

# The ontology of economic power in capitalism: mainstream economics and Marx

Giulio Palermo\*

Mainstream economics conceives power to be incompatible with perfect competition. This conception, I argue, derives from its deductivist method and the 'empirical realist' ontology that it presupposes. Following Marx, I show that capitalism constantly reproduces asymmetrical constraints on classes of individuals, independent of the market form. My ontological argument is rooted in the philosophy of 'critical realism'. My conclusion is that the dichotomy 'power–competition' is ontologically untenable. If capitalist relations necessarily involve power, it is not simply because neoclassical competition does not exist in reality, as radical mainstream economists suggest, but rather because capitalism altogether is a 'system of power'.

*Key words:* Power, Marxism, Critical realism, Ontology, Methodology

*JEL classifications:* B25, B41, D40, P16.

## 1. Introduction

This paper brings together two notions that are not usually considered together: power and ontology. Indeed, it is an ontological enquiry into the nature of power under capitalism and, as a sub-text, the inability of mainstream economic theory to understand power because of its mistaken ontological presuppositions.

In general terms, power is the faculty to do or to not do something, which I refer to as 'power to act' (PTA). In interpersonal relations, power is the capacity to influence the action of others, which I refer to as 'power over somebody' (POS). Whilst both aspects are important, mainstream economics cannot explain PTA and its relations with POS because of its ontology, and so operates entirely with an analysis restricted to POS. This manifests itself in the literature, via the twofold assumption that the distribution of PTA in society is given and that, in a system of perfect (Walrasian) competition, there is no power in social relations. This is because, in perfectly competitive markets, individuals with their inborn endowments can choose among a number of equivalent interpersonal relations. Therefore, if an individual tries to impose his/her will upon another, the latter can simply choose to

Manuscript received 15 January 2002; final version received 21 July 2006.

*Address for correspondence:* Dept of Economics, University of Brescia, via S. Faustino 74/B, 25122 Brescia, Italy; e-mail: palermo@eco.unibs.it

\* University of Brescia. A version of this paper was first presented at the EAEPE annual conference, Sienna, Italy, 2001. The author is grateful to Steve Fleetwood and to an anonymous referee of this journal for their comments, critical remarks and suggestions.

stop interacting with him/her with no loss, independently of their respective PTAs. In such a context, no one can actually exercise power over anyone else.

From a non-mainstream perspective, such as Marxist (as I shall elaborate here) or indeed a post-Keynesian or perhaps even Institutional one, capitalist relations are recognised as, by their nature, power relations. Under capitalism, PTA is asymmetrically distributed in society, and this asymmetry (which is necessary to the day-to-day operation of capitalism) has nothing to do with the particular competitive or non-competitive form of the market. And it is indeed this asymmetrical distribution of PTA at a social level which is the cause of relations of POS at an interpersonal level.

How is it possible that Marxist (or other) perspectives can grasp this form of power, whereas the mainstream perspective cannot? The answer lies not strictly at the level of theory, but at that of meta-theory. It is Marxism's meta-theoretical, or more specifically, ontological, presuppositions that discourage the development of theory in terms of isolated individuals, and encourage the development of theory in terms of the relations between agents and the social structures they interact with. And unsurprisingly, some of these social structures are the vehicle through which power is asserted.

Mainstream economics presupposes an 'empirical realist' (ER) ontology wherein, essentially, what is empirically observed is treated as synonymous with what is: it is a kind of 'what you see is what you get' ontology. Marxist economics, by contrast, presupposes a structured or depth ontology wherein, underlying the empirically observed and the actual occurrences, are social structures that govern the empirical and the actual. This ontology, I argue, is compatible with the philosophical perspective of 'critical realism' (CR). Put simply, for those like critical realists and Marxists committed to a structured ontology, essence underlies appearance, whereas for mainstream economists, committed to an ER ontology, appearance is all there is. These two different ontologies, then, motivate and sustain two different notions of power.

This paper starts with ontology. It elaborates upon the structured ontology developed within CR and the ER alternative before going on to discuss the individualist approach to power (developed by mainstream economics, but also accepted in some heterodox accounts) encouraged by ER. Bearing ontology in mind, I consider the relations between the different forms of power. As well as the empirical notions of PTA and POS, I shall discuss non-observable entities such as 'constraining structures', 'constraining mechanisms' and 'system of power'. This abstract ontological framework is used in the following section to analyse the concrete forms of economic power in capitalism. The structure of this section follows the preceding one. Here, however, PTA, POS and the other power-related concepts are discussed in the context of capitalist relations as purchasing power, market power, authority, etc. This analysis relies heavily on Marx's understanding of the working and reproduction of capitalism. My thesis is that capitalism is in its essence a system of power, with particular empirical manifestations of an underlying non-observable power structure.

## 2. Critical realism

The CR movement begins in the philosophical camp with the work of Bhaskar in the 1970s, and is developed in the 1980s thanks to the contributions of Benton, Collier and Outhwaite (cf., Norris, 1999). Today, CR is a movement encompassing different disciplines, including economics, sociology, biology and physics. The growing impact of this movement is witnessed by the number of associations, forums and workshops fostering

the discussion and development of CR and by the increasing penetration in academic journals of themes related to CR. Since 1998, the International Association for Critical Realism has also published a specialised journal on CR—the *Journal of Critical Realism*. In the context of philosophy and economics, the works of Archer (1995), Bhaskar (1978, 1979, 1986, 1993), Collier (1994), Lawson (1997, 2003) and Outhwaite (1987) constitute some of the main theoretical references. Some essential readings on CR are collected in Archer *et al.* (1998). Fleetwood (1999) is a collection of contributions to the debate about CR in economics. The development of a CR perspective in economics owes much to the ‘Cambridge school’, strongly influenced by Tony Lawson (some of its contributions have appeared in this journal and in the *Review of Social Economy*).

According to CR, mainstream economics can be characterised by its deductivist methodology, based on closed system modelling. Deductivism, like any other method, presupposes an ontology, in the sense that the nature of reality must be supposed to be such that it can be investigated using the deductivist method. Although mainstream economics rarely develops ontological arguments, its implicit ontology consists of atomistic, empirical events. More precisely, reality is supposed to be constituted by two domains, the ‘actual’ and the ‘empirical’. The former consists of events and states of affairs, the latter of human experiences of them. These two domains are supposed to be fused, so that actual events are presumed to coexist with their empirical perceptions. Reality is thus identified with what is perceived, or, at least, what is perceivable under certain conditions, and the explanation of an event is provided by looking at other (perceivable) events, since nothing else exists in this ontology. If knowledge is, allegedly, gained through observing and recording these events empirically (as data), then generalised and/or scientific knowledge can only be gained if these events produce some kind of stable pattern—if they simply produces a totally random flux of events, on this understanding, there could not be access to knowledge. In fact, the pattern these events produce has to be one of event regularity or constancy. Mainstream economists, typically, generate these event regularities by assumption. The result is an artificially closed system. The snag is that socio-economic systems are almost always open systems, i.e., systems wherein event regularities are not ubiquitous.

By contrast, according to CR, ‘the world is composed not only of events and states of affairs and our experiences or impressions of them, but also of underlying structures, powers, mechanisms and tendencies, which exist, whether or not detected, and govern or facilitate actual events’ (Lawson, 1997, p. 21). The CR ontology is stratified and consists of three domains, the ‘empirical’, the ‘actual’ and the ‘real’ (also called the ‘deep’). These three domains are presumed to be out of phase with one another. This means that it is not possible to establish a one-to-one relationship between experiences and events or between events and mechanisms. This ontology encourages a different methodology from deductivism. In contrast to the deductivist mode of inference, observable events are not explained in terms of other observable events, but in terms of underlying structures, their causal powers, the mechanisms through which they operate and the tendencies that they generate. This move from phenomenal reality to the deep domain is a mode of inference called ‘retroduction’. Structures and mechanisms, however, do not necessarily act in isolation; on the contrary, in general, an event or state of affairs is governed by the interaction of different structures and mechanisms. The scientific problem is thus to identify the structures and mechanisms that govern phenomenal reality and to explain the forms of their interaction.

These different ontological premises lead to radically different conceptions of power. According to CR, power is a notion that refers to entities of the deep domain. By contrast,

in ER inspired theories, the notion of power refers to particular empirical phenomena. From a CR perspective, the problem is thus to explain the relation between the empirical forms of power and the structures and mechanisms that govern them. In the study of power relations, however, the implicit or explicit acceptance of ER by academic orthodoxy has encouraged a completely different research project, based on the deductivist method. In fact, the most common way to study power relations has been to assume atomistic individuals as the sole explanatory units of eventual relations of POS (methodological individualism). But in order to close the system and make deductivism applicable, atomistic individuals also had to be deprived of any real agency. Methodological individualism has thus been coupled with the assumption of rational economic men. Only such a man is analytically empty, analytically atomistic, so that there is no intrinsic properties that can change, thereby generating different responses to the same stimuli at different times. Only an atomistically conceived *homo economicus* responds identically, and predictably every single time he is faced with the same set of conditions.<sup>1</sup> It is within this methodological framework, emanating from the ER ontology, that orthodox social scientists have approached the study of power.

### 3. The individualist approach

The subject of power has been investigated mainly within sociology and political science. The individualist approach has its roots in Weber, who defined power as ‘the probability that one actor within a social relationship will be in a position to carry out his own will despite resistance’ (Weber, 1968, vol. 1, p. 53).<sup>2</sup> This definition has been applied mainly to the study of situations in which an actor is able to get his/her way in social decisions when others are openly opposed. According to Dahl (1961), the exercise of power presupposes that two or more groups have conflicting preferences and that they manifest this explicitly. Lukes (1974), however, argues that this is a restrictive conception of power that can be called ‘one-dimensional’, and identifies two other views of power: the two-dimensional, developed by Bachrach and Baratz, and his own three-dimensional view.<sup>3</sup>

Bachrach and Baratz (1970) introduce a second dimension of power that consists in the ability to condition the issues that are the object of collective decision. If *A* manages to confine the scope of decision-making to particular issues and prevents *B* from bringing to the fore issues that might be detrimental to his/her own preferences, *A* is actually exercising power over *B*. This two-dimensional view, however, is still inadequate for Lukes. The political agenda, he argues, is not necessarily controlled by the intentional action of particular individuals; it depends also on collective action and on the form of organisation of the system (‘systemic effect’). Moreover, the notion of power should not be restricted to observable conflicts, because power over an individual may also be exercised by influencing, shaping or determining his/her very wants. Within this framework, even the absence of grievance does not imply genuine consensus, since those who are subject to power might not be able to express their *real* interests and might even be unaware of them. And most importantly, there might exist forms of coercion on individual choice that

<sup>1</sup> This explains why Austrian economics, the champion of methodological individualism, but also a severe critic of neoclassical *homo economicus*, has never really participated to the debate on power within mainstream economics.

<sup>2</sup> The English translation can be misleading, for the German term ‘chance’ (translated as ‘probability’) also means ‘opportunity’.

<sup>3</sup> After the criticisms of Bachrach and Baratz against the work of Dahl, the one-dimensional view has been defended by Polsby (1963) and Wolfinger (1971).

depend on the overall structure of the decision-making system and that cannot be ascribed to the action of any single individual.

Besides these conceptions of power as an interpersonal relation, Lukes (1974, p. 31) criticises the conceptions elaborated by Parsons (1957, 1963A, 1963B) and Arendt (1970), by noticing that they ‘focus on the locution “power to”, ignoring “power over”. Thus power indicates a “capacity”, a “facility”, an “ability”, not a relationship. Accordingly, the conflictual aspect of power—the fact that it is exercised over people—disappears altogether from view’. Lukes also maintains that everything that can be said by means of the notion of “power to” can be said with greater clarity by means of his own conceptual scheme. Although my analysis of economic power is an attempt to develop the three-dimensional view of Lukes, I do not think that the point is to establish whether the notion of POS is more or less general than that of PTA. The issue is rather to clarify the relations between them and, above all, the way both of them are governed by non-observable structures and mechanisms. In fact, I believe that this is the only way to study ‘systemic effects’, which Lukes himself regards as an essential aspect of his three-dimensional view.<sup>1</sup>

In the economics literature, the debate on power has developed mainly as a sub-problem of explaining ‘the nature of the firm’. Coase (1937) formulated this problem by asking the questions: Why do hierarchies exist? Where do power relations within the firm come from?<sup>2</sup> Of course, these questions can be approached in many ways. The acceptance of deductivism, however, and, in particular, of methodological individualism, poses serious restrictions that make the one-dimensional view largely dominant even within important parts of economic heterodoxy. Meta-theoretically speaking, even those parts of Marxism committed to deductivism and ER—such as rational choice Marxism and parts of the radical school—develop in fact the same one-dimensional view and are indistinguishable from mainstream economics.

This one-dimensional view includes traditional neoclassical economics, with its analysis of market power, the contractual approach (Alchian and Demsetz, 1972; Alchian and Woodward, 1987; Jensen and Meckling, 1976; Cheung, 1983, 1987A, 1987B, 1992), the transaction cost economics (Coase, 1937; Williamson, 1975, 1985, 1995, 1996A, 1996B; Williamson and Ouchi, 1983; Simon, 1951, 1991), the property right approach (Hart, 1995, 1996; Hart and Moore, 1990), and those parts of the institutional perspective (Goldberg, 1976, 1980) and of the radical school (Bowles and Gintis, 1988, 1993A, 1993B, 1993C, 1993D, 1994; Bowles, 1985; Gintis, 1976, 1989; Gintis and Ishikawa, 1981; Putterman, 1982, 1984, 1993, 1995; Dow and Putterman, 1999, 2000; Screpanti, 2001) that accept methodological individualism even if only as a theoretical challenge.<sup>3</sup>

<sup>1</sup> The issue of power in political science is often associated with the work of Foucault. In his analysis, however, Foucault addresses various questions on different aspects of power, but, as he himself claims, he ‘in no way construct[s] a theory of power’ (Foucault, 1990, p. 39). In his conception, power exists in a purely nominal sense rather than in any substantive sense: power ‘is the name one attributes to a complex strategical relationship in a particular society’ (Foucault, 1980A, p. 93). As Cousins and Hussain (1984) notice, Foucault’s major interest is not in *what is power*, but in *how it is exercised*. As he says: ‘Power is exercised rather than possessed’ (Foucault, 1977, p. 26); ‘it only exists in action’ (Foucault, 1980B, p. 89). He also has no interest in the quantification of power and disputes whether power comparability in any quantifiable form exists.

<sup>2</sup> An equivalent formulation of the same question is that of Samuelson (1957) who asks why, in perfectly competitive markets, capital usually hires labour and not vice versa.

<sup>3</sup> In Palermo (2000), I argue that new institutional economics fails both its attempts (1) to characterise theoretically the capitalist firm and (2) to analyse the power relations of capitalism. In Ankarloo and Palermo (2004), we focus the critique on Williamson’s transaction costs economics.

If I assemble theories that are often considered as competing with one another, it is because their individualist methodology and insistence on *observable* conflicts presuppose the same ER ontology. Ontologically, these theories assume that reality coincides with what is empirically detectable. Methodologically, they seek (what they consider to be) explanations by reducing empirical phenomena to the smallest units of the system, which are assumed to be independent of one another and of the system of which they are part. These units, as already noticed, are rational economic agents. Although this approach focuses on the relationship between the capitalist and the worker, these two figures are not *bona fide* social entities. In this ontology, capitalists and workers are simply individuals. Therefore, their eventual power relation is not found in the capital–labour relation, but in the innate qualities of individuals.

New Institutionalism, for instance, explains the origin of hierarchies in capitalism by assuming that they emerged spontaneously from the interaction of imperfect individuals in an imperfect context. Williamson (1975, p. 21) starts with the assumption that ‘in the beginning there were markets’ and, through successive exercises in comparative statics, *deduces* the emergence of hierarchies as solutions to market failures. His ‘explanation’ is based on the assumption that individuals have heterogeneous natural endowments, such as ‘unequally distributed administrative talent’, ‘oratorical gifts’, ‘information processing’ and ‘decision making skills’ (Williamson, 1975, pp. 47–52). As Pitelis (1991, p. 12) has shown, however, heterogeneity in natural individual endowments alone is not sufficient to make hierarchies superior to markets. It is necessary that the context in which individuals interact be imperfect as well. For this reason, Williamson introduces uncertainty and imperfect information as essential features of his ‘market and hierarchies framework’.

The assumption of an everlasting human nature makes Williamson’s historical analysis peculiar: the statement that capitalist hierarchies originated without coercion is not documented historically, but argued deductively. The problem for Williamson is not to investigate what has effectively taken place, but to find the conditions that make one institution superior to another, with the (unjustified) assumption that efficiency is always automatically selected. In this conception, hierarchies can exist only where the conditions for perfect competition do not hold.<sup>1</sup>

This conception is common to the whole of the individualist approach. In a perfectly competitive context, interpersonal relations are assumed to involve no power, and the cause of power relations is found in the empirical conditions that make perfect competition impossible.<sup>2</sup> In the words of two leading exponents of radical political economics, ‘the absence of power in the Walrasian model is based on the presumption that supply equals demand in competitive equilibrium for, when markets clear, each agent’s transaction is equivalent to his or her next best alternative’ (Bowles and Gintis, 1994, p. 301). According to the authors, the strength of two individuals who interact in the market depends on the difference between their current relation and their next best alternative. If a capitalist pays

<sup>1</sup> The individualist approach assumes that individuals are self-interested. However, self-interested behaviour is depicted as ‘profit maximisation’ with regard to the capitalist and as ‘shirking’ or ‘cheating’ with regard to the worker. Notice also that competition and power are conceived as mutually exclusive and symmetrical, but are analysed asymmetrically: power is to be explained; competition, by contrast, is natural and everlasting and deserves no scientific explanation.

<sup>2</sup> This conception of power can be extended to Austrian economics as well. As Young (1995) shows, although Austrians consider the market as an arena of freedom in which interaction is purely voluntary, their conception of capitalism as essentially free from power relations presupposes atomism and competition. In Palermo (1998), I criticise the Austrian conception of the market process for its neglect of power relations in the explanation of the convergence of individual plans.

a wage that is higher than the perfectly competitive one, then he/she holds the worker in check, and has power over him/her. But in the reign of perfect Walrasian competition, this cannot occur.<sup>1</sup>

Perfect competition presupposes full rationality, perfect information, and absence of radical uncertainty and historical time. Therefore, according to this approach, power relations can exist only in empirical contexts characterised by these sorts of *imperfection*. At an ontological level, the actual-empirical domain is so divided into two distinct closed systems: a system without any imperfection, in which interpersonal relations are governed by perfect competition; and a system with imperfections, in which interpersonal relations involve power. This distinction might appear purely theoretical. However, it is only when such a distinction exists in reality that it is meaningful to develop different and incompatible theories for both perfect and imperfect decision-making contexts: only in this case can the theories developed in the two decision-making contexts be simultaneously valid, each one in its subset of the actual-empirical domain. If, on the contrary, the perfect decision-making context is a pure fiction, with no empirical counterpart, then, to be rigorous, the whole set of theories built in it should be considered irrelevant in realist terms.<sup>2</sup>

The extent of power relations in reality is thus a merely empirical question, depending on the spread of imperfections in the actual-empirical domain. At one extreme, we find Alchian and Demsetz, who assume markets and perfect competition even where they do not exist, as in the case of intra-firm relationships. They write as follows:

It is common to see the firm characterized by the power to settle issues by fiat, by authority, or by disciplinary action superior to that available in the conventional market. This is delusion . . . [The employer] can fire or sue, just as I can fire my grocer by stopping purchases from him or sue him for delivering faulty products.<sup>3</sup> (Alchian and Demsetz, 1972, p. 777)

At the other extreme, authors of radical inspiration see market imperfections as endemic and maintain that power relations are ubiquitous in the real world. For instance, Screpanti (2001, p. 145), after defining a complex context characterised by bounded rationality, imperfect information, uncertainty and various externalities, affirms: 'Perfect and atomistic competition cannot exist in this world, even as a limit case—I mean the neoclassical competition that eliminates all inefficiencies and power hubris'. But these apparently opposite positions share the same conception, according to which the pervasiveness of power relations in reality depends on the empirical diffusion of market imperfections, which

<sup>1</sup> Bowles and Gintis distinguish between 'perfect competition' and 'perfect Walrasian competition': the former does not imply market clearing, the latter does (and coincides with what in the literature is generally called 'perfect competition'). Ultimately, this is why they can claim that power relations exist even in the reign of perfect competition (with non-clearing markets). In this paper, I shall continue to adopt the definition of perfect competition as implying market clearing.

<sup>2</sup> To the extent that in fact the perfect decision-making context does not exist in reality, Bowles and Gintis are coherent in rejecting the orthodox Walrasian model. Less clear is why they choose precisely this abstract fiction as the starting point of their supposedly more realistic 'post-Walrasian approach'.

<sup>3</sup> Within new institutional economics, Williamson (1997, p. 23) explicitly criticises Alchian and Demsetz (1972) by affirming: 'Firms can and do exercise fiat that markets cannot', and characterises intra-firm relations precisely on the asymmetry between employers and employees. Williamson, however, considers the notion of power intrinsically problematic and analyses the institutions of capitalism under the assumption that they are Pareto-efficient outcomes of *free* voluntary exchanges. Fourie (1989, 1991, 1993) has argued that this explanation of hierarchy in production rests on a theoretical confusion between production and exchange. Before him, Engels (1878, Part II, ch. 1) had noticed, 'Production may occur without exchange, but exchange—by the very fact that it is only an exchange of products—cannot occur without production.'

prevents markets from clearing and breaks the symmetry between the two sides of the market.

Before developing an explicit ontology that explains the social nature of capitalist power relations, let me briefly discuss a fundamental contradiction in the individualist methodology and in the ahistorical conception of capitalism it presupposes. Bounded rationality, imperfect information, historical time, etc. are not specific to capitalism; therefore, if we follow the deductivist logic of mainstream economics, power relations must be a constant in any social system. But then we must conclude that power relations have always existed, even before the historical development of market relations and economic competition, although they have become visible only with the historical development of capitalism (and the consequent possibility of conceiving a model of complete markets and perfect competition). However, if pre-capitalist systems, with less developed or completely absent market relations, were not regulated by economic competition, this clearly could not have been due to *market imperfections*, but to *lack of market relations*. As I shall show, the claim that power relations are ubiquitous in capitalism is correct, but for completely different reasons. But before analysing the specific forms of economic power of capitalism, I shall develop a general ontological framework of the relations between the different forms of power.

## 4. The ontology of power

### 4.1 *Power to act*

The PTA is defined by the ‘decision-making set’ of the agent, which exhaustively describes his/her potential courses of action. Agents are not only individuals, but also collective actors (a firm, a bank, a political party, a trade union . . . ). There is no reason to assume that they know precisely and take into account rationally their own decision-making sets and those of the others. Imperfect information and bounded rationality can lead to partial and imperfect knowledge. Independent of this, however, the sets of actions that agents can and cannot undertake *exist* and do not depend on what agents know. Of course, the analysis of the existing PTA is not sufficient to determine what agents will do, or, to put it differently, the analysis of the *existence* of PTA cannot explain how agents *exercise* it: choices do not depend only on constraints (or, better, on the perception and interpretation of them), but on goals as well.

Operationally, at a given moment of time, a measure of the *existing* PTAs is defined by the range of actions inscribed in each individual decision-making set. This measure is *ex ante* in the sense that it refers to the means at one’s disposal for the exercise of power, not to the exercise of power itself: purchasing power is determined by wealth, not by actual purchases; military power is determined by fire potential, not by the tons of bombs actually dropped. When a power is *exercised*, its measurement is *ex post*. As concerns existence, this measure is a mere imperfect proxy for the *ex ante* measure: purchases are correlated with wealth, bombs with fire potentials, but there is no necessary causality between them. Therefore, even remaining within the actual-empirical domain, empirical correlation is not an adequate tool for the analysis of *existence* of power relations.

### 4.2 *Power over somebody*

*A* has power over *B* when the choice of *B* depends on the specific action chosen by *A* within his/her own decision-making set. This can occur, first, when *A* is able to influence *B*’s

goals, and, second, when *A* has some control of *B*'s decision-making set (in this case, POS can be seen as the ability to *change* the PTA of other agents).<sup>1</sup>

POS and PTA are intimately linked, since the emergence of a relation of POS depends on the distribution of PTAs in the system. In a system of complex interpersonal relations, the decision-making sets and the goals of agents are necessarily interdependent. In this sense, relations of POS are only the tip of the iceberg that emerges from a sea of relations of PTA. The strongest form of POS is the 'authority relation', in which *A* can order *B* to do something and *B* must obey: in terms of constraints, *A*'s authority over *B* is expressed by *A*'s ability to restrict *B*'s decision-making set to just one option.<sup>2</sup>

Operationally, an *ex ante* measure of the *existing* relations of POS must be defined along at least two dimensions, an extensive one and an intensive one. The former is given by the number of agents whose behaviour depends on the action undertaken by *A*. The latter is given by the importance of the consequences that a particular decision of *A* produces on each single individual's goals and constraints. These dimensions are conceptually independent: on the one hand, it is possible that *A* has power over many agents but that his/her power over each of them is weak; on the other hand, it is possible that *A* has power over only one agent but that this power relation takes its strongest form, namely authority.

*Ex post* measures can be provided only when the constraints imposed by *A* on the decision-making set of *B* are binding, given *B*'s goals. If, on the contrary, *A* modifies *B*'s goals or constraints, but *B* does not change his/her choice, this relation of POS cannot be detected by the empirical observation of *B*'s behaviour. This means that empirical analysis can reveal only a sub-set of the existing relations of POS.

#### 4.3 The constraining structure

The set of individual decision-making sets and their interdependences define a 'decision-making system'. Within a decision-making system, the relations among individual decision-making sets can take different forms. In some cases, individual decision-making sets can simply be incommensurable, in the sense that *A* can undertake action *x*, but not action *y*, whilst *B* can choose *y* but not *x*. In other cases, *A*'s decision-making set can be a subset of *B*'s, which is to say that *B* has constraints that *A* has not. If this asymmetric distribution of constraints is a necessary condition for the working of the system, then the structure of the decision-making system is essentially a 'constraining structure'. With this term, I stress the asymmetric *constraints* that the structure of the decision-making system

<sup>1</sup> According to Marx's historical materialism, individuals are free to act within the existing social context, but are conditioned in their very consciousness by the mode of production of their material life (Marx, 1859, Preface; Marx and Engels, 1964, Part 1). This means that individual goals, like individual constraints, are influenced by the form of social interaction, independent of the existence of direct relations of POS. Within heterodox economics, the institutional school in particular has studied the mechanisms through which power relations concur to shape individuals' goals. Bartlett (1989) discusses how the values to be pursued, the authority to be accepted, the rights to be respected, and the ideology to be internalised are all part of endogenous social interaction. Galbraith (1983) analyses the forms and sources of power and the relations between them. Dugger (1984, 1989) focuses on the process through which corporations impose their values and culture in society. Outside of economic debates, this issue is illustrated with rich empirical evidence by Klein (2000).

<sup>2</sup> This definition of authority is inspired by the notion elaborated by Marx and Engels: 'the imposition of the will of another upon ours' (Engels, 1872). It is also compatible with the definition of mainstream economics, although, within this literature, the notion of authority is also referred to as 'hierarchy', 'verticality' or 'command'. In political writings, the term authority is sometimes used to describe situations in which '*B* complies because he recognises that *A*'s command is reasonable in terms of his own values' (Bachrach and Baratz, 1970, p. 34). This latter meaning takes inspiration from Weber's (1968) conception of 'legitimate authority' that presupposes a consent to obey commands.

poses for different agents. However, this structure can also be understood as *enabling* individual behaviours that could not be undertaken without its existence. These are just the two sides of the same coin, observed from the angles of asymmetric constraints or asymmetric PTAs.

#### 4.4 *Constraining mechanisms*

When the constraining structure remains relatively stable in time, the problem arises of discovering the mechanisms that regulate its reproduction and evolution. I shall call these mechanisms ‘constraining mechanisms’, given their effects in the reproduction of the constraining structure of the decision-making system.

#### 4.5 *Systems of power*

When we discuss a particular decision-making system as a system of power, we do not mean simply that the PTAs (and the POSs that they eventually produce) are precisely defined. We mean something more, namely that a constraining structure and some constraining mechanisms exist. This is what makes a decision-making system a ‘system of power’.

*A*’s decision-making sets and goals can be influenced by completely different factors: in one case, they can be (partly) controlled by *B*; in another case, they can be influenced by the tendencies caused by the constraining mechanisms that govern the evolution of the whole system of constraints, without anybody directly having power over him/her. However, if the result is the same decision-making set and the same set of goals, then the difference between the two cases is only formal, not substantial. This suggests that the analysis of power cannot be reduced to the study of POS, for if two agents are part of a system of power, their asymmetric PTAs can be systematically reproduced by impersonal structures and mechanisms without necessarily giving rise to relations of POS.

It is now time to move from a discussion of systems of power in general and consider the case of a specific system, namely capitalism.

### 5. **Capitalism as a system of power in Marxian political economy**

Marx and Engels are, in my view, the authors who have best investigated capitalism as a system of power. The relationship between Marxism and CR is not clear cut. Today, there is a growing literature on this subject, which shows the coexistence of different, and at least partly incompatible, viewpoints. A first, encouraging exploration of this relationship is developed by the founder of CR himself, Bhaskar (1991, p. 143), who affirms that ‘Marx’s work at its best illustrates critical realism; and critical realism is the absent methodological fulcrum of Marx’s work’. The compatibility between Marx’s analysis and CR has been defended at different levels, ranging from a simple formal coherence to a deep meta-theoretical unity. Ehrbar (1998) goes so far as to say that ‘Marx was a critical realist, long before critical realism was born’, and proposes a sentence-by-sentence translation of Marx’s *Capital* into CR terms (Ehrbar, 2001). The thesis of a mutually helpful relationship is developed, in particular, by Collier (1979, 1989), Creaven (2001, 2003), Fleetwood (2001) and Joseph (2001). On the opposite side, some overt criticisms about the compatibility between Marxism and CR are developed by Gunn (1989), Magill (1994) and Roberts (1999).

The main points of contrast and convergence between Marxism and CR are discussed in a book edited by Brown *et al.* (2001). In their introductory chapter, the editors explore

three different viewpoints. According to Fleetwood, the nature of the relationship between CR and Marxism is philosophical. In his view, CR can supply an all-encompassing philosophy of science that is missing in Marxism and that allows us to place some Marxian notions on a more secure philosophical footing. By contrast, Roberts argues that Marxism is in no need of the philosophical services of CR and suggests that a more suitable way for Marxism to proceed would be to develop the theoretical categories of historical materialism, rather than incorporate some concepts and categories of CR, which, in his view, are incompatible with historical materialism. Brown thinks that the lesson Marxism can learn from CR is the need to articulate the concepts of Marxian theory at the level of generality of philosophy. More precisely, he suggests that a Marxist philosophy should embrace some of the fundamental concepts of CR, such as structural causality, the distinction between thought and mind-independent object, the notion of tendencies, the relations between structure and agency. These notions, however, are stressed also within other philosophical perspectives. Thus, Brown sees no particular reason for Marxism to embrace a precisely CR philosophy and defends instead a ‘materialist dialectics’, as an alternative Marxist philosophical position able to embrace and transcend CR.

It is not necessary here to go further into the details of the general coherence of Marxism and CR. For my purpose, it is sufficient to re-establish the distinguishing features of the capitalist mode of production along with its Marxian analysis and interpret them in CR terms. This is sufficient to determine the constraining structure and the constraining mechanisms of capitalism.<sup>1</sup>

Capitalism, in Marx’s conception, is a system of generalised commodity production where goods are produced, not for the direct consumption of producers, but for sale. Marx’s *Capital* (1867, 1885, 1894) does not begin with the isolated individual, but with the commodity. The commodity contains all the distinguishing social relations of the capitalist mode of production. Material things are not in their nature commodities. They become commodities only under particular historical conditions, with particular social relations. The category of the commodity itself encompasses the categories of private property and the market. Private property is a social relation that defines a series of duties and rights in society and their distribution among agents. The existence of private property thus implies the existence of power relations in the form of PTA.<sup>2</sup> Through the market, then, commodities receive a social appraisal (the price system) and, on this basis, are exchanged. The exchange of commodities modifies the social system of duties and rights, i.e., modifies the system of individual PTAs. The coexistence of private property and the market gives rise to a specific form of PTA in the economy, namely, purchasing power: the power to buy. In barter, the parties exchange their respective PTAs over commodities directly. In money exchange, by contrast, one party alienates a concrete PTA (the power to dispose of a particular commodity) and receives money, i.e., the right to obtain commodities in the future. Money can thus be seen as an abstract PTA over commodities.

<sup>1</sup> In a review of Lawson’s 2003 book *Reorienting Economics*, Pinkstone (2003) criticises the author for defining economics in terms of social relations, but without any specific reference to power. He argues that neoclassical economists do not deny that capitalists and workers are engaged in a social relationship, but maintain that this relationship does not necessarily involve power. Pinkstone suggests that Marx is the economist who made social power the central focus of his explanation of production and distribution in capitalism. What follows can be seen as an attempt to follow Lawson’s reorientation of economics by taking account of Pinkstone’s criticism.

<sup>2</sup> Outside Marxism, the economic coercion emanating from property is investigated in particular by institutionalist authors, such as Veblen (1934), Samuels (1979, 1984, 1994) and Schmid (1987). The relations between Marxism and institutionalism in the analysis of power and classes are discussed by Klein (1992) and Dugger and Sherman (1994).

Private property and the market, however, are not sufficient to characterise capitalism. The specificity of capitalism is that the process of commodification includes labour power (the ability to work) as well. In capitalism, property is characterised not only by its legal form as private property, but also by its unequal distribution between the two classes of capitalists and wage workers. Property relations are thus also class relations in capitalism (Campbell, 1993).<sup>1</sup> Marx discusses at length the conditions under which labour power becomes a commodity. He explains that, for the wage–labour relation to arise, the worker must be free in a ‘double sense, that as a free man he can dispose of his labour-power as his own commodity, and that on the other hand he has no other commodity for sale’ (Marx 1867, ch. 6). Marx then discusses the historical circumstances that produced ‘on the one side owners of money or commodities, and on the other men possessing nothing but their own labour-power’, and the mechanisms that reproduce these classes of people.<sup>2</sup>

Given the central role of private property and the market in capitalism, it is by the analysis of purchasing power, as a form of power emanating from them, that we must start our investigation of power relations in capitalism. In doing so, our focus must remain on the particular transaction that distinguishes capitalism, namely the market exchange of labour power.

### 5.1 Purchasing power

Purchasing power exists in every system based on private property and the market. It is determined by the distribution of property rights and the array of prices, which define the budget constraints of each agent. In general terms, the decision-making set of an agent defines what the agent can and cannot *do*; in market relations, purchasing power defines what the agent can and cannot *buy*.

The quantitative differences between agents’ purchasing power are a measure of the existing asymmetries of PTA in the economic sphere.<sup>3</sup> In capitalism, these quantitative asymmetries produce an essential qualitative difference: on one side, there are people that, given their (lack of) purchasing power, must *sell* their labour power; on the other side, other people, thanks to their purchasing power, can *buy* this labour power and make a profit from

<sup>1</sup> Mattick (1993) maintains that *Capital* begins with the commodity only because Marx intended to criticise classical political economy (which often starts with the commodity), but the real theoretical starting point is class relations. This interpretation contrasts the logical-historical interpretation of Marx’s categories suggested by Engels (1886) and developed by Meek (1976), according to which the structure of *Capital* reflects an idealised periodisation of history from pre-capitalist ‘simple commodity production’ to proper capitalist production. Earlier critiques of this interpretation are developed by Banaji (1979) and Smith (1990). For an analysis of the significance of the opening chapters of *Capital*, see Pilling (1980, ch. 4).

<sup>2</sup> Marx dedicates the whole Part VIII of *Capital I*, to study the process of ‘primitive accumulation’ and the divorce of the worker from his/her means of production and harshly criticises the authors that he calls ‘vulgar economists’ for their abstract speculations on the origin of capitalism. Unfortunately the same speculative method, based on hypothetical spontaneous interactions between isolated individuals, has today become the distinguishing feature of new institutionalism. Although closer to a radical tradition, Putterman (1995) follows the same idea that hierarchical relations within the capitalist firm are the result of voluntary decisions. Similarly, Stiglitz (1975) contends that these relations were voluntarily selected by workers for efficiency reasons. A Marxist reply to this position is offered by Braverman (1974), Marglin (1974, 1975), R. Edwards (1979) and P. K. Edwards (1990), who discuss the authoritarian content of the work relation and the practices of extraction of the maximum possible amount of labour from a given quantity of labour power. More generally, historians of labour mostly agree that capitalist hierarchies were imposed with ample resistance from workers and independent producers. Within Marxism, this process is analysed by Thompson (1978, 1993), Hobsbawm (1964), Marglin (1974, 1975, 1991) and Rule (1986); Landes (1969), Berg (1984, 1991) and Pollard (1965) reach the same conclusion from a technology oriented perspective.

<sup>3</sup> Within the institutionalist tradition, Schutz (1995) discusses the asymmetric distribution of purchasing power as a potential cause of relations of POS in the market. The author, however, does not develop any analysis of this asymmetry as an essential aspect of the capitalist economic structure.

it. Without mechanisms capable of reproducing an asymmetrical distribution of constraints on (classes of) individuals, there would be no stable labour market, and wage labour might not be the dominant form of production. This entails a form of economic compulsion, mostly indirect, operating through economic constraints, which brings a class of persons to work (voluntarily) for another class of persons. This form of compulsion is not the consequence of deliberate choices of particularly powerful individuals, but rather the effect of the impersonal mechanisms that govern market prices.

### 5.2 *Market power and authority*

POS takes different forms in production and in circulation: in production, it takes the form of authority relations; in circulation, that of market power.

Although the worker and the capitalist meet in the market on the basis of equal right (but with asymmetric purchasing power), the fact that one sells labour power and the other buys it produces a direct relation of POS in the process of production. As we have seen, the champions of the liberal view, Alchian and Demsetz (1972), deny the existence of any asymmetry between the worker and the capitalist on the ground that their interpersonal relation is not different from any other market relation. Workers and capitalists, according to them, are generic individuals, not social figures. As Marx explained 120 years before, however:

The worker leaves the capitalist, to whom he has sold himself, as often as he chooses, and the capitalist discharges him as often as he sees fit . . . But the worker . . . cannot leave the whole class of buyers, i.e., the capitalist class, unless he gives up his own existence. He does not belong to this or that capitalist, but to the capitalist class; and it is for him to find his man — i.e., to find a buyer in this capitalist class. (Marx 1847A, ch. 2)

When a grocer sells a kilo of coffee, he/she alienates a piece of his/her property and transfers to somebody else his/her power to do with the coffee as he/she likes. When a worker sells his/her labour power, he/she alienates a piece of his/her *life* and transfers to somebody else his/her power to do with *himself/herself* as he/she likes. The exchange of labour power involves interpersonal relations directly. The PTA that the capitalist obtains in exchange for his/her money is itself a POS. He/she gives purchasing power to the worker and acquires authority over him/her.

Clearly, the authority relationship is never absolute, since, as for any commodity, the utilisation of labour power is regulated by law and institutional rules. However, within the existing norms, the POS involved in the authority relationship is absolute, exactly as absolute as the PTA conferred by the ownership of any other commodity.

In the sphere of circulation, an agent can influence the action of others only by having some control over the price system. Market power is thus the form of POS in circulation. It is defined as the power of the seller [buyer] to fix the price above [below] the price fixed by other sellers [buyers]. This form of economic power is not specific to capitalism; it is rather a potential feature of all systems based on private property and the market, for its existence presupposes market exchange, but not necessarily the market exchange of labour power.

Both these forms of economic POS presuppose purchasing power as a form of economic PTA. In order to have authority in production or market power in circulation, one must first have purchasing power, for the obvious reason that, without the power to buy, one clearly cannot buy labour power, or any other commodity, at whatever price. The problem now is to explain how purchasing power on the one hand, and authority and market power on the other, are continuously transformed into one another and reproduced.

### 5.3 *The class structure of capitalism*

The constraining structure of capitalism is characterised by class relations. In Marx's work, although the 'history of mankind is a history of class struggle' (Marx and Engels, 1848), there is no systematic discussion of how to define social classes.<sup>1</sup> The analysis of the capitalist mode of production in its pure form, developed in *Capital*, is based on a class structure with two main classes: capitalists and workers. In the study of concrete social formations (Marx, 1847B, 1852; Marx and Engels, 1848), however, Marx does not hesitate to consider a greater number of classes. This has prompted different interpretations of the theoretical status of classes in Marx's theory. According to an economic interpretation, in *Capital*, classes are defined solely in terms of the economic structure, by the relation of each individual to the means of production whilst, in the analysis of concrete social formations, classes must be defined also in terms of political and ideological structures. This interpretation, however, has been criticised for its unjustified separation of the economic structure, on the one hand, and political and ideological structures, on the other, as if the capitalist mode of production could effectively be defined in purely economic terms. Poulantzas (1973, ch. 2), in particular, argues that classes are the effect of the whole set of social structures that characterise the capitalist mode of production, and not solely of the economic structure.<sup>2</sup>

Here we do not need to develop the complex relations between the economic, the political and the ideological structures of capitalism. The economic separation of the population into buyers and sellers of labour power is sufficient to determine an essential aspect of class relations in capitalism. This is not to reduce social classes to an asymmetry in economic constraints; it is rather to recognise that the asymmetric distribution of purchasing power is an essential aspect of every definition of the class structure of capitalism.

With these caveats, capitalist class structure can be characterised by capitalists' monopoly of the means of production. Abstractly, private property and the market might exist without class divisions. Class monopoly of the means of production, however, is not a historical accident. It is rather a necessary condition for the development of wage labour and for the functioning of capitalism. Without such an asymmetry between buyers and sellers of labour power, no stable wage labour relation would exist. Considered from the viewpoint of constraints, wage labour exists only as long as a class of people is *constrained* to sell labour power. The other side of the coin is that another class of people is *enabled* to buy labour power. This is the essential asymmetry of the capitalist constraining structure (which capitalists might well call its 'enabling structure'): workers are constrained by their lack of purchasing power; capitalists are enabled by their possession of it.

### 5.4 *Competition*

The main mechanism that regulates the reproduction of class relations in capitalism is 'competition'. Competition is generally conceived of as a state of affairs (neoclassical

<sup>1</sup> In *Capital 3*, there is a draft chapter dedicated to the subject. However, the chapter is incomplete, and its purpose seems to be more to point out the problematic aspects of defining classes than to provide the blueprints for such a project.

<sup>2</sup> Cf., also Poulantzas (1986). Colletti (1972) criticises Kautsky's and Plekhanov's orthodoxy and Bernstein's revisionism for their separation of the economic structure from the other social structures of capitalism, and argues that Marx's 'economic sphere' in fact embraces the production of things as well as ideas, and material production as well as the production of social relations. In developing Colletti's interpretation, Sayer (1987) maintains that the attempt to separate forces and relations of production, or base and superstructure, as if they referred to different bits of empirical reality, presupposes an atomistic ontology that is extraneous to Marx's.

competition, with large numbers and small dimensions) or as a process (Austrian conception of the market as a discovery procedure). However, as in the case of power, these conceptions only confuse the mechanisms that govern actual-empirical phenomena with the phenomena themselves. I analyse competition, using CR ontological insights, as a causal mechanism. This mechanism is not specific to capitalism, but exists in other modes of production as well. In capitalism, however, competition takes a specific form, which depends on the specific social relations of such a mode of production. As Marx (1867, ch. 12) put it, ‘a scientific analysis of competition is not possible, before we have a conception of the inner nature of capital, just as the apparent motions of the heavenly bodies are not intelligible to any but him, who is acquainted with their real motions, motions which are not directly perceptible by the senses’.

According to Marx and Engels, the development of economic competition is to a large extent a consequence of private property. In Engels’ words,

because private property isolates everyone in his own crude solitariness, and because, nevertheless, everyone has the same interest as his neighbour, one landowner stands antagonistically confronted by another, one capitalist by another, one worker by another. In this discord of identical interests resulting precisely from this identity is consummated the immorality of mankind’s condition hitherto; and this consummation is competition. (Engels, 1844)

In turn, competition is also the cause of the tendency for private property relations to expand, both extensively (geographical expansion of market relations) and intensively (commodification of all aspects of nature and human life). This means that capitalism is by its nature dynamic and self-expanding, and that what we today call globalisation is in fact an intrinsic aspect of capitalist development. Competition and private property are thus linked by a dialectical relation, which characterises the working and development of the capitalist mode of production.

In Marx’s and Engels’ conception, unlike mainstream economics, competition is not the result of the opposition of private interests of atomistic individuals. Human interests, with a highly developed division of labour, are necessarily *social* interests. Competition, therefore, is not merely a mechanism whereby isolated individuals interact, but a mode of coordination of *social* individuals, with convergent and divergent *social* interests—social interests that, in capitalism, depend in an essential way on class relations.

The social nature of competition in Marx’s and Engels’s critique has been the object of debate within Marxism. In fact, in their analysis of competition, the two authors pursue slightly different theoretical objectives. Engels intends to show that all the categories of political economy and the realities to which they correspond presuppose both competition and private property. In his critique, however, Engels explains competition as a consequence of private property, but does not really explain private property. It is Marx that undertakes the task of explaining the origins of private property as well (Clarke, 1991). In fact, particularly in his early works, Marx focuses on the relations of private property to another social relation, namely alienated labour, which suggests a more articulated relation between private property and competition. As Marx explains, in order for labour to be appropriated in the form of property, it must first take the form of alienated labour. In this sense, ‘although private property appears as the basis and cause of alienated labour, it is in fact its consequence . . . Later, however, this relationship becomes reciprocal’ (Marx 1844). To put it differently, Marx arrives at his social conception of competition via its relations with alienated labour; Engels focuses instead on the necessarily asymmetrical distribution of private property between social classes. But commodification of labour power is for both

of them the theoretical and historical reason for the class dimension of competition in capitalism.<sup>1</sup> Let us thus consider how competition regulates the reproduction of class relations.

Engels (1845, ch. 3) defines ‘competition [as] the completest expression of the battle of all against all’—a battle ‘fought not between the different classes of society only, but also between the individual members of these classes’ (cf., also Engels, 1884).<sup>2</sup> Competition between classes and that within classes are dialectically linked. Consider first the struggle *between* classes. In this struggle, like in any other, the stronger often wins. And it is not difficult to understand that workers and capitalists do not have the same strength, for the former must work to live, whilst the latter can live on their capital. The asymmetric strength between classes influences competition *within* classes as well: competition tends to be stronger within the weaker class, i.e., on the workers’ side. This asymmetry, in turn, reinforces the asymmetric strength *between* classes, since the stronger the competition within one class, the weaker the whole class in its relation to the other.

This asymmetric competition between and within classes regulates wage dynamics and unemployment or, in Marx’s words, the ‘industrial reserve army of labour’ (Marx 1867, ch. 22). The industrial reserve army is an essential aspect of capitalism—although today in many advanced economies it takes the form of a reserve army of the underemployed, that is, an army of flexible workers whose tasks and working-hours are adjusted to suit the demands of productive conditions. First, it exerts pressure on the wages and working conditions of employed workers. Second, in periods of expansion, it cushions the effects that an increasing demand for labour may have on the labour market. But unemployment is also a *consequence* of capitalist accumulation. Very simply, the ‘surplus population’ could all be put to work if the length of the working day were reduced—something manifesting itself in the recent French workers’ drive for a 35-hour week. The point, however, is that there is no automatic tendency for this to occur, and capitalists surely do not have an interest in this—which is why, in the French case, they vehemently opposed the law limiting the working week to 35 hours, until it was finally abolished. More generally, this explains the historical hostility of the bourgeoisie towards workers’ associations—a hostility whose concrete expression ranges from legal prohibition in the past to ideological condemnation, as a violation of perfect competition, in more recent times. As Engels (1845) wrote, ‘competition of the workers among themselves is . . . the sharpest weapon against the proletariat in the hands of the bourgeoisie’. But all this is secondary; the point is rather that competition operates on the capitalists’ side as well, forcing them to extract as much labour as possible from active workers—a condition which is necessary for minimising costs and remaining in business.

Consider now wage determination. When competition among workers is strong, the wage reaches the subsistence level, a level below which there is no reason to work. This limit is relative and socially determined by ‘the average needs and the grade of civilisation of the workers’ (Engels 1845). Symmetrically, the maximum wage is determined by the competition of capitalists among themselves. If workers need capitalists (to live), capitalists need workers as well (to make profits). Competition among capitalists for employing new workers tends to increase when the demand for the good they produce increases and when

<sup>1</sup> Starting from the recognition of Marx’s and Engels’ slightly different theoretical objectives, Clarke (1994) discusses the different implications of their analysis of competition in the study of crisis in capitalism.

<sup>2</sup> This class dimension of competition is completely neglected by the individualist approach, which assumes that competition is a consequence of human nature. Human nature and the market, in turn, are not seen as products of history but as everlasting realities.

the reserve army is small. In these conditions, each capitalist prefers to pay slightly higher wages rather than miss out on any profits. The wage tends thus to increase above the subsistence level. However, as soon as this risks reducing the ordinary average profit, capitalist competition loses momentum, and the wage no longer increases.

These processes must not be understood as empirical descriptions, but rather as explanations of the tendencies produced by the interplay of competition within and between classes. In modern capitalist economies, wage determination is a complex process involving a whole web of social structures and institutions that can inhibit or reinforce these tendencies. But even when these tendencies do not show themselves as empirical regularities, they still operate as forces caused by the capitalist mode of social interaction.

To these economic tendencies produced by competition, Marx and Engels (1848) respond politically: 'Working men of all countries unite!' 'Association' is in many respects the opposite of competition. Unlike competition, however, this mechanism is not a direct consequence of the economic structure of capitalism, and its concrete working depends on class-consciousness and political action. More importantly, its existence is itself conditioned by the asymmetric power relationship between classes (Marx, 1867; Engels, 1844, 1845, 1847; Marx and Engels, 1848). It is not historically accidental that associations emerged quite spontaneously (and legally) among capitalists, whilst they encountered many obstacles among workers and had to remain secret for quite some time. In fact, the right to associate is itself a political victory for the workers' movement, a result of class struggle. In our analysis of the *essential* power relations of capitalism, the difference with competition is that association is not necessary to the reproduction of the capitalist mode of production (indeed the Wal-Mart model of capitalism without trade unions is not only possible, but also very profitable). This is why Marx and Engels discuss the mechanism of association mainly in their studies of concrete social formations and in their political works, where association takes the feature of a conscious subjective response to the objective coercive law of competition. However, in the analysis of the capitalist mode of production at a high level of abstraction, competition alone is the necessary, the essential, mechanism that governs and reproduces class relations.

### 5.5 *Capitalism as a system of power*

The class structure of capitalism and the mechanism of competition make capitalism a system of power. Within this system, PTA and POS are constantly reproduced and transformed into one another. Consider first the transformation and reproduction of purchasing power and authority. At time  $t$ , under the pressure of competition and because of the asymmetric distribution of purchasing power in society,  $K$  buys  $L$ 's labour power (i.e., he/she exercises his/her purchasing power) and acquires authority (the right to command) over  $L$  for the period  $(t, t + 1)$ . During this period, by virtue of his/her authority,  $K$  extracts as much labour as possible from  $L$ 's labour power. At time  $t + 1$ ,  $K$  sells the product and recovers the purchasing power he/she had anticipated (and probably more); at the same time,  $L$  spends the purchasing power gained with the sale of his/her labour power without, in general, accumulating enough to become independent of wage labour. This process is relatively stable and tends to reproduce the initial class division. There is no need for capitalists and workers to confront each other as classes for class relations to be reproduced. The power relationship of capitalists over workers exists independently of class-consciousness, and the tendencies it produces are independent of the wishes of both individual capitalists and workers and cannot be reduced to the choice of any of them.

Consider now the process of transformation and reproduction of purchasing power and market power. This process is characterised by a tendency towards the concentration and centralisation of capital (Marx 1867, ch. 25). In the process of competition, large firms use more advanced technologies, exploit better increasing returns to scale and the division of labour. This allows them to obtain higher profits and to accumulate faster. The result is a tendency towards concentration of the social means of production. This process is further reinforced by the tendency to mergers and take-overs that proceed with capitalist accumulation. In analysing this process, Marx points out the active role played by the credit system and the acceleration prompted by crisis. The effect of these processes is that fewer and fewer capitalists accumulate more and more capital. Competition tends thus to produce monopoly, i.e., market power. The exercise of market power, in turn, reinforces the asymmetric distribution of purchasing power.<sup>1</sup>

These tendencies, let me repeat, are not empirical regularities: first, there exist other tendencies and counter-tendencies that govern empirical reality; second, social interaction depends also on subjective factors, such as class-consciousness, the ability to associate, the structure of political power, and much else. These tendencies are rather *structural necessities*—the consequences of social relations that are necessary for the working and reproduction of the system.

## 6. Conclusions

Economic power takes different forms in capitalism. Mainstream economics, however, considers only the surface of interpersonal relations, in which power relations manifest themselves in the form of POS. This restriction occurs without any systematic analysis of the relations between POS and PTA and without any investigation of the factors that govern the evolution of the distribution of PTA in society. The cause of this, I have argued, lies in the ER ontology that underlies mainstream economics.

In this paper, I have drawn upon CR to develop a sophisticated ontology of power relations under capitalism, an ontology in which empirical and observable forms of power are put in relation to the structures and mechanisms that govern them. In line with Marx's method and analysis, I have shown that capitalism is a system of power, in which the forms of POS (market power and authority) depend on the distribution of PTA (purchasing power) in society. These phenomenal forms of power are governed by the constraining structure (characterised by class relations) and the constraining mechanism that reproduces it (competition).

This ontological investigation leads us to reject the mystifying conception of mainstream economics of capitalism as being possibly free from power relations. The problem is not simply that neoclassical perfect competition does not exist in reality, but rather that such a hypothetical system could not work and reproduce itself without forms of impersonal coercion produced by structures and mechanisms that are not necessarily detectable empirically. The ontology of mainstream economics cannot consider these forms of social coercion because, more generally, it does not allow the distinction between appearances and essence, between formal and substantial power relations. If capitalist economic relations are power relations, however, it is not because they necessarily appear as such empirically, but because capitalism is in its essence a system of power.

<sup>1</sup> Concentration and centralisation also reinforce the reproduction of the reserve army by creating the conditions for economising and rationalising labour.

## Bibliography

- Alchian, A. A. and Demsetz, H. 1972. Production, information costs and economic organization, *American Economic Review*, vol. 62, no. 1, 777–95
- Alchian, A. A. and Woodward, S. 1987. Reflections on the theory of the firm, *Journal of Institutional and Theoretical Economics*, vol. 143, no. 1, 110–36
- Ankarloo, D. and Palermo, G. 2004. Anti-Williamson. A Marxian critique of new institutional economics, *Cambridge Journal of Economics*, vol. 28, no. 3, 413–29
- Archer, M. 1995. *Realist Social Theory: The Morphogenetic Approach*, Cambridge, Cambridge University Press
- Archer, M., Bhaskar, R., Collier, A., Lawson, T. and Norrie, A. (eds) 1998. *Critical Realism: Essential Readings*, London, Routledge
- Arendt, H. 1970. *On Violence*, London, The Penguin Press
- Bachrach, P. and Baratz, M. S. 1970. *Power and Poverty. Theory and Practice*, New York, Oxford University Press
- Banaji, J. 1979. From the commodity to capital: Hegel's dialectic in Marx's *Capital*, in Elson, D. (ed.), *Value: The Representation of Labor in Capitalism*, London, CSE Books
- Bartlett, R. 1989. *Economics and Power: An Inquiry into Human Relations and Markets*, Cambridge, Cambridge University Press
- Berg, M. 1984. *The Age of Manufactures*, London, Fontana
- Berg, M. 1991. On the origins of capitalist hierarchy, in Gustavsson, B. (ed.), *Power and Economic Institutions*, Aldershot, Edward Elgar
- Bhaskar, R. 1978. *A Realist Theory of Science*, Hemel Hempstead, Harvester Press
- Bhaskar, R. 1979. *The Possibility of Naturalism*, Hemel Hempstead, Harvester Press
- Bhaskar, R. 1986. *Scientific Realism and Human Emancipation*, London, Verso
- Bhaskar, R. 1993. *Dialectic: The Pulse of Freedom*, London, Verso
- Bowles, S. 1985. The production process in a competitive economy: Walrasian, Marxian and Neo-Hobbesian models, *American Economic Review*, vol. 75, 16–36
- Bowles, S. and Gintis, H. 1988. Contested exchange: political economy and modern economic theory, *American Economic Review*, vol. 78, 145–50
- Bowles, S. and Gintis, H. 1993A, Power and wealth in a competitive capitalist economy, *Philosophy and Public Affairs*, vol. 21, no. 4, 324–53
- Bowles, S. and Gintis, H. 1993B. The revenge of homo economicus: contested exchange and the revival of political economy, *Journal of Economic Perspectives*, vol. 7, no. 1, 83–102
- Bowles, S. and Gintis, H. 1993C. Post Walrasian political economy, in Bowles, S., Gintis, H. and Gustafsson, B. (eds), *Markets and Democracy: Participation, Accountability and Efficiency*, Cambridge, Cambridge University Press
- Bowles, S. and Gintis, H. 1993D. The democratic firm: an agency-theoretic evaluation, in Bowles, S., Gintis, H. and Gustafsson, B. (eds), *Markets and Democracy: Participation, Accountability and Efficiency*, Cambridge, Cambridge University Press
- Bowles, S. and Gintis, H. 1994. Power in economic theory, in Arestis, P. and Sawyer, M. (eds), *The Elgar Companion to Radical Political Economy*, Aldershot, Edward Elgar
- Braverman, H. 1974. *Labor and Monopoly Capital*, New York, Monthly Review Press
- Brown, A., Fleetwood, S. and Roberts, J. M. (eds) 2001. *Critical Realism and Marxism*, London, Routledge
- Brown, A., Fleetwood, S. and Roberts, J. M. 2001. The marriage of critical realism and Marxism: happy, unhappy or on the rocks?, in Brown, A., Fleetwood, S. and Roberts, J. M. (eds), *Critical Realism and Marxism*, London, Routledge
- Campbell, M. 1993. Marx's concept of economic relations and the method of capital, in Moseley, F. (ed.), *Marx's Method in Capital. A Reexamination*. Atlantic Highlands, Humanities Press
- Cheung, S. N. S. 1983. The contractual nature of the firm, *Journal of Law and Economics*, vol. 26, no. 1, 1–21
- Cheung, S. N. S. 1987A. Economic organization and transaction costs, in Eatwell, J., Millgate, M. and Newman, P. (eds), *The New Palgrave: a Dictionary of Economics*, London: Macmillan
- Cheung, S. N. S. 1987B. Common property rights, in Eatwell, J., Millgate, M. and Newman, P. (eds), *The New Palgrave: a Dictionary of Economics*, London, Macmillan

- Cheung, S. N. S. 1992. On the new institutional economics, in Werin, L. and Wijkander, H. (eds), *Contract Economics*, Oxford, Basil Blackwell
- Clarke, S. 1991. *Marx, Marginalism and Modern Sociology: From Adam Smith to Max Weber*, 2nd edn, London, Macmillan
- Clarke, S. 1994. *Marx's Theory of Crisis*, London, Macmillan
- Coase, R. H. 1937. The nature of the firm, *Economica*, vol. 4, 386–405
- Colletti, L. 1972. Bernstein and the Marxism of the second international, in Colletti, L. (ed.), *From Rousseau to Lenin*, London, New Left Books
- Collier, A. 1979. Materialism and explanation in the human sciences, in Mephram, J. and Ruben, D. H. (eds), *Issues in Marxist Philosophy*, Brighton, The Harvester Press
- Collier, A. 1989. *Scientific Realism and Socialist Thought*, Hemel Hempstead, Harvester Wheatsheaf
- Collier, A. 1994. *Critical Realism: An Introduction to Roy Bhaskar's Philosophy*, London, Verso
- Cousins, M. and Hussain, A. 1984. *Michel Foucault*, Basingstoke, Macmillan
- Creaven, S. 2001. *Marxism and Realism: A Materialistic Application of Realism in the Social Sciences*, London, Routledge
- Creaven, S. 2003. Marx and Bhaskar on the dialectics of freedom, *Journal of Critical Realism*, vol. 2, no. 1, 63–93
- Dahl, R. A. 1961. *Who Governs? Democracy and Power in an American City*, New Haven, Yale University Press
- Dow, G. K. and Putterman, L. 1999. Why capital (usually) hires labor: an assessment of proposed explanations, in Blair, M. M. and Roe, M. (eds), *Employees and Corporate Governance*, Washington D.C., Brookings Institution Press
- Dow, G. K. and Putterman, L. 2000. Why capital suppliers (usually) hire workers: what we know and what we need to know, *Journal of Economic Behavior and Organization*, vol. 43, 319–36
- Dugger, W. M. 1984. *An Alternative to Economic Retrenchment*, New York, Petrocelli Books
- Dugger, W. M. 1989. *Corporate Power*, New York, Greenwood Press
- Dugger, W. M., and Sherman, H. J. 1994. Comparison of Marxism and institutionalism, *Journal of Economic Issues* vol. 28, no. 1, 101–27
- Edwards, P. K. 1990. The politics of conflict and consent: how the labor contract really works, *Journal of Economic Behavior and Organization*, vol. 13, 41–64
- Edwards, R. 1979. *Contested Terrain*, New York, Basis Books
- Ehrbar, H. G. 1998. *Marxism and Critical Realism*, <http://www.econ.utah.edu/ehrbar/marxre.pdf>
- Ehrbar, H. G. 2001. Critical realist argument in Marx's *Capital*, in Brown, A., Fleetwood, S. and Roberts, J. M. (eds), *Critical Realism and Marxism*, London, Routledge
- Engels, F. 1844. *Outline of a Critique of Political Economy*, The Marx/Engels Internet Archive, available at <http://www.marxists.org>
- Engels, F. 1845. *The Conditions of the Working-Class in England*, The Marx/Engels Internet Archive, available at <http://www.marxists.org>
- Engels, F. 1847. *The Principles of Communism*, The Marx/Engels Internet Archive, available at <http://www.marxists.org>
- Engels, F. 1872. *On Authority*, The Marx/Engels Internet Archive, available at <http://www.marxists.org>
- Engels, F. 1878. *Anti-Dühring. Herr Eugen Dühring's Revolution in Science*, The Marx/Engels Internet Archive, available at <http://www.marxists.org>
- Engels, F. 1884. *The Origin of the Family, Private Property and the State*, The Marx/Engels Internet Archive, available at <http://www.marxists.org>
- Engels, F. 1886. *Ludwig Feuerbach and the End of Classical German Philosophy*, The Marx/Engels Internet Archive, available at <http://www.marxists.org>
- Fleetwood, S. (ed.) 1999. *Critical Realism in Economics: Development and Debate*, London, Routledge
- Fleetwood, S. 2001. What kind of theory is Marx's labour theory of value? A critical realist inquiry, *Capital & Class*, no. 73, 41–77
- Foucault, M. 1977. *Discipline and Punish: The Birth of the Prison*, London, Allen Lane
- Foucault, M. 1980A. *The History of Sexuality, Volume 1: An Introduction*, London, Penguin
- Foucault, M. 1980B. *Power/Knowledge: Selected Interviews and Other Writings by Michel Foucault 1972–1977*, edited by C. Gordon, New York, Pantheon

- Foucault, M. 1990. *Politics, Philosophy, Culture: Interviews and Other Writings 1977–1984*, New York, Routledge
- Fourie, F. C. v. N. 1989. The nature of firms and markets: do transaction cost theories help?, *The South African Journal of Economics*, vol. 57, no. 2, 142–60
- Fourie, F. C. v. N. 1991. The nature of the market: a structural analysis, in Hodgson, G. M. and Screpanti, E. (eds), *Rethinking Economics. Markets, Technology and Economic Evolution*, Aldershot, Edward Elgar
- Fourie, F. C. v. N. 1993. In the beginning there were markets?, in Pitelis, C. (ed.), *Transaction Costs, Markets and Hierarchies*, Oxford, Basil Blackwell
- Galbraith, J. K. 1983. *The Anatomy of Power*, Boston, Houghton Mifflin
- Gintis, H. 1976. The nature of labor exchange and the theory of capitalist production, *Review of Radical Political Economics*, vol. 8, no. 2, 36–54
- Gintis, H. 1989. Financial markets and the political structure of the enterprise, *Journal of Economic Behavior and Organization*, vol. 11, 311–22
- Gintis, H. and Ishikawa, T. 1981. Wages, work discipline, and unemployment, *Journal of Japanese and International Economics*, vol. 1, 195–228
- Goldberg, V. P. 1976. Toward an expanded economic theory of contract, *Journal of Economic Issues*, vol. 10, no. 1, 45–61
- Goldberg, V. P. 1980. Bridges over contested terrain: exploring the radical account of the employment relationship, *Journal of Economic Behavior and Organization*, vol. 1, 249–74
- Gunn, R. 1989. Marxism and philosophy: a critique of critical realism, *Capital & Class*, no. 37, 86–116
- Hart, O. 1995. *Firms, Contracts, and Financial Structure*, Oxford, Oxford University Press
- Hart, O. 1996. An economist's view of authority, *Rationality and Society*, vol. 8, 371–86
- Hart, O. and Moore, J. 1990. Property rights and the nature of the firm. *Journal of Political Economy*, vol. 98, 1119–58
- Hobsbawm, E. J. 1964. *Labouring Men: Studies in the History of Labor*, London, Weidenfeld & Nicolson
- Jensen, M. and Meckling, W. 1976. Theory of the firm: managerial behaviour, agency costs and ownership structure, *Journal of Financial Economics*, vol. 3, 305–60
- Joseph, J. 2001. Five ways in which critical realism can help Marxism, in Brown, A., Fleetwood, S. and Roberts, J. M. (eds), *Critical Realism and Marxism*, London, Routledge
- Klein, N. 2000. *No Logo*, Toronto, Alfred A. Knopf
- Klein, P. A. 1992. Institutionalists, radical economists, and class, *Journal of Economic Issues*, vol. 26, no. 2, 535–44
- Landes, D. 1969. *The Unbound Prometheus*, Cambridge, Cambridge University Press
- Lawson, T. 1997. *Economics and Reality*, London, Routledge
- Lawson, T. 2003. *Reorienting Economics*, London, Routledge
- Lukes, S. 1974. *Power: A Radical View*, London, Macmillan
- Magill, K. 1994. Against Critical Realism, *Capital & Class*, no. 54, 113–36
- Marglin, S. A. 1974. What do bosses do? The origins and functions of hierarchy in capitalist production, Part 1, *Review of Radical Political Economics*, vol. 6, no. 2, 60–112
- Marglin, S. A. 1975. What do bosses do? The origins and functions of hierarchy in capitalist production, Part 2, *Review of Radical Political Economics*, vol. 7, no. 1, 20–37
- Marglin, S. A. 1991. Understanding capitalism: control versus efficiency, in Gustavsson, B. (ed.), *Power and Economic Institutions*, Aldershot, Edward Elgar
- Marx, K. 1844. *The Economic and Philosophic Manuscripts of 1844*, The Marx/Engels Internet Archive, available at <http://www.marxists.org>
- Marx, K. 1847A, *Wage Labour and Capital*, The Marx/Engels Internet Archive, available at <http://www.marxists.org>
- Marx, K. 1847B, *The Poverty of Philosophy*, The Marx/Engels Internet Archive, available at <http://www.marxists.org>
- Marx, K. 1852, *The 18<sup>th</sup> Brumaire of Louis Napoleon*, The Marx/Engels Internet Archive, available at <http://www.marxists.org>
- Marx, K. 1859, *A Contribution to the Critique of Political Economy*, The Marx/Engels Internet Archive, available at <http://www.marxists.org>

- Marx, K. 1867, *Capital: Critique of Political Economy, Vol. 1, The Process of Capitalist Production*, The Marx/Engels Internet Archive, available at <http://www.marxists.org>
- Marx, K. 1885, *Capital: Critique of Political Economy, Vol. 2, The Process of Circulation of Capital*, The Marx/Engels Internet Archive, available at <http://www.marxists.org>
- Marx, K. 1894, *Capital: Critique of Political Economy, Vol. 3, The Process of Capitalist Production as a Whole*, The Marx/Engels Internet Archive, available at <http://www.marxists.org>
- Marx, K. and Engels, F. 1848, *The Communist Manifesto*, The Marx/Engels Internet Archive, available at <http://www.marxists.org>
- Mattick, P. 1993. Marx's Dialectic, in Moseley, F. (ed.), *Marx's Method in Capital. A Re-examination*, Atlantic Highlands, Humanities Press
- Meek, R. L. 1976. *Studies in the Labor Theory of Value*, New York, Monthly Review Press
- Norris, C. 1999. Roy Bhaskar Interviewed, *The Philosopher's Magazine*, vol. 8
- Outhwaite, W. 1987. *New Philosophies of Social Science: Realism, Hermeneutics and Critical Theory*, London, Macmillan
- Palermo, G. 1998. Economic power and the market process. a critique of the theory of convergence of Hayek and Kirzner, *Revista de Economia*, vol. 24, no. 22, 49–77
- Palermo, G. 2000. Economic power and the firm in new institutional economics: two conflicting problems, *Journal of Economic Issues*, vol. 34, no. 3, 573–601
- Parsons, T. 1957. The distribution of power in American society, *World Politics*, vol. 10, 123–43
- Parsons, T. 1963A. On the concept of influence, *Public Opinion Quarterly*, vol. 27, 37–62
- Parsons, T. 1963B. On the concept of political power, *Proceedings of the American Philosophical Society*, vol. 107, 232–62
- Pilling, G. 1980. *Marx's Capital, Philosophy and Political Economy*, London, Routledge & Kegan Paul
- Pinkstone, B. 2003. Reorienting economics, new horizons, review of *Reorienting Economics* by Tony Lawson, *Journal of Critical Realism*, vol. 2, no. 1, 149–55
- Pitelis, C. 1991. *Market and Non-market Hierarchies: Theories of Institutional Failure*, Oxford, Basil Blackwell
- Pollard, S. 1965. *The Genesis of Modern Management*, London, Edward Arnold
- Polsby, N. W. 1963. *Community Power and Political Theory*, New Haven, Yale University Press
- Poulantzas, N. 1973. *Political Power and Social Classes*, London, Verso
- Poulantzas, N. 1986. Class power, in Lukes, S. (ed.) *Power*, Oxford, Basil Blackwell
- Putterman, L. 1982. Some behavioral perspectives on the dominance of hierarchical over democratic forms of enterprise, *Journal of Economic Behavior and Organization*, vol. 3, 139–60
- Putterman, L. 1984. On some recent explanations of why capital hires labor, *Economic Inquiry*, vol. 22, 171–87
- Putterman, L. 1993. Ownership and the nature of the firm, *Journal of Comparative Economics*, vol. 17, 243–63
- Putterman, L. 1995. Markets, hierarchies and information: on a paradox in the economics of organization, *Journal of Economic Behavior and Organization*, vol. 26, 373–90
- Roberts, J. 1999. Marxism and critical realism, *Capital & Class*, no. 68, 21–49
- Rule, J. 1986. *The Labouring Classes in Early Industrial England 1750–1850*, London, Longman
- Samuels, W. J. 1979 (ed.). *The Economy as a System of Power*, New Jersey, Transaction Books
- Samuels, W. J. 1984. On the nature and existence of economic coercion: the correspondence of Robert Lee Hale and Thomas Nixon Carver, *Journal of Economic Issues*, vol. 18, no. 4, 1027–48
- Samuels, W. J. 1994. Property, in Hodgson, G. M., Samuels, W. J. and Tool, M. R. (eds), *The Elgar Companion to Institutional and Evolutionary Economics*, Aldershot, Edward Elgar
- Samuelson, P. 1957. Wage and interest: a modern dissection of Marxian economic models, *American Economic Review*, vol. 47, 884–912
- Sayer, D. 1987. *The Violence of Abstraction*, Oxford, Basil Blackwell
- Schmid, A. A. 1987. *Property, Power, and Public Choice: An Inquiry into Law and Economics*, New York, Praeger
- Schutz, E. 1995. Markets and power, *Journal of Economic Issues*, vol. 29, no. 4, 1147–70
- Screpanti, E. 2001. *The Fundamental Institutions of Capitalism*, London, Routledge
- Simon, H. A. 1951. A formal theory of the employment relationship, *Econometrica*, vol. 19, no. 3, 293–305

- Simon, H. A. 1991. Organizations and markets, *Journal of Economic Perspectives*, vol. 5, 25–44
- Smith, T. 1990. The debate regarding dialectic logic in Marx's economic writings, *International Philosophical Quarterly*, vol. 30, no. 3, 289–98
- Stiglitz, J. E. 1975. Incentives, risk, and information: notes towards a theory of hierarchy, *Bell Journal of Economics*, vol. 6, 552–79
- Thompson, E. P. 1978. *The Making of the English Working Class*, London, Penguin
- Thompson, E. P. 1993. *Customs in Common*, London, Penguin
- Veblen, T. 1934. The beginnings of ownership, in Ardzrooni, L. (ed.), *Essays in Our Changing Order*, New York, The Viking Press
- Weber, M. 1968, *Economy and Society*, New York, Bedminster Press
- Williamson, O. E. 1975. *Markets and Hierarchies: Analysis and Anti-Trust Implications. A Study in the Economics of Internal Organization*, New York, The Free Press
- Williamson, O. E. 1985. *The Economic Institutions of Capitalism: Firms, Markets, Relational Contracting*, London, Macmillan
- Williamson, O. E. 1995. Hierarchies, markets and power in the economy: an economic perspective, *Industrial and Corporate Change*, vol. 1, no. 1, 21–49. Reprinted in Menard, C. (ed.), *Transaction Costs Economics*, Cheltenham, Edward Elgar, 1997
- Williamson, O. E. 1996A. *The Mechanisms of Governance*, Oxford, Oxford University Press
- Williamson, O. E. 1996B. Efficiency, power, authority and economic organization, in Groenewegen, J. (ed.), *Transaction Costs Economics and Beyond*, London, Kluwer
- Williamson, O. E. and Ouchi, W. G. 1983. The market and hierarchies program of research. Origins, implications, prospects, in Francis, A., Turk, J. and Willman, P. (eds), *Power, Efficiency and Institutions*, London, Heinemann
- Wolfinger, R. E. 1971. Nondecisions and the study of local politics, *American Political Science Review*, vol. 65, 1063–80
- Young, D. 1995. The meaning and role of power in economic theories, pp. 85–100 in Groenewegen, J., Pitelis, C. and Sjöstrand, S. *On Economic Institutions. Theory and Applications*, Aldershot, Edward Elgar