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Analytical Marxism and the Marxian theory of crisis

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1. Introduction

Methodology, it is often claimed, is what above all distinguishes Marxism from 'bourgeois social science'. In his classic articulation of this position, George Lukács argued many years ago that Marxian method constitutes the 'decisive difference': 'Orthodox Marxism . . . does not imply the uncritical acceptance of the results of Marx's investigations. It is not the "belief" in this or that thesis, nor the exegesis of a "sacred" book. On the contrary, orthodoxy refers exclusively to *method*' (Lukács, 1971, ch. 27, p. 1). For Lukács, the distinguishing characteristic of that Marxian method was obvious. It was 'the point of view of totality', 'the all-pervasive supremacy of the whole over the parts'; and, it was this, he proposed, which was 'the bearer of the principle of revolution in science' (*ibid.*).

More recently, a similar claim for methodological distinctiveness has been made forcefully by two Marxist biologists, Richard Levin and Richard Lewontin, in their book, *The Dialectical Biologist*. In contrast to a Cartesian method which begins from individual parts, each with its own intrinsic properties, and proceeds to explain the system as a whole, Levins and Lewontin stress an alternative, dialectical view in which 'parts acquire properties by virtue of being parts of a particular whole, properties they do not have in isolation or as parts of another whole'. What, indeed, distinguishes the dialectical view is its emphasis upon wholes (Levins and Lewontin, 1985, pp. 2–3, 273).

Yet, if there is, as has been proposed, a 'near-consensus view' with respect to an 'unreconcilable methodological fissure' between Marxism and its rivals (Levine *et al.*, 1987, p. 67), it is nevertheless rather difficult to find the clear articulation of this 'point of view of totality' in the particular sphere of Marxian economics. Although there are isolated examples of such a focus, as in the work of Stephen Resnick and Richard Wolff (1987, 1989) or Alain Lipietz (1985), most apparent in Marxian economics is an eclecticism which proceeds as if 'the point of view of totality' is deserving of lip service (and occasional aphorisms or exhortations) but is not to be taken seriously when it comes to analysis.

This rejection in practice of the focus upon the whole can be seen in many places; anywhere Marxists explain essential characteristics of capitalism (such as the drive for accumulation or the substitution of machinery for direct labour) by the competition among individual capitalists, it represents a departure from the approach that Marx took

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from the time of the writing of the *Grundrisse*.[1] 'It is easy', Marx noted there, 'to develop the introduction of machinery out of competition and out of the law of the reduction of production costs which is triggered by competition'. However, the theoretical requirement was to develop the introduction of machinery 'out of the relation of capital to living labour, without reference to other capitals' (Marx, 1973, pp. 776–7). There was a critical reason for this approach.

For Marx, it was necessary to understand the essential nature of 'capital in general' before exploring the manner in which its inherent tendencies are executed through the actions of individual capitalists in competition. Rather than the external phenomena of competition, only the inner connections within the whole, 'the obscure structure of the bourgeois economic system', can yield an understanding of the system (Marx, 1968, p. 165).

Thus, competition, he noted 'is nothing more than the way in which the immanent laws of capitalist production manifest themselves in the external movement of the individual capitals, assert themselves as the coercive laws of competition'. In short, competition as such does not '*explain* these laws; rather, it lets them be *seen*, but does not produce them' (Marx, 1973, pp. 651, 552).

Thus, Marx was quite explicit in rejecting analyses of the tendencies of capitalism based merely upon the observation of individual capitals in competition: 'to try to explain them simply as the results of competition therefore means to concede that one does not understand them' (Marx, 1973, p. 752). Indeed, he argued that a focus upon surface phenomena, the results of competition, could never establish *necessity*: 'Where, as here, it is competition as such that decides, the determination is inherently accidental, purely empirical, and only pedantry or fantasy can seek to present this accident as something necessary' (Marx, 1981B, p. 485). In this respect, the prevalence of Marxist arguments based upon the competition among capitalists suggests an implicit rejection of (or, at least, a confusion over) Marx's own method. Yet, currently at issue is not this implicit rejection but, rather, a quite explicit one.

2. Analytical Marxism

In recent years, a new phenomenon has appeared on the scene—a self-designated school of 'Analytical Marxism', centred in particular around the work of John Roemer (a US economist at the University of California at Davis), Jon Elster (a Norwegian political scientist at the University of Chicago) and G. A. Cohen (a Canadian philosopher at Oxford). In addition to editing the Cambridge University Press series on Studies in Marxism and Social Theory, these three also form the core of a group of scholars which has met annually to discuss each other's work.[2]

'Rigor and clarity' has been identified by Elster as the underlying principle behind the group; yet, what has thus far marked the Analytical Marxists has been their particular methodological stance. Rather than for *Making Sense of Marx* (the title of one of Elster's books), the attention attracted by the 'Analytical Marxists' has come largely from their success in making *fun* of Marx. Their technique is well-designed to achieve the desired result. First, one begins by asserting a methodological principle precisely contrary to that

[1] One of many examples can be found in Ernest Mandel 's 'Introduction' to Volume I of *Capital* (Marx, 1977, p. 60), where Mandel proposes that the drive to accumulate capital 'is essentially explained by competition, that is by the phenomenon of "various capitals" '.

[2] The nature and composition of the group, which also has designated itself as the 'No Bullshit Marxism Group', is described in Lebowitz (1988) and Wright (1989).

of the author of whom one presumably wants to make sense. Then, from this very standpoint, one investigates the propositions of said author and finds, *mirable dictu*,—nonsense. In defence of this singular approach to the rational reconstruction of a given theory, it may be said that it rarely fails to satisfy its practitioner.

Analytical Marxism begins with the unsupported premise of methodological individualism. It is not supported because it need *not* be: the power of Conventionalism in contemporary social science ensures that such a premise will be accepted as the common sense of scientific practice. Thus, confident that those who count will genuflect, Analytical Marxism points out that all institutions and social processes must be explained in terms of individuals alone.

For Jon Elster (1985, p. 6), one of the three founding partners, any explanation which 'assumes that there are supra-individual entities that are prior to individuals in the explanatory order' must be rejected. In short, without microfoundations, no explanation is acceptable. Nor, for that matter, need it even be considered—as when Elster (1985, p. 135n) peremptorily dismisses Lipietz's discussion of the 'so-called "transformation problem" ' with the comment that Lipietz uses 'an approach that completely neglects the need for microfoundations'.

Guided by their methodological given, the Analytical Marxists find Marxian theory, on the whole, rather inadequate. After all, Elster (1986, p. 24) comments, 'Marx believed that capital had a logic of its own, which was somehow prior in the explanatory order to market behavior and competition'. Similarly, John Roemer proposes that Marxists engage in teleological reasoning by their focus on capital as a supra-individual entity; 'in a competitive economy', he explains, 'there is no agent who looks after the needs of capital' (1986, pp. 191–2). Thus, Marxian analysis, Roemer also announces, requires microfoundations.

Of course, a preemptive methodological strike is not the sole element in the Analytical Marxism campaign. Using analytical tools based upon their methodology, the Analytical Marxists have also attempted to demonstrate that much of Marx is internally incoherent. Thus, in his long march through Marxian economics in his *Analytical Foundations of Marxian Economic Theory* (Roemer, 1981), Roemer left among the casualties the 'fundamental Marxian theorem', the falling rate of profit, the law of value and the transformation problem, and theories of crisis. The labour theory of value as a measure of exploitation, left standing, was subsequently disposed of in his *A General Theory of Exploitation and Class* (Roemer, 1982). Small wonder, then, that Elster (who characteristically dismisses Marx's crisis theory as 'trivial', 'rambling and repetitive', 'obscure', 'nebulous and opaque', and 'virtually devoid of content') could declare that 'Today Marxian economics is, with a few exceptions, intellectually dead' (Elster, 1985, pp. 161–5; 1986, pp. 60, 192).

Yet, if they judge Marxian method (and conclusions deriving therefrom) as wrong-headed, the Analytical Marxists are not prepared to break entirely with Marx. The 'substantive research agenda' of Marxian economics, they propose, remains valid. Thus, Roemer (1986, pp. 191–201) argues that, using neoclassical tools, rational choice models and the like, Marxian economics has made great progress in Marx's agenda by providing the necessary microfoundations and thereby substituting science for teleology.

As noted in an earlier examination of Analytical Marxism (Lebowitz, 1988), this particular self-evaluation, however, is rather debatable. As a study ('pathbreaking' in Elster's words) which generates 'class relations and the capital relationship from exchanges between differently endowed individuals in a competitive setting', Roemer's

General Theory (1982) provides crucial support for Analytical Marxism's quest for microfoundations (Elster, 1985, p. 7). Yet, not only does this prototype constructed according to Analytical Marxism's specifications provide a basis for a rather strange Marxian progress (as in the case of the concept of 'just' exploitation), but its central propositions are questionable. At the core of his privileging of unequal endowments (and, thus, the dismissal of the importance of capitalist relations of production) is Roemer's finding that 'truly it does not matter whether labor hires capital or capital hires labor: the poor are exploited and the rich exploit in either case' (Roemer, 1982, p. 93). Nevertheless, the equivalent results demonstrated in this 'isomorphism theorem' (despite the crucial difference in residual claimants) follow only from the assumptions embedded in Roemer's model which obliterate Marx's critical distinction between labour and labour-power (Lebowitz, 1988).

In the end, then, rather than demonstrating the robustness of the Analytical Marxist project, Roemer succeeds merely in proving what is already present in his assumption set. Nevertheless, this particular failure is not sufficient in itself to dismiss *a priori* any Analytical Marxist argument which rejects a focus on supra-individual entities. Such a dismissal requires a closer examination of the central issues.

3. The limits to individuals

To say that only individual human beings act is neither a matter of dispute nor a *prima facie* guide to the selection of an appropriate methodology. Rather than attributing impulse to abstractions. Marx never denied that real human beings are the only actors. Indeed, he asserted this over and over again. What he always stressed, however, is that they act within constraints. (They make history but not under conditions of their own choosing.) From this perspective, what was essential was to understand those constraints—constraints not necessarily apparent to the individual actors.

Surprisingly, the concept of such constraints is a spectre that preoccupies at least one of the Analytical Marxists. Having delivered his funeral oration for much of Marx's work, Elster (1986, pp. 38–9, 194) does find one important and living contribution (indeed, Marx's 'most important methodological achievement')—the study of 'social contradictions'. In particular, he has in mind Marx's exploration of the fallacy of composition, the unintended consequences of individual actions, 'counterfinality', the 'local-global' fallacy and the like. Here is the basis, Elster (1985, p. 43) announces, of a 'powerful methodology'.

By fallacy of composition, Elster understands the inference which takes the following form: 'what is possible for any single individual must be possible for them all simultaneously'. As he points out in his *Logic and Society* (1978, p. 99), such an interference is false if the relevant property is 'non-universalizable'. In short, generalising from what is true for any single agent or group of agents to what is true of *all* agents may involve a fallacy of composition (Elster, 1985, pp. 44–5).

Yet, for the actors themselves, nothing may be more natural. Elster (1985, p. 19) indicates that 'Marx's most original contribution to the theory of belief information was . . . his idea that the economic agents tend to generalize locally valid views into invalid global statements, because of a failure to perceive that causal relations that obtain *ceteris paribus* may not hold unrestrictedly'. More is involved, too, than simply a theory of endogenous belief formation. Where individuals then proceed to *act* on the basis of such mutually invalidating beliefs, the result will be counterfinality—unintended consequences which have as their basis a fallacy of composition. We have, then, what Elster

(1985, p. 19) describes as 'perhaps the most powerful part of the Marxist methodology: the demonstration that in a decentralised economy there spontaneously arises a *fallacy of composition* with consequences for theory as well as for practice'.

There appears to be something of a paradox here. It is obvious from the many examples that Elster offers—ranging from the cobweb phenomenon to the effect of wage reductions on effective demand (Elster, 1978, ch. 5), that he considers such 'social contradictions' to be central to social science in general and economics in particular. Indeed, Elster (1985, p. 48) describes this 'extremely powerful' idea as 'Marx's central contribution to the methodology of social science'. *Yet, implicit in the concepts of the fallacy of composition and counterfinality is the existence of constraints and limits upon individuals.*

How can there be a fallacy of composition and counterfinality ('the embodiment of the fallacy of composition') unless the group as a whole faces a constraint that no individual member of the group faces? Insofar as the fallacy of composition revolves around the non-universality of a given property, a specific limit to universality is obviously a *presupposition*. However, the refusal of Analytical Marxism to entertain supra-individual entities means that such limits are revealed only *ex post facto* as counterfinality.

Consider in this respect a case set out by G. A. Cohen (1986), the third of the founding partners, in his 'The Structure of Proletarian Unfreedom'. Ten people are placed in a locked room. There is a single heavy key on the floor which anyone can pick up. Whoever picks up that key can unlock the door and leave. But, *only* that person will be able to leave. In this case, to generalise from what is true of each (the ability to leave the room) to what is true of all is, of course, an example of the fallacy of composition. In fact, as Cohen (p. 244) points out, each person is free to leave the room—but '*only on condition that the others do not exercise their similarly conditional freedom*'. What makes their freedom contingent (a state which Cohen calls 'collective unfreedom') is that there are limits and constraints which are placed on the whole group: 'whatever happens, at least nine people will remain in the room' (p. 242).

Significantly, in this example, we have *prior knowledge* that the relevant property (freedom to leave the room) is 'non-universalizable'. Knowledge of the specific whole in this case is prior in the explanatory order to understanding the conditional and contingent state of the individuals within this whole. More is involved than simply a question of epistemology; it is also an ontological question: the true properties of the individuals are only given by the characteristics of the whole.

Clearly, the importance one assigns to knowledge of global constraints depends upon the extent to which interaction effects are deemed significant. If one assumes the latter to be of a small order of importance, then the whole can be treated simply as the sum of its parts taken individually; in this case, one proceeds from the individual blithely (as in the case of much of neoclassical economics) without concern for fallacies of composition that emerge from interdependence.[1] By assumption, no investigation of constraints upon the whole is required; the macro can be safely left behind in the search for micro-foundations.

If, on the other hand, interaction effects such as those captured by the concept of the fallacy of composition are considered important, a focus upon the macro-level and of constraints of the whole upon the individual parts would seem to follow (as it did for Keynes).[2] So here is the paradox: while stressing the significance of interaction effects,

[1] See, in this context, the discussion of the analysis of variance in Levins and Lewontin.

[2] The adage that an acceptance of Keynes is a precondition for acceptance of Marx is strengthened by Elster's complaint (Elster, 1986, p. 63) about the lack of microfoundations for Keynesian macroeconomics.

Analytical Marxism nevertheless remains committed to the Cartesian priority of the part over the whole characteristic of methodological individualism.

In Marx's methodological holism, by contrast, investigation of structural limits to individual actions is precisely the result of considering the whole first. Discussing the division of value, Marx (1981A, p. 462) noted that the length of a line 'is not determined by the lengths of the segments into which it is divided. It is rather the relative lengths of the latter that are limited in advance by the limits of the line of which they are parts'. Value, in short, pre-exists its subdivision. The magnitude of value is measured by the amount of labour expended, and 'the commodity value cannot be resolved into anything further, and consists of nothing more'. Thus, total social labour exists as a limit on the distribution of income, which 'presupposes this substance as already present, i.e. the total value of the annual product, which is nothing more than objectified social labour' (Marx, 1981B, p. 961).

Not only were there inherent limits on the total, but Marx also argued in the *Grundrisse* that the reproduction of capitalism as an organic system required specific proportions and internal relations. Thus, he spoke of an 'inner division' of necessary and surplus labour and of direct labour and means of production. 'This inner division, inherent in the concept of capital, appears in exchange in such a way that the exchange of capitals among one another takes place in *specific and restricted proportions*—even if these are constantly changing in the course of production. The inner relation, he proposed, 'determines both the sum total of the exchange which can take place and the proportions in which each of these capitals must both exchange and produce' (Marx, 1973, p. 443, emphasis added).

On the other hand, Marx certainly did not argue that capitalism as such operates as if the agents of production are *conscious* of those limits. Exchange and production were not absolutely bound to these 'specific and restricted proportions'; rather, it was the very nature of a commodity-producing society that there was no *a priori* plan. Thus, he continued (Marx, 1973, pp. 443–4), '*Exchange* in and for itself gives these conceptually opposite moments an indifferent being; they exist independently of one another; their inner necessity becomes *manifest* in the crisis, which puts a forcible end to their seeming indifference towards each other'.

We have here what has been called (Kenway, 1980) a 'possibility theory' of crisis in Marx. On the one hand, there are the necessary inner limits 'inherent in the concept of capital'; on the other hand, since capitalism is a commodity-money exchange economy, the very nature of real activity by capitalists occurs as if those limits are not present.[1] 'Exchange does not change the inner characteristics of realization; but it projects them to the outside; gives them a reciprocally independent form, and thereby lets their unity exist merely as an inner necessity, which must therefore come forcibly to the surface in crises' (1973, p. 447).[2]

Thus, crises result from growing divergences between the results of the action of autonomous economic agents and what Alain Lipietz describes as 'the internal connections and immanent laws', which 'express only the unity of the capitalist structure, that is, its reproduction' (Lipietz, 1985, p. 69). Counterfinality occurs when economic agents

[1] Note that Kenway (1980) and Lavoie (1983) focus upon the separation of selling and buying inherent in a commodity-money economy as the basis of the 'possibility theory' they identify in Marx.

[2] Marx made the same point in *Theories of Surplus Value* (1971, p. 518): 'It is *crises* that put an end to this apparent *independence* of the various elements of which the production process continually consists and which it continually reproduces.'

act in such a way as to violate the 'specific and restricted proportions' determined by the inner requirements for reproduction.

From this perspective, if we are to understand what places limits upon the individual actors, making their autonomy a conditional autonomy, neither individuals nor market behaviour nor competition can come first in the explanatory order. Rather, the requirement is the identification of the 'intrinsic connection existing between economic categories or the obscure structure of the bourgeois economic system' (Marx, 1968, p. 165). For, as Marx (1968, p. 500) noted, 'there would be no crisis without this inner unity of factors that are apparently indifferent to each other'. In the absence of such a consideration of those limits, it will not be surprising if Marx's theory of crisis appears (as it does for Elster) incomprehensible.

Yet, if we have here in this combination of inherent limits and individual capitalists indifferent to those limits the basis for a possibility theory of crisis, it must be acknowledged that for Marx demonstration of the possibility of capitalist crisis was a relatively trivial and self-evident matter. Far more critical was the demonstration of an inner tendency to *violate* those inner limits, an inherent tendency for capitalist crisis—i.e. what Kenway calls an 'actuality' theory of crisis (Kenway, 1989, p. 25).

4. Realisation and crisis

Let us consider Marx's 'nebulous and opaque' discussion of crises which are the result of the inability to realise surplus value.[1] As Marx stressed, the conditions for the realisation of surplus value differ significantly from the conditions for the production of surplus value; they are restricted by 'the proportionality between the different branches of production and by society's power of consumption'. Since the latter exists within the framework of 'antagonistic conditions of distribution' which restrict the consumption of the vast majority of the population, there is a specific reason for the emergence of crises within capitalism (Marx, 1981B, p. 352).

For Marx, overproduction, 'the fundamental contradiction of developed capital', was specific to the very nature of capitalism: 'The bourgeois mode of production contains within itself a barrier to the free development of the productive forces, a barrier which comes to the surface in crises, and, in particular, in *overproduction*—the basic phenomenon in crises' (Marx, 1973, p. 415; Marx, 1968, p. 528). Rather than occurring in the proper proportions, capitalist production takes place 'without any consideration for the actual limits of the market or the needs backed by the ability to pay' (Marx, 1968, p. 535). Thus, Marx observed (1981B, p. 365) that there is a 'constant tension between the restricted dimensions of consumption on the capitalist basis, and a production that is constantly striving to overcome these immanent barriers'.

In particular, he argued that the limit was the result of bounds upon the consumption of workers, which capital attempts to keep to a minimum. As he commented in Volume II of *Capital* (Marx, 1981A, p. 391n) in a well-known note for future elaboration: 'Contradiction in the capitalist mode of production. The workers are important for the market as buyers of commodities. But as sellers of their commodity—labour power—capitalist society has the tendency to restrict them to their minimum price.'

[1] The tendency of the falling rate of profit (FROP) is not our subject. We will simply note with respect to FROP that its ultimate basis is lagging productivity increases in Department I (the sector producing means of production). This was a point well understood by Marx (if not by Analytical Marxists and others) as indicated by his comment in Volume III of *Capital* (1981B, p. 333) that FROP would not hold 'when the productivity of labour cheapens all the elements of both constant and the variable capital to the same extent'. See Lebowitz (1976; 1982A) and Perelman (1987).

What Marx was describing was an inherent tendency of capitalism to produce more surplus value than it could realise through the sale of commodities. And, since the problem was manifested in inadequate consumer demand, it followed that overproduction has a logical sequence: it appears in Dept II (the sector producing articles of consumption) and spreads to Dept I. For general overproduction, Marx argued (1968, p. 505), it suffices that there be overproduction of the principle commercial goods.[1] Thus, the demand for means of production may appear 'adequate and sufficient', but 'its inadequacy shows itself as soon as the final product encounters its limit in direct and final consumption' (Marx, 1973, p. 412n).

It is essential to recognise, of course, that limits upon worker's consumption are *always* present. Accordingly, they cannot be the proximate (as opposed to ultimate) cause of periodic crises of overproduction. Precipitating the emergence of overproduction was an increase in the rate of surplus value in the sphere of production. The very efforts of capital 'to reduce the relation of this necessary labour to surplus labour to the minimum' posit 'a new barrier to the sphere of exchange' (Marx, 1973, p. 422)

Overproduction, Marx commented (1968, p. 468), arises precisely because the consumption of workers 'does not grow correspondingly with the productivity of labour'. Yet, it was not simply a matter of inadequate workers' consumption. Capitalists were also restricted in their consumption since they were preoccupied with 'the drive for accumulations'. Thus, the limit to the realisation of surplus value was that workers could not consume enough whereas capitalists, attempting to maximise profits and to accumulate *would not*.[2]

The result, then, is the tendency for crises, those 'momentary, violent solutions for the existing contradictions, violent eruptions that re-establish the disturbed balance for the time being' (Marx, 1981B, p. 357). The emerging crisis acts 'to restore the correct relation between necessary and surplus labour, on which, in the last analysis, everything rests' (Marx, 1973, p. 446).

Thus, the following points appear to follow from this brief consideration of the texts:

(i) There is a 'specific' rate of surplus value (e^*) required for balance (i.e. successful reproduction) in the economy.
(ii) Productivity increases which exceed real wage increases have the effect of increasing the rate of surplus value above e^*.
(iii) The effect of the increase in the rate of surplus value above e^* is sooner or later to create a crisis of overproduction, manifested initially in Dept II, the sector producing articles of consumption.
(iv) The result of the crisis is to restore the appropriate rate of surplus value, e^*.[3]

As can be seen, we have here a simple set of propositions which implies a pattern of periodic crises of overproduction and a long-run constant wage-share of national income. But, in this unqualified form, it is far *too* simple. In particular, there is no apparent link

[1] Given the interdependence of industries, overproduction in Dept I, was an 'effect' (Marx, 1968, p. 524); 'the *overproduction* of coal is implied in the *overproduction* of iron, yarn etc. (even if coal was produced only in proportion to the production of iron and yarn etc) (p. 531).

[2] Given these antagonistic conditions of distribution, there was too much accumulation, too much capital—and accordingly, also, overproduction of commodities: 'the statement that there is *too much capital*, after all means merely that too little is consumed as *revenue*, and that more cannot be consumed in the given conditions' (1968, p. 534).

[3] This concept of an 'equilibrium share of wages' appears to be the interpretation of David Harvey in a recent book (Harvey, 1982, pp. 55, 77, 174). See Lebowitz (1986).

between this 'actuality' theory based upon capital's tendency to increase the rate of surplus value beyond the 'specific and restrictive proportions' inherent in the concept of capital and the 'possibility' theory which focuses on the tension between the inherent limits and the existence of autonomous individual capitalists. To resolve this requires us to take seriously 'the point of view of totality'.

5. A holistic thought-experiment

Since our purpose here is to demonstrate the importance of considering the whole explicitly, let us conduct a holistic thought-experiment which represents capitalism as a relationship between one capitalist and his wage-labourers.

The justification for this procedure is straightforward: Marx did the same thing repeatedly.[1] Indeed, many of the central relations developed in *Capital* implicitly assume capital as a whole or One Capital. This is certainly the basis for Marx's determination that, within capitalism, surplus value does not originate in the exchange of non-equivalents in the sphere of circulation. His 'proof' ('The capitalist class of a given country, taken as a whole, cannot defraud itself') is simply an announcement that the true subject of study is capital as a whole rather than any single capitalist (Marx, 1977, p. 266).

Similarly, Marx often drew upon the image of capitalism as composed of two unified blocs—the capitalist class as a whole and the working class as a whole—in order to distinguish essential relations from apparent surface phenomena. By representing capitalism as an organic whole characterised by one capitalist and his wage-labourers, we capture what Marx described as the 'essential relation': 'the relation of *every* capitalist to his *own* workers is the *relation as such of capital and labour*, the essential relation' (1973, p. 420). Indeed, he explicitly argued (1977, p. 732) that one could not understand the nature of capital as the result of exploitation unless we consider the capitalist and the worker 'in their totality, as the capitalist class and the working class confronting each other'.[2] All this, of course, is precisely the focus upon 'supra-individual entities' that Analytical Marxism abhors.

By abstracting from any consideration of competition and the separation of capital into many capitals, our thought-experiment effectively assumes the planning of production and distribution of means of production by the One Capitalist. It is, of course, an abstraction. It does not suggest that capital really acts as a whole (or as One); nor does it depart from Marx's insistence (1973, p. 414) that 'capital exists and can only exist as many capitals'. Nevertheless, it is our contention that such a thought-experiment yields some interesting insights into Marx's argument (and, what is immediately relevant, the question of those inherent limits and restricted proportions).

Assume the optimising single capitalist wants to maximise the production and realisation of surplus value. We treat workers here as objects rather than subjects; that is, aside from permitting them to push sufficiently in the opposite direction to capital to permit us to assume that both the real wage and the work-day are constant, we are

[1] As Duncan Foley observes (1986, p. 6), 'Marx often fails to be explicit about the level of aggregation at which he is working. He frequently explains the aggregate behaviour of a system by discussing a typical or average element of it.'

[2] See the discussion in Lebowitz (1992), Chapter 7.

looking explicitly here only at capital's side of the totality which is capitalism as a whole. Thus, the thought-experiment explored here is inherently one-sided.[1]

Since we also will assume that optimising capitalist is faced with a given number of workers, it follows that he can only increase the level of surplus value by reducing the necessary portion of the work-day. This is achieved by an increase in the level of productivity; and the condition is the substitution of means of production for living labour (i.e. an increase in the technical composition of capital). What emerge, then, as inherent tendencies of capital in general from our thought-experiment are a rising technical composition of capital, rising productivity and a rising rate of surplus value.

Will increases in the rate of surplus value in the sphere of production however, generate problems of realisation? Let us suggest that our One Capital, as an optimiser, will only increase the technical composition of capital and will only strive for more surplus value if s/he intends to *use* this surplus value. To secure the additional articles of consumption and means of production that s/he desires, s/he will choose the appropriate increase in the technical composition of capital; i.e., we assume that s/he acts purposively and is not subject to myopia.

Thus, as long as our One capitalist respects the 'specific and restricted proportions' necessary for reproduction (and there is no reason to assume that s/he will not), there is no basis for overproduction. Through our thought-experiment, we posit a specific relation between the rate of surplus value and the level of capitalist expenditures (both consumption and investment) which constitutes the required proportions for inner balance. The rate of surplus value (or, alternatively stated, the profit-share of national income) can be increased without violating the necessary proportions—so long as capitalist expenditures themselves increase accordingly.

The point can be considered by reference to Michael Kalecki's argument, which itself drew upon Marx:

$$Y = P + W \tag{1}$$

$$Y = C_k + C_w + I \tag{2}$$

where Y, P, W, C_k, C_w and I are national income, profits, wages, capitalists' consumption, workers' consumption and investment, respectively. Since we assume that $W = C_w$ (i.e. that workers spend what they get), then the equilibrium condition is:

$$P = C_k + I$$

or,

$$Y(P/Y) = C_k + I \tag{3}$$

Kalecki's central point can be illustrated simply in Fig. 1 (The Kaleckian Cross). With the profit-share of $(P/Y)^\star$ (which is equivalent to $e^\star/e^\star + 1$), the equilibrium output is OA; all surplus value generated within the sphere of production (BA) is realised. If capitalists succeed, however, in increasing the rate of surplus-value (i.e. raising the profit-share) to $(P/Y)'$, then at the existing output of OA, profits (or surplus value) generated within production (CA) will exceed that realisable at the given level of capitalist expenditures, BA; i.e. CB is unrealisable surplus value. Thus, assuming no

[1] Among other things, this excludes consideration of the manner in which workers' struggles impose upon capital the necessity to revolutionise the means of production. See the discussion of this one-sidedness in Lebowitz (1982B, 1992).

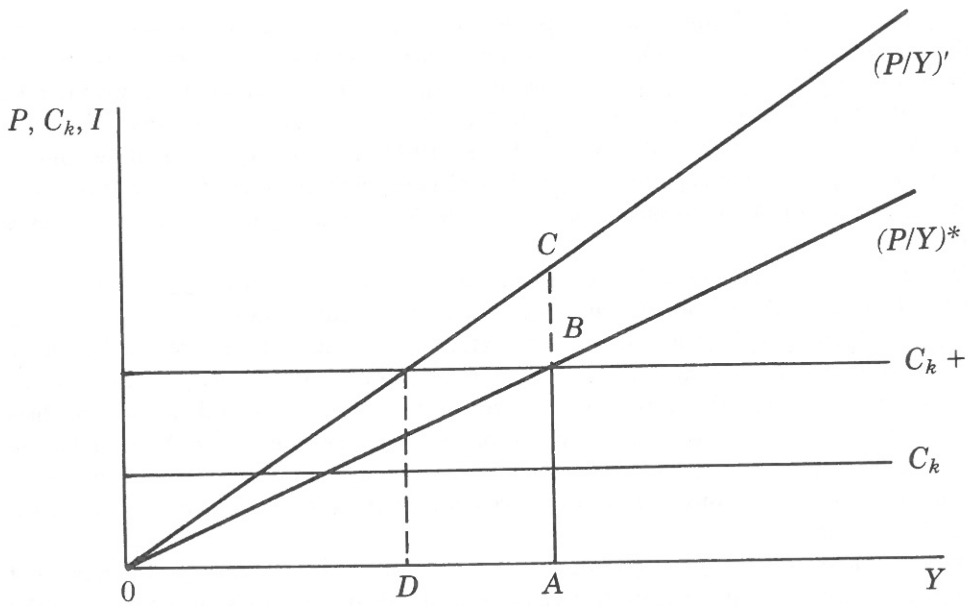

Fig. 1. *The Kaleckian Cross.*

commensurate increase in capitalist expenditures (or, for Kalecki, a budget deficit or export surplus), the equilibrium income level will fall to *OD*: 'The level of income or product will decline to the point at which the higher relative share of profits yields the same absolute level of profits' (Kalecki, 1986, p. 61).

What the argument indicates, of course, is that any increase in the rate of surplus-value is sustainable (i.e. does *not* violate the necessary conditions for balance) so long as it is accompanied by the appropriate increase in capitalist expenditures. That is precisely the point that Marx himself stressed in his reproduction models in Volume II of *Capital*: 'the capitalist class as a whole . . . must itself cast into circulation the money needed to realize its surplus value'. Not only was this point not paradoxical, 'it is in fact a necessary condition of the entire mechanism' (1981A, p. 497).

Thus, our thought-experiment yields an inference quite *different* to that of our earlier consideration of Marx's texts on crises of overproduction; it suggests that an increase in the rate of surplus value is *not* sufficient to generate a crisis. Rather, there appears to be no inherent check to the growth of the profit-share. For One Capital, there are no apparent barriers in the sphere of circulation to the growth of capital.

Of course, what should be immediately apparent is the relationship of this thought-experiment to Ricardo's treatment of accumulation without any regard for potential crises of overproduction. This similarity, however, is not accidental, since our thought-experiment has a familial relationship to Ricardo's corn model.

6. The world of many capitals

If these are the tendencies inherent in our One Capital experiment, what about those of a real world characterised by many capitals in competition? In this regime, the operative motive of each capitalist will not be to reduce the necessary portion of the work-day in order to increase the surplus portion. Such a perspective is clearly beyond the ken of any individual capitalist. Rather, each capitalist attempts to increase his/her profits by reducing his/her cost of production *vis-à-vis* his/her competitors; s/he does this by substituting machinery for labour and by finding more efficient methods of production. Thus, 'there is a motive for each individual capitalist to cheapen his commodities by increasing the productivity of labour' (Marx, 1977, p. 435). In the real regime of competition, the tendencies are rising technical composition of capital, rising productivity and a rising rate of surplus value . . . tendencies already seen in the regime of One Capital.

We have reproduced here Marx's distinction between 'the general and necessary tendencies of capital', on the one hand, and 'their forms of appearance', the way in which those inner laws 'manifest themselves in the external movement of the individual capitals' and 'assert themselves as the coercive laws of competition' (Marx, 1977, p. 433). In the one case, we have capital as a purposeful actor; in the other, many individual capitalists (also purposeful actors) driven by competition. We can see, then, what Marx meant in the *Grundrisse* (1973, p. 752) when he asserted that 'competition executes the inner laws of capital; makes them into compulsory laws towards the individual capital, but it does not invent them'.

Yet, what about the specific and restricted proportions that Marx discussed? In the regime of competing capitalists, there is *ex post* validation of private activities (in contrast to the planning of One Capital). Yet, as Marx (1968, p. 529) asked, 'since, on the basis of capitalist production, everyone works for himself and a particular labour must at the same time appear as its opposite, as abstract general labour and in this form as social labour—how is it possible to achieve the necessary balance and interdependence of the various spheres of production and the proportions between them, except through the constant neutralisation of a constant disharmony?'

In short, as noted earlier, precisely because there is not planned production in the regime of many capitals, there exists the *possibility* of crisis—crisis because the inner requirements for balance are not achieved. Nevertheless, we must recall that Marx wanted to do more than establish the possibility of crisis inherent in a capitalist commodity-money economy. More importantly, he wanted to establish its *necessity*.

This was precisely Marx's point with respect to the regime of many capitals. From Marx's perspective, the problem of Ricardo and his followers was one of reductionism: they treated the real world of many capitals as if it were the regime of One Capital and, thus, as a regime in which capital was distributed among the various spheres as if according to a plan. This, however, excluded by assumption what is specific to the real world of capital:

> All the objections which Ricardo and others raise against overproduction etc. rest on the fact that they regard bourgeois production either as a mode of production in which no distinction exists between purchase or sale—direct barter—or as *social* production, implying that society, as if according to a plan, distributes its means of production and productive forces in the degree and measure which is required for the fulfilment of the various social needs, so that each sphere of production receives the *quota* of social capital required to satisfy the corresponding need. This fiction arises entirely from the inability to grasp the specific form of bourgeois production . . . (Marx, 1968, pp. 528–9)

Let us consider, then, what is specific to the regime of many capitals. As we have already seen by examination of the regime of One Capital, an increase in the rate of surplus value is not in itself sufficient to generate a realisation crisis. The question before us, accordingly, is why do 'many capitals' *necessarily* drive beyond the proper proportions?

In the regime of One Capital, we assumed that in order to secure a given increase in surplus value (to satisfy desired increments in the means of production and articles of consumption) our rational capitalist initiates a given increase in the technical composition of capital. Since s/he is aware of the interdependencies between various sectors, it is assumed that s/he makes the correct decision to achieve his/her goals (i.e. that the proper proportions are respected).

Let us assume that each individual capitalist in the regime of many capitals similarly chooses the appropriate increase in the technical composition of capital to achieve his/her desired growth in surplus value *on the basis of the information available to him/her*. What the individual capitalist does *not* know, however, is that s/he will be the beneficiary not only of productivity increases in his/her *own* production process but also of productivity increases elsewhere in the economy; 'capitalist X benefits not only from the productivity of labour in his firm, but also from that of other firms as well' (Marx, 1981B, p. 177).

Thus, productivity increases in a Dept I sector not only reduce the value of the constant capital of all industries using its commodities as inputs (thereby increasing the rate of profit directly) but also cheapen these commodities and thus lower the value of labour-power insofar as these commodities enter into worker's consumption (Marx, 1981B, p. 174; 1977, p. 442). Similarly, the actions of each capitalist in Dept II will contribute to the reduction in necessary labour and thus to an increase in the general rate of surplus value (Marx, 1977, p. 433).

Consider the implications of the absence of foresight into developments in interdependent industries. Under these conditions, in order to achieve a given target (to meet requirements for planned expenditures), individual capitalists reduce their costs of production more than they would if they had foresight. Thus, compared to the regime of One Capital, the tendency will be for greater increases in the technical composition of capital. Characteristic of the world of real capital will be a period that Marx described (1977, p. 580) as one of 'feverish production'.

Conversely, the period in which production occurs on its new basis (the increased technical composition of capital) will be one in which total social productivity will increase more than the sum of the separate acts of individual capitalists. The benefit that accrues to the capitalist—indeed, to all capitalists—is the advantage produced by social labour. Elster describes this very case as a Marxian example of 'invisible hand' effects—unintended consequences characterised by positive externalities (Elster, 1985, pp. 24–5, 144).

What Elster does not recognise, however, is that violated under these circumstances are precisely the proper proportions that Marx stressed. Social productivity and the rate of surplus value in the sphere of production increase more than the individual capitalists expect. Surplus value grows more than their anticipatory expenditures on means of production and capitalist consumption.[1]

Stated in the context of Figure 1, the inherent tendency of capitalist production is to generate a profit-share of income which cannot be sustained without a fall in the level of income. Although, capitalist expenditures may increase sufficiently to validate the increased profit-share $(P/Y)'$, the effect of the interaction among individual capitalists is unintentionally to drive the profit-share higher than $(P/Y)'$. The period here is that of the

[1] The immediate effect is the unanticipated increase in money-capital (i.e. capitalists who sell but do not buy), which meets the conditions of the 'possibility theory' as stated by Kenway (1980) and Lavoie (1983). See p. 168, no. 1.

'consequent glut on the market' (Marx, 1977, p. 580) which follows that of feverish production. As Marx's Volume II footnote (Marx, 1981A, p. 391n) on the contradiction of capital continued: 'Further contradiction: the periods in which capitalist production exerts all its forces regularly show themselves to be periods of over-production; because the limit to the application of the productive powers is not simply the production of value, but also its realization.'

Thus, 'invisible hand' effects in the sphere of production will tend to have as their counterpart counterfinality in the sphere of circulation. It is as if in the regime of One Capital, the capitalist were to find to his/her surprise that s/he had produced more surplus value than s/he wanted—i.e. the myopic capitalist. Myopia in the regime of many capitals necessarily exists, however, because of the separation of capitals.

Our specific concern here has been to identify the nature of the necessary inner limits that Marx stressed. As we have seen, Marx proposed that the result of going beyond the proper proportions was a crisis which restores the 'correct relation' between necessary and surplus labour. But, what *is* that correct relation? It will not be the *original* rate of surplus value (e^*) but, rather, the increased rate of surplus value that would be found in the regime of One Capital [represented in Figure 1 by $(P/Y)'$]. There are 'specific and restricted proportions', but as Marx noted (1973, p. 443), 'these are constantly changing in the course of production.'

7. The specific fallacy of composition

The precise nature of the limit is clear if, taking a leaf from Elster's book, we restate the problem in the context of the fallacy of composition which underlies counterfinality in this case. *Any individual capitalist, it may be argued, can lower his/her cost of production and realise the additional surplus value thereby generated.* A fallacy of composition, however, may be committed if we attempt to generalise from this locally valid statement to all capitalists simultaneously. The familiar case, of course, is the Keynesian discussion of the effect of wage reductions.

That particular illustration of the fallacy was certainly understood by Marx. 'Every capitalist', Marx noted in the *Grundrisse* (1973, p. 420), 'knows this about his worker, that he does not relate to him as producer to consumer, and [he therefore] wishes to restrict his consumption, i.e. his ability to exchange, his wage, as much as possible.' Yet, at the same time, each capitalist looks upon the workers of *other* capitalists simply as consumers (i.e. as if they are not workers similarly restricted to a minimum). The result was an inherent tendency to violate the restricted proportions: '*Here again it is the competition among capitals*, their indifference to and independence of one another, which brings it about that the individual capital relates to the workers of the entire remaining capital *not as to workers*: hence is driven beyond the right proportion' (Marx, 1973, p. 420).

As our discussion has indicated, however, the fallacy of composition in question is not limited in its application to the case of a wage decrease. Where the reduction in the cost of production occurs through an increase in productivity, it may *also* hold. The mechanism, of course, is different. In this case, counterfinality emerges because, given the ('invisible hand') interaction effects, increases in productivity will generate a rate of surplus value in excess of that 'warranted'. More surplus value is produced than can be realised, and the 'inner necessity' therefore comes forcibly to the surface in a crisis.

The limit which, when violated, produces counterfinality is the same in both cases: *the limit as to how high the rate of surplus value in the sphere of production can rise without generating a realisation crisis is given by the level of expenditures on means of production and capitalist consumption.* So long as this condition is satisfied, neither in the case of reduced wages nor increased productivity will there be a fallacy of composition and counterfinality resulting from a local-global generalisation. Central to Marx's 'actuality' theory of crisis, however, was the view *contra* Ricardo that, precisely because of the independence of individual capitalists but of the necessary interdependence of their actions, the tendency was for that inner necessity to be violated and therefore manifested in crises.[1]

What this exercise accordingly has provided is a reconciliation between Marx's focus on the effects of increases in the rate of surplus value and the analysis based on 'the point of view of totality'. All this yields an interesting inference. Insofar as the 'correct relation' of necessary and surplus labour which crisis acts to restore is that of the regime of One Capital, the trajectory (the inner tendency) of capital remains that of our thought-experiment: rising technical composition of capital, rising productivity and rising rate of surplus value—*despite the periodic fluctuations about this trajectory which necessarily result from the competition of capitals.*[2] The 'necessary balance and interdependence of the various spheres of production and the proportions between them' is achieved 'through the constant neutralisation of a constant disharmony' (Marx, 1968, p. 529), but *in themselves* crises imply nothing about a 'breakdown' of capitalism.[3]

8. Conclusion

As the above discussion illustrates, our argument is not at all with Elster's focus on the fallacy of composition, counterfinality, unintended consequences, etc. Elster, indeed, is correct to emphasise the importance of such concepts in Marx. In the absence of a prior consideration of the structure as a whole, however, what is lost is an understanding of the structural limits which generate counterfinality as a phenomenon. This may explain why Elster's discussion of Marx's theory of crisis is 'virtually devoid of content'—despite his own recognition of 'invisible hand' effects in the sphere of production (Elster, 1985, pp. 161–5).

In Marx's methodological holism, consideration of supra-individual entities as prior in the explanatory order is a central part of his examination of the structure within which individuals act and which conditions their autonomy. In this respect, Roemer's truism that 'in a competitive economy there is no agent who looks after the needs of capital' (Roemer, 1986, p. 191) entirely misses Marx's point about the logical priority of the whole. Not only do the Analytical Marxists fail to advance Marx's substantive research agenda, but they also fail to understand the method they are challenging.

Analytical Marxism, on the other hand, has performed an important service. For, in their insistence in performing an 'erase and replace' operation with respect to Marxist methodology, its champions do explicitly what many others who consider themselves

[1] This argument corresponds to that of Lipietz (1985) and Harvey (1982). I incorrectly criticised the latter on this question in Lebowitz (1986).

[2] Recall, however, that we are considering here only the tendencies of capital (and not those of wage-labour). See note x, pp. xx above.

[3] Rather, as Gramsci (184) argued, crises 'can simply create a terrain more favourable to the dissemination of certain modes of thought, and certain ways of posing and resolving questions involving the entire subsequent development of national life.' Cf. Lebowitz 1992).

Marxists without any modifying adjective have long done implicitly and eclectically.[1] What distinguishes Analytical Marxism in this respect, then, is not its uniqueness in its methodological principles but, rather, its self-conscious articulation of those principles and rigorous consistency in applying them.

Accordingly, the greatest contribution of Analytical Marxism may be its success in revealing the current confused state of Marxist methodology. Through its searching (and occasionally sneering) criticism, it has created the context for a better specification of an integral Marxist methodology. For this reason, recalling Oscar Lange's retort to von Mises, the future developers of an adequate Marxist economic theory may wish to erect a statue to the Analytical Marxists. And, as Lange noted in his discussion, such a statue may serve well as a basis for a lecture on dialectics (Lange, 1964, pp. 57–8).

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[1] It would be wrong, of course, to equate the 'many capital' theorists with the methodological individualism of Analytical Marxism; however, an emphasis upon microfoundations is common to both.

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