

Steve Fleetwood 'Re-thinking Labour Markets: A Critical Realist-Socioeconomic Perspective', *Capital & Class*, 2006, No. 89, pp 59-89'

Abstract There are currently two main accounts of labour markets, the *mainstream* labour market (MLM) account which avoids serious analysis of social structures; and a rather unsystematic *socioeconomic* account which recognises that labour markets are embedded in social structures, but remains ambiguous vis-à-vis the nature of this embedding. Ambiguity is reduced and the possibility of building a systematic alternative to the MLM account is achieved by augmenting the socioeconomic account with critical realism. This allows us to break completely with the idea that there are phenomena called 'labour markets' that are embedded in other phenomena called 'social structures.' There is, arguably, no site independent of social structures, where some kind of (functional or unexplained) relation between wages, supply and demand for labour exists. Rather, *labour markets just are, or are exhausted by, the very social structures that constitute them.*

Introduction

Labour markets are central to the neo-liberal agenda. Hardly a week passes without a government minister or a leading industrialist urging us towards ever greater labour market flexibility. Tony Blair, for example, recently noted that 'Moving towards more flexible systems of pay and working will not be unopposed. Yet the argument can be won' (2002: 21). Neo-liberal ideas on labour markets and labour market flexibility get what intellectual justification they do from the orthodox, neoclassical or *mainstream labour market* (MLM) model or account. Despite this account being, arguably, intellectually bankrupt, it has gained hegemonic status. It is not only taught in schools, colleges and universities as if it is the 'only game in town' but it also informs local, national, supra-national and global economic policy. This state of affairs has come about, at least in part, because its critics have been unable to offer an alternative. Elliot, a mainstream economist who is aware of some of the limitations of the mainstream, provides a good example. Whilst he admits the mainstream account is problematic, he adds: '[u]ntil an alternative and superior analytical framework is proposed, I am reluctant to abandon the one we have' (1991: xvi). The absence of an alternative, then, not only encourages mainstream economists like Elliot to stick with a flawed account, it lends credibility to neo-liberal policies based upon increasing labour market flexibility.

In opposition to the mainstream is a disparate group of Heterodox economists such as Feminists, Institutionalists,² Marxists, Post-Keynesians, Regulationists, Social-Economists and Segmented Labour Market theorists, as well as non-economists from areas such as organisational theory, sociology of work and employment, labour law, state theory, human resource management, industrial or employment relations and urban geography. I refer to this body of literature as the *socioeconomics of labour markets*. Despite diversity, this literature unites around a common theme, namely, that labour markets are *embedded in institutions or social structures* (i.e. mechanisms, rules, resources, conventions, habits, powers, and so on) which I will refer to simply as 'social structures.'³ The multi-disciplinarity and diversity of the socioeconomic literature furnishes us with a set of theoretical and empirical insights out of which an alternative account can be forged. But at present, the *unsystematic* (i.e. disjointed, fragmented and partial) nature of these insights means they do not, currently, add up to the kind of *systematic* (i.e. connected, holistic, inclusive, totalising) alternative necessary to challenge the hegemony of the MLM account. This lack of systematicity is, in large measure, caused by the absence of a viable meta-theoretical apparatus with which to weld together these theoretical and empirical insights. Orienting current socioeconomic theoretical and empirical insights on labour markets around critical realist meta-theory may provide firm foundations from which to begin constructing a systematic alternative to the MLM account, that is, a *critical realist (oriented) socioeconomic account of labour markets*.

Because it is well known, part 1 of the paper does no more than sketch the MLM account, stripping it down to its basic principles. Part 2 introduces the diverse perspectives and key ideas that constitute the socioeconomic account; considers the embedding of labour markets in social structures; and investigates the ambiguous nature of the relationship between labour markets and social structures. In order to move beyond this state of affairs parts 3 and 4 turn to critical realist meta-theory which allows us to break completely from with the idea that relations between wages, and supply and demand for labour can be expressed as functional relations. This 'forces' us to take social structures far more seriously than we have hitherto and motivates a radical re-think of the nature of labour markets.

The moment we break completely from scientism, deductivism, closed systems, and functional relations, we are 'forced' almost by default as it were to take social structures far more seriously than we have hitherto, motivating a

radical re-think of the nature of labour markets. It is, arguably, a mistake to think, as almost everyone has hitherto, that there are two *separate* phenomena called 'labour markets' and 'social structures' respectively such that 'labour markets' are embedded in 'social structures.' There is, arguably, no site independent of social structures, where some kind of (functional or unexplained) relation between wages, supply and demand for labour exists. If this is correct, then *labour markets just are, or are exhausted by, the very social structures that constitute them.* The concluding parts show how we can deal robustly with social structures (and agents), provide a clear idea of what a theory or account of labour markets should do, and briefly sketch what a socioeconomic account of labour markets might look like if it took its meta-theoretical orientation from critical realism.

Mainstream account of labour markets

Part of the attraction of the MLM account is that it is a (theoretically and meta-theoretically) *systematic* body of thought.⁴ At the theoretical core of this account lies a simple, yet powerful, *basic principle*: wage rates and the quantities of labour demanded and supplied are functionally related. Labour markets are conceived of as sites where these relations operate, and are theorised as *if* the 'economic' forces of wages, supply and demand for labour over-ride 'non-economic' phenomena such as social structures. The latter are treated as problematic residuals. This theoretical dimension is systematic in the sense that the clutch of theorems and sub-theorems that constitute, and support, this basic principle are in agreement with one another – e.g. theories of rational agents, marginal cost, marginal productivity and appropriately sloped demand and supply curves.

Mainstream economists are, of course, aware that a range of 'non-economic' phenomena and institutions (they do not use the term 'social structures') impact upon labour markets, and many spend time and effort trying to consider phenomena like family, gender, race, trade unions, efficiency wages, insider-outsider distinctions and so on (*c.f.* Solow 1990; Gerhart & Rymes 2003, especially chapter 2) Yet even when mainstream economists do consider a social structure it is, typically, dealt with as a 'bolt on' to the basic principle and analysis takes the form of deducing the subsequent effects on the wage rate, supply, or demand for labour. The possibilities that social structures may actually dominate, or even completely negate, the 'economic' forces of wages, supply and demand, are never seriously considered. As Hyclak, Johnes & Thornton, (2004: 19) put matters: 'Adjustment to a demand and supply equilibrium may be complicated by institutional factors, but we would nevertheless expect supply and demand to be major influences on labour market outcomes.'

The MLM account is also systematic in the sense that its theorems are rooted consistently in a meta-theory best described as scientific,⁵ a deductivist method, and empirical realist ontology – elaborated upon below. This combination provides the account with unambiguous objectives, namely deduction and/or prediction.⁶ From axioms, assumptions, theorems and regularities or laws, a change in quantity of labour demanded can, for example, be deduced/predicted from a change in the wage rate with theoretical (and perhaps also empirical) precision. This meta-theoretical apparatus enables the basic principle to be expressed formally and mathematically, with the wage rate, supply, and demand for labour treated as functions.

In short, the *basic principle* of labour markets constitutes the essence of the MLM account, determines the field of study, shapes the way analysis is carried out, and grounds policy prescriptions.⁷

The socioeconomic account of labour markets⁸

The following section provides an introductory sketch of the main perspectives and ideas that constitute the socioeconomic account and hints at their individual, and collective, shortcomings. Lest my criticisms seem unduly harsh, please note that I count myself as part of this socioeconomic group. The shortcomings I highlight here are based on the simple fact that each of the perspectives tends to concentrate on one aspect of labour markets: feminist contributors, for example, tend to concentrate upon those labour market phenomena that impact upon women. Whilst such concentration is a perfectly legitimate exercise in its own right, taken in the aggregate, these individual perspectives do not add up to the kind of systematic alternative that I consider possible and necessary - although this possibility is denied by some socioeconomicists (*c.f.* Martin 2000: 456).

Whilst the post-war American Institutionalists (notably Dunlop 1944; Lester 1941; Kerr 1977; and Reynolds 1951) are often thought of as providing *The alternative*, many regard their approach as a variant of the MLM account, or 'Neoclassical Plus' as Hillard and McIntyre have it (1994: 620). Of the many theoretical and empirical insights on offer, none amount to a unifying thread (Segal 1986) and so remain unsystematic. Those that are consistent with scientism

render the approach meta-theoretically indistinguishable from the mainstream, and those that are *not* so consistent cannot be consistently rooted in any meta-theory because nothing else is offered.

Whilst there are some excellent (Economic) Institutional accounts of markets in general, (e.g. Hodgson 1988; Fligstein 2001) no Institutional work specifically *on labour* markets comes close to providing a systematic Institutional alternative – although Rogers (1994) is clearly moving in this direction. Whilst Marsden's *A Theory of Employment Systems* (1999: 5) promises to provide 'an institutional theory of labour markets' his commitment to rational choice, and hence to scientism, leaves his account vulnerable to the same meta-theoretical critique as the MLM account. Something similar can be said for Schmid (1994).

Economic and Sociological Institutionalism meet in the work of writers like Powell and DiMaggio (1991), Fevre (1992) and Granovetter (1992). Powell and DiMaggio's work is compromised by a reluctance to break entirely with the same meta-theoretical apparatus of mainstream theory - as evidenced, for example, by their desire to seek *inductively based predictions*. Fevre's insistence that the MLM account is basically sound, requiring only the grafting on of a sociological understanding of institutions, accepts far too much of the MLM account to be considered an alternative. Whilst Granovetter is to be applauded for stressing the need to conceive of labour markets as *embedded* in social structures, it is time to proceed beyond this conception.

Marxist economists have discussed the functions labour markets perform, such as transforming individual and concrete labour into socially necessary and abstract labour. They also offer important theoretical and empirical insights, such as role labour markets play in the commodification of labour power or in furthering income inequality. Important as they are, such insights do not amount to a systematic Marxist alternative. (*Cf.* Fine 1998; 2003 and Botwinick 1993).

The Post Keynesian emphasis on macroeconomic issues tends to deflect attention from the microeconomic (and microsociological) analysis of labour markets. Those Post Keynesians who do emphasise micro phenomena, tend focus their attention on administered prices in product markets, but not on what might be called 'administered wages' in labour markets. Once again, a systematic Post Keynesians alternative is not forthcoming – although Seccareccia's (1991) Post Keynesian/Institutionalist synthesis is a move in this direction.

There are many Feminists who have provided important theoretical and empirical insights into the gendered nature of labour markets and related issues such as the role played by women in paid and unpaid work and the role of the state and family in the re-production of labour power such as Dex 1999; Folbre 1994; Gardiner 1997; Olsen and Walby 2002 and Vogel (2000) to name but a few. Some feminists are clearly working towards an account of labour markets similar to the one I seek. Picchio, for example, seeks an alternative, inclusive, trans-disciplinary, 'analytical and political perspective on the labour market' (2000: 211). She explicitly rejects the analytical separation between how labour is set in motion, via the labour market, in the *production* of commodities, and how the labourer and his/her individual and social relationships at work, in the family and community are *reproduced*. With their notion of 'wages as a social practice' Figart, Mutari & Power (2002: 34) seem to consider social structures as doing more than simply embedding labour markets.⁹ Enlightening as these theoretical and empirical insights are, they do not amount to a systematic Feminist alternative.

The French tradition, including regulation, state, convention, and societal effect theories (*cf.* Boyer 1994; Michon 1992; Theret 1994; Rubery & Grimshaw 2003) provide many insights, theories and observations into the operation of labour markets that are, in many respects, compatible with the account I seek. Lack of English translation means this rich vein goes untapped by non-French speakers, and it may well be that this tradition has much more to offer.

Whilst I have tremendous sympathy with Rubery's observation that the segmented labour market (SLM) approach 'encompasses many institutional, non-neoclassical and historically-based approaches to labour market analysis' (Rubery 1992; 247) even this broad church does not amount to the systematic alternative we need. And despite offering important theoretical and empirical insights from this perspective, the same must be said of recent work by Beynon, Grimshaw, Rubery and Ward (2002)¹⁰ and Burchell, Deakin, Michie and Rubery (2003).

Urban Geographers like Storper and Walker (1983, 1989) pioneered the use of critical realism to underpin their account of labour markets in the 1980s and this perspective has been used by many geographers since then - even if they are not always explicit about it. (*c.f.* Peck 1996; Houghton 1993; Hudson 2001; Jonas 1995). Once again, however, we cannot expect a set of insights rooted in one perspective to amount to a systematic alternative.

Finally, there are a number of contributions that are often difficult to associate with any particular perspective because they, quite legitimately, draw upon ideas from more than one tradition – this is actually true of some of the above writers. Examples include: Applebaum (1986); Block (1990); Callaghan (1997); Craig et al (1988); Piore (1993); Standing (1999); Tilly and Tilly (1994; 1998); and Villa (1987).¹¹

In sum, then, the socioeconomic account is an advance on the MLM account because it takes seriously the fact that labour markets are *embedded* within social structures, and it insists on including the latter in any analysis. But as things stand, these individual perspectives do not add up to the kind of systematic alternative to the mainstream model of labour markets. There is, clearly, work to be done.

Labour markets and social structures

As this section will make clear, the socioeconomic literature recognises the existence of *two separate phenomena*: labour markets as sites where some kind of (typically unspecified) relation exists between wages, supply and demand for labour; and the social structures or institutions that embed these markets. Schmid's (1994: 30) comments are typical: 'Institutions steer and regulate labour markets in a variety of ways.' As soon as we inquire into the *precise nature* of the relation between labour markets and social structures, however, we run into ambiguity. Let us explore this ambiguity.

It is common to come across comments suggesting that 'economic' forces dominate, but do not entirely negate, the effect of social structures. Other comments imply the opposite, namely that social structures dominate, but do not entirely negate, 'economic' forces. Still other comments suggest a position in between these two extremes. Martin (2000; 463-4) seems to have spotted something similar, identifying six conceptions of local labour markets. 'At one extreme, the local labour market is assumed to function as a set of impersonal demand and supply interactions; at the other, as a power saturated, institutionally constructed social process.' To demonstrate this ambiguity, let us consider, firstly, some comments suggesting that 'economic' forces dominate, but do not entirely negate, the effect of social structures.

- One group of socioeconomists write a paper that, whilst not designed 'to put forward a general theory of how labour markets operate' nevertheless attempts to develop a framework which permits the 'coherent discussion of economic, social and political aspects' (Craig et al 1988; 105). Unfortunately, and I suspect against their intentions, they seem unable to break from the conceptual framework and terminology of the MLM account. They proceed by discussing 'Labour supply' followed by 'Labour demand' and even their section headed 'Labour Markets' does not provide an alternative to the MLM account – which, incidentally, they reject.
- After explaining that 'societal structures' are integral to the operation of labour markets and cannot be treated simply as market imperfections, Houghton *et al* add 'All this is not to deny the explanatory value of some of the variables most closely associated with neo-classical theory' (1993; 9). If the 'variables' to which they refer to include supply, demand and wage rates, can we take this as accepting the need to theorise supply, demand and wage rates in ways suggested in the MLM account, as long as we do ignore the effects of social structures?
- Fevre argues that problems associated with the discipline notwithstanding, labour economics is nonetheless '*by far the most productive* (to date) of the social sciences which have shown an interest in labour markets' (1992: 23 emphasis added). This encourages the idea that (mainstream) labour economics, and with it the basic principle, (not to mention its scientism) is, in some undefined sense, on the right track. Observing that sociologists, unlike economists, are '*not so much concerned*' with the setting of wage rates via the forces of supply and demand (*ibid*: 9 emphasis added), encourages the idea that sociologists accept wage rates are set by supply and demand – they are just not very interested in this issue. Whilst reminding the reader that he is discussing economic theory at its 'most basic level', Fevre suggests that the price of labour is '*determined (or at least heavily influenced by) the laws of supply and demand*' (*ibid*: 25, emphasis added).

From comments like these, and from what remains unsaid (from the 'absent traces' to borrow a term from poststructuralists), it is possible to identify what I call a '*watered down*' version of the MLM account which, if it were

unambiguously articulated (and it is not), would go something like this: *the economic forces of supply and demand, acting in conjunction with social structures, roughly determine or at least heavily influence wage rates.*

Now let us consider some comments where social structures are said to dominate, but not entirely negate, 'economic' forces.¹²

[Michon recognises confusion between] the view that a convention [i.e. a social structure or institution] is an alternative to the market, (2) the view that a convention is a complement to the market and (3) the view that the market is an alternative convention. In the first case, a convention is said to correct the 'failures of the market'. A convention can then be understood as an institutional mechanism by means of which scarce resources can be more satisfactorily allocated. Depending on the situations in question, 'this social machinery may replace the price mechanism, wholly or in part, or assist it by making it more efficient' (Michon 1992; 231).

[N]on-economic phenomena are integral to the nature and functioning of labour markets and, if labour markets...are to be understood more fully, these non-economic phenomena must be seen as endogenous to our model of labour markets...[T]he labour market, whilst being influenced, is not dominated by economic price signals...The task ahead is to build such an inclusive view of non-economic phenomena into our model of the labour market and, by doing so, move beyond the simple mainstream economic policies of continually deregulating labour markets, and on to the more positive possibility of negotiating the development of programmes and policies which take account of the plurality of social, cultural and political forces operating on labour markets (Callaghan 1998; 193).

The labour market is deeply embedded in a range of societal structures...which brings with it a whole range of 'distorting' influences...These distortions are in fact so integral to the workings of society and the economy that they cannot be treated simply as market imperfections: they actually structure the labour market in fundamental ways (Haughton et al; 1993; 9).

Whereas in standard theory it is assumed that in markets the exchange between supply and demand occurs in abstraction of any power relation or regulation, the term 'institutions' implies a socio-economic regulation of the unbridled working of the markets (Auer 2001: 3).

Labour institutions are those which effect the structure and functioning of the labour market (Rogers 1994: 9).

Whilst comments like these emphasise the dominance of social structures over 'economic' forces, and cannot, therefore, be accused on accepting the 'watered down' version mentioned above, the point remains that it is still difficult to know *exactly* what is being claimed about the relation between labour markets and social structures.

Generally speaking, then, the current socioeconomic literature leaves us in the following situation:

- Supply, demand and wage rates do something, but no-one is clear about what this 'something' is.
- Social structures do something, but no-one is clear about what this 'something' is or how social structures do it.
- Supply, demand and wage rates interact with social structures, but no-one is clear about what this 'interaction' means, how it works, or what consequences follow.
 - Does the presence of social structures *negate* the relationship between supply, demand and wage rates? If so, does this mean supply and demand have *no* effect on the wage rate? If so, are wage rates determined *entirely* by something other than supply and demand? If so, what?
 - Does the presence of social structures *modify* the relationship between supply, demand and the wage rate such that the latter is only roughly determined, or heavily influenced, by supply and demand? If so, how rough is 'roughly' and how 'heavy' is the influence?
- Is it the case, as some Institutionalists claim, that the forces of supply and demand for labour set boundaries to wage rates, and institutions or social structures regulate the actual wage rate.
- Or is it the case, that institutions or social structures set boundaries to wage rates, and the forces of supply and demand for labour regulate the actual wage rate?

Search as we might, we will not find a plausible explanation of how labour markets and social structures interact in the literature because many socioeconomists have not managed to break completely from the mainstream idea that labour markets are sites where wages, and supply and demand for labour are functionally related. Rubery (1997; 347) has spotted this, noting that the 'dominance of the supply and demand paradigm...leads most economists, even those predisposed to an Institutionalists analysis...[towards] a market based explanation.' Many socioeconomists have attempted to integrate the basic conception of labour markets into a serious analysis of social structures. Yet the more social structures are allowed into the account, the more difficult it is to maintain the idea that wages, and supply and demand are functionally related; the more difficult it is to maintain the idea that, for example, an increase in wages necessarily leads to an decrease in labour demand. But if wages, supply and demand are not functionally related, if an increase in wages does not *necessarily* lead to a decrease in labour demand, then there seems to be nothing left of these things called 'labour markets' and, by extension, nothing left to embed within social structures. In sum, the nature of the relations between wages, and supply and demand for labour, and between labour markets and social structures remains fudged. Socioeconomists have little option but to resort to claims like: 'labour institutions...effect the structure and functioning of the labour market'. Claims like this are, at best, a place-holding device, awaiting a more in-depth, analysis. It is, I think, about time we started such analysis. And the place to start is meta-theory.

Critical realism, meta-theory and theory

If socioeconomists break completely with the idea, inherited from the MLM account, that relations between wages and supply and demand for labour can be expressed as *functional* relations, they can cut the *Gordian Knot* that is the relation between labour markets and social structures. The following sections use the meta-theoretical apparatus of critical realism, applied to the theories of labour demand and supply, to justify such a break.

According to critical realists, the MLM account is systematically rooted in a scientific meta-theory consisting primarily of an *empirical realist ontology* and the *deductivist method* wherein to 'explain' something is to deduce/predict a statement about that something from a set of initial conditions, assumptions, axioms and a covering law or some form of constant conjunction of events.

- Central to the way the deductivist method is operationalised are functional relations, generalised as $y = f(x)$.¹³ These can also be expressed as laws and styled 'whenever event x then event y '.
- Functional relations and laws presuppose constant conjunctions of events.
- Constant conjunctions of events drive the nomological machinery of the deductive method: without them, it is impossible to deduce or predict an event(s) from antecedents.
- Because the entities permitted into this account are confined to what is, or could in principle be, experienced, the ontology is *empirical*; and because these entities are thought to exist independently of our identification of them, it is *realist*. The ontology can, thereby, be labeled *empirical realist*.

The deductive method is, however, inappropriate in cases where events do not manifest themselves as constant conjunctions, that is, in *open systems*. Put another way, deductivism presupposes *closed systems*. A closed system is one characterized by constant conjunctions of events and an open system is, of course, one characterized by a lack of such constancy. Events are constantly conjoined in the sense that for every event y , there exists a set of events x_1, x_2, \dots, x_n , such that y and x_1, x_2, \dots, x_n are regularly conjoined.¹⁴ Let us explore this inappropriateness in the case of the theory of labour demand.

Theory of labour demand

The (Humean) law of labour demand which states that the quantity of labour demanded changes indirectly with the wage rate, can be expressed as $l_d = f(w)$ ¹⁵ or more generally as $y = f(x)$ or 'whenever event x , then event y '. No one suggests that this event constancy holds all the time. Even advocates agree that sometimes it does and sometimes it does not, depending upon various (usually) unmentioned circumstances that are buried within the *ceteris paribus* clause or in other assumptions. Putting matters like this, however, is tantamount to denying the existence of closed systems and constant conjunctions of events, in which case the nomological machinery of the deductive method fails and deductions or predictions cannot be made. Mainstream economists avoid this situation by engineering (in theory) constant conjunctions of events by means of a set of closure conditions. They do not call them closure conditions of course, and in this they call them the Marshall-Hicks (M-H) conditions of derived demand – but this is a semantic difference only.

Marshall-Hicks conditions as closure conditions

The very possibility stating that a change in the wage rate will cause a deducible or predictable change in the quantity of labour demanded, depends on the existence of a functional relation between labour demand and the wage rate. This in turn depends upon the M-H conditions. The M-H conditions are usually used to demonstrate how *elastic* (i.e. responsive) the demand for labour will be to changes in wage rates. The demand for labour will be more elastic if:

1. *The elasticity of substitution between labour and capital is high.* That is, the demand for labour will be more responsive to a change in wage rates the more easily labour can be substituted for, or replaced by, capital.
2. *The elasticity of demand for the final product is high.* That is, the demand for labour will be more responsive to a change in wage rates if the cost increases caused by wage increases can be passed directly to the consumer without a loss of revenue.
3. *The share of wages in the total cost of production is high.* That is, the demand for labour will be more responsive to a change in wage rates if the firm is labour intensive because any increase in wage costs constitutes a relatively high proportion of overall costs.
4. *The elasticity of supply of other factors is high.* That is, the demand for labour will be more responsive to a change in wage rates if, when capital is substituted for labour, the suppliers of this additional capital are able to increase their supply immediately and effortlessly.

It is, however, not quite correct to say that these conditions merely effect the elasticity of demand for labour. Without them the very law of labour demand evaporates. Take a case where there is not just *low*, but *zero*, elasticity of substitution between labour and capital. One cannot substitute an extra wing for a pilot following an increase in the wage rate, so the wage increase might have no effect at all on labour demand. Whilst this is an extreme example, production usually involves a fixed crew of workers who operate a specific configuration of machinery. In many cases, even if it is technically possible, it is not socio-politically possible, to substitute a worker for a piece of machinery. But if substitutability is not assumed,¹⁶ the idea that an increase in wage rates causes the substitution of labour by capital is undermined, and with it the law of labour demand.¹⁷

Now, the M-H conditions can be mapped onto four conditions necessary to ensure the system remains closed. The fact that there happen to be four M-H conditions and four closure conditions is simply coincidence. Closing the system actually requires far more than the M-H conditions, these are merely the ones made explicitly. Many other necessary assumptions lie buried within the *ceteris paribus* clause, and many others are attached to sub-components of the theory of labour demand – such as the assumptions relating to profit maximisation or diminishing marginal returns. The M-H conditions are focused upon here because, as explicit assumptions, it is easier to see how they are used to close the system.

Intrinsic closure conditions). The *internal state* of the individuals that constitute the system must be engineered so that the individual (person, production system, firm or whatever) *always* responds in the same, *a priori* predictable way. The internal closure condition is maintained by a plethora of assumptions. One such assumption (there are others) is the assumption that the system of production is characterised by an elastic substitution between labour and capital. This assumption prevents the firm from doing unpredictable (yet realistic) things like granting a wage rise following the introduction of minimum wage legislation, and then introducing new flexible working practices that raise profitability and offset the initial wage rise.

The extrinsic closure condition ensures that the system is completely isolated from any *external* influences. This closure condition is maintained by a plethora of assumptions. One such assumption (there are others) is that the suppliers of other factors of production can increase their supply *immediately* and *effortlessly* should the need arise.

The aggregational closure condition ensures that the response remains constant, irrespective of the level of aggregation. This closure condition is maintained by a plethora of assumptions. One such assumption (there are others) is that the share of wages is high no matter what the industry. This assumption prevents situations whereby if the industry was, or became, highly capital intensive, an increase in the wage rate might be lost in the overall costs.

The reducibility closure (sub) condition requires the existence of assumptions whose sole purpose is to ensure mathematical tractability. These are merely technical assumptions used to ensure the relevant functions are well behaved, thereby preventing perverse outcomes. One such assumption (there are others) is that substitution

between labour and capital is smooth. Given that production usually involves a crew of workers who operate a set of equipment, even when workers are actually substitutable for machinery (how does one substitute a machine for a nurse to carefully bath an elderly patient?) this substitution is 'lumpy'. Production functions and isoquants would have 'lumps' in them leading to a loss of mathematical tractability as they cannot be differentiated.

In short, the M-H conditions are not just about establishing the elasticity of labour demand: *they are assumptions needed to ensure event constancy, and systemic closure.*

Theory of labour supply

The critical realist critique of the theory of labour demand is similar to that made against the theory of labour supply (although without the M-H conditions). There is, therefore, no utility in going through it again, so I shift the focus slightly towards the consequences that arise from closure.

The (Humean) 'law' of labour supply that states that the quantity of labour supplied varies directly with the wage rate can be expressed as $l_s = f(w)$ ¹⁸ or more generally as $y = f(x)$, or styled as 'whenever event x, then event y'. The requisite constant conjunction of events is engineered (in theory) via a set of closure conditions. I will not run through all the assumptions that create the closure conditions but will merely mention one.

The MLM account of labour supply assumes the individual worker is free to choose the number of hours s/he works in accordance with his/her preferences and subject only to an income constraint. The length of the working day, (week or year) is assumed to be the aggregate outcome of free choices by individual workers who have expressed their preference for it to be this length. This is, not only a false assumption (which should not be confused with a legitimate abstraction), even economists who use it know it is false. The working period is the length it is because workers and their employers have used the resources at their disposal such as: national or supranational government directives and legislation; and political, industrial and ideological power. Putting matters like this, however, is tantamount to denying the existence of constant conjunctions of events, in which case the nomological machinery of the deductive method fails. Once phenomena like legislation and power enter the account, the very idea of a simple choice between working an hour more or an hour less because of a change in taste, non-wage income, or the wage rate evaporates and uncertainty, indeterminism and unpredictability arise. In this case, the constant conjunction of events that form the basis of the claim that the quantity of labour functionally related to the wage rate will no longer hold.

In short, the (plethora of) knowingly false assumptions surrounding the activities involved with supplying labour are not made because economists have studied these activities and decided they are realistic they are made for the sole purpose of *ensuring systemic closure.*

The problems with closed systems

Commitment to scientific meta-theory, and especially the deductive method, encourages the theories of labour demand and supply to be set up in terms of the (Humean) laws of labour demand and supply. These laws are usually expressed as constant conjunctions of events and generalized in terms of functional relations. Theories of labour demand and supply, then, presuppose closed systems. And this brings us to a fundamental problem. Whilst closed systems are fundamental to scientism, they are exceptionally rare phenomena. There appear to be very few spontaneously occurring closed systems in the natural world, and virtually none in the social world. This is not to deny the possibility that constant conjunctions may occur accidentally, or over some restricted spatio-temporal region, or be trivial – e.g. all aeroplanes have a pilot. But virtually all of the constant conjunctions of interest to science only occur in artificially closed systems.

In natural science, the point of experiment is to close the system by creating a particular set of conditions that will isolate the one interesting mechanism. This mechanism is then allowed to operate unimpeded and the results, the constant conjunctions, recorded. In social science, however, constant conjunctions of events appear to be found only in the conceptual experiments' (Pencavel 1994: 14), that constitute theoretically closed systems. Unfortunately, (natural or) social scientists who adopt the deductivist method face the following problematic and counterintuitive implications:

- a) Outside closed systems, where constant conjunctions of events are *not* usually found, one would have to conclude that there are no laws. This would be tantamount to saying that nothing governs the (non-constant) flux of events in open systems; science would, then, become a fruitless endeavor.

- b) It is often the case that conclusions derived from experimental situations (i.e. in closed systems) are successfully applied outside experimental situations (i.e. in open systems). Because of (a) above, this state of affairs would have no valid explanation.
- c) The obvious problem of how one may, justifiably, claim anything about a reality that constitutes an open system from an analysis of a closed system has never been *seriously* addressed by mainstream 'economists'. In fact, deducing statements about the action of agents operating in a closed system, and transferring them to the action of agents in the open system, commits the fallacy called *ignoratio elenchi*. This entails 'assuming that one has demonstrated something to be true of X when the argument or evidence really applies to Y which is not the same as X in some respect' (Gordon 1991: 108). What is 'not the same' is the existence and ubiquity of constant conjunctions of events.
- d) Systemic closure, typically, requires the use of knowingly false assumptions. The use of known falsehoods in an account immediately divests it of all explanatory power (Fleetwood 2002).

These problematic and counterintuitive implications render the deductive method singularly inappropriate for the analysis of open systems such as labour markets. Whilst this is fatally damaging to the MLM account, where does this leave the socioeconomic account?

Cutting the Gordian Knot

With no closed systems there are no constant conjunctions of events, no (Humean) laws no functional relations and, therefore, no *functional* relations between wages, supply and demand for labour. Yet socioeconomicists have never proffered any alternative relations. We are caught on the horns of a dilemma. If we express the relation between wages, supply and demand for labour in terms of functional relations, then at least we know exactly what it means to say they are related. But this requires the assumption that labour markets are closed systems. If we are not prepared to make this assumption, if instead we think labour markets are open systems, then we cannot express the relation between wages, supply and demand for labour in terms of functional relations and have to admit that we do not know what it means to say they are related.¹⁹

This does not mean that wage rates exert no influence upon quantities of labour demanded and supplied or *vice versa*. Rather, the presence of social structures means such influence cannot be reduced to, and expressed solely in terms of, functional relations. It means, for example, that an increase in the wage rate sets in motion a chain of reactions between sets of agents acting within a complex web of social structures. At the end of this chain, the quantity of labour demanded may increase, decrease or remain constant. Any claim about the likely outcome and any putative explanation of a change in the quantity of labour demanded, would have to offer a detailed account of the operation of the agents and the social structures (*c.f.* Rubery & Grimshaw 2003).²⁰ But why should this requirement be a problem to a socioeconomicist who probably spends most of his/her time doing this already?

The moment we break completely from scientism, deductivism, closed systems, and functional relations, we are 'forced' almost by default as it were to take social structures far more seriously than we have hitherto, motivating a radical re-think of the nature of labour markets. It is, arguably, a mistake to think, as almost everyone has hitherto, that there are two *separate* phenomena called 'labour markets' and 'social structures' respectively such that 'labour markets' are embedded in 'social structures.' There is, arguably, no site independent of social structures, where some kind of (functional or unexplained) relation between wages, supply and demand for labour exists. If this is correct, then *labour markets just are, or are exhausted by, the very social structures that constitute them*. At a stroke we have cut the Gordian Knot.

Whilst this is an extremely contentious and radical claim, it must be said that a few socioeconomicists have come very close to saying the same thing.

Institutions and social forces are taken to be central determinants of the structure and organisation of employment. There is no division between the economic and the institutional as 'markets' are formed and shaped through institutions (Rubery 1992; 246-7).

[Many socioeconomicists] would argue that markets cannot be regarded as working in opposition to institutions. Instead, markets are themselves institutions...It is, for this group of theorists impossible to consider the labour market and the price of labour as determined by some abstract universal forces of supply and demand (Rubery & Grimshaw (2003: 37, see also Grimshaw & Rubery 2004).

Dealing with open systems and requiring a more robust treatment of social structures requires a more sophisticated meta-theoretical apparatus than has hitherto been employed by socioeconomists. Critical realism is especially useful here because it has, at its core, a meta-theoretical apparatus designed specially to consider social structures and, of course, the human agents that interact with them.

Ontology, methodology and theory

Firmly rejecting constant conjunctions of events as most unlikely features of the social world, critical realists are free to seek the cause of an event elsewhere in the ontological spectrum. Attention turns away from the flux of events and towards the 'deep' *social structures etc* that govern them. Rather than the ontology being restricted to the fused domains of the actual and empirical (as with empirical realism noted in an earlier section), the critical realist adds another domain, namely the (metaphoric) 'deep'. Figure (1) illustrates this *stratified* ontology.

Figure 1.

Domain	Entity
Empirical	Experiences & perceptions
Actual	Events & actions
'Deep'	Structures, mechanisms, resources, rules, powers, relations

Not only is the ontology stratified, it is also *transformational*. Whilst traditionally most commentators recognise that society consists (in some sense) of agents and structures, the debate centres upon the way they interact. Agents do not create or produce structures *ab initio*, rather they *recreate, reproduce and/or transform* a set of pre-existing structures. Society continues to exist only because agents reproduce and/or transform those structures that they encounter in their social actions. Every action performed requires the pre-existence of some social structures which agents draw upon in order to initiate that action, and in doing so reproduce and/or transform them. For example, communicating requires a medium (e.g.) language, and the operation of the market requires the rules of private property. This ensemble of social structures simply *is* society. The transformational principle, then, centres upon the structures and mechanisms that are the *ever-present condition, and the continually reproduced and/or transformed outcome, of human agency*. Agents, acting purposefully or consciously, unconsciously draw upon, and thereby reproduce, the structures and mechanisms that facilitate their actions in daily life.

With the recognition that events do not manifest as constant conjunctions, combined with the further recognition that *something must govern these events*, then the method, if it is to bear fruit, must switch. The emphasis of investigation necessarily switches (ontologically speaking) from the domains of the empirical and actual, to the domain of the deep and to the social structures that govern these events. Investigation switches from the *consequences*, that is, from the *outcomes or results* (in the form of events and their patterns) of some particular human action, to the conditions that make that action possible. Because of the openness of socio-economic systems, consequences *cannot* be induced, deduced/predicted. But the social structures that govern this human action *can* be *retroduced* and their operation illuminated and *explained*. Retroduction consists:

in the movement, on the basis of analogy and metaphor amongst other things, from a conception of some phenomenon of interest to a conception of some totally different type of thing, mechanism, structure or condition that, at least in part, is responsible for the given phenomenon. If deduction is illustrated by the move from the general claim that 'all ravens are black' to the particular inference that the next one seen will be black, and induction by the move from the particular observation of numerous black ravens to the general claim that 'all ravens are black', retroductive or abductive reasoning is indicated by a move from the observation of numerous black ravens to a theory of a mechanism intrinsic...to ravens which disposes them to be black (Lawson 1997: 24).

Explanation supplants prediction/deduction as the objective of theorising; retroduction supplants deduction and induction as the mode of inference; and what I call the causal-explanatory method supplants deductivism. The method is 'causal-explanatory' because its objective is to *explain*, and it explains in terms of providing a *causal* account. Note well, however, that 'to explain a phenomena is to give information about its causal history' (Lipton 1994; 33). The causal history of a phenomena is not one couched in terms of the event that happens to (regularly) precede the phenomena, but in terms of the underlying causal structures and the human agents that reproduce and transform them.

In sum, the meta-theoretical apparatus of critical realism furnishes us with a clear idea of what a theory, model or account can, and should, do: it can, and should, *explain*.

Preparing the ground for future work

If the labour market constitutes an *open* system, we cannot expect to make reliable deductions/predictions about the magnitude (or even the sign), for example, of a change in labour demand following the introduction of minimum wage legislation. Even if such a deduction/prediction were to hold (even over a relatively short spatio-temporal region) because of the deductivist method in which this deduction/prediction was rooted, the account would lack any explanatory power. Whilst we cannot expect predictive power, we can expect *explanatory power*. We can expect a viable alternative account of labour markets to explain the social structures which are drawn upon by labour market participants. Let me try to explain what this entails by means of a spatial metaphor.

Consider, first of all, a journey:

- A commuter necessarily draws upon a variety of physical structures in order to journey from home to the workplace. The physical structures might include: various kinds of pavements, roads, cycle-ways, bridges, tunnels, traffic signals, road markings, computer controlled crossing systems and so on.
- If these physical structures were (somehow) removed from the transportation landscape we would not be left with a 'structureless' transportation landscape: we would be left with no transportation landscape at all.
- It would be meaningless to try and postulate the existence of a transport system separate from the physical structures that constitute it.
- An account of how a commuter journeys successfully from home to work, would have to explain how the commuter interacted with these physical structures, noting how they are reproduced and/or transformed by this interaction.
- If and when such an explanation was forthcoming, the account would be complete. We would have completed our 'theorising'.

Now consider a labour market:

- Employers and employees necessarily draw upon a variety of social structures in order to co-ordinate what might be termed their 'labour market' actions. The structures might include:²¹ the public and private sector business organisation; private and public sector ideological, social, political and economic structures operating at local, national and international levels; local, national and supra-national state structures; kinship structures that facilitate the handling of information; family structures that facilitate the production and reproduction of labour power, including those necessary for activating and motivating labour power; structures that differentiate workers by class, gender and race; spatial structures and so on.
- If the social structures were (somehow) removed from the labour market landscape we would not be left with a 'structureless' labour market, one would be left with no labour market at all.
- It would be meaningless to try and postulate the existence of a labour market separate from, or embedded in, the social structures that constitute it.
- An account of how employers and employees necessarily draw upon a variety of social structures in order to co-ordinate their actions would have to explain how these agents interacted with social structures, noting how they are reproduced and/or transformed by this interaction.
- If and when such an explanation was forthcoming, the account would be complete. We would have taken the theoretical and empirical, although often disjointed, insights available in the existing socioeconomic literature and welded them to form a systematic, critical realist socioeconomic account of labour markets. We would have completed our 'theorising'.

If labour markets *just are, or are exhausted by, the very social structures that constitute them*, the interaction between human agents and social structures should form the basis of the account, determine the field of study and ground policy prescriptions.

Notes

¹ I wish to thank Stephen Ackroyd, Paul Lewis, Peter Nielsen, Brian Pinkstone and Grainne Collins for comments on an earlier draft.

² Note well that (Old) Institutionalists have little or nothing in common with New Institutionalists or Neoinstitutionalists who, essentially, attempt to 'modify or broaden the mainstream toolkit' (Rogers 1994: 6). A good example of this is Saint-Paul (2000) whose book *The Political Economy of Labour Market Institutions*, contains virtually no insights into the nature of institutions or social structures: in fact they are not even defined.

³ I use the term 'social structures' (with apologies to Institutionalist fellow travellers) as a generic term to cover both phenomena because (a) institutions are generally understood to be special kinds of social structures; (b) the precise relationship between institutions and social structures is not clear; and (c) the main arguments in this paper are damaged by it (*c.f.* Auer 2001; Hodgson 1999: 537; 2001: 295; Rogers 1994).

⁴ Gerhart and Rynes (2003: 15) clearly have something like this 'systematicity' in mind when referring to the 'highly interconnected logic of the neoclassical model'. Note, however, that whilst systematicity might be a necessary condition for a body of knowledge to be plausible, it is by no-means sufficient. In fact, the MLM account might be described as systematic but irrelevant.

⁵ I prefer the term 'scientism' to 'positivist' because the former refers, quite loosely, to the employment of methods and techniques allegedly similar to (some aspects of) natural science, without actually specifying what these methods and techniques are and why they are appropriate to social science. Simply put, 'scientism' resembles some under-elaborated notion of 'science'.

⁶ The critical realist 'project' within economics has sought to demonstrate the way mainstream economics in general is rooted in deductivism (*c.f.* Lawson 1997; Fleetwood 1999; Downward 2003). Fleetwood (1999a) demonstrated this for the mainstream economics of trade unions, and there seems no reason to suspect this is not applicable to all variants of mainstream economics including its account of labour markets.

⁷ The fact that this model can be made more sophisticated does not actually mean the basic principle is, or can be, abandoned. I have not yet met a mainstream economists (even one ready to concede that a socioeconomic approach has some validity) who is ready to abandon the idea that wages, supply and demand for labour are functionally related. Policies designed to make labour markets more flexible aim, essentially, to make changes in wages, supply and demand more responsive to one another. Whilst Gerhart and Rynes (2003: 40-44) recognise there is a gap between mainstream theory and reality, in the final analysis they cite both Samuelson and Coase to make the point that mainstream theory may not be perfect, but it is probably the best available.

⁸ See Rogers (1994) for an overview of the more Institutionalist orientated perspectives.

⁹ They make use of Practice theory (2002: 58-63) which seems consistent with the transformational conception of critical realism.

¹⁰ Two points are noteworthy. First, Beynon Grimshaw, Rubery and Ward (2002: 35), accept critical realism. Second, the kind of account of labour markets I seek to develop would constitute a part of what Wilkinson calls the Production System.

¹¹ Others who might be described as socioeconomists, and have valid insights to offer, nevertheless remain silent when it comes to discussing the labour market *theory* their work presupposes (*cf.* Richards 2001).

¹² The fact that many of these comments seem recognise the need for a systematic alternative, illustrates just how close many socio-economists are to the main arguments in this paper. I thank Grainne Collins for pointing this out.

¹³ This reads 'y is a function of x' and means 'the magnitude of y changes as the magnitude of x changes.'

¹⁴ A deterministically closed system can be expressed probabilistically and can, thereby, be transposed to a *stochastically* closed system. Here y and x_1, x_2, \dots, x_n are regularly conjoined under some well behaved probabilistic function. In effect, the claim 'whenever event x then event y' is transposed into the claim 'whenever events x_1, x_2, \dots, x_n on average, then event y on average', or 'whenever the average value of events measured by variables x_1, x_2, \dots, x_n are what they are, then the average value of event y measured by variable y is what it is'. Stochastically closed systems, are still closed systems.

¹⁵ This reads 'the magnitude of labour demanded (l_d) changes as the magnitude of wages (w) change'.

¹⁶ Neoclassical theorists do, of course, recognise that substitution between labour and capital is not ubiquitous and attempt to deal with it through non-convex isoquants. 'L' shaped isoquants associate one production technique with one capital-labour combination and allow no substitution. Isoquants with n 'flat' sections imply n-1 production techniques and allow limited substitution. But, where tangency between the isocost curve and the isoquants is at a corner, factor prices could change without 'causing' substitution. Where tangency occurs along the face of one of the 'flat' sections of the isoquant, then the choice of technique becomes indeterminate.

¹⁷ Incidentally, this argument works despite the fact that in many cases workers can be substituted for machinery because the MLM assumes that this substitution is always possible. It is forced to treat non-substitutability as a special case.

¹⁸ This reads 'the magnitude of labour supplied (l_s) changes as the magnitude of wages (w) change'.

¹⁹ Resorting to claims to the effect that these relations are not strictly law-like or constant, but more irregular or more like tendencies runs into arguments about the nature of tendencies (*c.f.* Fleetwood (2001a).

²⁰ In any case, the account most socioeconomists seek is, almost certainly, *not* one preoccupied solely with deducing/predicting wage rates and quantities of labour, perhaps in the presence of 'imperfections' like social structures. Wages and employment levels are important, but they would not exhaust the scope of a

realist socioeconomic account. Figart (1997) realises this in an aptly named paper where she reminded mainstream economists that 'Gender Is More Than a Dummy Variable'.

²¹ Rogers (1994: 23-4) lists fourteen 'labour institutions' that serve the same purpose as these social structures cited here.

References

- Applebaum, E. (1986) 'An Anthropogenic Approach to Labour Economics', A. Eichner, *Towards A New Economics: Essays in Post-Keynesian and Institutionalist Theory*, London: Macmillan.
- Auer, P. (2001) 'Introduction' P. Auer, *Changing Labour Markets in Europe: The Role of Institutions and Policies*, Geneva: International Labour Office.
- Beynon, H. Grimshaw, D. Rubery, J. Ward, K. (2002) *Managing Employment Change: The New Realities of Work*, Oxford: Oxford University Press.
- Blair, T. (2002) *Reforming Our Public Services: Principles into Practice*, The Office of Public Services Reform.
- Block, F. (1990) *Postindustrial Possibilities: A Critique of Economic Discourse*, Berkely: University of California Press.
- Botwinick, H. (1993) *Persistent Inequalities: Wage Disparity Under Capitalist Competition*, Princeton: Princeton University Press.
- Boyer R. (1994) 'Do Labour Institutions Matter for Economic Development' Rogers, G., Rogers, G. (ed) *Workers. Institutions and Economic Growth in Asia*, Geneva: International Institute for Labour Studies.
- Burchel, B. Deakin, S. Michie, J. Rubery J. (2003) *Systems of Production: Markets, Organisations and Performance*, London: Routledge.
- Callaghan G. (1997) *Flexibility, Mobility and the Labour Market*, Aldershot: Ashgate.
- Craig, C. *et al* (1988) 'Economic, Social and Political Factors in the Operation of the Labour Market', B, Roberts, R. Finnegan, D. Gallie, *New Approaches to Economic Life: Economic Restructuring, Unemployment and the Social Division of Labour*, Manchester: Manchester University Press.
- Dex, S. (1999) *Families and the Labour Market: Trends, Pressures and Policies*, Joseph Rowntree Foundation: York
- Downward, P. (2003) *Applied Economics and the Critical Realist Critique*, Routledge: London.
- Dunlop, J. (1944) *Wage Determination Under Trade Unions*, New York: Macmillan.
- Elliot, R. (1991) *Labour Economics: A Comparative Text*, London: McGraw-Hill
- Fevre, R. (1992) *The Sociology of Labour Markets*, London: Routledge.
- Figart, D. (1997) 'Gender As More Than a Dummy Variable: Feminist Approaches to Discrimination,' *Review of Social Economy* 55 (1): pp. 1-32.
- Figart, D. Mutari, E. & Power (2002) *Living Wages, Equal Wages: Gender & Labour Market Policies in the United States*, Routledge: London.
- Fleetwood, S. (1999) The Inadequacy of Mainstream Theories of Trade Unions, *Labour* Vol.13, No.2, pp. 445-80.
- (1999a) *Critical Realism in Economics*, London, Routledge.
- (2001) 'Causal Laws, Functional Relations and Tendencies' (2001), *Review of Political Economy*, Vol. 13, No. 2, 201-220.
- S. (2001a) 'What Kind of Theory is Marx's Labour Theory of Value? A Critical Realist Inquiry' *Capital & Class* 73, 41-77, reprinted in A. Brown, S. Fleetwood & J. Roberts. *Critical Realism and Marxism* (2002) Routledge: London, pp 264.
- (2002) 'Why Mainstream Economics Explains Nothing At All', *Post-Autistic Economics Review* No. 17, December.
- Fine, B. (1998) *Labour Market Theory: A Constructive Reassessment*, London: Routledge.
- (2003) 'Contesting Labour Markets' Saad-Filho A. *Anti-Capitalism: A Marxist Introduction*, London: Pluto
- Fligstein, N. (2001) *The Architecture of Markets: An Economic Sociology of Twenty-First Century Capitalist Societies*, Princeton: Princeton University Press.
- Folbre, N. (1994) *Who Pays for the Kids?* London: Routledge.
- Gardiner, J. (1997) *Gender, Care and Economics*, London: Macmillan.
- Gerhart, B. Rynes, S. (2003) *Compensation: Theory, Evidence and Strategic Implications*, Thousand Oakes: Sage.
- Gordon, S. (1991) *The History and Philosophy of Social Science*, London: Routledge.
- Granovetter, M. (1992) 'The Sociological and Economic Approaches to Labour Market Analysis: A Social Structural View', *The Sociology of Economic Life*, Granovetter M. Swedberg R. San Fransisco: Westview Press.
- Grimshaw, D. Rubery, J. (2004) 'Economics & Industrial Relations' P. Ackers, A. Wilkinson, *Understanding Work & Employment: Industrial Relations in Transition*, Oxford, Oxford University Press.
- Haughton, G. *et al* (1993) *Local Geographies of Unemployment*, Aldershot: Avenbury.
- Hillard, M. McIntyre R. (1994) 'Is There a New Institutional Consensus in Labour Economics?', *Journal of Economic Issues*, Vol. XXVIII, pp 619-629.
- Hodgson, G. (1988) *Economics and Institutions*, Oxford: Basil Blackwell.
- (1999) 'Institutions and Habits' O'Hara P. *Encyclopaedia of Political Economy*, Volume 1, London: Routledge.
- (2001) *How Economics Forgot History: The Problem of Historical Specificity in Social Science*, Routledge: London.
- Hudson R. (2001) *Producing Places*, New York: Guilford Press

- Hyclak, T. Johnes, G. Thornton, R (2004) *Fundamentals of Labor Economic*, Houghton Mifflin: Boston.
- Jonas, A. (1995) 'Local Labour Market Regimes: Uneven Development and the Social Regulation of Production', *Regional Studies* Vol. 30, No. 4, 323-338.
- Kerr, C. (1977) *Labour Markets and Wage Determination: The Balkanisation of Labour Markets and Other Essays*, Berkeley: University of California Press
- Lester, R. (1941) *Economics of Labour*, New York: Macmillan.
- Lawson, T. (1997) *Economics and Reality*, London: Routledge.
- (2003) *Reorienting Economics*, London: Routledge.
- Lipton, P. (1994) *Inference to the Best Explanation*, London: Routledge.
- Marsden, D. (1999) *A Theory of Employment Systems: Micro-Foundations of Societal Diversity*, Oxford: Oxford University Press.
- Martin, R. (2000) 'Local Labour Markets: Their Nature, Performance and Regulation' G. Clark, M. Feldman, M. Gertler, *The Oxford Handbook of Economic Geography*, Oxford: Oxford University Press.
- Michon, F. (1992) 'The Institutional Forms of Work and Employment' A. Castro, P. Mehaut, J. Rubery *International Integration and Labour Market Organisation*, London: Academic Press.
- Olsen, W. Walby, S. (2002) 'The Impact of Women's Position in the Labour Market on Pay & Implications for UK productivity' London: Department of Trade and Industry.
- Peck, J. (1996) *Work Place: The Social Regulation of Labour Markets*, New York: Guilford Press.
- Pencavel, J. (1994) *Labour Markets Under Trade Unionism: Employment, Wages and Hours*, Oxford: Blackwell.
- Picchio A. (2000) Wages as a reflection of socially embedded production and reproduction processes', in Clarke (et al) *The Dynamics of Wage Relations in the New Europe*, Kluwer
- Piore, M. (1993) 'The Social Embeddedness of Labour Markets and Cognitive Processes' **LABOUR**, Vol. 7, No. 7, pp 3-18.
- Powel, W. Di Maggio, P. (1991) 'Introduction' to W. Powel and P. DiMaggio, *The New Institutionalism in Organizational Analysis*, Chicago: University of Chicago Press.
- Reynolds, L. (1951) *The Structure of Labour Markets: Wages and Labour Mobility in Theory and Practice*, New York: Harper.
- Richards, P. (2001) *Towards The Goal of Full Employment: Trends, Obstacles and Policies*, Geneva: International Labour Office.
- Rogers, G. (1994) 'Institutional Economics, development Economics and Labour Economics' Rogers, G. (ed) *Workers. Institutions and Economic Growth in Asia*, Geneva: International Institute for Labour Studies.
- Rubery, J. (1992) 'Productive Systems, International Integration and the Single European Market', in Castro, A. Mehaut, P. Rubery, J. *International Integration and Labour Market Organisation*, London: Academic.
- (1997) 'Wages and the Labour Market', *British Journal of Industrial Relations*, 35:3, pp337-366.
- Rubery, J. Grimshaw, D. (1998) 'Integrating the Internal and External Labour Markets', *Cambridge Journal of Economics*, 22, pp199-220.
- Rubery, J. Grimshaw, D. (2003) *The Organization of Employment: An International Perspective*, Basingstoke: Palgrave Macmillan.
- Saint-Paul, G. (2000) *The Political Economy of Labour Market Institutions*, Oxford: Oxford University Press
- Schmid, G. (1994) 'Equality and Efficiency in the Labour Market: Towards a Socioeconomic Theory of Cooperation' G. Schmid (ed), *Labour Market Institutions in Europe: A Socioeconomic Evaluation of Performance*, New York: M.E. Sharpe.
- Seccareccia, M. (1991) 'An Alternative To Labour-Market Orthodoxy: The Post-Keynesian - Institutional View' *Review of Political Economy*, 3.1, pp 43-61.
- Segal, M. (1986) 'Post-Institutionalism in Labour Economics: The Forties and Fifties Revisited', *Industrial and Labour Relations Review*, Vol. 39, No. 3, pp 388-403.
- Standing, G. (1999) *Global Labour Flexibility: Seeking Distributive Justice*, Basingstoke: Palgrave Macmillan.
- Solow, R. (1990) *The Labour Market as a Social Institution*, New York: Blackwell
- Storper, M. Walker, R. (1983) 'The Theory of Labour and the Theory of Location' *International Journal of Urban and Regional Research* No. 7, pp 1-41.
- Storper, M. Walker R. (1989) *The Capitalist Imperative: Territory, Technology and Industrial Growth*, Oxford: Basil Blackwell.
- Theret B. (1994) 'To Have or To Be: On The Problems of the Interaction Between State and Economy & its "Solidarist" Mode of Regulation' (1994) *Economy & Society* Vol. 23, No. 1, pp1-46.
- Tille, C. Tilly C. (1994) 'Capitalist Work and Labour Markets', N. Smelser & R. Swedberg, *The Handbook of Economic Sociology*, Princeton: Princeton University Press.

Tilly, C. Tilly, C. (1998) *Work Under Capitalism*, Oxford: Westview Press.
Villa, P. (1987) *The Structuring of Labour Markets*, Oxford: Clarendon Press.
Vogel, L. (2000) 'Domestic Labour Revisited' *Science & Society*, Vol. 64, No. 2, pp 151-170.

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