social relations of production.

It is true that in the *German Ideology*, Marx seems to equate 'civil society' with what he later terms 'the social relations of production'. However, this impression is due to Marx at first making use of the term 'civil society' in a double sense. On the one hand, Marx conceives of 'civil society' as the extrication of property relations in the form of 'bürgerliche gesellschaft' from the 'animist and medieval communal society'.⁸⁹ However, he also uses the term 'civil society' to refer to that aspect of society which is 'the social organization evolving directly out of production and commerce'. This is an aspect of all forms of society which only acquires a relatively independent institutional form in bourgeois society. Marx subsequently resolves the ambiguity of his use in *The German Ideology* of the term 'civil society' by adopting the distinction between the economic base of society and its legal and political superstructure.

⁸⁹ Marx, excerpt from *The German Ideology* in *The Marx-Engels Reader*, ed., Tucker, p. 163.

Hegel's 'civil society' is concerned with a structure of rights and duties which regulate our conduct in satisfying our own needs, not just directly, but through satisfying the needs of others. So Marx is not, as Pelczynski alleges, narrowing the sense of 'civil society' so that it only covers Hegel's 'system of needs', but is suggesting a 'doubling' of civil society into social relations of production and their forms of appearance in the rights and duties pertaining to property, that is, a doubling of civil society into base and superstructure. Marx's 'superstructure' of society is clearly what Hegel presents in *The Philosophy of Right* as the sphere of Ethical Life,⁹⁰ with the economic base being its practical, material foundation.

⁹⁰ The sphere of Ethical life is the system of all those institutions and practices, which in giving expression to normative principles, constitutes the actuality of Objective Spirit, *The Philosophy of Right*, §33, and *The Philosophy of Mind*, §487. Sean Sayers supposes that Marx's social relations of production are equivalent to Hegel's Objective Spirit. See his 'Forces of Production...', *Radical Philosophy*, 24, 1980, p. 24. However, this is mistaken, as is clear from the fact that Hegel is concerned with *Recht*, that is, with the *normative principles* acted upon in social life. Marx's view is that those normative principles, far from being the original source of social life, are grounded in and derivative of the fundamental project of making provision for our material existence. Thus, our normative principles serve to realize our embodiment, instead of our embodiment serving to realize those principles. The identification of Marx's superstructure with Hegel's sphere of Ethical Life proposed here is not quite perfect, as Marx tends to let the family and the coercive role of morality fall out of sight, so that Marx's specifications of the superstructure fail to say it is 'moral' as well as 'legal and political', and fail to mention family affairs as well as those of civil society and the state.

Both the economic base and the superstructure take on varying forms, so that Hegel's 'civil society' is seen by Marx as the transient superstructure of bourgeois society, instead of as the consummate product of reason striving to realize the interdependence of self-interested individuals in a 'system of needs'. Marx is thus not 'de-historicising' Hegel's concept of 'civil society', but rather sees its normative principles as the peculiar historical expression of the social relations through which capitalist production is organized.

For Hegel, the normative principles of ethical life appear coercive to individuals estranged from Spirit, and therefore, from themselves. When the 'true' meaning of the normative principles of Ethical Life are recognized, they are seen as liberating the individual from his finitude. Freedom for Hegel is submission to necessities articulated in the law.⁹¹ For Marx, on the contrary, Hegel's entire sphere of 'Ethical Life' is seen as a system of at once coercive (for the underclasses of society) and liberatory (for the dominant class) principles defining what individuals are permitted and obliged to do as members of families, as individual economic agents, and as members of a nation (state).

⁹¹ Hegel, *Philosophy of Mind*, §513.

5.8 CONCLUSION

We have considered in any detail only the relation between the productive forces and relations of production, and the relation between the economic base and the moral, legal and political superstructure of society. In another part of the 1849 Preface, Marx hints at a role in the formation and transformation of society for aspects of human action and consciousness other than those bound up in the legal and political superstructure. Marx suggests that art, religion and philosophy constitute ideological forms through which classes become conscious of their interests, and fight out the resulting conflicts which arise between them. This introduces another theoretical project, which has barely been touched on in Marxist theory, and which involves spelling out how objectively conflicting class interests come to be translated into ideological and political conflicts. There is a further project of showing how ideology and culture shape the forms of consciousness through which individuals come to live out their places in society.

In both cases, though, a distinctively Marxist project would begin from the assumption that the material production process is the focal point of social life as a whole, that is, in terms of the two forms of 'dominance' discussed earlier,⁹² it is dominant in the way the genotype is dominant over the phenotype, so that the production process determines the relative salience of each component of social activity, and thus determines what sort of

⁹² See pages 221 to 223 above.

society it is.

Our discussion of historical materialism has shown that it survives the philosophical critique to which it has been subjected. It also shows that the dialectic of productive forces and relations and the dialectic of base and superstructure need to be complemented with theoretical sketches of the place in society of other aspects of social life and development, such as the place of ideology and culture. To do this requires another work. The next chapter is given over to an interpretation of Marx's theory of capitalism in terms of the model of a unity of opposites.

CHAPTER SIX

MARX'S THEORY OF CAPITALISM

6.0 INTRODUCTION

Marx's theory of capitalism is based on the labour theory of value. While there have been many schools of interpretation of the labour theory of value, none to my knowledge has succeeded in showing why Marx maintains all of the following propositions on 'value':

- (1) value is the 'substance' of exchange value, or exchange-value is the 'form of appearance' of value
- (2) the magnitude of value is determined by socially necessary labour time
- (3) socially necessary abstract labour is the substance of value
- (4) value is the form in which private labours appear as social labour
- (5) value is a social relation of production¹

Some interpretations can be taken as stressing one or other, or a cluster of these theses,

¹ For proposition (1) see K. Marx, *Capital*, vol. 1, p. 128; for (2) see *Capital*, vol. 1, p. 129; for (3), *Capital*, vol. 1, pp. 130-131; for (4), *Capital*, vol. 1, pp. 164-166; and for (5), see *Capital*, vol. 1, p. 165, and *Grundrisse*, pp. 156-157.

but none gives due weight to all. Naturalistic interpretations of the labour theory of value, or 'physical cost of production' theories, are descendents of Adam Smith's view that:

The real price of everything, what everything really costs to the man who wants to acquire it, is the toil and trouble of acquiring it...What is bought with money or with goods is purchased by labour as much as what we acquire by the toil of our own body.²

In their standard form, naturalistic interpretations of the labour theory of value³ can be

² Adam Smith, *An Inquiry Into the Nature and Causes of the Wealth of Nations*, (Chicago: Encyclopaedia Britannica, Inc., 1952), p. 13. That nothing can be purchased without direct or indirect 'toil and trouble' is only a qualitative claim, so that Adam Smith's words do not state a definite quantitative relationship between the cost in money and the cost in labour of purchasing any good, although they may suggest there is one. Just previously, Smith suggests that the 'real value' of any commodity in exchange is measured by the quantity of labour it can 'purchase or command' (ibid). Marx's view is that *changes* in price correspond with changes in the labour of production. Shaikh suggests that variations in the labour of production account for about 90% of the variance in prices. See Anwar Shaikh, 'The Transformation from Marx to Sraffa', *Ricardo, Marx, Sraffa*, (London: Verso, 1984), pp. 62-70, for a theoretical discussion of this question, and for a summary of the empirical evidence bearing on it, see pp. 78-79.

³ See, for example, R. Meek, *Smith, Marx and After*, (London: Chapman and Hall, 1977), and M. Dobb, *Theories of Value and Distribution since Adam Smith*, (Cambridge: Cambridge University Press, 1973).

seen as stressing propositions (1) and (2), rather than propositions (4) or (5). 'Physical cost of production' theories of value vary according to the quantitative relationship which they posit between the labour cost of production and prices. Such theories also, and more importantly, vary according to the theoretical context in which they are embedded. With Ricardo, the 'labour theory of value' is invoked to solve the problem of how changes in the conditions of production impact on prices and the size and distribution of the surplus. His version of the labour theory of value is tailored to that end. Marx, on the other hand, is concerned with the impact market forces have on production, and with the necessary conditions for the reproduction (and transformation) of the capitalist mode of production. This theoretical task places different constraints on the 'labour theory of value' from those set by the problems which concern Ricardo.

Another interpretation of the labour theory of value is to see it as a 'value theory of labour', to use Elson's words.⁴ According to this view, the key to understanding the labour theory of value is to see it as an account of how labour appears as 'abstract labour' in commodity production in general, or its capitalist form in particular. Thus, the equivalence in exchange between two commodities does not depend on their labour costs of production being equivalent. Rather, any equivalence between the values of commodities presupposes a way of rendering *commensurable* the heterogeneous labours involved in the production of various products. That is, in Marx's terms, quantitative comparisons

⁴ See D. Elson, 'The Value Theory of labour', in D. Elson, ed., *Value; the Representation of Labour in Capitalism*, (London, CSE Books, 1979).

between heterogeneous labours presuppose a way of reducing concrete labours to 'abstract labour'. That labours are commensurable is supposed to be a result rather than a presupposition of the relations which exchange establishes between commodities.

Once again, this interpretation of the labour theory of value has a number of variants. The versions differ according to how they reduce concrete labours to abstract labour, but in all cases, the 'reduction' of concrete labour to abstract labour entails that the actually embodied labour content of commodities may not equal their 'abstract labour' content, even when they are produced under standard conditions. It then follows that commodities which require for their production the same total amount of direct and indirect labour need not contain the same amount of 'abstract labour', or have the same 'value'.⁵ The

⁵ Alain. Lipietz, 'The So-Called "Transformation Problem" Revisited', *Journal of Economic Theory*, vol. 26, 1982, pp. 59-82, and others, for example, Duncan Foley, 'The Value of Money, The Value of Labor Power and the Marxian Transformation Problem', *Review of Radical Political Economics*, vol., 14, 2, 1982, claim that the equivalence of the total price of commodities with the sum total of value, and the equivalence of total surplus value with total profits are fundamental postulates of the labour theory of value. These postulates determine the value of the money wage. The money wage is by definition the price of the real or commodity wage. However, in this model, the value of the money wage is not in general equal to the value of the commodity wage. Ulrich Krause, *Money and Abstract Labour*, (London: Verso, 1982), on the other hand, claims that the equivalence in money worth of bundles of commodities determines the equivalence of their values, and this in turn constrains the reduction co-efficients through which concrete labours are reduced to abstract labour. As Ulrich Krause puts it, 'abstract labour means concrete labour homogenized via the market by the

'value-form of labour' interpretation can be seen as stressing proposition (4), but not propositions (1) and (2).

In this chapter, I shall offer a new interpretation of the labour theory of value. This interpretation accounts for Marx maintaining all of propositions (1) to (5) by showing that they are consequences of the dialectic of the production and exchange ('circulation') of commodities, together with the dialectic of price and value. I then consider the standard Neo-classical and 'Neo-Ricardian' critiques of the labour theory of value. These have sought to show that Marx's 'values' are not definable, that 'values' cannot be said to determine prices, and that 'values' are theoretically redundant.

Thus one claim is that Marx's 'values' cannot properly be defined in models of economic systems in which 'heterogeneous labour' is employed, that is, in systems where there is more than one type of labour. Samuelson and Elster claim that if there are innate differences in skill between workers, or if different kinds of work are more or less unpleasant or dangerous, then it is impossible to aggregate these different kinds of labour into one sort of labour independently of price.⁶ It has also been claimed that 'values' cannot be defined in economic systems with joint production, that is, in systems which have industries like the sheep industry, where the same process produces both wool and mutton, or

exchange of products of labour', see 'Abstract Labour in General Joint Systems', *Metroeconomica*, Vol XXXII, N. 2-3, p. 118.

⁶ P. Samuelson, 'Understanding the Marxian Notion of Exploitation', *Journal of Economic Literature*, 1971, pp. 404-405, Jon Elster, *Making Sense of Marx*, pp. 129-131.

in general terms, where at least one indivisible production process produces more than one commodity output. Steedman, Hodgson, and others⁷ claim that in such systems Marx's 'values' are undetermined, or determinable only with reference to prices.

Further, Steedman argues that Marx's 'values' do not determine prices, but that on the contrary, prices determine values. On the first point, Steedman's argument turns on the claim that relative commodity prices are not determined by what he calls the 'traditional value schema'.⁸ On the second point, Steedman appeals to the obvious fact that the value of a commodity depends on the technology by which it is produced, and that the technology in use at equilibrium is the one yielding the lowest cost of production. Thus values depend on, and are determined by prices.

Finally, Samuelson, Steedman and others have found no theoretical role for values other

⁷ See I Steedman, *Marx After Sraffa*, J. Roemer, *A General Theory of Exploitation and Class*, (Harvard: Harvard University Press, 1982), Chapters 5&6, G. Hodgson, *Capitalism, Value and Exploitation a Radical Theory*, (London: Martin Robertson, 1982), Chapter 9.

⁸ Steedman's 'traditional value schema' is only one of many, however, so that even if it does not incorporate sufficient data to determine prices unambiguously, it is an open question whether other value schemas are also unable to determine prices. A value-schema which does determine relative prices involves disaggregating any value into the values of all commodities used up in its production plus surplus value. See, for example, A. Medio, 'Profits and Surplus Value: Appearance and Reality in Capitalist Production', in E.K. Hunt and J. G. Schwartz, eds., *A Critique of Economic Theory*, (Harmondsworth: Penguin, 1972).

than determining equilibrium prices. In that guise, 'values' are seen to be explanatorily redundant, or to involve an 'unnecessary detour'.

In this chapter, I show that the standard neo-classical and 'neo-Ricardian' critiques of the labour theory of value founder. I shall begin by looking at the production and exchange (or circulation) of commodities as an 'organic unity', or 'identity of opposites'. This shows why Marx thought that the concept of value delineates the essential 'physiology'⁹ of commodity production, and capitalist commodity production in particular. I shall then look at the connection between prices and values taken as an 'identity of opposites', and use that model to interpret Marx's claim that values determine prices. With this interpretation, Marx's theory is shown to be viable in broad outline, although Marx entertained some Hegelian presumptions about the relationship between price and value which cannot be sustained.

6.1 THE PRODUCTION AND EXCHANGE OF COMMODITIES

In *Capital*, volume 1, Marx starts with the world of commodities, taken as containing the phenomena which need to be explained. That the product of labour takes the form of a commodity is not something which can simply be taken for granted in Marx's view. The

⁹ 'The basis, the starting point for the physiology of the bourgeois system-for the understanding of its internal organic coherence and life process-is the determination of *value by labour-time*.' Karl Marx, *Theories of Surplus Value*, Part II, (Moscow: Progress Publishers, 1968), p. 166.

first question is: what are the presuppositions of the product of labour taking on the form of a commodity?

Let us initially take the exchange of commodities as a given, as something which happens to occur once its prerequisites are in place. For a clay bowl, say, to be a commodity, it must first be owned. Its owner must have the right to dispose of it in the owners' self interest, and be under no obligation to dispose of it in any other way. In the second place, there must be another commodity, a bone knife, say, which in turn must be owned in the same way, and with which the clay bowl may be exchanged. A familiar scenario is that a tribe with access to clay finds itself with more clay bowls than it requires, and with fewer bone knives than is desirable. Members of this tribe come across members of another tribe whose requirements and possessions complement their own, and exchange takes place out of mutual self interest. A relative surplus of clay bowls is exchanged for bone knives in such a way that each side gains as much as it can from the transaction, getting rid of things they need less in exchange for things which they need more. Exchanges of goods like this might occur whenever the vagaries of need and productive activity produce relative surpluses and shortages on each side. They would never occur if each tribe always tailored production precisely to its needs, or its needs to what it produced.

What is required to turn ephemeral acts of commodity exchange into an enduring and central part of life? Marx claims that the crucial requirement is that production within a society should become commodity production. For this to occur, not only must social

agents exchange out of self-interest, but it must be the case that a social division of labour develops, so that the labour process itself is ruled by private interest. This involves each producer specializing in the production of one sort of good, with the self-interest of the producer determining what is produced, and how it is produced. In these circumstances, the need to exchange goods as commodities is systemic, and social labour, or the labour of society as a whole, is decomposed into independent, privately interested activities.

This model establishes the need for goods to be exchanged as commodities, since each producer possesses and may privately dispose of goods which he or she does not need, and has a need for goods possessed by other private producers, since goods which have been use up in production and consumption must be replaced. However, although this model grounds a need for exchange, it has not yet established that goods will be exchanged in the proportions required if the whole process is to continue. For this to take place, labour must be allocated in the appropriate proportions among the various branches of industry. However, if all productive activities are carried on independently, and are governed by private interest, how is this to come about? Somehow independent, privately interested producers must be oriented to producing outputs in the proportions required for the production process to be carried on.

6.12 THE INVISIBLE HAND OF THE MARKET

From Adam Smith onward, it has been assumed that competition among buyers and

sellers in the market spontaneously orient self-interested producers, as though by an invisible hand, to allocate labour in the proportions required for reproduction, although economic theories have tended to skip over a precise specification of how this allocation is supposed to come about.

However, the problem of avoiding economic collapse is not the only consequence of the anarchy of commodity production. There is also the problem of orienting commodity production to achieve reproduction with a surplus, which the classical school thought would also be solved spontaneously through market competition. Yet another problem is that of orienting production to the satisfaction of consumer tastes, so that production may not only continue and produce a surplus, but can adapt to changes in consumption needs.

The requirement that production be tailored to tastes can be articulated theoretically as the condition that the process of market exchange should orient private producers to produce just what there is market demand for, given current tastes and endowments of resources. That is, the market should orient production so that just those quantities are produced which enable all markets to be cleared, given the current distribution of wants, resources and techniques of production. Once again, however, economic theories have tended to falter in the task of showing how this might come about.

The Walrasian neo-classical model, for example, shows how this might come about in a market which satisfies the following conditions. First, no-one can affect prices by their own production or consumption decisions. Secondly, everyone knows exactly what

everyone else will produce and consume. Finally, exchange is to be suspended until a central auctioneer is able to declare that markets will clear at currently bid prices, given the current distribution of wants and endowments, the current allocation of resources, and the current techniques of production.¹⁰

It is obvious that this model demonstrates very little about the functioning of decentralized markets, in which participants have no more than informed guesses concerning prices being paid, current distributions of techniques of production, endowments and tastes, and current levels of production and consumption. The Walrasian *tatônnement* process provides a model of how a centralized planning process might function, rather than a model of decentralized markets.¹¹ Further, Neo-classical models generally prove that there is an equilibrium allocation of resources including social labour, which *once arrived at* will be adhered to, provided the parameters of the model do not vary. Such models do not show that if the market starts from a position out of equilibrium, prices and resource allocations will be driven by market forces in the direction of a set of prices, a resource allocation,

¹⁰ K. J. Arrow and F. H. Hahn, *General Competitive Analysis*, (San Francisco: Holden-Day, 1977), chapters 1-3.

¹¹ See Walsh and Gram, *Classical and Neo-classical Theories of General Equilibrium*, pp. 409-410, G. Duménil and D. Lévy, 'The Classics and the Neo-classicals: a Rejoinder to Frank Hahn', *Cambridge Journal of Economics*, 9, 1985, pp. 327-345, p. 344, and Duménil and Lévy, 'The dynamics of competition: a restoration of the classical analysis', *Cambridge Journal of Economics*, 11, 1987, pp. 133-164, and especially p. 139.

and a set of operating levels for techniques of production which are in equilibrium.

The anarchy of commodity production clearly poses two problems for economic theory. The first is to specify the ends to which the process of commodity production must be oriented so that it meets the principal social requirements of production. The second is to show how the activities of private producers can be oriented in practice to those ends, or be made to cohere so that the social requirements of production are met. That is, economic theory must show there are feasible mechanisms for inducing a coherence in a system of commodity production which ensures its social viability.

Marx recognized the significance of these two problems. In Marx's terms, the first problem amounts to revealing the social relations of production which are involved in the production of commodities, since it is through these that production is oriented to given social ends. The second problem involves specifying 'the form in which private labours appear as parts of social labour', since this is to specify the way private labours are organized into a coherent social labour process. Marx has a distinctive solution to these problems, discovered by noting that, for Marx, *value* is the 'social relation of production' constitutive of commodity production, and the 'form in which private labours appear as social labour'.

Of course, this only provides an initial insight into Marx's theory, as we still have to make sense of these claims about 'value'. Nevertheless, the initial insight is significant. It shows that Marx employs the concept of value in the theoretical task of specifying how

production based on private property in the means of production must be integrated and oriented so that it meets social requirements.

Now a little reflection shows that by positing value as a social relation of production and as the form in which private labours appear as social labour, Marx is thereby making the claim that the essential function of market competition is to impose labour discipline on private producers, or compel them to use labour economically. Thus, for Marx, the principal effect of market competition is the orientation of self-interested commodity producers to the all-round and progressive development of labour productivity.

Solutions which differ from Marx's are presented by the Neo-classical theory and by the contemporary Classical or 'Neo-Ricardian' theory. According to the Walrasian Neo-classical theory, competition among buyers and sellers will yield prices and activity levels which permit maximum gains from trade, given a set of techniques of production, and a given distribution of wants and resource endowments. According to the Classical or Neo-Ricardian theory, competition among buyers and sellers enables a market economy to be viable, given that this amounts to it producing those goods required to replace stocks which are consumed, and in addition, produce a surplus for accumulation or luxury consumption.

It is possible to exaggerate the difference between these solutions. Marx need not deny that commodity markets, at least to some extent, enable gains from trade or rational

budgeting by households and firms. Marx can also concede that markets normally induce industries to operate at levels which permit the system to reproduce itself with a surplus, despite the anarchy inherent in commodity production. However, Marx's position implies that commodity markets will never achieve an optimal allocation of resources between competing ends, except perhaps by chance now and then. And, although Marx accepts that the market generally keeps in check the anarchy of commodity production so that growth can occur, he claims that market forces as a whole periodically produce crises which frustrate that end, at least in the most developed, or capitalist form of commodity production and exchange.¹²

In any case, it seems to be Marx's view that the viability of commodity production, or the achievement of a balance between supply and demand, has a less significant impact on the development of commodity production, and on capitalist commodity production in particular, than the all-round and progressive development of labour productivity.

The mechanism which orients commodity production to the all-round and progressive development of labour productivity is, of course, nothing but Adam Smith's invisible hand.¹³ That is, Marx accepts that free, self-interested market transactions of themselves, or spontaneously, constitute a mechanism by which coherence in a market economy is attainable to the extent that it is. And, of course, competition between and among

¹² Marx, *Capital*, vol 3, pp. 357-368.

¹³ Adam Smith, *The Wealth of Nations*, p. 194.

buyers and sellers is a crucial part of the market mechanism for Marx.

However, Marx has a distinctive theory of the competitive process, which contrasts quite radically with the picture of competition presented in Neo-classical theory, and which even contrasts with the Classical theory, though to a lesser extent. According to Marx, for example, the law of supply and demand plays only a limited role in the competitive process compared with the role Neo-classical theory gives it.

6.13 THE LAW OF SUPPLY AND DEMAND

For Marx, the law of supply and demand is a first approximation to short-term movements or fluctuations in the market prices of commodities. However, Marx would deny that the law is a complete theory of the determinants of the patterns of exchange among commodities, and of the way those patterns alter over time. Thus Marx says 'If supply and demand balance one another, they cease to explain anything, do not affect market values,...It is evident that the real inner laws of capitalist production cannot be explained by the interaction of supply and demand'. Now, even if this is not a satisfactory account of the limitations of the law of supply and demand, Marx is correct when he claims that a theory of price adjustment does not completely account for the laws of development of capitalism.

The law of supply and demand can be stated as follows:

$$(1) D = f(p);$$

(2) $S = g(p)$, where D is the demand and S is the supply of each commodity, and with both supply and demand dependent on the commodity price, p ;

$$S = D, \text{ for each commodity.}$$

Here there are three variables, p , S , and D , and three equations linking them, so that the price, supply and demand of each commodity is determined. However, it is hardly, if ever, the case that supply equals demand in each and every market. The theory in this form merely states that if we could determine how the supply and demand for each commodity depends on its price, then there is a unique set of commodity prices at which all markets clear.

An account of actual markets requires a dynamic theory which shows how prices adjust to imbalances in supply and demand, which can be represented schematically as follows:

(4) $dp/dt = h(S - D)$; where h is a function which shows how changes in price depend on the excess of the supply over the demand for a commodity, with $h' < 0$, where h' is the derivative of $h(S - D)$ with respect to an increase in the excess supply ($S - D$). This says that prices decrease when the excess supply increases.¹⁴ However, the conditions that supplies and demands are functions of price, and that prices fall when the excess of supply over demand increases, do not yield a determinate set of prices as there

¹⁴ Kenneth J. Arrow, 'Toward a Theory of Price Adjustment' reprinted in Yale Brozen, ed., *The Competitive Economy: Selected Readings*, (Morristown, N.Y.: General Learning Press, 1975), and for another formulation see Willi Semmler, *Competition, Monopoly, and Differential Profit Rates*, (New York: Columbia University Press, 1984), Appendix 5.

are now four variables t , p , S and D , and only three equations linking them. The dependence of price on time can be eliminated if the adjustment process converges on stable prices, that is, prices which are time-invariant.

If we assume for the moment that all of these functions behave as required by the theory, then for all commodities, as t increases, both dp/dt and $(S - D)$ approach 0, and when there is no excess supply in any market, $(S - D) = 0$, and $dp / dt = h(0) = 0$. That is, price changes tend to eliminate any excess supply (or excess demand), and prices have no tendency to change when there is no excess demand for any commodity. We then have a model of a dynamic process linking prices, supplies and demands, in which prices converge on a determinate set of equilibrium prices, which obtain when $S = D$ for all commodities.

Now, the assumption that the functions behave as required by the theory involves some idealization of actual commodity markets. For example, interactions between supplies, demands and prices must be relatively moderate if all are to converge to equilibrium values. In the cob-web model of pork production, for example, this may not be the case. Thus an initially high price for pork may prompt an oversupply on the market. This may drive the price of pork down sharply enough to lead to a reduction in pig breeding, which in turn is sufficient to create a subsequent shortage of pork, with a return to a high price, and a new cycle. Convergence to equilibrium presupposes that no such extreme price or supply responses should occur.

Secondly, preferences can produce 'perverse' linkages between prices and supply and demand. A low price for a commodity can reduce rather than increase sales, if buyers assume that its low price is an index of poor quality.¹⁵ It follows that the price of a commodity may be stable, or at equilibrium, even when supply does not equal demand. For, even if an excess supply of a commodity tends to drive down its price, the market may fail to clear if potential buyers refuse to purchase cheaper items of the commodity because they consider them much less useful than those available at a higher price.¹⁶

To some extent, such 'perverse' linkages are an artifact of the way the commodity is specified. Thus, in the case of second-hand cars, while a fall in price may lead to poorer quality cars offered for sale and for which there is little demand, this is not really a case of a falling price for a commodity leading to reduced demand for it, but rather a case of the price of higher quality cars falling below their supply price, alongside an excess supply in the market for poorer quality cars. Nevertheless, 'perverse' linkages can remain when the use-value of the commodity is partly constituted by its price, as with the snob-value of french perfume, say, or, the loyalty and motivation of workers, perhaps.

¹⁵ See Joseph E. Stiglitz, 'The Causes and Consequences of the Dependence of Quality on Price', *Journal of Economic Literature*, vol XXV, March 1987, pp. 1-48, for a comprehensive survey of such 'perverse' linkages.

¹⁶ Stiglitz, 'The Causes and Consequences...', pp. 4-6, discusses the case of lower wages leading to such a reduction in the labour productivity of low-wage workers that it does not pay employers to hire workers at wages sufficiently low to clear the labour market.

Thirdly, an increase in demand for a commodity can lead to a fall rather than a rise in its price, because a change in demand can impact on the rate of profit, and through that, on the costs of production of the commodity.¹⁷ This perverse linkage between price and demand vanishes when the rate of profit is zero. In neo-classical theory, the 'price' of each commodity is 'fully imputed to the value of the factor services which enter into its production',¹⁸ so that the rate of profit in such models is zero. However, if every factor of production must have a neo-classical 'price', then it seems that these 'prices' cannot be identified with market prices, not the least because there may not be markets or market prices for all factors of production, for example, when markets for technologies are incomplete, or when there are incomplete futures markets.¹⁹

Nevertheless, the law of supply and demand is (approximately) true when taken as stating that there is a tendency for prices, supplies and demands to adjust in the direction of a set of equilibrium prices which obtain when all markets clear, provided there is no change in

¹⁷ John Broome, *The Microeconomics of Capitalism*, (London: Academic Press, 1983), pp. 64-72.

Broome also discusses other, more complicated, 'perverse' price responses to changes in demand, involving the impact of demand on the resource cost structure of a commodity, see pp. 183-190.

¹⁸ Walsh and Gram, *Classical and Neo-classical Theories...*, p. 211.

¹⁹ Walsh and Gram, *Classical and Neo-classical Theories...*, pp. 266-268 and p. 410, argue that neo-classical theory cannot be interpreted successfully as a theory of markets, and are unable to cite any adequate dynamic theory of price adjustment which has a neo-classical basis.

the meantime in the technology of production, the interests of classes, or the preferences of individual workers and consumers.²⁰ This limited validity of the law of supply and demand, however, confirms Marx's claim that the law says little about the way the capitalist mode of production develops over time. When capitalists and wage-workers are considered only as vendors of commodities, who differ only in the nature of the commodities they have to sell, the law of supply and demand still applies, but the resulting theory loses sight entirely of the class relations which determine endowments and preferences, and which drive technological change. Thus capitalists make technological changes not only for the sake of price advantage, but in order to operate technologies which are better adapted to the reproduction of capitalist social relations of production. The strategic interests of capitalists thus induce changes in the methods of production which turn human labour into machine like motions, and leads to the displacement of labour through mechanization. Class interests thus shape price signals so that they point

²⁰ Note, however, the pessimistic review of attempts to model the price adjustment process which rely on excess demand functions in articles by Peter Flaschel and Willi Semmler, 'Classical and Neo-Classical Competitive Adjustment Processes', *The Manchester School*, 1987, G. Duménil and D. Lévy, 'The classicals and the neo-classicals: a rejoinder to Frank Hahn', *Cambridge Journal of Economics*, 9, 1985, pp. 327-345, and especially p. 338ff, and 'The dynamics of competition...', pp. 137-143. In this article, Duménil and Lévy describe the valid form of the law of supply and demand as a 'thoroughly different approach to the operation of the market' (p 137). An abstract dynamic theory of price adjustment based on rational action theory, which takes into account changes in preferences, techniques of production, and so on, has recently been developed in L.G. Telser, *Theories of Competition*, (New York: North Holland, 1988).

in the overall direction of changes in the methods of production which increase labour productivity.²¹

Although one function of price movements is to signal a disequilibrium in supply and demand, and so orient the activities of market participants toward those prices and quantities of commodities which enable all markets to clear, this is not their sole function. To fully understand the working of commodity production and exchange, we need more than the law of supply and demand. We may therefore ask whether Marx's theory of the functions of price competition in commodity production adds significantly to the law of supply and demand. By showing how the production and exchange of commodities constitutes a 'unity of opposites', I shall now attempt to fill out the sketch of Marx's theory provided so far, and show what 'The Law of Value' adds to the 'Law of Supply and Demand'.

²¹ William Mitchell and Martin Watts, 'Efficiency Under Capitalist Production: A Critique and Re-formulation', *Review of Radical Political Economics*, vol. 17, 1/2, 1985, pp. 212-220, argue that it is impossible to separate technological progress based merely on cost savings, or 'quantitative' efficiency, from progress in capitalist control over production, or 'qualitative' efficiency. The importance of the reproduction of capitalist relations of production is recognised in the discussion by Nai-Pew Ong ('Marx's classical and Post-classical Conceptions of the Real Wage', *Australian Economic Papers*, December 1980, pp. 273-277) of the relevance of technological change to the resolution of a potential conflict between the wage level as determined by market forces, and the level of wages required for sustained profitability.

6.2 DIALECTIC OF COMMODITY PRODUCTION AND EXCHANGE

The production and circulation of commodities are opposites in a quite simple sense. Commodity production transforms products for use into products for sale, and commodity exchange transforms commodities for sale into commodities for use. Each thus undoes the effect of the other. Yet the production and circulation of commodities are not just opposites. Each merges with the other, inasmuch as production can be seen as a mere phase of exchange, and exchange as merely a phase of production. Production is what enables a buyer of commodities to become a commodity vendor also, and exchange is what enables a commodity producer to replenish the stock of goods used up in production. As Marx points out in *Capital* volume two,²² production and exchange are equivalent inasmuch as they are phases in the metamorphosis of commodities, and can only be understood and distinguished in terms of their respective roles in the cycle of production and exchange. Taking the production of products as the starting point, this cycle passes over into a phase of exchange which passes over into into a new phase of production. Singling out the role of money as a universal means of payment in exchange, the cycle can be represented as follows:

$$P... C — M — C' ...P'$$

²² K. Marx, *Capital*, vol 2, trans. David Fernbach, Introduced by Ernest Mandel, (Harmondsworth: Penguin Books, 1978), p. 181.

In this representation, the cycle begins and ends with production, so that exchange appears as a phase of production, or as a phase in the reproduction of the producer, which is essentially the way Classical political economy took it.²³ The same cycle can be represented in another way also:

C — M — C' ...P... C, or if we recognize that commodities can take the form of either specific commodities or the money commodity, the cycle of commodities in exchange can be represented as having money as its premise and result:

M — C' ...P... C — M'

In both cases, the cycle begins and ends with exchange, so that production appears as a phase in an exchange process, which is essentially the way Neo-classical theory views it. Gramm and Walsh note that Neo-classical theory begins with a model of pure exchange, in which endowments of various commodities are taken as given, and the exchange process operates as a means by which elements in each and every endowment can be swapped, until no further improvement can be made to the usefulness of any endowment for its owner.

This model of pure exchange can then be extended to take production into account. The

²³ K. Marx, *Capital*, vol 2, p. 166, and p. 172.

difference between such a model and a model of pure exchange is that in the model which includes production, each owner begins with endowments of productive resources, rather than with endowments of final consumption goods. The resource endowments are then transformed through exchange, production, and further exchange into optimally useful bundles of final consumption goods.²⁴

The production and exchange of commodities are not just an immediate identity of opposites. Each further presupposes or depends on the other. Exchange presupposes production for a supply of commodities for sale. Commodity production depends on prices and rates of sale in the exchange process for signals as to both its efficiency and effectiveness. That is, commodity production depends on exchange to orient the production of any given commodity to the technique and level of production which minimizes waste.

Now, not only does the production of commodities mediate exchange, and vice-versa, but each is also the result of the other. In the first place, each provides the impetus for the other. On the one hand, production depletes the stock of products required for production to be carried on, and it transforms those stocks into other products which the producers have no use for. It thereby provides the impetus for exchange. That is, once production has taken place, the producer enters the market with an incentive to exchange the products which he or she cannot use for products which are needed for consumption, or for future productive activity. On the other hand, exchange provides the impetus for production by

²⁴ Walsh and Gram, *Classical and Neo-classical Theories...*, pp. 168-172.

providing a producer with both the means and incentive to produce. Exchange enables a producer to acquire what he or she needs for production. Further, exchange enables a producer to gain by producing commodities for which there is a growing demand, or to gain by producing a commodity more efficiently, if only as a result of the division of labour and specialization in production which derives from exchange.²⁵

This 'mediated identity' between production and exchange is the subject of Sraffa's *Production of Commodities by Means of Commodities*. Given Sraffa's assumptions, together with some further behavioural assumptions about producers, it is possible to construct a model which captures the way the interaction between production and exchange enables the reproduction or propagation of the system over time.²⁶ Such an outcome is the key theme of classical economic theories, as Walsh and Gram point out in their definitive study.²⁷ Given a technology of input-output relations, an initial level of employment, and the rate of accumulation, the classical model shows which pattern of prices will permit the reproduction and expansion of the economic system, if they are the prices at which commodities exchange in the market.

²⁵ This point is emphasised by Adam Smith, who virtually declares that the progressive articulation of production into specialised departments or industries is the principal source of the wealth of nations.

Adam Smith, *The Wealth of Nations*, Chapter 1.

²⁶ See Joan Robinson and A. Badhuri, 'Accumulation and exploitation: an analysis in the tradition of Marx, Sraffa and Kalecki', *Cambridge Journal of Economics*, Vol. 4, No. 2, June 1980, pp. 103-115.

²⁷ Walsh and Gram, *Classical and Neo-classical Theories...*, pp. 108-115, and pp. 397-403.

In the second place, production and exchange complete, or put the finishing touches to one another. The interaction between existing patterns of production and exchange transforms each into new patterns. Exchange shapes the profile of production with respect to the quantities of each use-value produced, and with respect to the technologies employed. It thus provides the impetus for new levels and techniques of production. On the other hand, the introduction of new products and techniques of production produces new prices and patterns of exchange.

A dynamic transformation of commodity production and exchange thus emerges out of the way each shapes and provides the impetus for the other. From Marx's perspective, this is clearly more fundamental than their equilibrium and reproduction, even though transformation necessarily involves a degree of continuity, and therefore reproduction.

The development of production and exchange produces a more fundamental opposition between them than the fact that one converts use-values into exchange values and the other does the opposite. This more fundamental opposition is revealed by the question of how it is possible for the activities of independent, self-interested commodity producers to cohere into a social production process which is viable and economical in its use of resources.

I propose that the fundamental contradiction between commodity production and exchange is the contradiction between the anarchy of private production and the socialization

of labour through exchange. On the one hand, private production is sufficiently anarchic to make it impossible for a decentralized market system to reach the general market equilibrium modelled by Neo-classical theory. On the other hand, if general commodity production is to be sustained, the process of market exchange itself must somehow orient private producers away from a waste of productive effort. Or, to put it another way, private labours must be socialized, or transformed into fractions of social labour.²⁸

Commodity exchange therefore *negates* while *preserving* the private, independent character of the labour involved in commodity production. The interaction between individuals in the market produces an outcome, a co-ordination of their activities, which by the very nature of commodity production and exchange can be intended by none. For Marx, the principal outcome of the discipline imposed by the market on private producers is a tendency toward economy in the use of labour, or a tendency for the values of commodities to diminish progressively. A secondary, but also essential outcome, is a tendency for supply and demand to balance.

Conversely, the private, independent basis of commodity production negates the socialization of production through exchange. Production constantly escapes the discipline of the market. Waste springs up in private production just as incessantly as it is culled by market forces. Any tendency toward a balance between supply and demand, and for economy in the use of labour, at best counteracts but can never abolish the underlying

²⁸Anwar Shaikh makes very much the same point in 'The Transformation from Marx to Sraffa' in

Ricardo, Marx Sraffa, eds., Ernest Mandel and Alan Freeman (London: Verso, 1984), pp. 44-45.

anarchy of labour directed by private interest.

The market thus articulates what is dislocated by necessity in private production. A conflict between the articulation and dislocation of production is inherent in the production of commodities. For Marx, this constitutes a fundamental opposition between commodity production and exchange, and as I shall now attempt to show, also constitutes the fundamental transforming force within commodity production.²⁹

Exchange of commodities in the market imposes a coherence or socialization of production, thereby negating the independence of commodity producers founded on private property in the means of production. The result is not only that production provides an impetus for exchange, and exchange an impetus for production, but that each also shapes the specific form of the other. Thus the quantities produced under each technique of production are determined by market prices, and in turn market prices are determined by the range of techniques of production in use.

²⁹ Michael A. Lebowitz, 'Marx's falling rate of profit: a dialectical view', *Canadian Journal of Economics*, IX, No 2, 1976, points out that the process of circulation negates capitalist production, inasmuch as it suspends the process of creating surplus-value, and quotes support from Marx's *Grundrisse*, p. 535, as follows: 'As long as capital remains frozen in the form of the finished product, it cannot be active as capital, it is *negated* capital'. This points out a specific contradiction between commodity production and exchange under the capitalist mode of production. The contradiction between production and exchange identified here is inherent in commodity production in all its forms.

Marx claims that the essential result which emerges from this interaction between production and exchange is a transformation of technology, resulting in an all round and progressive development of labour productivity.³⁰ That is, a universal and cumulative development of labour productivity is the most important outcome of the resolution (and simultaneous preservation) of the contradiction between the anarchy of commodity production, and the socialization of labour achieved through market exchange. The mechanism which produces this outcome is, of course, nothing but competition between buyers and sellers over the prices and quantities of commodities to be exchanged in the market.³¹

Now, by claiming that a development of labour productivity is the most important outcome of market competition, Marx is not thereby committed to the view that competition has no other significant result. Nor does it follow that economy in the use of labour is the only significant component of the 'coherence' established by the market in commodity production.

Market competition secures at least one other result, which is a rough and ready balance between supply and demand. This, however, can be seen as a component of economy in the use of labour. For the latter requires both efficiency and effectiveness. Production is

³⁰ For example, see *Capital*, vol 1, pp. 431-433, 646-647, and *Grundrisse*, pp. 711-712.

³¹ The best model of the competitive process which I am aware of is presented by Duménil and Lévy in 'The dynamics of competition'.

efficient if it uses a minimum of resources, while it is more effective when a given bundle of resources produces more of the products consumers need. Matching supplies of a product with market mediated needs is therefore an aspect of maximizing the realized usefulness of the product.

However, the theory that the principal result of market competition is a universal and progressive increase in labour productivity, which we may call the 'Law of Value', goes beyond the law of Supply and Demand. The Law of Value, but not the Law of Supply and Demand as such, implies that there is an impetus inherent in commodity production for changes in the techniques of production which free labour from existing industries to be redeployed in new or growing industries. Labour-displacing changes in industries producing wage goods also reduce the labour necessary for the maintenance of the labouring population, and thereby enable a greater proportion of labour to be performed as surplus labour. Thus the Law of Supply and Demand provides an approximate theory of short term movements in commodity prices, while the Law of Value provides a theory of how the system of commodity production orients technological development over the long term.

That competition provides an incentive for a universal and cumulative cheapening of commodities is a platitude. In putting forward the Law of Value, Marx is making the further substantive claim that the battle to cheapen commodities produces and presupposes an all-round and progressive increase in labour productivity. In the next section, I shall dis-

tinguish price and value, and in the section after, show how the grounds for Marx's Law of Value emerge from a dialectic of price and value.

6.3 PRICE AND VALUE

As we have already seen,³² actual commodity markets are hardly ever, if at all, in equilibrium, so that the market price of a commodity is not a uniform equilibrium price, but in the first instance is an average of the prices at which similar units of a commodity sell. These units of a commodity may not be identical in what Marx terms their 'use-value', that is, the attributes through which they satisfy human needs, nor identical in the way they are produced. Exactly alike units of a commodity may have different prices because they are produced by different methods, while units of a commodity produced by different producers using similar methods may not be alike in their use-value or their price.

Market prices must be taken as averages over a range of prices of similar but not identical goods. As a result of imbalances in supply and demand, and corresponding changes in the level of inventories, these averages undergo short term fluctuations. Competition drives these fluctuations, and pushes market prices toward what may be called 'centres of gravitation',³³ as market prices fluctuate above or below them, but will gravitate toward

³² See section 6.13 above.

³³ See Duménil and Lévy, 'The dynamics of competition', p. 149, for an explanation and model of this process. In their model, convergence to prices of production occurs provided that the initial

them from either side under competitive pressures. These 'centres of gravitation' may be called 'natural prices', 'cost prices' or 'prices of production',³⁴ which as Marx explains, signifies that these prices are 'the condition of supply, [or] the condition for the reproduction of commodities, in each particular sphere of production.'³⁵

Market competition is primarily competition over returns (profits, earnings from labour, and so on) from commodity exchange. Therefore, in a capitalist economy, competition involves a dual, or 'cross-over' interaction between prices, changes in supply and demand, and rates of profit. As Duménil and Lévy³⁶ point out, the price adjustment process

quantities and prices are not too far from the prices of production, and the reactions of producers to changes in price are 'moderate'.

³⁴ G. Duménil and D. Lévy, 'The dynamics of competition', especially point (viii), p. 136. F. Farjourn and M. Machover, *Laws of Chaos*, (London: Verso, 1983), Chapter One, rightly point out that prices and profit rates are not single but dispersed. However, their statistical analysis of prices and rates of profits, however useful it may be for the purposes of description, is no substitute for the notion of 'prices of production' as centres of gravitation. There can be no sustainable methodological objection to the claim that a process undergoing somewhat random fluctuations is tending toward an end point, even if it never reaches it.

³⁵ Marx, *Capital*, vol 3, p. 300.

³⁶ G. Duménil and D. Lévy, 'The dynamics of competition', p. 135. They also give a model which takes account of the peculiar features of fixed capital and variations in the level of capital utilization as signals for the need to change investment, see G. Duménil and D. Lévy, 'The Competitive Process in a Fixed Capital Environment: The Classical View', *The Manchester School of Economic and Social*

begins with a mismatch between supply and demand, manifested by a change in inventories or the level of capacity utilization. This leads to a change in prices, and in the capitalist mode of production, this in turn leads to changes in profit rates. Changes in profit rates then lead to a new allocation of resources, generated by a new pattern of capital investments, which in turn leads to a new supply/demand disequilibrium.

While market prices may tend to prices which are consistent with a balance between the supply and demand of commodities, even if only a temporary one, the outcome in the short to medium run is a set of *quasi-equilibrium* average prices.³⁷ That is, although sales of output are in line with expectations while the equilibrium lasts, and the scale of production is constant, there can be changes in other aspects of economic activity.

For, if there are a number of techniques of production with differing productivities, returns to producers will vary according to the techniques they use. Those with the more productive techniques will obtain greater returns than those with the less productive. They will thus be able to undercut the price of the less productive producers, so that while inventories remain unchanged overall, less productive producers will confront rising inventories, while more productive producers will enjoy a fall in theirs. Less productive producers are thus induced to scale down their level of activity, while the more productive expand. Competition thus weeds out inferior techniques of production, so that over time

Studies, Vol. LVII, No. 1, March 1989.

³⁷ With a quasi-equilibrium price there is a temporary equilibrium in inventories, for example, but not a full equilibrium of activities, quantities and prices.

the mix of techniques used in producing a commodity changes, and the average quasi-equilibrium price of the commodity falls.

There is a remarkable agreement between this model of the competitive process as developed by Duménil and Lévy, and Marx's intuitions on the formation of prices of production. Marx says:

What competition brings about, first of all in one sphere, is the establishment of a uniform market value and market price out of the individual values of commodities. But it is only the competition of capitals in *different* spheres that brings forth the production price that equalize the rates of profit between those spheres.³⁸

Duménil and Lévy point out that Marx here identifies two out of the three processes which are predominant at different and successive stages of the competitive process in their model. The first process is that whereby an average price in an industry is formed out of the initial cost plus profit prices of producers employing different techniques of production. The second is the process whereby profit rates are equalized between industries. These two processes lead to Marx's 'quasi-equilibrium' prices of production, which hold when there is an initial balance between supply and demand in every industry. However, there will still be producers with different costs of production within each industry, so

³⁸ Marx, *Capital*, Vol., 3, p. 281.

that the market price in each industry is an average of different cost-plus-profit prices, and there is a spread of profit rates between more and less efficient producers, when competition forces prices to cluster more closely around the market average.

Because Duménil and Lévy are concerned with the Classical theory of market competition, they add a third process to the two noted by Marx. This is the process whereby inferior techniques are squeezed out, leaving only the optimal productive technique, and equilibrium prices of production determined by that technique.³⁹ In Duménil and Lévy's model this process is much slower than the others, and if new techniques are introduced while the inferior techniques of production are being eliminated, the process of gravitation to the optimal productive technique will begin again, with a new end point to aim at.

Technical progress in capitalism is in fact rapid enough to ensure that the process whereby market prices gravitate to prices of production hardly ever gets past Marx's quasi-equilibrium prices of production to the terminal state where only the optimum technology is in use. Therefore, Marx's prices of production present themselves as the actual 'centres of gravitation' of market prices by comparison with the optimal prices of production of the classical model.

³⁹ It is also worth noting that there will be more than one technique in use when a scarce resource is involved. In this case also, remuneration per hour will vary from producer to producer, although there may be an equilibrium price if producers using less productive resources are unable to shift to activities using more productive resources.

On the surface, there is no general pattern to which prices of production conform in all forms of commodity production. Different forms of commodity production involve different modes of distribution between industries, and within industries there are different forms of distribution reflecting variations in the way competition works. For an all too familiar example of different modes of distribution, we can compare industries producing freely reproducible goods with industries producing or substantially relying on scarce resources. Thus, when any industry produces or uses scarce resources, that is, resources which are not freely reproducible, more efficient producers earn rents over and above the normal rate of profit prevailing in sectors producing freely reproducible goods. Moreover, if there are barriers to competition within any industry, relatively sheltered producers in that industry can earn quasi-rents.

Apart from variations in the patterns of production prices due to scarcity and barriers to competition in general, there are two basic types of commodity production: simple commodity production; and capitalist commodity production. They differ according to whether the direct producers own the means of production. Earnings take different forms in these modes of production and are distributed in different ways.

With simple commodity production, commodity producers and owners are one and the same, that is, the direct producers of commodities are also owners of the means of production.⁴⁰ This is the form in which commodity production spontaneously appears,

⁴⁰ In *Value, Exploitation and Growth*, (London: McGraw-Hill, 1978), pp. 182-3, Michio Morish-

although it often appears blended with other relations, such as those between creditor and debtor, or landlord and tenant. And although the direct producer and owner of the means of production is typically an individual, families and co-operatives can play the same role.

I do not intend to contribute to the myth that simple commodity production was the prevailing mode of production before capitalism.⁴¹ For a start, simple commodity production has never been entirely displaced by capitalism, but can still be found in agriculture, building trades, transport, services and commerce, for example. Secondly, its role in pre-capitalist societies was no more central nor significant than its role in present day capitalism. It has never been the general form of production, nor functioned in a pure form, except perhaps, in settlements such as early New England society in America.

Generally speaking, simple commodity production has been no more widespread nor

ima and George Catephores claim that simple commodity production presupposes a 'spontaneously developed...division of labour among independent producers', where these producers are independent in a three-fold way: first, that there is no prior social co-ordination of their activities, second, they are not subject to a master as producers, and thirdly, mobility of labour is not limited by social or geographical reasons, so that 'income per man-hour is equalised throughout society'. The last of these conditions is probably too strong, as simple commodity production has always involved private ownership of land and other resources, and these have not been in such unlimited supply that only the most productive has been in use, so that in the production of any commodity, one hour of labour is as productive as any other. However, simple commodity production does require a mobility of labour sufficient to equalize the gross income per average hour of work in any industry with that in any other.

⁴¹ See, for example, the discussion in Morishima and Catephores, *Op. cit.*, chapter 7.

central in pre-capitalist societies than it has been in capitalist society. Nevertheless, it is a significant variant of commodity production.

In simple commodity production, where the direct producers own the means of production and there is only a limited surplus available for accumulation over and above the requirements set by population growth, the law of distribution is that all producers of reproducible goods earn the same per hour of work in any industry when prices are at equilibrium. When the economy includes scarce resources and reasonably rapid technical change, all averagely productive producers of reproducible goods and marginal producers and users of scarce resources will earn the same per hour of work in any industry, that is, they earn the same amount per hour of abstract labour, when the fluctuations of supply and demand are abstracted from.

In capitalist commodity production on the other hand, owners of the means of production hire workers for a wage to labour under their management to produce commodities. There is a tendency for technological progress under capitalism to take the form of productive mechanisms driven by natural forces, which progressively incorporate the direct producers as quasi mechanical components. The economy is capable of producing a significant surplus product, while the capitalists have an objectively grounded interest in increasing their capital as quickly as possible. Distribution under capitalism takes the form of a tendency toward remuneration in proportion to capital outlaid.

Prices of production are proportional to 'values', as Marx defines them, in simple commodity production, while under capitalism, this relationship does not hold in general. The reason is that the two systems have different principles of distribution. In simple commodity production, quasi equilibrium prices cover the costs of production and pay the direct producer the normal rate per hour of averagely productive labour, while in the other system, they cover the costs of production and provide more or less the normal rate of profit on capital outlays to the capitalist.⁴²

Now the value of a commodity is by definition constituted by the socially necessary abstract labour required for its production. That is, socially necessary abstract labour is the 'substance' of value. This has two implications. First, the value of any commodity is the quantity of averagely productive labour directly or indirectly required in its production. Second, averagely productive labour in any industry counts the same, that is, has the same value measure, as averagely productive labour in any other industry. Value is thus an equivalence relation defined over the labours of all industries, so that one hour of averagely productive labour in any industry equates with one hour of averagely productive labour in any other.⁴³ The value of the whole output of any industry is thus the

⁴² See Appendix 1, for a mathematical model of the relationship between prices (that is, quasi-equilibrium prices when a number of techniques of production are in use) and values in simple commodity production, and a specification of the difference between these prices and prices under capitalist commodity production.

⁴³ Both value and price in simple commodity production are defined with reference to an average technology. Prices of production are therefore quasi-equilibrium prices, which must be distinguished

total hours worked in that industry, while the measure of that value is the total number of hours worked.

It is clear that value, as Marx defines it, directly regulates the ratios in which commodities exchange in simple commodity production. The concept of value thus brings the diversity of the exchange-ratios of commodities under a single rule. If the array of commodity exchange-ratios is termed the 'form of value', then in simple commodity production the form of value coincides with its substance, or directly expresses its substance. Marx also claims that value ultimately regulates the ratios in which commodities exchange in capitalist commodity production, although the form of value in capitalist commodity pro-

from full equilibrium prices in simple commodity production proportional to the individual values of commodities. Duménil and Lévy term these full equilibrium prices 'values' in G. Duménil and Dominique Lévy, 'Value and Natural Prices Trapped in Joint Production Pitfalls', *Zeitschrift für Nationalökonomie*, Vol. 47, No1, 1987. With these equilibrium 'values', every hour of labour receives equal remuneration, since all labour in equilibrium is at once the most productive and average-productive labour of its type. Thus, in equilibrium, labour has no tendency to migrate between activities. With quasi-equilibrium prices, however, labour tends to switch from less productive to more productive techniques, although there is no net migration of labour between industries. Duménil and Lévy seem to assume that the 'laws of exchange' deal only with full equilibrium prices. It is assumed here that prices in both simple and capitalist commodity production are quasi-equilibrium prices. The form of value in simple commodity production is then proportional to the market or average value of a commodity, and might be termed a 'value', since the price form in this case directly reflects the (market) value.

duction does not directly manifest its alleged substance, but reflects it in a displaced and partial form.⁴⁴ In the next section, I shall use a sketch of the dialectic of price and value to show what Marx might mean by this.

6.4 THE DIALECTIC OF PRICE AND VALUE

As we have seen, there is an immediate identity and difference between prices and values in simple commodity production. While day to day prices fluctuate as a result of imbalances between supply and demand, these fluctuations 'cancel each other out', as Marx puts it, and yield an average price, around which short term prices oscillate. And although a number of processes of varying productivity produce the total output of any commodity, so that the 'individual values' of instances of one and the same commodity differ, their average yields a relatively stable market value. In simple commodity production, the average market price is the same as the market value.

There is thus, on the one hand, a set of quasi-equilibrium prices of commodities which are proportional to their market values. With these prices, labour of average productivity in any industry receives the same remuneration as averagely productive labour in any other industry. On the other hand, prices and individual values differ, due to short term

⁴⁴ See Anwar Shaikh, 'The Transformation from Marx to Sraffa', for an illuminating discussion of the relationship between the form and substance of value, and its bearing on the interpretation of Marx's labour theory of value.

oscillations in market prices and the employment of several techniques of production of varying labour productivity.⁴⁵

Marx claims that an immediate identity between price and value remains in capitalist commodity production. According to Marx, when we take the whole mass of commodities produced in any period, the value of the total output coincides with its price, and the total surplus-value, that is, the value which capitalists may appropriate as profits, coincides with total profits. Or, as Robert Paul Wolff points out, Marx assumes that, in any period of production, the ratio of total profits to total surplus value is the same as the ratio of the price of the output as a whole to its value. That is, if the price of the sum of commodities is taken to be equal to their value, then profits will also equal surplus value.

Many people have shown that Marx is mistaken on this point.⁴⁶ Total value and surplus value coincide with the price of the whole output and with total profits only in the cases where the economy is undergoing maximum proportionate expansion, where all industries have the same organic composition of capital, that is, where the ratio of the direct

⁴⁵ These equations from Appendix 1 signify the immediate identity of quasi-equilibrium prices with market values in simple commodity production: $P / \omega = \Delta P / \omega + L$; $\Delta = \Delta \Delta + L$; since any set of prices which satisfies the first equation also satisfies the second.

⁴⁶ For example, Ian Steedman, *Marx After Sraffa*, (London: New left Books, 1977), pp. 43-44.

However, G. Petrovic, 'The deviation of production price from labour values: some methodological and empirical evidence', *Cambridge Journal of Economics*, Vol 11, 1987, pp. 197-210, argues that the value rate of profit and general rate of profit are close together.

labour of production to the indirect labour embodied in the means of production is the same in all industries, and in some other theoretically insignificant circumstances.⁴⁷

Robert Paul Wolff argues that the coincidence between value and price as Marx presents it is crucial to Marx's project. Yet he finds that Marx only asserts the view, and provides no argument for it. Wolff surmises that Marx may have made a fetish of value in much the same way as Marx alleges that political economy and common sense make a fetish of the influence which social relations of production have over society by treating that influence as a natural force attaching to the tangible forms of commodities and money. So Marx must have fallen, despite himself, into conceiving of value as some sort of stuff, or ectoplasm which inheres in commodities.

However, while there is some evidence that Marx may indeed have thought this, there is even more evidence that such a view captures instead the way Marx considers exchange must 'appear' to those who participate in it, so that conceiving 'value' as an ectoplasm inherent in commodities becomes one of the objectively grounded ideologies of capitalism.

I think that the true source of Marx's conviction that price and value coincide for the total

⁴⁷ See Gilbert Abraham-Frois and Edmond Bereby, *Theory of Value, Prices and Accumulation: A mathematical integration of Marx, von Neumann and Sraffa*, Trans. M.P. Kregel-Javaux, (Cambridge: Cambridge University Press, 1979), pp. 218-226.

output of an economy is Hegel's view that appearance and essence coincide in a totality.⁴⁸ Now, as I intend to show, taking the relation between price and value as one of appearance to essence is crucial to making sense of their dialectic. However, the Hegelian conception of a coincidence of appearance and essence in the whole may well be false in general, and is, I think, of little significance to Marx's project.

Shaikh argues that what is important to Marx's theory of capitalism is the claim that value is neither created nor destroyed but only redistributed when commodities exchange. According to Shaikh, the deviation between the price and the value of total output is due to transfers of value which do not violate the claim that value is conserved in exchange.⁴⁹ And, as Shaikh also argues, there is still an immediate identity between price and value in capitalism. For example, there is a correspondence between the rate of surplus value and the money rate of profit, so that the money rate of profit can be represented as a displaced form of the overall value rate of profit.⁵⁰ Furthermore the ratio of surplus value to the value of capital used up in any period within the 'balancing' or the 'standard' industry of the economy, coincides with that industry's profit margin on the capital consumed in the period.⁵¹ In other words, there are a number of significant res-

⁴⁸ See Hegel, *Logic*, §131.

⁴⁹ Anwar Shaikh, 'The Poverty of Algebra', in *The Value Controversy* ed., Ian Steedman, et.al., (London: Verso Editions and New Left Books, 1981), pp. 284-286.

⁵⁰ Anwar Shaikh, 'The Poverty of Algebra', pp. 288-289, and also 'The Transformation From Marx to Sraffa', in *Ricardo, Marx, Sraffa*.

⁵¹ See Ian Hunt, 'The Labours of Steedman on Marx', p. 67.

pects in which value and price magnitudes are indiscernable.

Value and Price are not only immediately identical, they are mutually dependent. It is clear, as Steedman is at pains to point out, that the value of a commodity depends on the prices of commodities.⁵² For the value depends on the technique of production, which in turn depends on prices, as competition leads to the dominance of the technology with the least cost of production. So, far from being a refutation of the theory of value, the dependence of values on prices is a direct consequence of the organic unity of price and value.

On the other hand, the price of a commodity depends on the values of commodities. The price of any commodity depends on its value, and the exchange ratio of a commodity with any other, depends on the ratio of their values, which is expressed in mathematical terms in the following equations:⁵³

$$p_i = w \Lambda_i (1 + z_i), \text{ and;}$$

$$p_i / p_j = (\Lambda_i / \Lambda_j) \bullet (1 + z_i / 1 + z_j)$$

Here, the first equation says that the price of any commodity depends on its value,

⁵² Steedman, *Marx After Sraffa*, pp. 64-65.

⁵³ Appendix 2 gives a derivation of these equations, following Pasinetti and Anwar Shaikh, 'The Transformation From Marx to Sraffa', *Ricardo, Marx, Sraffa*, pp. 65-70. The variable 'p' ranges over prices, 'w' is a scalar representing the wage rate per hour, 'Λ' is a column vector of values, with 'Λ_i' and 'Λ_j' representing its ith and jth rows, and 'z' is the disturbance factor.

together with a disturbance factor which is a function of the ratio of the sum of the profits at each and every stage of production, to the corresponding sum of the wages, or the 'integrated' profits to wages ratio. The price of a commodity thus depends on its value, even if prices do not depend on values alone.⁵⁴

The second equation says that the exchange ratio between any two commodities depends on the ratio of the values of the two commodities, and a disturbance factor which depends on how the integrated profits to wages ratios of the commodities differ from one another. The ratio in which two commodities exchange coincides with the ratio of their values to the extent that their integrated profit to wages ratios coincide, since in that case the disturbance factor is small. Otherwise the exchange ratio deviates from the value ratio.

Value and price are not only 'immediately identical' and mutually dependent, but each also completes the other. For, firstly, each puts the finishing touches to the other, and secondly, each produces the other. Value puts the finishing touches to price inasmuch as the

⁵⁴ Variations in the relative price of a commodity over time will depend almost entirely on variations in its value if the integrated profits to wages ratio for the commodity remains constant. In 'The Transformation From Marx to Sraffa', *Ricardo, Marx, Sraffa*, p. 68, Shaikh argues that this is not just a hypothetical case. The integrated profits to wages ratio of any commodity will be roughly constant in a highly interdependent system, where every commodity is significantly involved in the production of every other. Here shifts in the profit wage ratio at any stage of production tend to be counteracted by opposite shifts in the profit/wage ratio at other stages of production, and by shifts in the weight each profit/wage ratio has in the integrated profits to wages ratio as a whole.

price of a commodity produced with the same combination of direct producers and means of production is high or low just when its value is high or low. This is exemplified in any industry when variations in the techniques of production are due to variations in the management of labour. Thus the same *ex ante* technique of production, that is, a technique employing the same combination of workers and means of production, will lead to a greater or lesser output depending on how successful management is in extracting labour from the direct producers. Here, while the cost of production for each producer is the same, this will be spread over a greater or lesser number of products. The price which covers the cost of production with the normal rate of profit will therefore be higher or lower according to whether the value of the commodity is higher or lower.

On the other hand, price puts the finishing touches to value when more than one output, for example, wool and mutton, is produced by the one process. From the standpoint of production it is arbitrary how the value of the output in such a case is divided among its component products. However, if the value is divided among the joint products of a production process in proportion to their prices, it is then possible to have two complementary modes of non-distorting value accounting.

One mode of value accounting is to determine the market values of each distinct use-value. The processes by which a single use-value is produced along with others can be decomposed into distinct processes by dividing the value of the composite output among its components in proportion to their prices. The instances of a given use value produced

by these different processes have distinct individual values. The market value of the use value can then be determined as a weighted average of its individual values.⁵⁵ Under the other mode of accounting, the composite output of each process of production is treated as a single product, for example 'the output of the wool industry', which, like food, is an aggregate of different use values. The composite output of each and every industry then has a price of production (measured as an amount of money per unit of value) which covers the cost of production and the normal rate of profit, just when the value of the composite product is divided among its components in proportion to their prices.⁵⁶

Further, price and value complete one another inasmuch as changes in price provide the impetus for changes in value, and vice-versa. Rising prices lead to a decrease in labour productivity (and thus rising values) since they promote the use of less productive techniques of production to meet demand, while falling prices force less productive producers out of the market and thereby increase labour productivity. Conversely, improvements to the productivity of labour in the production of any commodity tend to induce a relative fall in its average price, while a decline in labour productivity tends to produce a relative price increase.

⁵⁵ See Peter Flaschel, 'Actual Labour Values in a General Model of Production', *Econometrica*, vol 51, No. 2, March, 1983, pp. 435-454, and especially pp. 443-444, and G. Duménil and Dominique Lévy, 'Value and Natural Prices Trapped in Joint Production Pitfalls', *Zeitschrift für Nationalökonomie*, Vol. 47, No1, 1987.

⁵⁶ See Ian Hunt, 'The Labours of Steedman on Marx', p. 62.

In Volume 3 of *Capital*, Marx makes the claim that changes in the value of a commodity always produce a corresponding change in its price:

The law of value governs their movement in so far as reduction or increase in the labour-time needed for their production makes the price of production rise or fall. It is in this sense that Ricardo, who certainly feels that his prices of production depart from the values of commodities, says that 'the inquiry to which I wish to draw the reader's attention relates to the effect of the variations in the relative value of commodities, and not in their absolute value'.⁵⁷

What Marx says here is not strictly correct. Nevertheless, it can be argued that it holds as a generalization. That is, while the price of a commodity may fall even when its value increases, and its price may increase even when its value falls, increases or falls in price and value generally go together, so that there is a high probability that a change in price is associated with a corresponding change in value. Further, the probability that a change in price goes with a corresponding change in value approaches unity as the interval of time for the changes becomes greater.⁵⁸ What is crucial to Marx's position is that the workings of commodity production and exchange ground a high correlation between prices and values.

⁵⁷ Marx, *Capital*, vol 3, p. 280.

⁵⁸ See Marjoun and Machover, *Laws of Chaos*, Chapter Seven, especially pp. 145-149.

In the case of simple commodity production, the correlation between price and value is a direct consequence of competition. Marx appears to assume that in capitalist commodity production, the battle to cheapen commodities, and so to win competitive advantage, is also conducted principally through improvements to labour productivity.

This assumption can be supported by argument. Marx claims that competition between capitalists presupposes and produces accumulation, and that accumulation on the foundation of capitalist relations of production presupposes and produces a tendency toward labour displacing technological change. Marx presents an explicit argument for only one side of this relation, that is, for the idea that capitalist accumulation presupposes economy of labour.⁵⁹

Marx argues that in the course of capitalist accumulation, labour displacing technological change is required to maintain or increase the rate of surplus-value, which in turn is the principal determinant of the mass and rate of profits. Accumulation without labour displacing technological change leads to a growth in demand for labour-power and an increase in wages. Accumulation thus becomes an obstacle to further expansion, since the rate of surplus value and profitability can be maintained only by keeping wages in check, which requires a decline in the rate of accumulation.⁶⁰

⁵⁹ Marx, *Capital*, vol 1, pp. 436-437, pp. 645-646.

⁶⁰ *Capital*, vol 1, pp. 771-776.

Further, Marx claims that as capitalism develops it becomes more difficult to simply increase the hours worked by labourers either by extending the working day or by compelling more work to be done in any interval of time. This means that it becomes progressively more difficult to increase what Marx terms the absolute rate of surplus value. Therefore, as capitalism develops, the rate of surplus value can be maintained or increased only by increasing what is termed by Marx the relative rate of surplus-value. This in turn presupposes a general reduction of the labour content or value of wage goods, and thus a reduction in the value of all commodities (excepting luxury goods, perhaps).

Now, from the fact that capitalist accumulation needs labour saving technical change, it does not follow that competition will produce the desired outcome. If capitalists could be certain of the future, then, as Joan Robinson suggests, when current and future production costs are known for all alternatives and the choice of technique is made solely on the basis of relative profitability, no 'bias' toward labour saving technical change need appear. However, as capitalists cannot be certain of the future, or even have complete knowledge of the present and past, the relative profitability of techniques of production is more or less unknown, and therefore is not the sole determinant of technological change.

Schefold argues that if capitalists take into account uncertainties over the future level of wages and profits, then the criterion of choosing techniques of production on the basis of superior profitability under feasible variations in the rate of profit, coincides with the criterion of choosing labour saving technical changes.⁶¹ Further, when capitalists cannot

⁶¹ B. Schefold, 'Fixed Capital as a Joint Product' in L. Pasinetti, ed., *Essays on the Theory of Joint*

be certain about the determinants of profitability, their plans for technical change may need to accommodate 'worst case' scenarios, such as labour shortages and increasing wages, and this will produce a 'bias' toward labour saving options.

From the dialectic of price and value, it is evident that price and value are related as appearance to essence.⁶² Prices are particularistic, concretely determined phenomena which express and constitute economy with labour and the development of labour productivity as their formative, underlying pattern. That is, fluctuations of prices in the market constitute competitive pressures which bring about economy in the use of labour and the development of labour productivity, while this in turn shapes the initially chaotic field of commodity exchanges into a coherent whole which develops in a definite way.

Of course, it can be argued that it is arbitrary to see price phenomena as the appearance of the essential 'regulation of labour-time and the distribution of social labour among various production groups',⁶³ that is, as the appearance of *value* as a social relation of production crucial to commodity production. In the next section I consider whether economy in the use of any other resource could be viewed just as legitimately as the essence of price phenomena.

Production, (New York: Columbia University Press, 1980), p. 212.

⁶² For a useful account of the Hegelian distinction between appearance and essence, see Crawford

Elder, *Appropriating Hegel*, pp. 22-24

⁶³ Marx, *Capital*, vol 3, p. 991.

6.41 THE SIGNIFICANCE OF LABOUR VALUES IN COMMODITY PRODUCTION

Robert Paul Wolff argues that Marx's definition of 'value' is arbitrary.⁶⁴ He points out that we could just as easily define the 'corn value' of any commodity as the amount of 'socially necessary abstract corn' required for its production, so that 'value' is now the equivalence relation through which the averagely productive, direct or indirect use of a tonne of corn in any industry is equated with the averagely productive use of a tonne of corn in any other industry. Wolff goes on to point out that so long as the technology of the economy is productive, profits exist if and only if the system produces surplus corn value.

Wolff considers the following objection to his claim that it is arbitrary to stipulate labour rather than, for example, corn as the substance of 'value'. The objection is that corn-value cannot play the same role as labour value, since corn is not indispensable to capitalist production, while labour is. Because labour is indispensable to capitalist production we can show that there can be positive profits in a capitalist economy only if there is a positive surplus 'labour value'.⁶⁵ However, since a capitalist economy need not produce corn,

⁶⁴ Robert Paul Wolff, *Understanding Marx: A Reconstruction and Critique of Capital*, (Princeton: Princeton University Press, 1984), pp. 163-178, and especially pp.176-178.

⁶⁵ See M. Morishima, *Marx's Economics*, (Cambridge: Cambridge University Press, 1973), pp. 53-

profits are possible without a positive surplus 'corn value'.

Wolff's response to this objection is that even if corn taken as a particular commodity is dispensable, aggregates such as food, land or energy are as indispensable as labour is. Moreover, if exception is taken to aggregates such as food and energy, inasmuch as they are not one single use-value, but a composite of a number of distinct commodities with distinct uses, the same applies to labour. Abstract labour is itself the result of abstracting from the distinct uses of different types of labour. The specific activity of knitting cannot be substituted for weaving in a production process with any expectation of the same productive result. Abstract labour is thus not homogeneous labour.

However, this debate over whether it is arbitrary to compare commodities with respect to their labour costs as opposed to other sorts of cost rests on an assumption which Marx rejects. Value accounting, as Wolff represents it, involves taking the price of labour as a numeraire, and then determining what any commodity costs in terms of labour by calculating the amount of labour used up directly and indirectly in the production of the commodity. But if capitalists purchase labour power and not labour, as Marx claims, then every commodity will cost nothing in terms of the labour directly and indirectly used in its production. Through the wage labour contract, capitalists thus pay for control over the use of their employees' labouring capacities during the working day, but they appropriate for free the actual collective labour services performed by their employees.

54, for a proof of what he calls 'The Marxian General Theorem of Exploitation'

We can, of course, consider labour-power instead of labour as a cost of production in the way Wolff does, and compute the direct and indirect monetary cost of the labour-power employed in production. Then, given the rate of surplus-value associated with each technique of production and each industry, the cost of labour-power can be expressed in terms of the cost of labour at the average wage rate per hour. Labour-power rather than labour may therefore be taken as a numeraire, and compared in that role with other resources. We can ask whether labour-power is a qualitatively heterogeneous aggregate in the same way that food and energy are, or as we have just seen, labour is.

Now, generally, any labourer is substitutable for any other, although individuals may be more or less productive at any task. We can therefore treat labour-power as relatively homogeneous in qualitative terms, although it varies quantitatively between individuals. Marx thus defines labour-power as the general productive ability shared by 'ordinary' human beings.⁶⁶ This definition is usable since capitalist production presupposes and produces progressively less reliance on exclusive skills, so that employment comes to be predominantly of commonly shared human skills. This homogeneity of labour-power is consistent with labour being heterogeneous, since the qualitative variation of labours is due not to the skills they express but the ways in which those skills are applied in various situations and to various objects. So, within the problematic set up by Robert Paul Wolff, labour-power does stand out as indispensable to capitalist production.

⁶⁶ Marx, *Capital*, vol 1, p. 135. Of course, not being 'ordinary' does not involve a departure from humanity, but amounts only to having a significant ability or disability.

Against this, it may be claimed that human skills are not as homogeneous as we have made out. Thus highly skilled work generally relies on exceptional skills, which only a small number of individuals possess at birth, or can develop out of generally shared productive abilities. However, these exceptional skills need not be aggregated with labour-power so that it becomes a qualitatively heterogeneous aggregate of use-values, such as food or energy are, since commonly shared human skills are in any case indispensable to production. There is no corresponding qualitatively homogeneous component of food, land or energy which is similarly indispensable. Consistently with the claim that labour-power is indispensable to capitalist production, we can therefore consider exceptional skills as human forces of production distinct from labour-power, and treat them theoretically as non-reproducible scarce resources.

Nevertheless, although labour-power, and by extension, its expression in labour, has some claim to be thus uniquely indispensable to capitalist production, this is not the principal reason for advancing a labour theory of value. We have reason to support a labour theory of value, not because labour-power is an indispensable productive force, but because value is a significant social relation of production. The market may well orient producers to economy in the use of any resource. However, economy in the use of labour is crucially significant to the production of commodities, because only commodity production must at once presuppose and overcome the anarchy of private production.

Marx considers that the most important aspect of any pattern of control over production is the direct or indirect control exercised over the direct producers. In simple commodity production, this control is exercised through the market, and orients the direct producers to economy in the use of labour with regard to both the usefulness of the product and the efficiency with which it is produced. In capitalist commodity production, the market immediately orients capitalists to profitable lines of investment. However, due to the all pervasive role in production of labour power, and the strategic importance of labour saving technical change to the reproduction of capitalist relations of production, the orientation of production toward profitable lines of investment largely coincides with its orientation to economy in the use of labour.

Economy in the use of labour is especially significant because the developmental possibilities of the capitalist mode of production depend critically on the development of labour productivity. Thus capitalist control over the production process is strengthened and wages are kept in check through labour displacing technical change. So, for all of the above reasons, and abstracting from the particular circumstances of this or that industry, we may claim that value, or the orientation of privately interested labour to increased labour productivity, is the predominant social relation of production within commodity production.

6.42 THE PRIMACY OF VALUE

In this section I shall briefly look at the question of whether and in what way price is subordinate to value in commodity production, before going on to review various objections to Marx's labour theory of value in the light of its interpretation as given here.

As noted in the previous chapter, there appear to be two senses in which the economic base is 'predominant' over the legal and political superstructure. In the first sense, the economic base is 'predominant' in the way a dominant allele at a given gene locus is 'predominant' over a recessive allele because its impact on the phenotype is greater. Thus, for example, when a gene for brown eyes is paired with a blue eye gene, the resulting eye colour is closer to brown than to blue. In the second sense, the economic base is 'predominant' in the way that the genotype is predominant over the phenotype because it orchestrates the rates at which various proteins are manufactured in the organism, and so determines its nature.

If we consider the case of price and value in the light of this distinction, then I think that value can be 'predominant' over price only in the second sense. For, it is hard to imagine how we can say that value has a stronger effect in a market economy than price does, since it is only through price that value has any effect at all. On the other hand, given that value and price are related as essence to phenomena as was argued above, it immediately

follows that the relation of value to economic phenomena is analogous to the relation between the genotype and the phenotype, and so it follows that value is predominant over price in that sense.

6.5 CRITICS OF THE LABOUR THEORY OF VALUE

It is clear that a number of the criticisms of Marx's labour theory of value involve claims which are not at all incompatible with the theory, but are precisely what one would expect if the theory were true. Thus, when Steedman says that values cannot determine prices because prices determine values, he is appealing to the fact that the spread of technologies which determines the value of a commodity is in turn the outcome of price competition. However, we have seen that the dependence of value on price is part of the dialectic of price and value.

Further, when Roemer and others argue that values are indeterminate in economies with joint production, or that prices enter into a determinate specification of values, they are only pointing out that price puts a finishing touch to value, which, once again, is a consequence of the dialectic of value and price.

It is not immediately clear why it is claimed that values are indefinable if there are innate differences of skill between workers, or if there are wage differentials due to the relative pleasantness or safety of the tasks employees are expected to perform. For value is an

equivalence relation over variously productive labours, which involves comparing any labour with the averagely productive labour of its type, while differential wages concern variations in labour-power rather than labour. Thus ineradicable differences in skills between workers, or differential wages due to skill differences, bear on the question of whether it is possible to take labour power as a single, qualitatively homogeneous productive force, which is surely a matter distinct from comparisons between labours of varying productivity.

Now wage variations due to skill differences do not even show that labour-power is qualitatively heterogeneous. I have argued that capitalist relations of production involve the hire of labour power as a generally shared, qualitatively homogeneous, but quantitatively variable human capacity for labour. In addition to labour power, some individuals possess highly specialized skills, which are possibly due to some special genetic or environmental factor of their development. These skills are not part of labour power, but are scarce resources which are economically on the same footing as rare metals or highly fertile land. If this is the case, then wage differences due to quantitative differences between labour-powers, or due to the scarcity of some specialized skills, are consistent with labour-power being qualitatively homogeneous.

Differential wages are also a sign of barriers to competition which prevent wages settling to the same level in all occupations. These barriers to competition can arise from preferences workers have for more pleasant or safer work, or from preferences employers

have for white or male employees, for example. That the price of labour-power need not thus be uniform is possible, but surely presupposes rather than precluding the possibility of defining value or its inverse, labour productivity.

As we have seen above, the real challenge to the possibility of defining labour productivity comes from labour which results in a number of distinct products, as we then have the problem of how the labour involved in a process is to be divided up between its joint products. I have suggested that this means that price is involved in the determination of values. However, neither this, nor the element of arbitrariness in dividing up the labour involved in a production process between its products, vitiates the definition of value when taken in the context of a dialectic of price and value.

There remains only the claim of Samuelson and Steedman that value has no theoretical role. Whether this is so clearly depends on what role value is supposed to play. It is thus quite possible for value to be redundant in one role, but necessary in another. Steedman implicitly makes this point when he argues that value is redundant in the determination of prices, but might be required in the peripheral task of specifying the composition of the surplus product in a capitalist economy.

From the standpoint of the dialectic of price and value, the concept of value is clearly required to articulate the law of value, which identifies a general trend in the way prices alter over time. The law of value is that, as a general rule, competition between

commodity producers, which is effected through reducing costs, presupposes and produces savings of labour, and leads to an all-round and progressive increase in labour productivity. This trend to diminishing values or increasing labour productivity is crucial to the development of the system of commodity production, especially in its capitalist form. The theoretical task performed by the law of value is thus quite different from the task which Samuelson and Steedman are concerned with of specifying a set of simultaneous equations from which prices of commodities in a capitalist economy can be determined.

I conclude that the neo-classical, and the related neo-Ricardian critique is at best effective against only some interpretations of the labour theory of value, but leaves untouched the theory as I have interpreted it.

6.6 CONCLUSION

Some appraisals of the labour theory of value and its place in Marx's theory of capitalism may overdo its significance. However, the view that the labour theory of value can be excised from Marx's theory without affecting the central part of his theory of the capitalist mode of production is, I believe, quite wrong. For those who view capitalist profit as grounded in the advantages capital has in the market, the passing of the labour theory of value is, perhaps, of little significance. However, for those who take Marx's point that capitalist profit is grounded in the forms of control which capital exercises over the production process, the labour theory of value serves a crucial function. It highlights the

role that the market plays in the functioning and development of the capitalist mode of production when it orients capitalists seeking competitive advantage to maintain and increase the productivity of labour. What this chapter has shown is that Marx's model of the unity of opposites is essential to grasping this theme in Marx.

Appendix 1.

Following Duménil and Lévy,⁶⁷ (A, L, B) gives a technology in which A_j is a row vector of inputs in process j , B_j is a row vector of outputs, and L_j is a scalar measuring the amount of labour used in process j , so that the inputs are transformed into outputs through the incorporation of labour. The number of products is n , and each product i appears in the inputs and outputs of each process in certain quantities, which may be zero. The number of productive processes is m . The m vectors A_j and B_j form the input and output matrices A and B , and the m scalars L_j form the column vector L of labour inputs. Each process has a level of activity measured by scalars Z_j , which make up the activity row vector Z . We thus have a technology (A, L, B) ; and an economy: (A, L, B, Z) .

Now let us suppose, for the sake of simplicity, that each process has only one non-zero output B_j^i , so that each process produces only one output.

- $J(i)$ is then the set of processes producing product i .
- Y_i is a scalar measuring the total amount of good i produced, so that
- $Y_i = \sum_{j \in J(i)} Z_j$.

Let • Λ_j^i be a scalar measuring the individual value of good i produced by process j , and

- $\underline{\Delta}^i$ be a scalar which measures the market value or average value of good i . $\underline{\Delta}$ is

then the column vector of market values.

⁶⁷ G. Duménil and Dominique Lévy, 'Value and Natural Prices Trapped in Joint Production Pitfalls',

The following equations define individual and average market values:

$$\Lambda_j^i = A_j \Delta + L_j \text{ for } j \in J(i),$$

$$\Delta^i = \sum_{j \in J(i)} \Lambda_j^i / Y_i, \quad i = 1, 2, \dots, n.$$

Now let Δ_i be the average row vector of inputs utilised in the production of commodity i , and Δ be the matrix of these vectors. Let L_i be the average labour requirements for product i , and L be the vector of such labour requirements.

The average technology is then determined by the following:

$$\Delta_i = \sum_{j \in J(i)} Z_j A_j / Y_i,$$

$$L_i = \sum_{j \in J(i)} Z_j L_j / Y_i,$$

The prices of commodities, p_i , then satisfy both of the following equations in simple commodity production:

$$p/\omega = \Delta P/\omega + L.$$

$\Delta = \Delta \Delta + L$, which signifies that in simple commodity production (with each industry assumed for the sake of simplicity to have only one output), quasi-equilibrium prices which ensure that averagely productive labour in any industry receives the same remuneration are proportional to market values.

In capitalist commodity production, Marx's quasi-equilibrium industrial prices of production are the prices of production of the average technology in each industry, so that the price of each commodity i is given by:

$$p_i = (1 + r_i) (p \Delta_i + L_i w), \text{ where } p \text{ is the row vector of commodity prices, and } r$$

$=r_i$ for all i , is the uniform rate of profit, equal to the average rate of profit in industry i ,

given by:

$$r_i = \frac{\sum_j \epsilon_{j(i)} Z_j (pA_j + L_j w) (1 + r_j)}{\sum_j \epsilon_{j(i)} Z_j (pA_j + L_j w)}$$

Appendix 2

Given the truism that, in a capitalist system, the equilibrium price of a commodity must cover the costs of production and pay the normal rate of profit on those costs, then, as Pasinetti and Shaikh show, the price of a commodity reduces to the integrated wages and profits payable to the workers and capitalists involved in each stage of its production.⁶⁸

For the price of a commodity is the sum of its wage costs, profits, and material costs.

Now, the sum of the material costs is the sum of the cost of each of the materials used in production of the commodity, which in turn is the sum of the wage costs, profits and

material costs of production of each the materials used. The material costs of production

of the materials used to produce the commodity can in turn be broken down into wage

cost, profits, and further material costs, and so on. That is, the price, p_i , of each

commodity, i , is given by:

$$p_i = W_i^T + \pi_i^T, \text{ where } W_i^T \text{ and } \pi_i^T \text{ are the integrated wages, } W_i^T, \text{ and}$$

profits of production, π_i^T , or the summations over all stages of production of the wages

and profits payable in each stage.

Now, given that the price of any commodity reduces to its integrated wages and profits, it

follows that the price of a commodity depends on its value, as:

$$W_i^T = w L_i^T, \text{ if the wage rate per hour, represented by the scalar } w, \text{ is}$$

assumed to be uniform for the sake of simplicity, and L_i^T is to be the integrated labour

⁶⁸ L. L. Pasinetti, ed., *Essays on the Theory of Joint Production*, p. 22.

requirements of the production of i , where:

$$L_i^T = L_i + L_i^{(1)} + L_i^{(2)} + \dots, \text{ where } L \text{ is a column vector of direct labour}$$

inputs, its i th row L_i is the direct labour of production, $L_i^{(1)}$ is the direct labour of production of the means of production, $L_i^{(2)}$ is the direct labour of production of the means of production of the means of production, and so on.

Now, it is also clear that:

$$\pi_i^T = \pi_i + \pi_i^{(1)} + \pi_i^{(2)} + \dots, \text{ where } \pi_i \text{ are the direct profits of pro-}$$

duction, $\pi_i^{(1)}$ are the profits on the production of the means of production, and so on.

And it is clear that, if ' Λ ' is a column vector of values, with ' Λ_i ' representing its i th row,

then Λ_i is the value of i , and is given by:

$$\Lambda_i = L_i^T$$

Now, if we set: $z_i = \pi_i^T / W_i^T$, so that z_i is the integrated profits to wages ratio, then it

follows that:

$$p_i = w \Lambda_i (1 + z_i), \text{ and:}$$

$$p_i / p_j = (\Lambda_i / \Lambda_j) \cdot (1 + z_i / 1 + z_j), \text{ where the variable 'p' ranges over}$$

prices, ' w ' is a scalar representing the wage rate per hour, and ' z ' is the disturbance factor defined above.

CHAPTER SEVEN

MARX'S THEORY OF REVOLUTION

7.0 INTRODUCTION

In this chapter, I shall discuss that aspect of Marx's theory of revolution which led both Marx and Engels to claim that when they proposed a revolution to overthrow the property system of capitalism and establish a society of free, co-operative producers, this was a 'scientifically' grounded version of socialism as opposed to 'utopian' variants. In a passage from the *Communist Manifesto*, Marx and Engels indicate what they mean by the distinction:

The Socialist and Communist systems properly so-called...spring into existence in the early undeveloped period...of the struggle between proletariat and bourgeoisie. ... the economic situation, as they [early Socialists] find it, does not as yet offer to them the material conditions for the emancipation of the proletariat ... Historical action is to yield to their personal inventive action; historically created conditions of emancipation to fantastic ones; and the gradual spontaneous class organization of the proletariat to an organization of society specially contrived by these

inventors. Future history resolves itself, in their eyes, into the propaganda and the practical carrying out of their social plans. ... Hence, they reject all political, and especially all revolutionary, action; they wish to attain their ends by peaceful means, and endeavour by small experiments, doomed to failure, and by the force of example, to pave the way for the new social Gospel. ... these Socialist and Communist writings contain also a critical element. They attack every principle of existing society. ... The practical measures proposed in them ... point solely to the disappearance of class antagonisms ... which in these publications are recognized in their earliest indistinct and undefined forms only. These proposals, therefore, are of a purely Utopian character.¹

Two distinctive features of Marx's scientific socialism emerge from this. The first is that Marx's communism is supposed to be objectively and materially grounded in the historically created 'economic situation' of society. The second is that it recognizes that socialism can only emerge from a 'spontaneous' political movement of a social class, the proletariat, whose members have an overriding interest in socialism.

Marx and Engels do not claim that conscious action plays no role in history. What they claim is that conscious action is bound to be futile if it is directed to ends which bear no relation to class interests, and if the means for realizing those ends are lacking in the historically created, practical, material foundation of society. Marx asserts the necessity of a

¹ Karl Marx and Friedrich Engels, *Manifesto of the Communist Party*, in *Collected Works*, Vol. 6, pp. 514-516.

material foundation for the fulfillment of conscious aims in the following passage:

Revolutions need a *passive* element, a *material* base. Theory is only realized in a people so far as it fulfills the needs of the people. ... It is not enough that thought should seek to realize itself; reality must also strive towards thought.²

Marx and Engels are not so much concerned with what can be thought best for the future of society, but with what individuals in society pursue in practice, and is thus emerging from society in its present form:

Communism is for us not a *state of affairs* which is to be established, an *ideal* to which reality [will] have to adjust itself. We call communism the *real* movement which abolishes the present state of affairs. The conditions of this movement result from the premises now in existence.³

And Engels emphasizes that the premises of this social change are historically conditioned:

... the appropriation by society of all the means of production has often been dreamed of, more or less vaguely, by individuals, as well by sects, as the ideal of

² Karl Marx, *Contribution to the Critique of Hegel's Philosophy of Right: Introduction*, in *The Marx-Engels Reader*, Second Edition, ed., Robert C. Tucker, (New York: Norton, 1978)

³ Karl Marx and Friedrich Engels, *The German Ideology*, in *The Marx-Engels Reader*, p. 162.

the future. But it could become possible, could become a historical necessity, only when the actual conditions for its realization were there. Like every other social advance, it becomes practicable, not by men understanding that the existence of classes is in contradiction to justice, equality, etc., not by the mere willingness to abolish these classes, but by virtue of certain new economic conditions. ... the abolition of classes in society presupposes ... the development of production carried out to a degree at which appropriation of the means of production and of the products, and with this, of political domination, of the monopoly of culture, and of political leadership by a particular class of society, has become not only superfluous but economically, politically, intellectually, a hindrance to development.⁴

In this chapter, I shall employ Marx's dialectic to clarify the distinction which Marx and Engels attempt to draw between 'scientific' and 'utopian' socialism. I shall attempt to show that what is meant by 'scientific' socialism is simply a socialist project which takes cognizance of that fact that conscious action and its objective circumstances constitute a unity of opposites. Such a dialectic of conscious action and its objective circumstances is implicit in the following account from Marx and Engels of history as the interplay of subjective and objective determinants:

each stage [of history] contains a material result, a sum of productive forces, a historically created relation to nature and of individuals to one another, which is

⁴ Friedrich Engels, *Socialism: Utopian and Scientific in The Marx-Engels Reader*, pp. 713-714.

handed down to each generation from its predecessor; ... which on the one hand is indeed modified by the new generation, but on the other also prescribes for it its conditions of life and gives it a definite development, a special character. It shows that circumstances make men just as much as men make circumstances.⁵

I shall defend this account from easy misconceptions, such as the two extreme interpretations which Jorge Larrain identifies.⁶ One extreme involves taking objective conditions to be already ripe for change, so that only conscious action for change is needed to bring it about. The other sees conscious action for change as following when the objective conditions for change are ripe. On the interpretation I shall argue for, objective conditions are seen as setting limits to conscious action which, however, within those limits can change objective conditions, and thus set new limits to conscious action.

I shall then attempt to show that Marx's theory of revolution does not involve wishful thinking as to whether the working class must or might ever be prepared to act in a revolutionary way. The claim of critics such as Elster is that members of the working class and the ruling capitalist class cannot be expected to behave rationally in ways which will lead to revolution. For, if both act rationally, capitalists can be expected to make concessions which will defuse revolutionary action, while workers will not wish to risk what they presently have for the uncertainties and dangers of revolution.⁷

⁵ Marx and Engels, *The German Ideology*, in *The Marx-Engels Reader*, p. 164.

⁶ Jorge Larrain, *A Reconstruction of Historical Materialism*, (London: Allen & Unwin, 1986), pp. 93-94.

I shall show that when taken from the standpoint of a dialectic of conscious action and its circumstances, revolution is not a single action which workers and capitalists might consider taking or avoiding, but is the outcome of a process of social change through which both agents and circumstances develop over time, so that actions which might be irrational at the beginning may become rational in the light of changes to both agents and their circumstances.

7.2 CONSCIOUS ACTION AND ITS CONDITIONS

In this section, I shall look at the relation which Marx posits between the conscious determinants of action and their objective basis. Marx takes an objectivist position which is currently out of fashion. However, Marx does not conceive of consciousness as a 'mirror of nature' in the simplistic way of the empiricists criticised by Richard Rorty.⁸ Marx holds that beliefs and intentions reflect, and therefore are 'immediately identical' with corresponding objective conditions and interests. However, Marx also claims that the conscious aims of individuals may be at odds with, and therefore contradict their interests. And he claims that beliefs may misrepresent the objective world.

Action is consciously governed by aims and beliefs. It is objectively conditioned by

⁷ Jon Elster, *An Introduction to Karl Marx*, (Cambridge: Cambridge University Press, 1986), pp. 159-162.

⁸ Richard Rorty, *Philosophy and the Mirror of Nature*, (Oxford: Basil Blackwell, 1980), pp. 42-43.

interests and available means of action. Action is the point where consciousness and the objective world meet. In this section, I shall examine how the subjective and objective determinants of action, and thus of class struggle, may correspond and yet be at odds with one another. In the next section, I shall consider how subjective and objective conditions of action may develop, so that they become progressively more adequate to human existence. For what people do, and therefore class struggle in particular, develops as practice transforms objective conditions and interests, and thereby produces new forms of consciousness, and makes available new means of action.

Aims and beliefs 'reflect' their objective circumstances. However, they are not simply a 'mirror of nature', since nature itself does not always outwardly show itself. Marx claims that there is a discrepancy between appearance and reality which gives science its point.⁹ Thus Marx claims that a worker's experience of capitalism is initially that of the market, which appears as a 'very Eden of the innate rights of man [and] is the exclusive

⁹ '...what is true of all forms of appearance and their hidden background is also true of the form of appearance,...'wages', as contrasted with the essential relation manifested in it,... forms of appearance are reproduced directly and spontaneously, as current and usual modes of thought; the essential relation must first be discovered by science', Marx *Capital*, vol 1, p. 682. See also Marx's letter to Engels: 'here it will be shown how the philistine's and vulgar economist's *manner of conceiving things* arises, namely, because the only thing that is ever reflected in their minds is the immediate *form of appearance* of relations and not their *inner connection*. Incidentally, if the latter were the case, we would surely have no need of *science* at all.', *Collected Works*, Vol 42, (London: Lawrence & Wishart, 1987), p. 390.

realm of Freedom, Equality, Property and Bentham.¹⁰ The despotism over labour exercised by the capitalist in the sphere of production appears to be the outcome of contracts of employment freely entered into. Thus as Marx says:

*In competition, therefore, everything appears upside down. The finished configuration of economic relations, as these are visible on the surface, in their actual existence, and therefore also in the notions with which the bearers and agents of these relations seek an understanding of them, is very different from the configuration of their inner core, which is essential but concealed, and the concept corresponding to it. It is in fact the very reverse and antithesis of this.*¹¹

Marx's distinction between appearance and reality is not between delusion and fact, but between the surface of reality as it presents itself to the passive observer, and what is represented as the causal foundation of phenomena by theories, which agents adopt so as to provide themselves with some measure of control over their circumstances. The exemplary instance, or paradigm of this distinction is the contrast between the conception of the earth as stationary and flat with the heavens revolving overhead, and the conception of the earth as a sphere revolving under the stars. The former conception is a faithful reflection of how things may appear to observers who need knowledge only of their immediate locality, but is the reverse of the latter, which is the conception required for effective global navigation.¹² Jorge Larrain makes the point that the spontaneous consciousness

¹⁰ Marx *Capital*, vol 1, p. 280.

¹¹ Karl Marx *Capital*, vol 3, (Harmondsworth: Penguin, 1981), p. 311.

of individuals in everyday life may invert, distort or conceal the contradictions of everyday life.¹³

However, we are not left with the simple fact that our beliefs may correspond with or distort reality. As was noted in chapter four, theory and practice constitute a dialectic through which each develops. Thus a belief, which corresponds with the superficial appearance of things, but inverts the reality underlying it, leads to actions which expose the limitations of that belief, and thus prompt the formation of more adequate beliefs. Marx clearly believes that theoretically informed experience leads to beliefs which more and more adequately correspond with reality, so that no matter how dominant subjective factors initially may be in shaping beliefs, eventually objective factors become predominant.

If our interests lie in what we need in order to flourish, then the translation of interests into consciousness constitutes the core of our aims. Once again, however, interests may be distorted or concealed in translation. Thus the relative poverty, insecurity and alienation of workers may be against their interests, but if removing these evils along with the social relations which produce them is generally thought an unattainable end, then that end is not likely to be among their consciously held aims. Instead, workers may pursue ends

¹² See B. Hessen, 'The Social and Economic Roots of Newton's *Principia*', (New York: Fertig, 1971), for a detailed account of the technical problems which gave an impetus to the theories of Galileo and Newton.

¹³ Jorge Larrain, *Marxism and Ideology*, (London: Macmillan, 1983), pp. 23-41.

which sublimate their interests, or provide consolation for their lack of fulfillment. In an arresting passage, Marx claims that this is true of religion:

Religion is the general theory of this world, its encyclopedic compendium, its logic in popular form, its spiritual *point d'honneur*, its enthusiasm, its moral sanction, its solemn complement, its general basis of consolation and justification. It is the *fantastic realization* of the human being inasmuch as the *human being* possesses no true reality ... *Religious* suffering is at the same time an *expression* of real suffering and a *protest* against real suffering. Religion is the sigh of the oppressed creature, the sentiment of a heartless world, and the soul of soulless conditions.¹⁴

However, aims which displace or sublimate interests are not the only ones which may be at odds with them. Allen Buchanan has argued that individual rationality precludes collective action to satisfy shared interests. This is because individuals contemplating whether they will contribute to the good in question must prefer the alternative of making an exception of themselves. That is, they must prefer a situation in which others take on the effort of bringing about the good they wish to enjoy, thereby saving themselves the bother of their own contribution. In the terminology of game theory rather than that of Kantian morality, Buchanan claims that it is always rational for the individual to 'free-ride' in order to maximise their own or group utility.¹⁵ This, of course, confronts any

¹⁴ Karl Marx, 'Contribution to the Critique of Hegel's *Philosophy of Right*: Introduction', *The Marx-Engels Reader*, Second Edition, ed. Robert C. Tucker, (New York: Norton, 1978)

individual with a stark situation. Assuming that people generally behave 'rationally', we can then be certain that the free co-operation of interested individuals cannot obtain any good which individuals might enjoy regardless of whether they contribute to it. This is a Hobbesian vision: to achieve such goods, we need a coercive authority which forces individuals to contribute their fair share to that achievement.

Thus the 'free-rider' problem is a standard problem for any good which is obtained by collective effort or co-operation, and arises whenever individuals can make an exception of themselves. For example, the problem of air pollution stems in part from individuals burning rubbish, and this part of the problem might be solved if everyone agreed to dispose of rubbish in some other way. Given Buchanan's reasoning, no such agreement can hold, no matter what the cost of failure.

However, this oversimplifies the problem. Whether it is rational to make an exception of oneself depends in part on one's moral principals, and on the consequences of such action. Obviously Kantians, by definition, will reject making an exception of themselves. Buchanan is aware of this, but contends that this irrelevant in the context of class struggle, since Marx rejects any idea that socialism depends on morality.¹⁶ Buchanan considers the possibility that a preference for taking a benefit without cost to oneself

¹⁵ Allen Buchanan, 'Revolutionary motivation and Rationality' in *Marx, Justice, and History*, eds, Marshall Cohen, Thomas Nagel, Thomas Scanlon, (Princeton, New Jersey: Princeton University Press, 1980), especially p. 270.

¹⁶ *Marx, Justice, and History*, pp. 279-280.

might be changed by penalties for 'free-riding', or by benefits derived from participation alongside others in a common enterprise.

Buchanan glides over what he calls the 'process' benefits to be gained from working with others. Marx, of course, is very much aware of the benefits which derive from solidarity as such, and Buchanan recognizes this. However, he thinks such benefits are of little weight, which sits rather strangely with passages where Marx claims that the proletariat can only become fit to rule through the revolutionary process itself.¹⁷ With regard to reprisals for free-riding, Buchanan equates coercion with violence exercised by a power which is something like Hobbes' sovereign, although it is quite likely that free-riders may be deterred by moral disapproval and ostracism.

However, coercion is not the only way to ensure that a sufficient number of individuals have an aversion to free-riding. Even utilitarians have to consider the possibility that sponging on the efforts of others will tend to undermine the trust necessary for free co-operation and its benefits in many areas of life. Individuals will realize that they face not just one, but indefinitely many choices and their consequences. Thus, bitter experience of the consequences of Buchanan's rationality may be sufficient for individuals to prefer doing their fair share to stabbing others in the back. If this is so, the situation which Buchanan models as a 'prisoner's dilemma' should be modelled instead as an 'assurance' game.¹⁸

¹⁷ Hal Draper recognizes the significance of these passages in *Karl Marx's Theory of Revolution*, vol II, (New York: Monthly Review Press, 1987), pp. 72-80.

Moreover, utilitarians need not suppose that their behaviour will make no difference to the outcome in cases where benefits depend on the concerted action of many. Nor need they suppose that they face only a one-off choice. Each individual contributes something to pollution, for otherwise what many individuals do would have no effect. So a little reflection may convince an individual that, given the number of people who may have an excuse for burning off and will do so, and the need for a margin of safety, it may be necessary for anyone without an excuse to refrain, or necessary for everyone to refrain from burning off on all but one day of the month, for example. That is, it may be rational for utilitarians to pursue a mixed strategy of burning off on some occasions and not on others, given that they thereby make some contribution to the good, and they will face the choice of contributing on indefinitely many occasions.¹⁹

Mancur Olson presents a related but somewhat different argument to that given by Buchanan.²⁰ Olson is concerned to show that although behaviours benefitting a group may be

¹⁸ See William Shaw, 'Marxism, revolution, and rationality' in *After Marx*, edited by Ball and Farr, who makes this point and many others in a thorough analysis. The fact that a repeated prisoner's dilemma may become equivalent to an assurance game is pointed out at pp. 23-24, and that people's preferences can result in an assurance game from the start on pp. 25-26, and p. 28.

¹⁹ This is how Smart defends utilitarianism from the charge that it invites individuals to make exceptions of themselves, especially when that may seem not to make much difference to the outcome.

J.J.C. Smart, 'Restricted and Extreme Utilitarianism' in Judith J. Thomson and Gerald Dworkin, eds., *Ethics*, (New York: Harper & Row, 1968)

possible when it has few members, incentives for the individual to achieve the benefits may be lacking in large groups. Thus price fixing provides increased profits in an industry, which is therefore a 'public good', that is, a benefit which is available to all if available to any. Price fixing is possible if there are few firms in the industry, but impossible in markets so large that the pricing behaviour of any firm has little or no effect on price. Olson calculates that individuals will produce a public good even if others sponge on their efforts, provided that the gain for the individual from the good exceeds the cost of providing it.

From this rather obvious point, Olson infers that the cost of the good must be so small in relation to the gain of the group from it, that the ratio of the total gain to the total cost of the good is greater than the ratio of the group gain to the gain of the individual from the good. Olson then insinuates that the gain to the individual in large groups will be very small in relation to the gain for the group as a whole, and therefore only very cost effective public goods will be produced spontaneously in large groups, such as social classes. That is, a public good will not be produced spontaneously in large groups if its cost is not negligible.

However, although Olson disclaims any assumption that individuals are self-interested, it is clear that he assumes this by tacitly supposing that the overall group gain is the sum of individual gains. For altruists, the gains of others are their gains also, so that in the

²⁰ Mancur Olson, *The Logic of Collective Action*, (Cambridge, Massachusetts: Harvard University Press, 1965), especially pp. 22-36.

extreme where all members of a group are perfect altruists, the gain for each individual is equal to the gain for the group as a whole. In this case, of course, the sum of individual gains will be larger than the group gain. That is, the group gain is the sum of individual gains, as Olson assumes, only when individual gains are self-interested gains, or are for the benefit of the individual only. This is clearly the case with capitalist firms competing for sales in a market, where Olson's claim that there is a significant difference between small and large groups is correct. Olson's further claim²¹ that Marx's theory of revolution is inconsistent rests, therefore, on attributing to Marx the assumption that proletarians are interested in revolution only for what they can get out of it for themselves.

However, this discussion of the rationality of collective action shows that there can be no straightforward presumption that individuals in a group will be motivated to work in the interest of the group as a whole. There is, therefore, a contradiction between individual aims and collective interests, whose resolution depends on the specific nature of the interests involved in each case, and the specific processes whereby conscious aims are formed. It has also been shown that individual rationality and collective interests may nevertheless coincide.

A contradiction between beliefs and aims of action and the situation which gives rise to them is not the only possibility. It is also possible to have a clash between what we can hope for, and the means required for their fulfillment. Means of action are what we can make of the resources at hand. These therefore set limits which our aspirations can run

²¹ Olson, *The Logic of Collective Action*, p. 66ff.

beyond. Now, when it comes to class struggle, this truism brings to light a startling discrepancy between the means of action available to a propertied ruling class and those available to an exploited and oppressed class. The only weapon the working class has is organization. Marx believed that the situation of workers prepares them to take daring and decisive action, and compels them to unite, organize and struggle, at least to prevent a worsening of their position.²² On the other hand, competition over jobs and wages pits one worker against another, while the poverty and alienation suffered by workers limits their capacity to communicate and organize on a social scale. Because of its situation, the working class has but one possible means of realizing its interests which it can obtain only with difficulty, and hold onto precariously.

The situation of the capitalist class, on the other hand, is radically different. For example,

²² For a thorough account of this see Hal Draper, *Karl Marx's Theory of Revolution*, vol II, pp. 40-48. Francis Mulhern, 'Towards 2000, or News From You-Know-Where', *New Left Review*, 148, November-December 1984, p. 22, makes the same point: 'The working class is revolutionary, Marxists have maintained, because of its historically constituted nature as the exploited collective producer within the capitalist mode of production. As the *exploited* class, it is caught in a systematic clash with capital, which cannot generally and permanently satisfy its needs. As the main *producing* class, it has the power to halt- and within limits redirect- the economic apparatus of capitalism, in pursuit of its goals. And as the *collective* producer it has the objective capacity to found a new, non-exploitative mode of production. This combination of interest, power and creative capacity distinguishes the working class from every other social or political force in capitalist society...What has to be said is that 'our major positive resource' can never be other than the organized working class...'

capitalists can use their power to hire and fire to disrupt working class organization. They can rely on, and if necessary, mobilize a complex apparatus of coercion and seduction to keep workers in their place. Consequent on this is a vast difference in power between the working class and the capitalist class, which accounts for the rule of the latter class. In the light of this, it is not surprising that workers have not yet made the revolution Marx envisaged. We should, perhaps, be surprised that anyone could ever suppose that the working class will overthrow the capitalist class and build socialism.

Poverty thus gives rise to hopes which are inherently at odds with capacity of the poor to fulfill them. Nevertheless, when a class distinction between property owners and direct producers gives rise to the exploitation and consequent poverty of the direct producers, the ensuing conflict of interest may undermine the capacity of the propertied to rule, and thereby give the poor some prospect of fulfilling their hopes. We thus have systems of beliefs and aims, that is, ideologies in the sense spelled out by McCarney, which at once correspond and conflict with the objective conditions from which they are derived.²³ In the next section, I shall consider this as a dialectic of subjective consciousness and objective conditions.

²³ J. McCarney, *The Real World of Ideology*, (Brighton: Harvester Press, 1980), pp. 4-10.

7.3 THE DIALECTIC OF CONSCIOUSNESS AND ITS OBJECTIVE CONDITIONS

According to Marx, class struggle is the motor of revolutionary social change. Class struggle involves individuals from given social classes acting consciously for the sake of ends which are in conflict with those of individuals from other classes. The action of these individuals is rational in the sense that they pursue ends by means which they believe will realize those ends. That is, their actions are consciously purposive. However, while we can explain the way individuals act in terms of their reasons for acting, including their responses to the intentions of other individuals, such explanations are by no means complete. We need to know what determines the range of ends individuals may pursue and the range of means available to them, as such factors may be decisive in determining the way individuals act, especially when they act in concert.

Aims, beliefs and means of action are not independently given parameters of action, but are themselves determined by what individuals have done previously. Thus the means of travelling by motor car from one place to another is the product of a cumulative process of acquiring the capacity to make heat engines, coupling them with carriages, and developing both of these over time, together with the roads needed to carry such vehicles. Each step in this process makes use of means of action created by what individuals have done previously with the means of action available to them. Existing beliefs at any stage are modified by experience and theoretical reflection. Finally, the disappointment or fulfillment of

previous aims, and changes in interests, beliefs and opportunities determines the aims of individuals at any stage.

Action, therefore, is subjectively determined by aims and beliefs, and objectively shaped by interests and means of action. These factors of action are in turn both subjectively and objectively determined. Aims and beliefs are subjectively determined by being transcribed from those previously held. They are objectively determined by what we now recognize as our interests and available means of action. On the other hand, our present interests and means of action are objectively determined inasmuch as they are the objective result of past actions on past circumstances. And they are subjectively determined insofar as they have realized prior aims and beliefs.

When Marx speaks of the traditions of the past pressing like a nightmare on the the brains of the living, he probably assumes that past aims and beliefs are pressed on the brains of the living through processes of imitation and instruction. This does not simply pass on traditions without change, but subjects them to a degree of conscious reconstruction. Thus, for example, we may imitate what our parents believe or take instruction from them, but we may acquire somewhat different beliefs through resolving inconsistencies in and between our parents' beliefs, or by making explicit their hitherto unknown implications. It need not be assumed, however, that a Marxian theory has no room for such processes as those involved in the formation of the ego as conceived in neo-Freudian theories, just because Marx himself had little or no idea of them. For example, gender is acquired in part by boys and girls imitating fathers and mothers, and by gender instruct-

ion. However, a Marxist can consistently suppose that less familiar processes, such as the resolution of the Oedipal complex, are also involved in the reproduction of mothering.²⁴

If tradition reproduces ways of thinking, the problems which the bearers of tradition confront in the context of their present interests and means of action tend to transform tradition. In the *Theses on Feuerbach*, Marx makes the point that while the way people think cannot be changed without changing their circumstances, this does not mean that change must come from people who have somehow risen above their circumstances. Rather, both people and circumstances can be changed through revolutionizing practice. Marx thus claims that social change can arise only from interests which emerge from existing conditions, and which lead to actions by agents which tend to change those conditions along with the agents themselves.

A part of this claim is that social change presupposes 'radical needs', as Heller puts it.²⁵ That is, existing society must give rise to needs or interests which can only be satisfied by social change. Another part of the claim is that these needs give rise to practices undertaken by agents which transform the given conditions and the agents themselves. Thus workers have 'radical' needs which can lead to class struggle. However, Marx is not

²⁴ See Nancy Chodorow, *The Reproduction of Mothering: Psychoanalysis and the Sociology of Gender*, (Berkeley and Los Angeles: University of California Press, 1978).

²⁵ Agnes Heller, *The Theory of Need in Marx*, (London: Allison & Busby, 1974), Chapter IV. Heller defines 'radical needs' as those which require for their satisfaction a social formation radically different from what has gone before, and cites the 'need for free time' (p. 91) as an example of such needs.

claiming at this point that if workers take action as a result of their needs, they will consciously aim to change society so that their needs are satisfied. For Marx is not claiming that workers will immediately recognize their needs, or recognize that they are 'radical needs'. Moreover, Marx is not claiming that workers will immediately have the means to change society, even if they wanted to.

The theory of social change implicit in Marx's idea of 'revolutionizing practice' involves instead the idea that present circumstances are sufficient to set in motion a cumulative process which eventually will lead to sufficient members of society having both the will and means to make a revolutionary change. The process of change itself is supposed to transform workers and their circumstances so that workers are able to recognize that their interests are antagonistic to capital, and are capable of taking action to satisfy those interests. The question then is whether it really is possible, as Levine and Wright put it, for the working class to acquire class capacities sufficient to realize those of its interests which are antagonistic to capital. I shall argue that a process constituted by a dialectic of working class consciousness and objective conditions is capable of giving the working class this capacity.

As the discussion of consciousness and its conditions in the previous section showed, working class ideology, that is, a structure of aims and beliefs expressed in action by members of the working class, constitutes a unity of opposites with the objective conditions of working class life. They are immediately identical inasmuch as working class ideology corresponds to some degree to its conditions of life. Considered from its

objective side, life and class struggle translate working class ideology into reality, while ideology translates reality into thought.

Now, ideology and its objective conditions are opposites to the extent that the beliefs and aims of members of the working class are false or misdirected.²⁶ One important implication of this is that there is no sharp line to be drawn between ideology and science in terms of their objectivity, although they may differ in other respects, because ideology combines interests with beliefs, for example, and is thus not 'disinterested' in the way of science. Both science and ideology are thus objectively grounded, and when put into practice, exposed to revision as a result of discrepancies between expectations (predictions) and outcomes. The working class is no more trapped in its ideologies than are scientists trapped within present day science. Each sets the present boundaries of thought, but each is also subject to a practical immanent critique.

Not only is there an immediate identity and difference between working class ideology and working class life and its conditions, but each also depends on the other. Thus the ends pursued depend on the means of action available, as Marx suggests with the aphorism that 'mankind always sets itself only such tasks as it can solve'.²⁷ On the other hand, without class consciousness, class struggle would be nothing more than a welter of

²⁶ Sean Sayers, *Reason and Reality*, (Oxford: Basil Blackwell, 1985), Chapter 10, makes a similar point in claiming that truth comes in degrees.

²⁷ Karl Marx, 'Preface to *A Contribution to A Critique of Political Economy*', *Marx-Engels Reader*, ed., Tucker, p. 5.

spontaneous reactions to present circumstances, which would be incapable of transforming society. Ideology which cannot be translated into objective consequences of action is impotent, while action without an ideology to direct it, can only grope toward change.

Finally, objective conditions and ideology not only presuppose one another, but each is also the result of the other. First, each completes the other, inasmuch as the objective consequences of action make explicit the implications of ideology, while ideology gives a determinate meaning to practical activity in a given context. Secondly each provides the impetus for the other. The practical problems of working class life provide the impetus for their theoretical resolution, while working class ideology provides the impetus for the practical solution of the problems of working class life.²⁸ This last identity is the most important when considering the way working class ideology and its objective conditions might develop over time.

We can gauge the significance of this by looking at what Elster thinks will discourage the working class from attempting radical change. According to Elster, workers are discouraged from attempting change by, among other things, an aversion to novelty, fear of the unknown, fear of the risks involved in change, and a belief that, since individual action can make little or no difference to the outcome, it is rational for an individual to make no contribution, taking benefits without personal cost if others act, and not making fruitless or risky efforts, should others fail to act.²⁹

²⁸ Ideology is thus in contradiction with its objective conditions in the sense that the aspirations of the ideology are to change the objective conditions which conflict with those aspirations.

That workers will be discouraged from radical change by considerations like these has some plausibility if we picture workers weighing up the option of radical change as a single choice in the context of their present circumstances. However, if we take instead a process of change set under way by workers attempting to find solutions for the problems of life in capitalist society as they perceive them, a different picture is then possible. For, if this process results in an organized working class, which is assured through experience of the importance of solidarity, and which finds itself confronting an established society demoralized by the gap between the needs it gives rise to and its inability to satisfy them, then the working class may find that in these circumstances it has in fact little to lose but its chains.

Thus, one result of repeated confrontations with the dilemmas of life under capitalism may be that the obstacles outlined by Elster to workers opting for change can be overcome if the working class becomes conscious of its own interests and their relation to the interests of other classes. Repetition of problems and choices transforms both. Thus a problem which might initially appear soluble within capitalism can eventually seem insoluble if repeated attempts to solve it within the confines of capitalism fail. Even a relatively self-interested individual may find that the choice of enjoying the efforts of others while making no contribution oneself is counterproductive in the context of an indefinitely repeated confrontation with the choice of contributing to a collective effort. And continued class conflict can change the respective powers of classes, weakening

²⁹ Jon Elster, *An Introduction*, p. 160, *Making Sense*, pp. 347-352, and pp. 359-371.

some and strengthening others, so that the balance of hope and fear at the prospect of social change can alter. These points are elaborated below.

Repetition can transform the problems of capitalism. For example, take the problem that investment oriented to maximum profits need not coincide with investment oriented to the minimum use of energy, or minimum damage to the environment.³⁰ The initial response may be to attempt to regulate investment so that it better conforms to the requirements of sustainable development. However, if profit oriented investment persistently and cumulatively damages the environment, despite attempts to prevent such damage, and burdens society with ever mounting repairs, the problem may then appear in a different light.

Capitalist society may no longer present itself as a source of familiar, if limited, satis-

³⁰ As was pointed out in Chapter 6, profit oriented investment need not coincide with labour-saving investment when considered at an abstract level. However, it was argued that when the requirements and consequences of the reproduction of capitalist social relations of production are considered, profitable investment must largely coincide with labour-saving investment. I know of no comparable reasons for supposing that profit maximizing investment must largely coincide with investment oriented to minimal use of energy and damage to the environment, although when energy constraints become more intense and widespread, minimizing costs will tend to line up with minimizing the use of energy at least to some extent. This is not to say that any alternative to capitalism will necessarily reconcile economic activity with its sustain environment. Utopian socialist societies, such as the command economies, may wreak more damage on the environment than capitalist market economies, partly because of the discrepancy between ideals and actuality in such societies may get in the way of the recognition of environmental problems.

factions, but as a standing threat to the future of humanity. A problem which initially appears tractable thus might come to appear insoluble within the framework of capitalism. Workers can discover whether their problems can be solved under capitalism only through repeated efforts thus to solve them.

Therefore, political strategies which counterpose efforts to obtain reform with revolutionary endeavour are fundamentally misguided. The working class can organize itself politically and acquire revolutionary aims only through the struggle for reforms. Reformism, therefore, is not just the pursuit of reforms, but their pursuit in such a way as to render the working class incapable of effectively pursuing revolutionary aims. A political process which proclaims its revolutionary aims and repudiates all striving for reforms objectively may have the same effect as reformism, if it too demobilises and disillusiones the working class.

Now, let us consider Elster's case of a proletarian tempted to obtain the benefits of class struggle without making any corresponding contribution. Even in the case of a relatively self-interested proletarian, the rational response to an indefinitely long sequence of choices between contributing or not contributing to some collective good, can be the adoption of either a mixed strategy of participating in some circumstances and not in others, or a preference for participation so long as others pull their weight also. Such responses can rationally be preferred to parasitism.³¹

³¹ Elster considers this point in *Making Sense*, pp. 360-361. See also Alex Callinicos, *Making History: Agency, Structure and Change in Social Theory*, (Ithica, N.Y.: Cornell University Press,

Mixed strategies are, perhaps, the most likely response to an indefinitely long series of problems, which in any single case might take the form of a prisoner's dilemma. One example of a mixed strategy involves determining the number of individuals required to obtain the benefit, and then having individuals contribute with a probability which ensures that the required number make a contribution at any time. Mixed strategies also include the more familiar practice of individuals deciding that they will contribute except when they have a more or less weighty reason for not doing so. If the need for contributors is great, individuals might always contribute unless they have a very weighty excuse not to, and if fewer contributions are required, slighter reasons may excuse individuals from contributing. Faced with a continuing need for action, workers thus may come to realize that, if change is to be achieved, everyone committed to change must participate on some occasions, and in some way or other.

Further, as Michael Taylor points out, a situation which initially might be represented as a prisoner's dilemma changes if it is repeated indefinitely.³² Participants in the situation learn that if their initial preferences are self-interested, the outcome is bad for all. Having learnt this, they may move toward a policy of solidarity, in which individuals will contribute their share to the collective effort, unless others do not. Any individual attempting to sponge on the efforts of others comes to realize that such a policy cannot work for

1988) pp. 193-201, and especially, William H. Shaw, 'Marxism, Revolution and Rationality'.

³² Michael Taylor, *Community, Anarchy and Liberty*, (Cambridge: Cambridge University Press, 1982), Chapter 2, and *Anarchy and Co-operation*, (Chichester: Wiley, 1976), Chapter 3.

long, since the response of others is to withdraw their efforts, thereby depriving all of the benefits sought, including the would be sponger. In either case, if mixed strategies or solidarity is achieved, no-one committed to social change has any reason to leave the task to others, or feel that their own contribution might be pointless.

Experience is also the only means through which workers can discover the limitations of trade union and social democratic politics. Thus it is only now, after a hundred years of pursuing immediate aims through trade unions and parliamentary parties, that such politics are clearly at an impasse.³³ Experience has now shown that the pursuit of material gains within the ambit of capitalism tends to undermine the self-organisation of the workers, and therefore limits the capacity of the working class to pursue even its immediate aims.

The politics of class compromise, which is the distinctive feature of trade union and social democratic politics, leads to the demobilisation of the working class. For the first concession sought from the working class is wage restraint, which can be delivered only if working class organizations are contained. This containment requires and facilitates a process in which workers no longer act on their own behalf, but seek gains through a stratum of professional politicians and trade unionists, who act on behalf of the working class in pressing industrial or political claims. Professional politicians seeking parliamentary influence are in turn led to abandon any exclusive ties to the working class for the

³³ See Leo Panitch, *Working Class Politics in Crisis: Essays on Labour and the State*, (London: Verso, 1986), Chapter 1.

sake of electoral advantage, and come to represent 'middle class' interests as well.³⁴

Working class organization is thus weakened by inaction and dependency. This process is accelerated by direct demands for the political demobilisation of the working class as a concession to the capitalist class under the politics of class compromise.

Simultaneously, experience with the politics of Bolshevism, that is, socialist politics inspired by the Russian revolution, has shown that the present impasse in working class politics is not just due to the politics of class compromise as such, but is essentially the consequence of 'substitutionalism', that is, the process of pursuing aims through representatives rather than the political self-organization of the working class. For the repudiation of class compromise by western communist parties has also ended in an impasse, and in some cases, led communist parties to abandon militant politics in favour of social democracy. In either case, whether an attempt is made to quell or fuel class conflict, the dominant tendency in working class politics has been 'substitutionalism'. In the case of communist 'militancy', this takes the form of socialist intellectuals rallying

³⁴ Przeworski explains how electoral politics leads social democracy in the direction of party policies which seek to express the interests of the 'common people' rather than the sectional interests of the working class, although Przeworski's argument depends in part on a too restricted definition of the working class as the 'blue collar' manual working class. Adam Przeworski, *Capitalism and Social Democracy*, (Cambridge: Cambridge University Press, 1985), Chapters 1 & 2. For a wider definition which falls short of taking all wage and salary earners as members of the working class in Marx's sense, see Ian Hunt, 'A Critique of Roemer, Hodgson and Cohen on Marxian Exploitation', *Social Theory and Practice*, 12, No. 2, 1986.

working class militants to the cause, and pursuing militant political propaganda in the place of actual working class action. Any argument for, or even comprehension of the need for the working class to liberate itself by its own efforts thus relies on the experience of the failure of the alternative.³⁵

This last point is crucial to Marx's theory of revolution, and it bears crucially on the fears and hopes of the working class when contemplating revolution. Only to the degree that the working class has organized itself can it have any confidence that revolution will serve its interests and not be diverted to other ends. Equally it is only to the degree that it has organized itself that the future may appear to workers as other than a blank unknown, and capable of being shaped by its own action. The self-organization of the proletariat is the only way out of the impasse left by substitutionalism, whether it takes the form of the politics of class compromise, or class conflict inspired by a 'vanguard'. This is not to advocate reliance on what has been termed the 'spontaneity' of the working class, that is, reliance on sporadic, piece-meal protests. It is to advocate the self-organization and self-instruction of the working class as the only effective way to go beyond merely piecemeal resistance to the encroachments of capital.

The process whereby the working class becomes conscious of its own interests in conflict with those of other classes, and is capable of translating this consciousness into social change, is still fairly remote from its conclusion in advanced capitalist countries.³⁶ As

³⁵ See Hal Draper, *Marx's Theory of Revolution*, vol. II, Part I, Chapter 6.

³⁶ This is explained at length in Przeworski, *Capitalism and Social Democracy*, especially chapter 5.

Przeworski shows, if working class struggle is confined solely to disputes over wages, then it is only in exceptional circumstances that it will be rational for workers to proceed to the expropriation of the capitalist class. However, the working class can extend its aims to include the abolition of alienated labour, increased free time, and social control over economic development, which has the aim of ensuring that such development is environmentally sustainable, and culturally satisfying. In this event, the struggle for reforms is more likely to become a revolutionary struggle.

Given the forces available to capitalist class to maintain its property system, it is clear that revolutionary struggle has its best chance of success when an organized working class confronts a ruling class disorganized and demoralised by continuing problems which the capitalist system generates, but cannot resolve. This fulfills the requirement, as Marx puts it, that thought should not only strive to realize itself, but that 'reality must strive toward thought.'³⁷

³⁷ As will be evident from the preceding discussion, I do not believe that reality has sufficiently striven toward thought in the aftermath of the Russian revolution and subsequent revolutions inspired by it. Current socialist societies have proven to be Utopian, a fact confirmed by contemporary events in Eastern Europe and the Soviet Union, but which was always manifest in the way social planning equalled bureaucratic administration, private interests prevailed, the labour of the direct producers was alienated labour, and social organizations in general attempted to emulate their counterparts in capitalist societies. The ossification of Marxism into a creed under a 'scientific' banner is also symptomatic of the Utopian character of the 'socialism' of such societies. Still, as the most developed revolutionary ideology of our times, Marxism has served effectively as the ideology of anti-feudal, national revol-

In the next section, I shall consider Marx's discussion of crises and the socialization of production as an attempt to show that capitalist reality prepares the ground for the realization of socialist thought.

7.4 CRISIS THEORY

According to Engels, capitalism has prepared the ground for socialism by developing the means of production to the point where further social development is hindered by the capitalist property system, together with the normative principles and ideology of capitalism. Marx says that capitalist private property turns from being a form of development of the productive forces of society into their fetter. It seems that Marx and Engels have in mind the following features of capitalism. One is the way capitalist social relations of production prevent the full use of existing productive forces through periodical economic crises. The other is the way capitalist private property inhibits the development of free, conscious co-operation among producers, when the ever increasing interdependence of production makes such forms of cooperative activity ever more necessary. I shall consider each of these features of capitalist society in turn.

The level of investment under capitalism, and therefore the level of economic activity, is determined by its actual and prospective profitability. Investment rises and falls as recent and prospective profitability rises and falls. Thus investment tends to increase as profits

utions, even if its adherents entertained illusions about what they could achieve.

increase, and tends to decrease as the stock of capital increases, or as wages rise faster than is tolerable to capital.³⁸ Theories of economic cycles or crises agree that once a fall in sales and profitability occurs, this tends to produce a fall in investment, which in turn can lead to a cumulative contraction of economic activity, at least until prospects of profitability return. Where theories differ is on what they consider is the cause of the initial fall in sales and profitability. In looking at Marx's sketch of a theory, it is important to recognise that crises are concrete economic phenomena, which are the result of the action of many factors. It is therefore impossible to come up with a single, fundamental cause of crises, since they differ according to the relative weight of the various factors involved. In fact, Marx left hanging a number of theoretical threads, corresponding to his sketches of the various factors at work in crises. These have been built on by subsequent theorists, sometimes with one to the exclusion of others being emphasised as the source of the proper Marxist theory.³⁹

Marx, I believe, identified two main causes of a fall in profitability, the first being a crisis

³⁸ Howard J. Sherman and Gary R. Evans, *Macro-economics: Keynesian, Monetarist and Marxist Views*, (New York: Harper & Row, 1984), pp. 172-173, claim that investment is determined largely by three factors: current sales; the amount of profits a quarter of a year prior to the investment decision; and the rate of profit three quarters prior.

³⁹ See, for example, Paul Mattick, *Economic Crisis and Crisis Theory*, (White Plains, N.Y.: M.E.Sharpe, 1981), who emphasises crises in the production of surplus value, and P.A. Baran and P.M. Sweezy, *Monopoly Capital*, (New York: Monthly Review Press, 1966) who emphasise crises in the realization of surplus value.

in the production of surplus value, and the second a crisis in the realization of surplus value. In each case, capital itself is the main barrier to continued capitalist accumulation. That is, the process of capital accumulation itself generates the conditions which halt or reverse accumulation. With a crisis in the production of surplus value, accumulation produces conditions which restrict the amount of potential profit relative to the cost of producing commodities, whereas in a crisis in the realization of surplus value, accumulation produces conditions which limit profits from the sale of products. That is, in a crisis in the production of surplus-value, less labour is extracted from the direct producers than is necessary to maintain profitability, and the rate of profit, in particular, while in a crisis in the realization of surplus-value, the problem is that not enough is sold to realize in full the surplus labour extracted from the direct producers in the monetary form of profits, rents and interest.

Marx notes in *Capital* volume 1 that as accumulation proceeds, demand for labour rises, so that wages rise at the expense of profits, unless labour saving technological change occurs.⁴⁰ However, if labour saving technical change occurs, it will tend to raise the break-even point for profits, making profitability more sensitive to a fall in commodity sales. Further, there will be a relative increase in demand for raw materials. This will tend to increase raw material prices, as it takes time for production to respond to increased demand, and as less productive sources of materials come into use. As non-labour costs of production rise relatively, the rate of profit can be maintained only if the rate of exploitation or the rate of surplus value increases, that is, only if wages rise less rapidly

⁴⁰ Marx, *Capital*, vol. 1, pp. 768-772.

than labour productivity. So, in any case, accumulation will from time to time lead to a rise in wages beyond the limit tolerable to capital.

The overall result is that as accumulation proceeds, wages and raw material material prices tend to rise so as to threaten profitability. In addition, ongoing accumulation provides a climate in which less efficient capitals are protected from competition, thereby reducing the average profitability of capital. As capitalist accumulation peaks, the stock of capital tends to grow more rapidly than profits, so that profitability tends to fall,⁴¹ and as a result, investment, and the level of economic activity fall also.

Apart from profits periodically failing to increase in line with increases in costs of production, a capitalist economy is prone to imbalances between supply and demand. According to Marx, the main source of such imbalances is a tendency for the internal demand for consumption goods in an economy to fall short of their supply. As labour saving technical change progresses, wages tend to fall as a proportion of the value of output. That is, wage-costs fall as a proportion of total costs and total sales. This means that a smaller proportion of the output of the consumption good sector can be sold against wages or consumption from profits earned within the consumption good sector itself. Unless there is increased consumption from wages or profits, that is, in practice, unless a greater proportion of profits is spent on consumption goods, more of these goods must be sold against income earned outside the consumption goods sector. Sales can be made against income outside the consumption goods sector either by selling exports outside the

⁴¹ See Marx, *Capital*, vol. 3, pp. 359-363.

economy, or by making sales against income earned in another sector of the economy. Excluding exports, the demand for consumption goods can only come from wages and consumption out of profits earned in the sector producing means of production.⁴²

However, as wages in the sector producing means of production are also falling as a proportion of the total output of that sector, due to technological change, the result is that as the volume of consumption goods which must be sold outside the consumption sector rises, the capacity to purchase those goods in another sector tends to fall. Unless the sector producing means of production expands sufficiently rapidly, so that wages and profits earned in that sector grow, demand for consumption goods will tend to fall short of supply.⁴³ This shortfall can be offset by exports of consumption goods, by increasing wages, or by measures to increase consumption out of profits, such as spending on arms, which is directly useful to the capitalist class through increasing its power, or spending on welfare, which is indirectly useful insofar as it disarms criticism of the capitalist system.

Within this perspective, we can see that crises in different periods have been initiated

⁴² Some theories consider the government sector as well, but government activity either produces consumption goods or investment goods. The government sector is distinct only in that some of its goods are not commodities, that is, not produced for sale, and investment is not determined to such a great extent by profitability. We can therefore include commodities produced in the government sector in the sectors producing means of production or consumption goods, and the non-commodity part of the government sector among exports.

⁴³ Marx, *Capital*, vol. 2, Chapter 21.

predominantly by one or other of these factors, although they involve all in varying degrees, and have led to varying corrective measures. Thus the Great Depression appears to have been a crisis in the realization of surplus value, which led capitalist governments to adopt measures to increase consumption out of profits, such as arms and welfare spending, and to undertake infrastructure investments which were independent of profitability so as to increase demand. On the other hand, the stagflation crisis of the mid-seventies appears to be an example of a crisis in the production of surplus value, which has led capitalist governments to reverse Keynesian measures for increased consumption out of profits, and to adopt measures which constrain real wages and increase labour productivity.

Marx's theory, as outlined above, can be supplemented by theories such as those of Harrod and Domar, in which aggregate demand can fall short of supply because subdued investment leads to growth which is less than what is termed the 'warranted' rate of growth, and thus leads to further reductions in investment.⁴⁴ Together, these theories imply that capitalism is subject to recurring crises. However, whether the oscillations in the level of economic activity implied by these theories are periodic or irregular, dampened or exploding, depends on the specific parameters of the models. In general, the only prediction which can be made with any confidence is that economic crises will recur within capitalism. We cannot make sure predictions as to the timing or severity of such crises.

⁴⁴ See papers by Harrod and Domar in *Capital and Growth*, eds., G.C. Harcourt and N.F. Laing, (Harmondsworth: Penguin, 1971.)

This may be part of the reason why workers in general have not yet come to see that the problem of recurring economic crises cannot be solved within capitalism, but have tended to focus instead on the specific features of particular crises, and have been prepared to see debate confined to the merits of specific solutions proposed in each case. Also, while the politics of class compromise hold sway, crises will, perhaps, be viewed as a temporary problem which will give way eventually to renewed recovery and prosperity, rather than as a failure of the capitalist system as such to orient investment consistently to the end of meeting the needs of all members of society.

The gathering environmental crisis has, perhaps, the capacity to focus the critique of capitalism on the problem of investment, and its orientation to profitability to the exclusion of other ends. Thus the orientation of capitalist investment only haphazardly coincides with what is required for a sound environment. The consequence is a massive degradation of the soil, inefficient use of energy and other resources, and a vast output of wastes, which threaten to make the earth progressively less habitable. The massive waste involved in capitalist military and luxury spending may also come to be recognised as such. One reform which would address the problem of orienting capitalist investment to more useful ends than those which the profit motive spontaneously gives rise to, is to have regular social audits of capitalist investment which would identify both its socially useful and harmful effects, and thereby enable incentives for useful investment and disincentives for socially harmful investment to be put in place, for example, through tax concessions and penalties.⁴⁵

The second major way in which capitalism stands in the way of progress is a consequence of the anarchy of the play of private interest, whose effects can not only be seen in free market economies, but are even more dramatically evident in command economies.⁴⁶ For, as the various sectors of an economy become increasingly interdependent, they become increasingly subject to disruption through the vagaries of private interest.

This can be illustrated by the use of 'just-in-time' inventory planning, which enables capitalists to reduce their stocks of raw materials and finished goods, and so increase the turnover of capital, and hence the rate of profit. However, with 'just-in-time' inventory planning, production becomes more susceptible to the vagaries of trade, and in particular, to strikes, as such planning reduces the buffer stocks of raw materials which enable enterprises to ride out interruptions in supply. Workers exploited as wage-labourers have no incentive to ensure that interruptions to supply do not occur. Indeed, the prevailing ethos of egoism leads workers to take advantage of whatever bargaining power they have to improve their relative income. So, computer control over and minimization of the level of stocks can only be realized fully on the basis of the free, conscious co-operation of

⁴⁵ One symptom of the current impasse of working class politics is that working class political organizations have failed to put such reforms on their agenda, let alone pursue them by all available means.

⁴⁶ Thus, in Eastern European command economies, enterprise managers pursue private interests, subject only to the progressively less effective constraint of central planning targets, which in practice fail to match the 'hidden hand' of the market in checking the anarchy of independent producers.

workers. Within capitalism, the only alternative to this is a workforce disciplined by force, or through internalised submission, as in the case of the Japanese status system.

The capitalist system thus confronts a contradiction between the deployment and development of the productive forces which capitalism permits, and the development of the productive forces necessary to meet the material and 'radical' needs of the working class, and all those who share in its conditions of life. Whether these intractable problems will disorganize and demoralise the political and ideological rule of the capitalist class depends in part on whether the working class can organize itself politically and ideologically, so that it can recognise and pursue its interests effectively. I shall conclude this chapter and the work as a whole by briefly sketching the prospects of the working class becoming a class in and for itself, that is, organized in such a way that the mass of its members can become conscious of their class interests, and pursue them against opposing class forces.

7.5. DEVELOPMENT OF THE PROLETARIAT AS A CLASS IN-AND-FOR ITSELF

The working class can be emancipated only by its own action. Its members have to find the organizational means to articulate and pursue their interests. The strongest incentive for discovering such means lies in the impasse of existing forms of working class politics. In Eastern Europe, the impasse of Bolshevick politics has led to a flowering of organizational forms, the closest to a mass organization of the working class being the Solidarity organization in Poland, at least prior to its repression and subsequent official recognition, which led to the emergence of political 'representatives' of the Polish 'people'. In Western capitalist societies, the impasse of social democracy is leading to experiments with other ways to articulate and mobilize on behalf of working class interests.

Marxists can contribute to this process by freeing themselves of their utopian illusions. For Marxists, perhaps more than any others, have relied on the agency of an inspired few to construct and propagate plans for a new organization of society. By canonizing Marx and subsequent heroes of political movements inspired by Marx, they have transformed Marxism into a strand of utopian socialism. Marxist movements have tended to put wishful thinking in the place of a political practice based on the premises of a real movement to abolish capitalist society. A revolutionary political practice must first of all find a way of

identifying the problems of the working class under capitalism in clear and concrete terms. It must then progressively and cumulatively foster all efforts to address those problems by members of the working class, and those who share in its conditions of life.

A real movement to abolish capitalist society is thus implicit in the struggles of the working class to improve their lot under capitalism. For it is out of an unrelenting struggle for reforms that revolutionary consciousness and organization can grow. While organization is not necessary to achieve reforms which the capitalist class is prepared to grant, it is necessary to achieve reforms, regardless of whether the ruling class consents to them. Provided the working class is organized so that it can bring about changes necessary for a better life, regardless of whether the capitalist class is prepared to consent to them, it is then possible for revolutionary consciousness to emerge from the discovery that such changes are unattainable within the present property system, despite exhaustive attempts to bring them about.. This is the prospect offered in Marx's theory of revolution.

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