**Critical Realism and Systematic Dialectics: A Reply to Andy Brown**

Abstract. In `Approach With Caution: Critical Realism in Social Research´, Andy Brown sets out a series of criticisms of critical realism from the perspective of systematic dialectics. This current article is one critical realist´s reply to Brown.

Keywords: critical realism, systematic dialectics, agents, structures, mechanisms, ontology, stratification, emergence, abstraction, hierarchisation.

**Introduction**

Andy Brown is to be thanked, not only for his thoughtful and critical insights into systematic dialectics and critical realism, but also for his scholarly attitude towards debate and discussion. What follows is one critical realist´s reply to Brown´s main criticisms - interpreted and summarized in the following paragraph.

Critical realism is said to `*cleave*´ (an apt metaphor) the social world into multiple, discrete and different strata, layers or levels of analysis or abstraction, with associated concepts such as structures, mechanisms, powers, agents etc. Once so `cleaved´, the strata and associated concepts are analysed in separation from one another and cannot, therefore, be re-integrated. Re-integration is substituted for *pseudo*-systematic abstraction, creating a chaotic conception, and concealing the way different strata and concepts integrate. Furthermore, critical realism cannot have a system-wide, historical perspective on capitalism because this contradicts the principle of multiple, discrete and different strata. Critical realism cannot conceive of a journey from abstract to concrete, yielding progressively richer, less ‘thin’ conceptions of agency - and other phenomena. Its agency-structure framework is a mistake because it is trans-historical and fails to integrate agents and structures. Its notions of free floating social structures obscure their necessary interconnections. It (mis)understands capitalism as one set of structures amongst many and as an open system.

Now, the idea that critical realists `cleave´ the social world into discrete, separate, un-integratable strata is given legs by ambiguous terminology. Strata, layers and levels are often used interchangeably to refer to epistemological matters like levels of analysis and levels of abstraction, and ontological matters like the stratification of real, actual and `deep´ domains, levels of emergence and levels of capitalist society, multiple embeddedness etc. These terms are then used to discuss phenomena like structures, mechanisms, agents, stratification, emergence, abstraction and hierarchisation. Once this ambiguity is cleared up, however, the charge of `cleaving´ is weakened. It is, therefore, necessary to disambiguate key critical realist terms.

Before doing this, two important features of systematic dialectics need mentioning. First, whilst the starting point for investigation is the object or system as a whole, the starting point for presentation is a particular category often referred to as the `cell form´. In the case of Marx´s analysis of capitalism, for example, the cell form is the commodity. Second, movement between categories and levels of abstraction are not arbitrary but *systematic*, and driven, step by step, by *dialectical* contradictions. For example, starting from the commodity, the contradiction between the categories labour power as a commodity, and exploitation, analysed at the level of `capital in production´, drives the move to the new category of the `production process proper´ and the new level of `capital as a principle of organisation´ (Smith 1990: 146). Brown refers to this as *systematic* or *categorical presentation*. Critical realists, he argues, cannot *systematically* and *dialectically* unfold theircategories, step by step*,* via levels of abstraction, from the cell form because they have `cleaved´ them into discrete, separate, un-integratable strata.

**Disambiguating key terms**

This section disambiguates the following key concepts: structures, mechanisms, agents, stratification, emergence, abstraction and hierarchisation.

***Structures and mechanisms***

Sometimes the term `structure´ is used, generally, as a placeholder for phenomena such as *structures, mechanisms, institutions, rules, conventions, norms, values, customs, powers etc.* Henceforth this placeholder will be referred to as `structures and mechanisms´. Sometimes, however, `structures´ and `mechanisms´ are used to refer to particular phenomena such as the structure of class, or the market mechanism. Importantly, structures and mechanisms never exist in splendid isolation, but are *always* reproduced or transformed by human agents.

Now, some structures and mechanisms are historically specific and others are historically universal. The class structure is historically universal (at least since the emergence of surplus-product producing societies) whereas the class structure based upon ownership/control of capital is historically specific. The labour market mechanism is historically specific to commodity producing societies. Critical realist´s analysis of structures is not, therefore, necessarily trans-historical. See Elder-Vass (2010); Fleetwood (2008a and b); and Lopez & Scott (2000).

Critical realists conceive of phenomena like the capitalist system as (minimally) a particular set of structures and mechanisms. There seems to be no reason why a systematic dialectician would object to the claim that capitalism consists of those structures and mechanisms that sustain the commodity, value and capital forms.

***Stratification***

Critical realists claim that the world is stratified into domains of the *empirical, actual* and (metaphoric) `*deep*´. Whilst the latter is sometimes referred to as the `real´, this (misleadingly) implies that the other domains are `unreal´. The term `deep´ is not only less ambiguous, it also implies a domain that is difficult, or perhaps even impossible, to observe and investigate, without a process of excavation or uncovering.

Stratification refers to a distinction between what is empirically observed, what actually occurs and what causes that which occurs and is observed. The `deep´ includes structures and mechanisms. There seems to be no reason why a systematic dialectician would object, for example, to the claim that empirical observation of actual workplace conflict (e.g. a strike) is causally governed by `deep´ structures and mechanisms that sustain the commodification of labour power, exploitation and alienation. Moreover, if there is a real distinction between cause, actuality and observation, then the charge of `cleaving´ the three domains into discrete, separate, un-integratable strata and concepts, becomes problematic – for two reasons.

First, the domains, and the phenomena located therein, *are* discrete and separate – that is the whole point. If they were not, then observation would be synonymous with underlying causes. In Marx´s terms, appearance would be synonymous with essence. Second, structures and mechanisms act *tendentially*, meaning they may, or may not, manifest themselves in actual and observed events. Gravity, for example, acts tendentially on my coffee cup, but it rarely falls to the floor (see Fleetwood 2012). This has important implications for integration. If, for example, the structures and mechanisms that sustain the commodification of labour power, exploitation and alienation act tendentially, then they do not always bring about actual and observed workplace conflict. In this sense there is *no* integration between phenomena of the `deep´, actual and empirical. Importantly, these structures and mechanisms *always tend to* bring about workplace conflict. In this sense there *is* integration between these domains – albeit not always an empirically observable one. Incidentally, understanding this contradiction allows us to avoid the mistake of assuming that the absence of empirically observable workplace conflict (e.g. resistance) means the causes of conflict are also absent.

Stratification is *not*, however, the same as `vertical´ (or `horizontal´) divisions of the world into a conceptual hierarchy, such as industrial, national, supra-national and global, or regimes of accumulation, value chains, workplaces, vested interest groups and plural subjects – to cite two of Brown´s examples. This is better understood as what might be termed `*hierarchisation*´.

***Hierarchisation***

Hierarchisation is an epistemic practice, routinely carried out by social scientists of various stripes because it is a convenient way of ordering a complex social world as an aid to analysis. When Brown criticizes critical realists for `cleaving´ the social world into discrete, separate, un-integratable strata and concepts, *hierarchisation* is his real target. The concepts within a hierarchy are `free floating´. They are relatively arbitrary (because convenient) and thus have no necessary interconnections with one another. Hierarchisation is not, however, a specifically critical realist technique. Brown´s criticism would work only in cases where a critical realist (mis)represented some kind of hierarchy as a division between structures, mechanisms and agents; as stratification; as emergence, or as levels of abstraction.

***Emergence of entities with powers***

Phenomena existing at one *level* emerge from phenomena existing at a different level and have different properties. Brown accepts this, using the example of H2O emerging from hydrogen and oxygen. Groups emerge from individuals; social phenomena emerge from biological phenomena; biological phenomena emerge from chemical phenomena; chemical phenomena emerge from atomic phenomena. A capitalist firm emerges from a set of structures and mechanisms such as raw materials, machinery, managerial discourses, class relations – when, of course, acted upon by agents. With the emergence of the firm comes the emergent power to generate profit. This power is not found in any one of the firms components, but emerges when the firm emerges – i.e. emerges from *`the system as a whole´* as Brown puts it. Emergence is necessary to prevent reductionism, either to individuals or to social wholes. See Elder-Vass (2010).

The power of a UK university employee to vote for strike action to defend pensions, for example, is a power of the system as a whole – i.e. of social phenomena (e.g. degrees of political consciousness and confidence and the existence of a union), plus biological phenomena (e.g. hand muscles to place an X on the ballot paper), plus electro-chemical phenomena (to connect hand muscles and nervous system) and so on. When a social scientist tries to explain a vote for strike action, s/he does not need to refer to biological and electro-chemical phenomena. In parentheses, it is worth noting that, occasionally, a social scientist might need to consider other levels – e.g. investigation of ill-health and poor safety in the workplace might involve social *and* biological levels. Emergence allows him/her to remain at the level of the `social´, *abstract* from other phenomena and their associated levels, and focus upon, *inter alia*, the degrees of political consciousness of voters, the relationship between the union´s leadership and activists, the state of the pension fund, the political and economic climate, the intentions of the government vis-à-vis the provision of pensions and neo-liberal policies, the financial crisis and the crisis-prone nature of a capitalist economy. Thus the power to vote for strike action emerges from the system as a whole, the *capitalist* system as a whole - or the capitalist mode of production. Failure to analyse a strike, or for that matter, a capitalist firm, as part of the capitalist system as a whole, will almost certainly result in a superficial analysis.

Critical realism helps here. It directs our attention not only to the structures, mechanisms and agents that constitute a strike, or a capitalist firm, but also to the structures, mechanisms and agents that constitute the capitalist system as a whole and, therefore, to the integration of these two sets of phenomena. This keeps researchers asking: `What structures and mechanisms are involved?´ `Which agents are involved?´ How do these agents reproduce or transform these structures and mechanisms?´ This does not guarantee that research into strikes or firms (or other phenomena) is integrated with analysis of the capitalist system as a whole, but it certainly helps.

The charge of `cleaving´ the social world does not work with emergent phenomena. No-one charges physicists of `cleaving´ H2O from hydrogen and oxygen, firstly because H2O really does have different properties than hydrogen and oxygen and secondly because H2O really exists at a different level than hydrogen and oxygen, making them discrete and separable phenomena. Similarly, we should not charge critical realists of `cleaving´ capitalist firms from individual workers and owners/managers, firstly because capitalist firms really do have different properties than individual workers and owners/managers and secondly because capitalist firms really exist at a different level than individual workers and owners/managers, making them discrete and separable phenomena.

It is worth noting that emergence is an ontic phenomenon and should not be confused with hierarchisation which is epistemic. Unlike emergent phenomena, phenomena in a hierarchy can be arbitrary and, therefore, lack necessary interconnections with one another.

***Levels of abstraction***

Because the whole social world cannot be analysed `in one go´ as it were, one needs to omit much (indeed most) of it in order to analyse it; one needs to abstract. But there is more to the process of abstraction than this. When constructing a model of labour markets one might, for example, abstract from the social class of agents in order to concentrate on their gender. Abstracting does not, however, mean forgetting, and so at some point it will be necessary to bring class into the model and, moreover, do so without violating any earlier claims made when class was abstracted from. Many entities left out at the primary level of abstraction will be included at secondary, tertiary, (and subsequent) levels of abstraction. When done correctly, concepts included at later levels allow us to return to concepts that were merely sketched at earlier levels, to develop, augment or enhance them. As Brown puts it; `each new category retains and develops, rather than discards, the comprehension of the system provided by the previous category´. Thus levels of abstraction and, thereby, the concepts located in each level, should be sequential and developmental (see Sayer 1988 and 1992).

Good abstractions `carve nature at its joints´. That is, one´s epistemology (i.e. the abstracted concept) corresponds to, expresses, grasps or reflects one´s ontology (i.e. the real object). For example, the capitalist firm, and the capitalist system as a whole, are good abstractions because they carve-out precisely those (and only those) components that constitute these objects – i.e. capitalist firms and the capitalist system. Good abstractions are also sequential and developmental. Concepts left out at the level of abstraction of `the firm´ should be included at intermediate levels and, ultimately, at the level of `the capitalist system´. Concepts included at later levels allow us to return to earlier concepts to develop, augment or enhance them.

Bad abstractions simply fasten on concepts arbitrarily (e.g. for expositional convenience or mathematical tractability) preventing a correspondence between epistemology and ontology. Bad abstractions are not sequential and developmental. Concepts introduced at the level of abstraction of `the capitalist system´ might have no precursors at the level of abstraction of `the firm´. Or concepts that were introduced at the level of abstraction of `the firm´ might be introduced in ways that prevent them being developed, augmented or enhanced – i.e. perhaps they were initially based upon knowingly false assumptions that, when removed, undermine the initial concepts. The result of bad abstraction is a chaotic ensemble of concepts at each level and across levels.

Levels of abstraction should not be confused with hierarchisation, because the latter is merely a convenient, but arbitrary, way of ordering the social world.

***Structure and agency***

Bhaskar´s (1989) *Transformational Model of Social Action* (TMSA), and Archer´s (1998) *Morphogenetic-Morphostatic* (M-M)approach, gave the `*agency-structure´* framework a level of sophistication missing in previous accounts such as Structuration Theory. Indeed, the M-M approach is now, arguably, the most sophisticated account of how (human) agents and structures integrate. The M-M approach can be sketched as follows. Agents do not create or produce structures and mechanisms *ab initio,* rather they *re*produce (hence *morphostatic*) or *transform* (hence *morphogenetic)* a set of pre-existing structures and mechanisms. Society continues to exist only because agents continue to reproduce or transform structures and mechanisms. Every action performed ­requires the pre‑existence of structures and mechanisms which agents draw upon, and by drawing upon them, agents reproduce or transform them. For example, speaking requires the structure of grammar, and the operation of a capitalist workplace requires mechanisms for extracting profit. Structures and mechanisms, then, are the *ever-present condition, and the continually reproduced or transformed outcome, of* agents´ actions. There seems to be no reason why a systematic dialectician would object to the claim that the structures and mechanisms that sustain the commodity, value and capital forms (e.g. class structure, market mechanisms) are the ever-present condition, and the continually reproduced or transformed outcome, of agents´ actions.

A central tenet of both the TMSA and the M-M approach, is the real (ontic) distinction (separation or hiatus) between agents and structures: *they are different classes of thing*. This means the charge of `cleaving´ the social world into discrete, separate, un-integratable strata and concepts becomes problematic. On the one hand, agents and structures *are* different classes of things, making them discrete and separate. But on the other hand, structures and mechanisms only exist because they are the reproduced or transformed outcome of agents´ actions, thereby integrating structures and mechanisms and agents. It is precisely this (long known) tension in the agency-structure framework that the TMSA and MM approaches have resolved.

***Thompson & Vincent´s diagram***

At this juncture it is possible to say a little about Thompson & Vincent´s diagram - cited by Brown. It is difficult to say whether it is an example of stratification, emergence, hierarchisation or abstraction, or something else. Clarity is not helped by the use of terms like `levels´, `constellations´, `multiple embeddedness´, `strata´ and `stratified entities´ - with the whole thing referred to as a `map´. I interpret this diagram as an example of hierarchisation, coupled with the M-M approach, for the following reasons. Vincent & Thompson are well aware that they are presenting a relatively crude, in-exhaustive, sketch or beginning. Much more detail would have to be provided before one could identify what exactly is emerging from what. There is no reference to abstraction, although abstraction at each level is presupposed. The division into five levels is done for expediency and based upon general recognition – which makes it arbitrary. Stratification, typically, refers to the domains of the empirical, actual and `deep´ and these are not part of the diagram – despite the title referring to `stratified entities´. All this notwithstanding, one has to be careful of pushing an admittedly crude diagram beyond what its authors intended.

**Critical realism and systems**

Critical realists have written much about social systems being *open,* not *closed*, but little about systems *per se* – exceptions are Mingers (2007, 2011); Elder-Vass (2007) and Bhaskar (1993: 2.7 and 3.8) - who write of totalities not systems. The next section considers open and closed systems and is followed by a far more exploratory section on what critical realists might consider a system to be.

***Open and closed systems***

The *critical realist* concept ofopen and closed systems is simple, perhaps deceptively so – and should not be confused with open and closed systems in *General Systems Theory*. For critical realists, *systems that display event regularities are closed; systems that do not display event regularities are open.* This simplicity should not obscure the fact that event regularities and, therefore, closed systems, have an *extremely precise* meaning in the critical realist lexicon. This can be grasped via an example familiar to readers of this journal, namely, the alleged association between High Performance Work Practices (HPWP) and organisational performance. When HPWP are introduced (events *x1, x2, x3….xn*) into an organisation and its performance increases (event *y*), this organisation is referred to as a *closed* system. When HPWP are introduced in an organisation, and *no* regular pattern of events follows, it is an *open* system.

This can be expressed as a mathematical function – deterministically as in (1) or stochastically or probabilistically as in (2) which is the kind of function used in statistical analysis.

(1) *y* = *f* (*x1, x2, x3….xn*)

(2) *y* *= α + β1X1 + β2X2, + β3X3 +… βnXn + ε*

Two things are noteworthy here. First, systems displaying stochastic or probabilistic event regularities are just as closed as systems displaying deterministic event regularities. Second, tendencies are often (mis)understood as stochastic event regularities. Critical realists understand tendencies not as events and not, therefore, patterns or regularities in these events, but as the typical way of acting of a thing with properties (Fleetwood 2012).

Now, critical realists did *not* arrive at the closed/open system conception from an analysis of systems themselves, but from an analysis of positivism. Bhaskar´s (1978) critique of positivism turns on a rejection of the Humean concept of causal laws - i.e. *laws as event regularities*. This concept of laws ties event regularities to experimentally *closed* conditions. It also presumes that closed systems are ubiquitous when in fact they are rare (and for the most part) artificially generated situations.

So, are organisations open or closed systems? The empirical evidence is, at best, inconclusive. When HPWP are introduced, sometimes organisational performance increases, sometimes it decreases and sometimes it does not change (Fleetwood & Hesketh 2010). Whilst this cannot establish the existence of event regularities and closed systems, it is sufficient to establish the existence of event *ir*regularities and open systems. The same goes for a great deal of other empirical research on other work and employment systems. When a trade union is introduced into a workplace, *sometimes* pay and conditions improve, *sometimes* they worsen and *sometimes* they do not change. When wage rates increase, *sometimes* the demand for labour decreases and the supply of labour increases, *sometimes* the demand for labour increases and the supply of labour decreases, and *sometimes* they do not change. In short, organisations and other work and employment systems are almost certainly open systems.

Brown claims that capitalism is *not* an open system because there exists regular systemic activities and social event regularities. Capitalism does not, he argues, just occasionally ‘shine through’ an otherwise chaotic flux of events, but impresses itself via our basic everyday economic activities, so one should try to fathom the systemic role of regular and systemic activities, forms and structures involved in making profit, earning wages, paying interest, paying rent, exchanging commodities etc. What Brown (and others) have in mind, appears to be the idea that, every day millions of workers go to work at the same place they did yesterday, clock on or sign in, take breaks, give and/or action instructions, respond (or not) to performance related payments (PRP), receive wages, take holidays, alter the amount of labour services they supply and so on. This is entirely sensible. Indeed, it makes perfect sense to say that work and employment systems, for example, are characterised by *systematic working behaviour*. But, systematic working behaviour is not synonymous with (even rough-and-ready) event regularities and is not, therefore, evidence of closed systems. There is no contradiction in arguing that work and employment systems are characterized by systematic working behaviour, whilst simultaneously arguing that they are characterized by a lack of event regularities and are, therefore, open systems.

Note well that critical realism has no truck with positivism. When positivists see systematic working behaviour, their (methodological) intuition is to transpose it into law-like behaviour, formulate a hypothesis and test it empirically. Brown dismisses this as `the critical realist problematic, revolving around the [positivist] need to “compensate” for the inability to experimentally engineer social event regularities´. When critical realists see systematic working behaviour, their intuition is to ask: What structures and mechanisms might exist to causally govern this systematic working behaviour? The critical realist (causal-explanatory) method requires neither the transposition of systematic working behaviour into event regularities nor the engineering of closed systems. It works entirely with open systems. It is not, therefore, that `the critical realist “open system” ontology obscures the very question, rather than helping to answer it´, this ontology provides a means for answering it – a means denied to positivism. Brown´s claim that critical realism misunderstands capitalism as an open system is itself a misunderstanding.

Once clarified, one might accept the critical realist open/closed system distinction, accept that work and employment systems are open, and yet still be left asking: What do critical realists think a *system* is?

***The critical realist concept of system***

Mingers is the critical realist who has written most on systems. For him:

A system can be defined generically as a collection of entities of any kind…that form a whole, the behaviour of which depends on the relations between the entities (Mingers 2007: 451).

Defining a system in terms of its components and their relations is effectively to delineate its boundary (Mingers 2011: 319).

A social system is a collection of structures and mechanisms, the agents who reproduce and transform them, relations between these agents, and relations between these structures and mechanisms. Boundaries are one of the key problems for many attempts to delineate systems, but not for critical realists because they do not start by attempting to establish the boundary, *they arrive at it*. The analysis itself subsequently determines (*knowledge of*) the boundary.

Consider a workplace (W), understood to consist of structures and mechanisms (SMw) that causally govern the production of commodities and profit; agents *qua* employees (Ae) who reproduce or transform (SMw); relations between employees (Re); and relations between structures and mechanisms (Rsm). W could be described as: SMw + Ae + Re + Rsm and this collection would determine the boundary – the notation has no mathematical connotation, it is used merely to aid exposition. Suppose closer inspection reveals that some of W´s employees are not strictly employees but agency workers (Aa) who often work in other workplaces. Critical realists would extend the analysis to accommodate these additional agents. W could now be described as SMw + Ae + Aa + Re + Rsm and this collection would determine the boundary. Suppose even closer inspection reveals that, because of supply chains, some of W´s structures and mechanisms are shared with other workplaces such as Z (SMz). W could now be described as SMw + SMz + Ae + Aa +Re + Rsm and this collection would determine the boundary.

This kind of analysis could be extended to any system, including the capitalist system. The capitalist system could be understood to consist of structures and mechanisms that causally govern the commodity, value and capital forms, the agents that reproduce or transform them and associated relations. If systematic dialecticians can accept this, then the claim that critical realism misunderstands capitalism as one set of structures (and mechanisms) amongst many seems misplaced.

**Why systematic dialectics needs critical realism**

Systematic dialectics needs the M-M approach (or something similar) in order to explain how contradictions *exert their causal influence upon agents*. Categories are incapable of doing anything (such as unfolding systematically and dialectically) until acted upon by human agents.Marx makes a similar argument when he observes that: `Commodities cannot take themselves to market, and perform exchanges in their own right´ (Marx 1974: 178). For dialectical contradictions to exert their causal influence on agents, something must `connect´ the contradictions and the agents. The obvious candidate is structures and mechanisms and, in this context, institutions – i.e. sets of tacit rules or norms. There are two ways this can occur. First, contradictions can be experienced *consciously* as constraints or enablements on agents´ decisions and actions. Contradictions exert a conscious causal influence on agents. Second, contradictions can be experienced *unconsciously* as institutions that, via a process of habituation, become internalised as habits. Contradictions exert an unconscious causal influence on agents.

This is easier to understand with an example – in this case, from a systematic dialectician.

The category `labour power as a commodity´ defines a structure in which disparities of wealth lead one class to own/control considerable productive resources while another does not, with the latter selling their labour power to the former. It is a category of simple unity in that it refers to the reciprocal agreement in the wage contract that directly unites wage labour and capital. However, given the structural parameters defined by the category, a dominant structural tendency necessarily arises that points away from simple unity. The controllers of capital possess both the productive resources of the society and a considerable reserve fund. Their subsistence is thereby guaranteed. Workers, in contrast, do not possess any reserves beyond their hands and minds, which they must hire out if they and their families are to survive. Wage labour must bargain wage contracts from a structurally weaker position (Smith 1990: 112).

The contradictions that drive exploitation operate on agents via the structures and mechanisms of class and institutions that are themselves shaped by class – e.g. the tacit rules and norms that govern the labour process. This M-M approach, with its conceptual apparatus of structures, mechanisms, rules and norms, all reproduced or transformed by agents, is perfectly suited to explain how dialectical contradictions exert their causal influence on agents. Without the M-M approach (or something similar) systematic dialecticians cannot explain how contradictions exert their causal influence upon agents.

The above argument has a `flip-side´ that Brown does not mention, but other systematic dialecticians do – and it is important for my concluding comments. Systematic dialecticians accept that not *all* phenomena are dialectical. For Albritton (2007: 85) non-dialectical phenomena `escape strict dialectical reasoning´, whereas Smith (1990: 105) claims they are not an `appropriate topic for categorical analysis´. Non-dialectical phenomena cannot, of course, be systematically and dialecticallyunfolded, step by step, from a carefully chosen starting point. Consider two examples.

First, the structure of gender, that is, the relation between men and women, often takes the form of *domestic labour*. Women, typically, end up performing domestic labour alongside wage labour, thereby experiencing a `double burden´. Unlike wage labour, domestic labour cannot be systematically and dialectically unfolded from the commodity form because *domestic labour is not a form of value* - see Brown´s diagram 2. Second, flexible working practices such as temporary working, term-time working or shift working, cannot be systematically and dialectically unfolded from the commodity form either, because these kinds of flexible working `escape strict dialectical reasoning´. They are, in many ways, entirely arbitrary forms taken by wage labour. Whereas systematic dialectics offers no guidance about how to deal with non-dialectical phenomena like domestic labour, or flexible working, critical realism offers the M-M approach.

**Conclusion: a critical realist model of labour markets**

Brown criticizes critical realists for using `pseudo abstraction´ and, therefore, being unable to conceive of a journey from the abstract to the concrete, yielding progressively richer, less thin, (i.e. more concrete) conceptions. This can be countered by making use of a recently developed model of labour markets. I take the liberty of using my own work for four reasons. First, I want to present something *other* than Marx´s model of the capitalist system, because this is virtually always used to exemplify systematic dialectics. Second, it is the only model of its kind I am aware of that has an *explicitly* critical realist orientation. Third, it makes explicit use of levels of abstraction. Fourth, labour markets will be of interest to many readers of this journal.

Labour markets can be defined as:

sets of socio-economic phenomena [including structures and mechanisms] that are reproduced or transformed by labour market agents who draw upon these phenomena in order to engage in actions they think (consciously or unconsciously) will meet their employment-related needs (Fleetwood 2011: 19).

The (more) complete model presented in (Fleetwood 2011) includes an analysis of workers supplying labour services *and* firms hiring them. In the slightly truncated version presented below, only the former analysis is presented – although this is sufficient to exemplify a `journey from the abstract to the concrete´. The model is depicted via two diagrams. Diagrams 1 and 2 below relate to figures 1 and 3 in Fleetwood (2011: 28-32) with one slight alteration: the state is omitted in diagram 2.

**Diagram 1 here**

Diagram one captures the first level of abstraction. It introduces a labour force divided into several categories, production, reproduction and preparation of labour power, information, job queue and the point of contact between potential worker and potential employer. The supporting narrative imagines a family; that family having a child; that child being socialised, educated and skilled and so prepared (physically and mentally) for his/her eventual involvement in labour markets; informed about the available jobs; and informed about how to join the labour queue and get recruited.

**Diagram 2 here**

The second level of abstraction is captured in diagram two – although first level concepts are not absent in the second level, a point illustrated by the use of shading. The second level includes more concepts, namely, health, household, transport, self-employment, unions, historical legacy, legislation, education and training, and ideology. The supporting narrative imagines a firm deciding upon crewing levels, on-the job training, and managing technical and labour processes. But there is more to it than merely including *more* concepts.

At the first level of abstraction, reproduction and preparation of labour power, for example, are introduced but with little or no elaboration. It is not until education and training, and ideology are introduced at the second level of abstraction that reproduction and preparation of labour power can be understood in a more adequate manner. The supporting narrative explains that reproduction and preparation of labour power is not simply a matter of education and training, but also of ideology as young workers are `groomed´ for a life of short-term contracts, and business-friendly forms of flexible working patterns, with little or no security and minimum wages. In other words, at the end of the second level of abstraction, concepts introduced at the first level become richer and less thin than when they appeared in the first level.

Whilst the analysis stops with two levels of abstraction, there is nothing to prevent third, fourth or subsequent levels being added. Already mentioned concepts (e.g. health, households, transport, self-employment, unions, historical legacy, legislation) could be made richer and less thin, and new concepts (e.g. state and macroeconomic conditions and policy) could be added.

It is instructive to wrap all this up by presenting an anticipated objection to this model of labour markets, followed by an objection to this objection. A systematic dialectician would almost certainly raise the accusation of `pseudo abstraction´. The concepts and levels of abstraction are chosen arbitrarily, or at best on the basis of appearing to fit together in some kind of sequence – i.e. workers need to be produced (born and raised) before they can be prepared, and prepared before they can join the job queue. The shift between levels of abstraction could have been carried out in any of several, arbitrary, ways. The end product is a chaotic conception of labour markets (theoretically) `cleaved´ into multiple, discrete and different strata, analysed in separation from one another and, therefore, un-integratable.

The objection runs into a problem when applying systematic dialectics to the construction of a model of (something like) labour markets. This would, presumably, involve the systematic and dialectical unfolding of concepts, step by step, via levels of abstraction, from the cell form of the labour market. It is not, however, clear what the cell form of labour markets is, what the appropriate concepts are, what their inherent contradictions are, how these concepts should unfold, or what the appropriate levels of abstraction and shifts between them are. The same problems would almost certainly arise in any attempt to apply systematic dialectics to other work and employment related phenomena such as industrial relations conflict.

I do not know what the cell form of labour markets is. It is, of course, possible that the cell form of labour markets happens to be that shared with the cell form of capitalism (i.e. the commodity and the commodification of labour power), but this would be just good luck. What about those cases where `lady luck´ is not present? What if the phenomenon under investigation was domestic labour? What is the cell form of domestic labour? Even if the cell form of labour markets is the commodity, highly abstract concepts like commodity, money, value and capital are not much help here, because a model of labour markets must include relatively concrete concepts. Some labour market phenomena (e.g. the reserve army of unemployed or under-employed, the value of labour power, flexible working practices) can be *mentioned* at highly abstract levels of analysis, but at these levels they would be thin concepts. When the time comes to introduce richer concepts, it is not clear which ones should be used, other than the ones already in the model – e.g. labour force, production, reproduction and preparation of labour power, information, job queues, self-employment, unions, legislation, education, training, and ideology. Moreover, it is not clear how the systematic and dialectical development of these concepts should unfold because these phenomena are non-dialectical and, therefore, `escape strict dialectical reasoning´. Finally, it is not clear how the levels of abstraction should be established, and the shifts managed, again, other than (something like) the way they appear in the model. In short, even if systematic dialectics is helpful in constructing a model of the capitalist system as a whole, it offers little help in constructing a model of labour markets or, for that matter, investigating other work and employment related systems.

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