

On the Coherence of Post Keynesian Economics: Is Critical Realism Dow-Dualist?

Andrew Mearman,
Leeds University Business School

Abstract

There has been considerable work done on developing Post Keynesian (and other heterodox perspectives) along Critical Realist lines. Recent developments have suggested a methodology combining Critical Realism and other existing aspects of Post Keynesianism. One such aspect is Sheila Dow's Babylonian perspective. One of its major facets is the avoidance of dualism. If Critical Realism is guilty of dualism, according to Dow's definition, this combination is called into question. Using a clarified and expanded version of Dow's definition of dualism, this paper examines whether Critical Realism is dualist in its treatments of other philosophies of science, including other varieties of realism. It is argued that Critical Realism uses dualism as a rhetorical device to establish its position in the philosophy of science. Alternatively Critical Realism can be seen to use dualism heuristically for the same purpose. It is acknowledged though that Critical Realism can be defended by arguments based on levels of abstraction. However, it is concluded that Critical Realism still has a propensity to dualism in the original sense of Dow's definition.

Paper presented to the IACR Conference, 'Debating Realism', Roskilde University, Denmark, August 17th – 19th, 2001.

Copyright held.

On the Coherence of Post Keynesian Economics: Is Critical Realism Dow-Dualist?¹

INTRODUCTION

Critical Realism (CR)² has had a large impact on the school of economic thought known as Post Keynesianism (PK). This is evidenced most clearly by a recent *Journal of Post Keynesian Economics* that focused on the links between them. Significantly, the second article in that issue was by another well-established PK methodologist, Sheila Dow. Dow has developed, through a series of works, a methodological position known as Babylonianism (see Dow, 1996, pp. 12-13). Dow offered Babylonianism as a potential major foundation stone for PK. However, given her commitment to pluralism (see Dow, 1996, 1997a) and the constructive impact of CR on PK, Dow accommodates CR in her vision for PK (cf. Dow, 1985 and 1996; see Dow, 1999). The interpretation offered here of Dow's attitude towards CR and her view of how it complements Babylonianism within PK, is itself based on the interpretation of Dow as viewing PK as stratified, in terms acceptable to CR. Thus, PK theory is generated but not determined by PK methodology, which is in turn similarly rooted in some philosophy. At this point, it is argued, Dow envisions CR making its major contribution to PK. Further, following Dow (1996), it is argued that Dow sees Babylonianism acting at an even deeper stratum, as "vision" or *Weltanschauung*. Thus, if Babylonianism somehow underpins CR, one would expect CR to be generated by, or at least possibly generated by, but again not determined, by Babylonianism and that the major elements of Babylonianism should be consistent with CR³. One of those major elements is a rejection of 'dualism'. This is defined shortly. Dow (1990a) notes carefully that she is neither 'non-', 'anti-' nor 'a-' dualist; rather she urges theorists to move 'beyond dualism'. One way to do this is to adopt a Hegelian dialectical method (Dow, 1996, 1999), however, the exact response is left open.

Now it is a fairly obvious feature of CR that it utilises extensively duals in its formulation⁴. Indeed, some of these duals are essential to CR, an obvious example being the ID/TD distinction: *DPF* (p. 183) identifies non-identity as a central element of CR. These duals are far too numerous to discuss: the author's research has identified over five hundred different examples of duals. They cover the entire literature, but can be broken down, for analysis, into various categories. This paper considers one: the way in which CR classifies philosophical literature. Particular attention is paid to how CR characterises itself and how it uses duals to do so. The cases of dualism under this

¹ This paper has benefited from comments from Andrew Brown and Malcolm Sawyer. The usual disclaimer applies. Comments are welcome.

² This paper does not consider Dialectical Critical Realism (DCR), despite occasional clarificatory citations of *DPF*. Clearly, given the emphasis on dialectic, DCR might resolve many of the problems discussed here. However, that is another question. Also, DCR has made a strictly limited impact on economics and can be ignored legitimately here.

³ A question crucial here is left unanswered. Clearly, the relationship between strata could be such that all elements in the philosophical stratum are completely opposite to those in the lower stratum. It just depends on the specific mechanism of the generation of strata.

⁴ Bhaskar sometimes uses the term 'dual' (*RTS*, pp. 109-12), but at other times, he uses 'pair' (*SR*, p. 235), 'couple' (get ref), or 'duality' (*PN*, p. 35). Here 'dual' is used except where absolutely necessary.

category are assessed according to whether they meet Dow's criteria for dualism, as clarified and developed by Mearman (2001a). Particular attention is paid to the way in which CR might be held to utilise 'rhetorical dualism', i.e. the creation of (often false) duals for a rhetorical purpose. It is argued that this practice appears in CR. In defence of CR, it is then argued that many of the duals can be justified on the basis of an abstractionist argument; viz., that at the level of abstraction in the specific context in which CR argues, the dual might be valid. This would appear to protect CR from the charge of Dow-dualism. However, it is then argued that CR does commit dualism in the sense in which Dow objects to it. It is argued that the level of abstraction chosen serves a rhetorical purpose. Thus, CR can be seen to flout the spirit of the Dow dualism, exhibiting as it does a propensity to think in dualist terms.

DOW DUALISM

Dow offers a seven-part definition of dualism. It is worth giving in full Dow's basic definition of dualism, found in practically identical form in Dow (1985, 1990a, 1994, 1996, 1997a), although it is elaborated differently at each point. So, in both editions of her main book (Dow, 1985, p. 14; 1996, pp. 16-17) dualism is defined as: "the propensity to classify concepts, statements and events according to duals, as belonging to only one of two all-encompassing, mutually-exclusive categories with fixed meanings: true or false, logical or illogical, positive or normative, fact or opinion, and so on. Reliance on duals has a strong tradition in the rather different debate within Greek philosophy (to which Euclid subscribed) as to whether mind/soul could be separated from matter, or the mental/spiritual from the material."

Elsewhere (Mearman, 2001a), several types of dualism in Dow were identified:-

- i) *dualism*₁, which corresponds to Dow's original seven-part definition, plus the criterion of 'no necessary relation'; Dow disallows (i) unless there is some ontological basis. In this spirit, one should disallow dualism of types (ii-v) unless there is an ontological basis;
- ii) degrees of *dualism*₁, depending on how many of the (now) eight criteria are met, and how strongly. *Dualism*₁, it was noted, can also be applied to cases where there are more than two categories, such as pluralism;
- iii) *dualism*₂: where polar concepts are transformed into strictly separated duals by the institution of a 'fault line', the poles acting as attractors, creating something akin to two slippery slopes⁵;
- iv) from *dualism*₂, any use of polar concepts, particularly the use of *polarising* language;
- v) from (iv), *dynamic polar* concepts, the best example of their use being Hegelian dialectic;
- vi) from (iv), *dualism*_{2a}, defined as where the poles created are demonstrably false, or at least exaggerated.

⁵ However, slippery slopes imply an unintended outcome of reasoning, whereas, *dualism*₂ seems to entail a deliberate analytical step.

Clearly there are connections between many of these types. Obviously, dualism_2 arises from clarification of dualism_1 . Dualism_{2a} , defined as the creation of *false* poles, transformed into a dual, follows from dualism_2 and suggests in turn heuristic, rhetorical and polemical dualism, discussed below. However, rhetorical (etc.) dualism can be any of the above types of dualism. It should also be made clear that the lists are non-exhaustive and non-fixed, and that the constitutive categories are non-mutually exclusive.

Heuristic or rhetorical dualism

First, neither of these terms refers to a split in heuristic (as in Lakatos, 1978) or in rhetoric. Rather the terms refer to dualism as a heuristic or rhetorical strategy. The former corresponds loosely to Dow's notion of using dualism for analytical convenience. As a step in theorising, it might be useful to posit the heuristic of two distinct categories. Now this might be an inevitable element of theorising, similar to the use of abstraction, to the closing (in some sense) of open systems, etc. Now, immediately, it should be clear that this notion of separating categories, in thought, is close to Dow's definition of $\text{dualism}_{[1]}$. Perhaps the difference between the two is that for Dow, such analytical or heuristic devices are strictly an intermediate step and that the problem of $\text{dualism}_{[1]}$ is that in those cases, the analysis ends at that point, with two fixed categories. It is a different proposition to envisage a strict dual in order to, for instance, show that it is inappropriate. However, this heuristic device might be termed rhetorical if the purpose of the creation of the dual is to create or exaggerate an apparent problem, in order to solve it with a proposed alternative solution. Thus, rhetorical dualism can be seen to be in many cases a sub-category of dualism_{2a} . Therefore, when a politician attempts to exaggerate the position of an opponent, or a prosecution lawyer tries to convince the jury that a witness is, based on small indiscretions or untruths, in fact a bare-faced liar, this is rhetorical dualism. In the first case, the purpose of doing so is to emphasise that the politician has a very different view. Or, it can be to show that the politician adopts moderate positions, compared to his extremist opponent. In other words, the politician aims to push out the boundary of the other's definition in order to create space in the middle for him or herself.

Identifying heuristic/rhetorical/polemical dualism is a three-stage process: identify the dualism_2 present in a distinction; identify the pole set up as being false, i.e., as dualism_{2a} ; identify a purpose for the dualism_{2a} , usually either for heuristic or rhetorical reasons. It should be noted that it is not claimed that if a dualism_{2a} is identified, it must be either heuristic or rhetorical (or some variant of that). In some cases, it will not be possible to assess the dualism_{2a} in that way. In those cases, a (somewhat unsatisfactory) position of 'pending classification' is necessary. This qualification is important in that this investigation avoids the charge that it is itself dualist. Of course, in no cases, is it the intention either to accuse the author in question of any form of intellectual dishonesty, or to make claims about or judgements on the motives of the author. It might be that such motives or beliefs are causally relevant, however, and to avoid the functionalist fallacy of ascribing existence to the function served, motives should be examined.

Heuristic or rhetorical dualism is problematic for several reasons, including those general objections made by Dow (*passim*). Dow emphasises what might be called the path dependency of investigation, and the (*usually* negative) effect of dualism on that investigation. Dualism serves to fix categories, to allocate instances incorrectly, and most significantly, to fix the path of the investigation, directing it along incorrect routes and excluding the more fruitful. Also, these types of dualism_{2a} can lead the researcher to misjudge their target and therefore to imbalanced theories. For example, Collier (1994, pp. 237-8) accuses Bhaskar of being lopsided in his treatment of other philosophies of science; he argues that Bhaskar attacks positivism too much and hermeneutics too little. This is arguably a consequence of Bhaskar caricaturing positivism in order to contrast it sharply with hermeneutics, a case of asymmetrical dualism_{2a} where only one of the poles is extended. Moreover, Sayer (1992, p. 265) notes, there is scarcely an ontological basis for most dualisms. This suggests serious methodological problems, or at least conflicts, for CR, since its official position, for instance in Archer (1995) is that all models and arguments should be grounded ontologically and that the heuristic use of fictional assumptions is to be avoided. Indeed, this is the defining mark of realism cf. instrumentalism.

LOCATING CRITICAL REALISM IN PHILOSOPHY

Varieties of Realism

The author has identified over fifty separate distinctions within CR relating to philosophy of science. Necessarily only a selection can be examined. Most pertain to either positivism or realism, which will be examined first. It is widely acknowledged (see, for example, Bitsakis, 1993, Lawson, 1997 and Mäki, 1998) that realism as a term is problematic, mainly because of its many variants. Indeed, Bhaskar uses several different labels for his own philosophy as it develops, including its latest incarnation, TDCR. *SR* (p. 5) defines his approach as a (metaphysical) scientific realism⁶, wherein objects exist independent of investigation into them. The section from which this is taken (*SR*, pp. 5-10) is illustrative of both the problematic nature of 'realism' and of the dualism within Bhaskar. Bhaskar notes that given the mind-, thought-, or investigation-independence of objects in metaphysical scientific realism, it is "immediately opposed to both empiricism and rationalism" (*SR*, p. 6), as well as the *epistemic fallacy* committed by both (*SR*, p. 6).

This phrasing is significant: scientific realism is *opposed* to both empiricism and rationalism. This suggests a strict distinction, *perhaps* polarity, between scientific realism and the previous prevailing philosophical methods. This is a significant trend in Bhaskar and other CR writing: to make clear and distinct a place for CR in the history of the philosophy of science. This clearly serves a rhetorical or even polemical function: otherwise 'differs from', 'is different to' or even 'objects to' would suffice. Significantly, even though scientific realism is opposed to both empiricism and

⁶ Note that in *PIF* (p. 141) the further distinction between *scientistic* and *scientific* realisms is made. The former is that "which attributes overwhelming evaluative and/or historically explanatory pre-eminence to the social institutions of science." Bhaskar is making distinct the territory occupied by his theory. This clearly serves a polemical function, although that is not to say that the distinction *exists* for that reason.

rationalism, for CR, empiricism and rationalism are also opposite: “Broadly speaking, philosophers divided into two camps:...*rationalist*...[and]...the opposed *empiricist* position” (emphasis in original) (*SR*, pp. 235-6). Claims about that CR is a dialectical synthesis of previous perspectives (see below; see Dow, 2000, cited in Ch. 2), however it is not usual for the synthesis to be opposite to both thesis and antithesis, as the synthesis acts to (as *SR*, p. 60, on the relationship between realism, deductivism and contextualism) “incorporate the situated strengths of both.” Here, it might be argued that false polar oppositions are being set up for rhetorical purposes. This is an example of what has been termed *rhetorical dualism*. In defence, though, a hub and spoke metaphor might be envisaged here to reconcile these apparently conflicting oppositions. i.e., (in this case) scientific realism is the hub and the spokes are continua that extend from the hub, out to empiricism and rationalism respectively.

Returning to *SR* (pp. 5-10), a strong claim is made: “...every philosophy, inasmuch as it takes science for its topic, is essentially a realism, or at least takes realism for its principle, the pertinent questions being only *how far* and *in what form* this principle is actually implemented” (emphasis in original) (*SR*, p. 7). This claim is explicitly (*SR*, p. 7; n. 17) *opposite* to Hegel (1969, pp. 154-5), and also sets up realism as a replacement or opposite to idealism. This is clearly polarising language. Bhaskar supports his claim by quoting Bachelard (1953, p. 141) that “all philosophy...presupposes a *reality*” (emphasis added). Bhaskar then uses his claim to attempt to codify much (if not all) philosophy in realist terms. Thus, a continuum can be imagined encompassing a) transcendental realism, b) empirical realism, c) objective conceptual realism, d) transcendent realism, e) intuitional realism, and f) subjective conceptual realism. (a), as outlined above, is Bhaskar’s own theory of scientific realism (also described above as metaphysical scientific realism⁷). (b), is where real objects are “defined in terms of actual or possible experience” (*SR*, p. 7). (c), is where real objects are independent of minds but remain “quintessentially rational...constituted by and/or causally or teleologically dependent upon what is known to us only as an attribute of *human* being, namely thought or reason” (emphasis in original) (*SR*, p. 8). (d) “posits a sphere of pure unrecognisable other-being, defined in terms of its *inaccessibility* to human being” (emphasis in original) (*SR*, p. 8). (e) defines objects purely in terms of human intuition. (f) defines real objects as purely the products of thought, “unconstrained by sense-experience” (*SR*, p. 7).

It appears that, in this passage, Bhaskar is careful to avoid collapsing distinctions, and to avoid polar categories. Moreover, there are clearly overlaps between categories (a-f), for example between (e) and (f). However, Bhaskar does also attempt to group them together under broader banners. For example, (b-c) and (e-f) are described as “anthroporealisms” (*SR*, pp. 7-8), as depending upon humans. More significantly, these realist categories contain idealisms. (b) includes both empiricism (and its opponent) Kantian transcendental idealism. (f) is also known as “super-idealism” (*SR*, p. 7).

⁷ This is to distinguish it from ‘internal realism’, an *a posteriori*, empirical, scientific realism, associated with Putnam (1978), which assesses realism by virtue of the behaviour of scientists. In distinguishing these, Bhaskar clearly draws on an *a posteriori/a priori* distinction. Note that Dow (1985, p. 21) rejects that distinction. Note also that internal realism is, at least intuitively, consistent with the metaphysical scientific realism, and that the latter encompasses the former. This changes the nature of the distinction.

Additionally, (d) is said to include Kantian noumena (*SR*, p. 8). This clouds the picture somewhat. Also, it completes the inversion of the Hegelian position, in that realism encompasses idealism as some form of ‘not realism.’ However, up to this point, Bhaskar has resisted such obvious dualism₁. Shortly after though, he capitulates, by making a sharp distinction between realism and ‘irrealism’, which is “any *non-transcendental* realism, i.e., any incomplete, inexplicit or ineffable realism...[including] empirical, conceptual, intuitional and/or transcendent realism” (emphasis added) (*SR*, p. 9). Irrealism is ‘*not-TR*.’ Thus from a subtle series of distinctions between brands of realism, each brand being a (somewhat) distinct station along a continuum, the analysis has shifted to a blunt dualism₂, wherein anything that is not TR is irrealist (and visa-versa). Moreover, we know this to be dualism_{2a}: the category must be false, since we know that it contains several distinct brands of realism⁸. The purpose of this distinction is arguably not heuristic, since it is not utilised in that way⁹. Therefore, it can be argued that its main function is to once again make clear the distinctiveness of TR, and that this in turn performs a rhetorical, political, or polemical function. Similar patterns can be seen in the term ‘non-realism’, the absence of an external reality (see Collier, 1994, pp. 12-16). Collier (*passim*) equates non-realism and idealism. Clearly non-realism is a narrower category than irrealism. Realism remains, though, an over-arching term, such that “non-realists may in the end turn out to be realists about something” (Collier, p. 12). Collier seems to be guilty of some form of dualism. As usual it is difficult to claim that realism/non-realism represents a dual₁, but the way in which several types of clearly distinct strands of non-realism are collapsed is suggestive of dualism₂. It is less easy to show that this amounts to dualism_{2a}, nevertheless, this separation is crucial to a) the operation and b) the distinctiveness of TR, so does have a rhetorical/polemical function.

TR and Empirical Realism

One of the most important distinctions made by CR is between TR and empirical realism (ER), introduced early in CR (*RTS*, p. 15). There are several ontological reasons for this distinction, many of which are themselves crucial distinctions. For now however, focus remains on the philosophy of science. In that context and in the establishment of CR, TR/ER is amongst the most significant and this is reflected in Bhaskar’s treatment of it. He discusses the concept at length in the context of a triad of traditions in the philosophy of science: classical empiricism, transcendental idealism and TR (*RTS*, p. 24). Bhaskar is clear that the categories are not mutually exclusive (and therefore Dow’s fifth criterion for dualism_[1] is not satisfied) and he cites Nagel as “stand[ing] somewhere along the *continuum* between Humean empiricism and neo-Kantianism” (emphasis added) (*RTS*, p. 26). Moreover, he states that “[i]n outlining these [three] positions [in philosophy of science], I am not offering them as a complete typology, but only as one which will be of some significance in illuminating current issues in the philosophy of science” (*RTS*, p. 26). Thus, the three are not exhaustive categories and thus do not satisfy Dow’s sixth

⁸ Bhaskar (*SR*, pp. 23-4) also introduces a new explicitly polar distinction, within the irrealist domain, of transcendent/immanent irrealism. This is then a pole within a pole, suggesting perhaps strata of poles.

⁹ Indeed, the only other use of this distinction found in this investigation is on *SR* (p. 160) where Bhaskar contrasts the respective positions on the epistemic value of experience.

criterion for dualism_[1] (extended as in Mearman, 2001a, to triadic notions). Here he is careful to avoid dualism.

For Bhaskar, classical empiricism, associated with Hume, holds that “the ultimate objects of knowledge are atomistic events...[which] constitute given facts and their conjunctions exhaust the objective content of our idea of natural necessity” (*RTS*, p. 24). Transcendental idealism, from Kant, holds that “the objects of scientific knowledge are models, ideals of natural order etc....[which] are artificial constructs and though they may be independent of particular men, they are not independent of men or human activity in general. On this conception, a constant conjunction of events is insufficient, though it is still necessary, for the attribution of natural necessity” (*RTS*, p. 25). It is this distinction, between knowledge and their objects, which are held by ER to be equivalent; and between the necessity or sufficiency of constant conjunctions of events, as opposed to mechanisms that generate events, that lead Bhaskar to distinguish TR and ER.

As Collier (1994, p. 26) notes, ‘ER’ is possibly inherited from Kant, who uses the term to describe anyone who believes that objects exist independently of the observer, although the form of experience is contributed by the mind, which imposes categories on that experience. As Collier notes, though, Bhaskar uses the term somewhat differently (cf. Dow’s fixity of meaning), so that ER “is used not for anyone who holds concrete objects to be real [i.e. simple realism]...but for one who *denies* the reality of *underlying* mechanisms, structures etc., which don’t appear in experience, but cause phenomena that do” (emphasis in original) (p. 26). This is contrasted to TR that “claims that such mechanisms can be shown to be real by means of transcendental arguments” (p. 26). This partly explains how an idealist like Kant can be realist too. Thus, one traditional dual, i.e., realism/idealism, is broken down, by a change in the category definitions (non-fixity again). Clearly this is consistent with Dow. However, the removal of this dual leads directly to the creation of another, TR/ER. Thus, *RTS* (p. 26) holds that both classical empiricism and transcendental idealism can be classified as ER and that TR “must be *distinguished from*, and is in *direct opposition* to” ER (emphasis added) (*RTS*, p. 26)¹⁰. Again, this distinction is crucial to the entire CR project, as it ties in with the notion of the epistemic and ontic fallacies, with the intransitive/transitive distinction, structures/events, etc. There are several points to note here. First, *RTS* (pp. 24-6) has been careful to distinguish empiricism and transcendental idealism. Indeed, this distinction is crucial to his understanding of social science and its philosophy. For instance, he argues (*PN, passim*) that the (opposed) positivist and hermeneutic traditions derive from these opposed prior traditions. Nevertheless, Bhaskar collapses the two into a single category of ER, from which TR is not merely ‘distinguished’, but is directly *opposed to*; the movement between terms in that sentence representing a rhetorical shift.

Clearly TR and ER are different. But, for Bhaskar, they are totally different and irreconcilable. This can be inferred from their definitions: for the ER (TR), knowledge and their objects are (not) equivalent; a constant conjunction of events is (not) either

¹⁰ Dow (2000) and Viskovatoff (2000) respectively argue that CR’s presentations of Hume and Kant are unfair and that in fact both are closer to CR than it admits. They are implicitly accusing CR of rhetorical dualism₂.

necessary or sufficient for the identification or existence of a causal law; the natural world does not (does) exist independently of man¹¹. These are made clear binary distinctions. Moreover, Bhaskar (*SR*, p. 258), in arguing that Humean closure of systems requires Humean ontological tenets (such as atomism), states that indeed “[t]here is no midway station between [ER] and [TR].” Again, this phrasing is significant as it a) suggests a line connecting the two points; b) suggests that if one leaves ER, one arrives inevitably at TR; c) that within the continuum of types of realism, itself stretching between the poles of realism and irrealism (as discussed above) there is a sub-categorical polar relationship between TR and ER. Thus, both dualism₂ (in (b) above) and strata of dualisms₂ can be identified, some of which are dualisms_{2a}. It was suggested above that ir/realism is a rhetorical dualism_{2a}; although it is not clear that TR/ER is false, it clearly possesses a high rhetorical value, given its centrality to TR and its position with respect to other philosophies of science.

CR and Postmodernism

Collier (1994) criticises Bhaskar for yielding too much to hermeneutic social sciences (as noted above). If this is true (Collier arguably focuses on *PN*), it might have been compensated for in later Bhaskar and other CR texts. Specifically, *PIF* is *arguably* an attack on postmodernism. However, the relationship between CR and postmodernism is somewhat unclear in *PIF*, since Bhaskar only uses the term a handful of times. He does note (p. 139) that CR and postmodernism emerged from similar socio-historical context (p. 140). Both are responses to the crisis of positivism and its disputes with rival theories: for this reason, perhaps, Stones (1996) advocates a ‘*past-modern*’ sociology based on CR. They are but two of many responses, arising from anti-monist critiques (e.g. from Popper) and anti-deductivist critiques (e.g. from Harré; Hesse)¹². Thus, he is focusing on but two of many schools and apparently avoiding dualism. The other side of *PIF*, though, is premised on Bhaskar “tak[ing] Rorty...as emblematic of postmodernism” (*PIF*, p. 139). *PIF* is a two-part text, the first part, entitled ‘Anti-Rorty’, being a long critique of his philosophy (particularly Rorty, 1980), the second being a positive statement on CR. Significantly, much of Bhaskar’s critique deals with unwarranted duals in Rorty’s work. Amongst these is a methodological dualism in Rorty, which, he argued, is a result of Rorty’s positivistic conception of science (see Collier, pp. 97-101). Second, Bhaskar (*PIF*, p. 53) also accuses Rorty of maintaining the traditional reasons/causes distinction (see *PIF*, p. 143; see below), of maintaining voluntarism (*PIF*, p. 62), plus the following polar oppositions: metaphysics/irony, normal/abnormal discourse, and

¹¹ As Bhaskar (*PN*, *passim*) and others, for example Benton (1981) note, this is not true for societies. This led to a redefinition and therefore a bridging of this dual, since the social world is only independent of people in certain senses.

¹² These are also discussed in *SR* (p. 1-3), a section illuminating for the shifting language and combative metaphors used to describe the group: for example, they are each a “tendency” (p. 1), a “camp” (p. 2), a “corps” (p. 2) and strongest, a “faction” (p. 3). As elsewhere (see text) this factionalism collapses differences between authors such as Kuhn, Popper and Lakatos. Bhaskar talks of the groups as criticisms of positivism. So they are set up as reactions to positivism. The aim of CR was to capture the best elements of each in a new philosophy. This is one of clearest claims made that CR is a dialectical synthesis.

scientific/literary cultures (Collier, p. 100). Given the arrangement of the book, Bhaskar is setting up a strong contrast with Rorty, perhaps a polar opposition.

Now, Rorty, although clearly a non-realist (Rorty, 1999, p. 40, describes belief in a real world as “immature”), is most often (ref?) described as pragmatist or neo-pragmatist (or, as in Blackburn, 1995, p. 332, as a postmodernist-pragmatist). Also, *PIF* (p. 108, n. 2) notes that Rorty (1987, p. 578, n. 22) “has renounced...any formal postmodernist allegiances.” This highlights, perhaps, the difficulty of the term (see, for example, Collier, 1994, pp. 195-6, n. 8). Less charitably, though, it suggests inconsistency, and indeed a false pole with rhetorical significance. Thus, Bhaskar appears guilty of rhetorical dualism_{2a}. Third, CR is itself seen as a solution to some of the disputes between positivist and postmodernist authors, or even between realist and non-realist authors (see Chandler, 1999). As in the case above, it is questionable that CR could be a solution to problems with postmodernism as well as being opposite to it.

Stones (1996) portrays CR as building a “much improved bridge” (p. 3) between modernism and “the defeatism of that dominant trend of postmodernism” (p. 2). So, he intends to bridge a modernist/postmodernist dual, postmodernism being defined mainly as ‘not-modernism’. Stones (p. 2) accuses postmodernism itself of dualism₂. For instance he writes that “[postmodernism] places what I think is a healthy, and celebratory, emphasis on the plurality of different perspectives on the world, the diversity of that world, and the obstacles to obtaining accurate, truthful knowledge of that world...[but] it moves far too quickly from these insights to an attitude of hopelessness about our ability to make comparative judgements about the quality of different knowledge claims” (p. 2)¹³. Having said that, he goes on to claim, “when a postmodern sociologist prepares an account of the world, she accepts no constraints of coherency of perspective, accurate representation, empirical data or logical connections. Her motto can be said to be ‘anything goes in any old way’.” This follows on immediately from the above, leading to the question as to which type of postmodernist Stones means, given his previous careful distinction. The cautious helpful postmodernist seems to have been banished. This is clearly dualism_{2a} and arguably this is for rhetorical/polemical reasons. To underline this point, it should be noted that this material is from a section entitled “The Enemies.” Even though ‘enemy’ is usually presented in scare quotes the parallels are clear between this and some of Bhaskar’s metaphors (see note 21; *SR*, p. 1-3)¹⁴.

¹³ Sayer (2000, p. 5) is also careful to distinguish between ‘defeatist postmodernists’ who “imply relativism, idealism and a rejection of the ambitions of social science” and those who “point to a renewed social science which is conceptually cautious and more reflexive.” Indeed CR might be said to share the latter view.

¹⁴ Postmodernism espouses relativism. Bhaskar attempts to transcend relativism/anti-relativism, which suggests also relativism/absolutism, and, as realism is often associated with absolutism, realism/relativism. *SR* (p. 98) claims that *unlike* irrealist theories, realist theories have no tension between these duals. This has a rhetorical effect. *PN* (pp. 57-8) accuses relativists and anti-relativists of confusing and conflating epistemological and judgemental relativism. *SR* (p. 73) notes that “[r]elativists have mistakenly inferred [judgemental relativism] from [epistemic relativism], while anti-relativists have wrongly taken the unacceptability of [judgemental relativism] as a reductio of [epistemic relativity].” This is taken to mean that a relativist (Bhaskar cites Kuhn) sees any move away from complete anti-relativism, as resulting at relativism; and an anti-relativist (Bhaskar cites Popper) sees any attempt to retreat from complete relativism as ending up in absolutism. Bhaskar a) rejects this polar reasoning and b) offers epistemic relativity as a

Positivism and its treatment

Space prevents a full discussion of all the distinctions posited or utilised by CR that involve ‘positivism’ as one of their categories, however a number of them are crucial in a) the development of CR and b) the context of this paper. Particularly important in both (a) and (b) are the characterisations of positivism used in the portrayal of CR’s position in philosophy and in particular in the development of *Critical Naturalism* (CN). Bhaskar (*SR*, p. 4) describes positivism as a “dominant historical attractor position” in the philosophy of science. Also, as Collier (1994, p. 102) notes, a broad “anti-positivist strand...is often parasitic on positivism...as mere inversions...usually accept[ing] the positivist account of natural science, treating it as an *enemy*...” (emphasis added). Stones’ (1996, p. 1) terminology noted above resonates here. Further, *SR* (pp. 229-230) describes positivism as “a pole not merely in relation to which other philosophical positions may be defined, but a pole in relation to which they have had to defend themselves – to such an extent that [positivism] has come to exercise a kind of shaping hegemony in the philosophy of science; to constitute, one might say, its underlying determinant, if not always locally dominant, mode of production.” Hence, although, given the definition of dualism₂, it is interesting that Bhaskar uses the term ‘attractor’, ‘repeller’ might be more appropriate, since positivism is being portrayed as something to which alternatives react or against which they set themselves up. Thus, two parallels can be drawn with the discussion of realism above: first, there seems to be a continuum of positivist views, many (or most) of which are anti-positivist; second, positivism acts as a hub from which several spokes project. These spokes are reactions against positivism as a whole, such as in the cases of positivism/anti-positivism (Collier, pp. 101-103; *SR*, pp. 4, 229), positivism/hermeneutics (Collier, p. 167; Bhaskar, 1981a, p. 283; Bhaskar, 1981b, p. 333; *PN*, *SR*, *passim*; Benton, 1981); positivism/pluralism (*RTS*, p. 246; *SR*, pp. 101, 106); positivism/idealism and positivism/super-idealism (*SR*, p. 63); positivism/moralism (*PIF*, p. 146); positivist rationality/irrationalism (*SR*, p. 170) and positivist science/*no* science (Collier, pp. 212, 221; Bhaskar, 1981b, pp. 334-5). In addition to these, there are a host of dualisms emerging from methodological disputes between positivists and their opponents.

mid-point, as a (Hegelian dialectical) synthesis of the other polar views. However, there are two objections to this. First, *PN* (p. 57) argues that “[d]enying the principle of epistemic relativity *inevitably* entails embracing some type of epistemological absolutism (which, by a short route, invariably results in some kind of idealism), while acceptance of judgemental relativism *inevitably* leads to some or other form of irrationalism” (emphasis added). These are examples of dualism₂. For, Bhaskar seems to suggest that if one denies epistemic relativity (which is consistent with realism and a (modified) rationalism), one slides into either epistemological absolutism (and therefore idealism), or one must accept judgemental relativism (and therefore irrationalism). Thus epistemic relativity acts as a mid-point or fulcrum, between two polar attractors. Second, Collier (1994, p. 177) holds that in fact “[t]he epistemic relativity which Bhaskar accepts is widely held by anti-relativists.” Thus, Bhaskar’s position posits dynamics that may not exist, i.e., the slide into absolutism for those who deny epistemic relativity. Moreover, the other side of the pole, relativism, might also have been misdescribed, since, as argued above, there might be degrees of relativists. Moreover, Dow’s (1985, 1996, 1997a) own modified pluralism reflects something akin to epistemic relativity. Bhaskar’s treatment of this issue seems to be an example of dualism_{2a}. Bhaskar seemingly misreads the situation here, although clearly it serves a rhetorical purpose, clearing the ground for epistemic relativity as a distinct concept.

However, discussing positivism is inherently problematic. Bhaskar (1981b, p. 333) notes (citing Raymond Williams) that “positivism has now become...a ‘swear word by which nobody is swearing’” and he claims that this is because “it is no longer used – ‘positively’ – to describe or prescribe a criterion of authentic knowledge, but ‘negatively’ to assess critically its constituent themes.” Indeed, the impression of positivism in some social scientific circles is that it is almost a term of ridicule. Bhaskar (1981b) provides a useful sketch of his definition of positivism. For him, it is characterised as concerned with empiricism, deductivism, closure, empirical realism, precision, quantification, unity of method, laws as constant conjunctions of events, reductionism, scientism, phenomenalism, *a priori* analytic concepts, theory/fact and fact/value distinctions, the central role of models, and decisive test situations, i.e., verification, or following Popper, falsification. Lawson (1997a) clarifies some of these as formalism, regularity determinism and the portrayal of humans as passive receptors. Clearly, Lawson has neo-classical economics in mind, and indeed, it is one of the most striking features of Lawson (1997a) that the bizarre excesses of positivism seem to thrive in contemporary economics. There might be apparent exceptions, for instance a concern with latent variables in orthodox econometrics. This might suggest an attempt to go beneath phenomena, to generative variables. However, the usual approach to such problems is to adopt the Humean approach that there is no prospect of identifying such variables. Thus it appears that even though positivism is dead, its influence is still very strong. Collier (1994, see above) and Sayer (1992) agree with this conclusion.

Clearly, this adds weight to Bhaskar’s approach, and defends him (*et al*) against the charge of rhetorical dualism, since if he is attacking a position that really exists, he strictly cannot be guilty of dualism_{2a}. There are, though, some objections to this. For instance, positivism is described (*SR*, p. 230) as a *limit form* of empiricism, suggesting a polar concept. This polarising language surfaces again referring to scientific development, where CR seeks to overcome “both the hypernaturalist monism of positivism (all growth and no change) and the self-specifying theoretical solipsism of super-idealism (all change and no growth), as well as the one-sidedness of more moderate continuists, such as Nagel, and discontinuists, such as Popper, alike” (*SR*, pp. 63-4). Here, Bhaskar wants to stress the extremes of the spectrum, using the prefixes ‘hyper’ and ‘super’, in order to make his point. Then, when he retreats from this position, to talk of ‘moderates’, he introduces another distinction, between continuists and discontinuists. Additionally, Bhaskar (particularly, *SR*, Ch. 3) tends to portray positivism as inherently conservative in the philosophy of science. He refers to the ways in which, he claims, positivism fails to explain or really allow scientific change. However, of course, from Saint-Simon, positivism emerged as a radical movement, an antidote to the dominance of religion, a rejection of unobservables, particularly omnipotent deities.

A theme noted earlier was that Bhaskar tends to collapse distinctions that at other points are made significant. Thus, while Bhaskar (1981b, p. 335) identifies a “direct line” from Comte through Durkheim, *PN* (pp. 130-1) portrays Durkheim as being a more sophisticated positivist who had “elements of a realist scientific practice” (*PN*, p. 131; see also Stones, 1996, p. 31) who is contrasted with “vulgar or apologetic positivism

characteristic of much of the contemporary ‘behavioural sciences’” (*PN*, p. 131). The reference to Durkheim points to another distinction in CR, between diurnal/nocturnal philosophies of scientists¹⁵. For although Durkheim is said to have ‘realist...practice’ (diurnal), he had made a “methodological commitment to positivism” (*PN*, p. 131) (nocturnal). Collier (1994, p. 102) supports this distinction, arguing that the diurnal practice of social science has been affected by positivism, as “they assume that natural science is as described by the positivists, and try to imitate this.” More importantly, perhaps, from above, those who are methodologically dualist, i.e., believe that social science must be completely different from natural science, react against positivism and create social science that is effectively the polar opposite of (supposedly positivist) natural science. However, it could be argued, even from Bhaskar’s own analysis of experimentation, and from, for example, Sarré (1987) that scientists already act in realist ways: thus what is the point of the realist critique and the polarisation of positivism/anti-positivism? It applies only to nocturnal philosophy. However, *PN* (p. 130) argues that in fact pure positivism – implying a distinction between a pure, or extreme variant of it and a bastardised version – is not applicable. This begs the question as to why, in that case, pure positivism is used as a benchmark. Clearly it is more powerful and persuasive. This suggests rhetorical dualism_{2a}. Furthermore, as discussed below, arguably Bhaskar portrays natural science in an overly positivist manner, leading to spurious conclusions about social science and a methodological dualism.

Whether or not positivism is misrepresented, the strict distinction undoubtedly serves a powerful rhetorical or heuristic purpose. Particularly, it allows CR to emerge as a distinct alternative to all predecessors, but more specifically as their (Hegelian) dialectical synthesis. Such claims are pervasive to CR. Previewing CN, *RTS* (p. 246) notes that TR “conceives the various sciences as unified in their method but specific to (or differentiated with respect to) their particular objects”, reflecting a synthesis of positivist monism and relativism, pluralism, or eclecticism. Similarly, Collier (1994, p. 167) notes that “[Bhaskar] holds social explanation to be both causal (as does the positivist) and interpretive (as does the hermeneuticist), denying their shared premiss [sic] that these two notion will not cohabit.” *PN* (p. 123) discusses a paradox that positivism makes social activity “quite *unlike* science” (emphasis in original) while hermeneutics makes social activity “*insusceptible* to science” (emphasis in original). Bhaskar goes on to hold that “this paradox is reflected in the character of the debate, or rather the structure of the confrontation, between the two. The weaknesses of the one position find their antitheses in the strengths of the other.” This leads into an argument for CN, specifically that “[TR]...situates the possibility of a genuine *Aufhebung* (or sublation) of the quarrel between the champions of meaning [hermeneuticists] and law [positivists]”¹⁶. *SR* (p. 4) puts forward CR as a way to combine a new ontology with “the rational gains of both the anti-monistic and anti-deductivist [see above] movements.” Similar claims are made about the ability of CN to reconcile (positivist) monism and subjectivism (*SR*, p. 27); and (hypernaturalist, positivist) monism and (super-idealist) solipsism (*SR*, p. 63). Of course, these dialectical sublations, which in each case result in TR/CR/CN, have no foundation

¹⁵ *SR* (p. 50, n. 84) attributes this distinction to Bachelard (1949).

¹⁶ See also *SR* (pp. 120-2, pp. 135-6) and below.

if the poles upon which they are founded are false, hence their heuristic or rhetorical value.

The Naturalism Debate

One of the main impacts of CR on social science has been the argument that the same principles apply in all sciences, and that indeed it is right to call social studies 'science'. This argument is introduced in *RTS* and is the main theme of *PN*. Bhaskar (1981a, pp. 283-5) provides probably the best summary of his argument. Central to the argument is the term "naturalism," which he notes has changed its meaning over time (non-fixity). He focuses on one contemporary meaning of 'naturalism', i.e., a methodological monism, running from natural to social science. He identifies (initially) the naturalist strand with positivism, and thence functionalism, behaviourism and structuralism. He then identifies an anti-naturalism, which has developed in direct opposition to (positivist) naturalism, associated with hermeneutics, which argues that society and nature are different and therefore require different methods¹⁷. The anti-naturalists emphasise several distinctions: erklären/verstehen (explanation/understanding), nomothetic/ideographic, repeatable/unique, physics/history, structuralism/interpretivism. Specifically, anti-naturalists claim that in each dual, the former case applies *only* in natural science, the latter *only* in social science. Positivists have argued that social laws are the same as natural laws and thus should be sought in the same way (i.e., Humean constant conjunctions). When anti-naturalists have shown that no such laws can be found in social science, positivists claim that this is because of complexity at the empirical level, requiring a reductionist regress, either of an atomist or holist type – to the smallest possible unit, or to the largest possible system. Anti-naturalists argue that social science is restricted by the concept-dependence of society and thus meanings should be a focus of social scientific inquiry. Additionally, attention should focus on "the discovery of intelligible connections in [society]" (Bhaskar, 1981a, p. 284).

Clearly this debate can be understood in terms of dualism. Bhaskar argues that the groups – and criticising them as a result – have been engaged in polarising. Specifically, if it is accepted that anti-naturalism (hermeneutics) has reacted to naturalism (positivism) as described, clearly it has engaged in polar theorising and necessarily dualism₂. For instance, anti-positivists set up diametrically opposed alternative theories, allowing no room for an intermediate, compromise or synthesised theory. Positivists demanded a monist approach, collapsing all possible differences in substantive sciences, much as economic imperialists, who themselves want to model economics on physics, intend to force all social sciences to become versions of orthodox economics. In response, anti-positivists accepted completely the premise that natural science must proceed along a positivist route, thereby equating positivism and naturalism, i.e., collapsing a distinction, and *using* that collapse to argue for an *opposite* social science. This is clearly dualism₂ and arguably dualism_{2a}. CN aims to bridge this gap and remove the dual between the two groups and "to criticise and transcend these standard, if influential conceptions" (Lawson,

¹⁷ However, these are split into neo-Kantian synthesisists (for example, Habermas and Weber) and (possibly Viconian) dualists (for example, Winch and Gadamer). Clearly this careful distinction is collapsed at times.

1997a, p. 224). As was argued before, the gap might not be as wide between the schools as Bhaskar claims; nevertheless, Bhaskar wants to move away from this polarisation. Thus, he develops CN so as to accept arguments from both sides of the divide. As he notes (1981a, p. 285) CN follows from showing that social objects are consistent with TR, via the TMSA. Thus, drawing on hermeneutics, actors' accounts are both the indispensable starting point of social science and, drawing on positivism, corrigible and conditioned by society, and leading to social scientific *explanations*.

Bhaskar then goes on to discuss certain limits on naturalism¹⁸ that he categorises as ontological (the concept-, activity-, and space-time-dependence of social structures), relational (acknowledging the relationship between social science and its object) and epistemological (principally the existence of open systems, which removes the possibility of experimentation and (other) decisive test situations in social science). He also notes the possibility of false consciousness in social science, which he denies applies in natural science. However, this is the basis for his claim that “the social sciences can be ‘sciences’ in exactly the same sense, but in ways as different (and specific) as are their objects, as the natural ones” (Bhaskar, 1981a, p. 285). Because of the nature of society, and because he conceives ‘naturalism’ differently (non-fixity), Bhaskar makes his case for naturalism. Bhaskar wishes to reinstate a distinction between naturalism and positivism, in order to collapse the dual naturalism/anti-naturalism; so one distinction is instated in order to remove another.

However, in attempting to bridge the duals (as perceived) in the philosophy of science, Bhaskar is accused of creating others. This criticism comes principally from Benton (1981). It is worth quoting Benton's main argument in full: “I propose to argue that the extent and significance of the natural science/social science asymmetries which Roy Bhaskar claims to identify would justify description of his position as a form of anti-naturalism, rather than as a ‘qualified naturalism’. It would follow from this that his intended transcendence of the positivism/hermeneutics polarity is not entirely successful. The failure in this respect derives from the reproduction in Roy Bhaskar's work of the very dualist ontology of a natural/human opposition which is the basis of hermeneutic and neo-Kantian forms of anti-positivism. This ontology is, in turn, sustained by an unnecessarily restricted conception of the natural sciences. This excludes, or under-represents, the philosophical and methodological characteristics of a range of historical and life-sciences whose bearing on the social sciences, both philosophically and substantively, is direct and most pertinent to Roy Bhaskar's philosophical project” (Benton, 1981, p. 298).

Benton, (pp. 300-1), in focusing particularly on the differences set up in *RTS* between natural and human domains, accuses Bhaskar of a “radical dualism” (p. 300), arguing clearly that Bhaskar has a natural/social science dualism. Of course, in Bhaskar's argument it is *because* of these differences that social science is possible along what he calls are naturalist lines: so he uses one dual (natural/social realms) to collapse another (naturalism/anti-naturalism). This, Benton argues, leads Bhaskar to a dualist and hence

¹⁸ Although given that he claims later that these are what enables social science and are the basis of *Critical Naturalism*, it is strange that he uses the term ‘limits.’

anti-naturalist position, rather than a compromise or synthesised qualified naturalism. In other words, Bhaskar himself reacts too strongly to positivism and reverts to an anti-naturalist position. This is dualism₂ and again arguably dualism_{2a}. Benton then (pp. 304-8) attacks the validity and significance of the limits to naturalism identified in *PN*. Arguably, for Benton, the root of all of these problems is Bhaskar's characterisation of natural sciences as 'experimentalist', which leads him to search for an experimental analogue in the social sphere, the absence of which would seem to rule out a (conditional) unity of method between the natural and social sciences. This is also an example of dualism_{2a}, since Bhaskar is guilty of collapsing distinctions between natural sciences and bracketing all natural science as being equivalent to physics and chemistry. This represents one (false) pole. It in turn leads to the creation of another, since Bhaskar looks in vain for the equivalent features in social science and concludes that in fact social science is fundamentally different. This results in a dualism, which is unnecessary and contrary to Bhaskar's original intention. For, as Benton (pp. 309-312) argues there are many natural sciences most unlike physics and chemistry and more like social sciences. With this conception in hand, it is more possible to represent the sciences as a spectrum from physics and chemistry (which of course, under Bhaskar's arguments of *RTS*, do not operate according to positivist, but to realist, principles), through the non-experimental (another dual) natural sciences, to the social sciences.

In this way, differences between natural and social sciences become differences in degree rather than in kind. For instance, Lawson (1997a, p. 207) notes that his concept of demi-regularities applies in natural and social science alike; he also argues (p. 217) that in neither natural or social science does a deviation from an observed pattern lead to the rejection of a theory; and (p. 220) that the role of antecedent knowledge is the same (significant in the development of new knowledge) in natural and social science¹⁹. Bhaskar, for his part, tried to argue for the similarity of natural and social science (for example, *PN*, pp. 59, 125, 129, 147; *SR*, p. 108). He seems to accept much of Benton's critique (see *PN*, p. 168) although he contends that he was merely in the first stage of an argument (p. 168) and that he wanted to address the issue on existing terrain. *SR* (p. 101) still maintains the relational limit to naturalism, but is careful to state that "there is neither antinomy nor unbridgeable *chasm* nor the possibility of *mutual exclusion* between the sciences of nature and of (wo)man" (emphasis added). Clearly Bhaskar shares Dow's concerns at this point. *SR* (p. 119) underlines that the bridging of the naturalism/anti-naturalism dual is a long process, including examining arts and "a whole compendium of sciences" (he cites Benton at this point (p. 119, n. 21)). *SR* (p. 121) talks of brands of naturalism; this might explain his use of the term hypernaturalism (see, for instance, *PIF*, p. 143).

The Abstractionist Defence

¹⁹ However, Lawson (1997a, p. 203) argues that natural and social science are different, but that "the dividing line can get drawn in the wrong place." This is a dualist approach and is inconsistent with his other comments. Incidentally this quotation is located in a section entitled 'Experimental and non-experimental conditions contrasted', thereby accepting Bhaskar's original argument.

In many of the cases above, a possible response to the charge of dualism is to invoke the hub-spoke metaphor. Thus even though, say, transcendent realism is distinctly different from the other irrealisms, *SR* (p. 8) argues that TR is “also and *equally opposed to*” (emphasis added) transcendent realism. However, this is not really a defence, merely a codification. A more robust defence relies on the notion of context. Significantly, Dow demands that duals should have an ontological basis and not to be merely heuristic or analytical devices. Hence, as Mearman (2001a) argues, her own micro/macro-economics split (Dow, 1994) is problematic. Clearly though, some contrasts are valid in some contexts, under some criteria, but not in or under other contexts and criteria. For instance, it might be clearly necessary to distinguish between man/woman in certain contexts. However, when the contrast is between human/extra terrestrial, the man/woman contrast is less important. That is not to say, of course, that a man compares with an extra-terrestrial in exactly the same way as a woman would. This also suggests the notion, above, of strata of dualisms: in this case, the dual man/woman is at a different stratum to the dual human/extra-terrestrial. In this light, it might be legitimate to collapse types of (identified previously) non-realisms into that single category, or indeed, to collapse realisms, irrealisms or indeed variants of TR or CR. Ultimately this seems to be an argument based on abstraction. By collapsing known distinctions at one stratum, in order to examine a contrast at another, the researcher is trying to move from the concrete, complex (see Sayer, 1981) to an abstract conception of the essential contrast between categories.

For instance, on the question of TR/ER, having collapsed classical empiricism to transcendental idealism in his definition of ER (*RTS*, p. 26) Bhaskar then (pp. 26-30) carefully contrasts TR with each individually, or together, with respect to the particular issue he is discussing. This adds weight to this defence, i.e., that distinctions are made and unmade according to context²⁰. Thus, while systems might be partially open, in the sense that they are neither completely open nor completely closed, i.e., they exhibit neither a complete lack of even rough regularity nor universal event regularities, there are grounds for positing an open/closed distinction in order to contrast systems that are, really, closed and ‘not closed’. This might well depend on a restrictive definition of ‘closed’, but given that distinction, systems can be identified as either closed or not on its basis. At this level of abstraction, there is legitimacy in contrasting these two types of system. Similarly, it is legitimate to categorise philosophies of science according to how they would answer a question, like ‘are constant conjunctions necessary for the identification of causal laws?’ This is the level of abstraction at which the researcher is interested. It would not be legitimate, however, to say that there were effectively only two philosophies of science. Characterisations of economics as orthodox/heterodox crush detailed differences within both orthodox and heterodoxy (such as between Marxism and Post Keynesianism for example).

²⁰ Space prevents a detailed consideration, but arguably Bhaskar’s treatment of the notion of actualism, also stemming from his ontological distinction between domains of reality, mirrors almost precisely the arguments made here about ER. Bhaskar discusses actualism regularly, but only at two points (*RTS*, Ch. 2, see pp. 92-96, 114-117, 141-142; effectively recapitulated at *SR*, pp. 28-9) does he divide up actualism into a weak/strong distinction. Bhaskar dispenses with both in separate critiques, but then (and before) criticises actualism as a coherent whole, in opposition to TR.

So there are two potential problems with the abstractionist defence from the perspective of Dow's dualism. One, although the categories elaborated in CR might themselves, in the context of the specific question, be legitimate, the question must be asked as to why that level of abstraction is chosen. Once this question is asked the abstractionist defence is insufficient in itself and the analysis above is reinstated. Arguably, the level of abstraction itself is chosen for rhetorical reasons: where TR/CR/CN is to be portrayed as a radical alternative pole, the level of abstraction is at two categories. Where TR/CR/CN is to be the reconciliation of two opposing traditions, three categories are chosen. This is not to argue that this is the only determinant of such categories or levels of abstraction, but the important aspect is that such questions should be asked. The second problem from Dow's perspective is that dualism, even where strictly justified (as in many of the cases discussed here), as well as obscuring information as several distinct categories are collapsed into each other, can lead to path dependence problems. Arguably CR treatment of positivism and naturalism reflects this concern (as noted above). This problem is also evident more widely, for instance in Economics. For instance, the concept of open systems has certain methodological implications. This in turn means that when assessing economic theorists, those that use certain 'closed systems' techniques would be deemed 'closed systems theorists.' However, this ignores both the question of local or partial closure, and of the actual production of the 'closed system techniques.' For instance, Downward (1999) and Setterfield (2000) argue that an equation can be left 'open', if its limitedness is recognised and it is triangulated with other methods. Also, Mearman (2001b) argues that an equation can reflect underlying open systems methods, whilst being itself nominally a closed system method.

CONCLUSION

Sheila Dow's work on methodology is itself a realism (Dow, 1990b; Downward, 1999); hence this is a contrast between realisms. Particularly, her work on dualism, specifically its problems and its avoidance, has been very influential in Post Keynesian Economics. This paper has utilised a clarified and developed version of her dualism to examine CR. Specifically, CR's approach to its own location in the philosophy of science was examined. It has been argued that at times, CR clearly engages in what was described here as rhetorical dualism. At other times there is rhetorical value to some of the duals used, although rhetorical dualism is unproven. At yet other times dualism can be seen to serve a heuristic purpose. However, it is difficult to show that CR meets all eight criteria for dualism₁, or even the slightly looser but more powerful definition of dualism₂. Moreover, CR can be defended via arguments based on levels of abstraction. Namely, where dualisms may not exist at the concrete level, they are valid at a more abstract level of analysis. Thus, in terms of the criteria chosen by CR, it might well be valid to portray CR in contrast with the entire history of philosophy, or to draw strict distinctions between groups of schools of thought. However, returning to the original definition of Dow's dualism, and examining the spirit of that whole, it is argued that there is in CR indeed a "propensity to think" and argue dualistically. Thus the choice of evaluative criteria and the issues chosen for distinctions between schools are such that strict differences can be argued for. Levels of abstraction are chosen in order to reach desired rhetorical and

polemical conclusions. Thus, even though in a strict technical sense, CR is not guilty of dualism, it is possible to argue that CR violates the spirit if not the letter of Dow's dualism law. This might have implications for PK.

REFERENCES

1. Archer, M. (1995). *Realism and Social Science: A Morphogenetic Approach*, Cambridge, Cambridge University Press.
2. _____ & R. Bhaskar, A. Collier, T. Lawson, A. Norrie (Eds.) (1998). *Critical Realism: Essential Readings*, London, Routledge.
3. Bachelard, G. (1949). *Le Rationalisme Appliqué*, Paris, Presses Universitaires de France.
4. _____ (1953). *La Matérialisme Rationnel*, Paris, Presses Universitaires de France.
5. Benton, T. (1981). 'Realism and Social Science: Some Comments on Roy Bhaskar's "The Possibility of Naturalism",' *Radical Philosophy*, 27, 13-21, reprinted in M. Archer et al (Eds.), 297-312.
6. Bhaskar, R. (1978). *A Realist Theory of Science*, Brighton, Harvester.
7. _____ (1979). *The Possibility of Naturalism*, Hemel Hempstead, Harvester.
8. _____ (1981a). 'Naturalism', in W.F. Bynum, E.J. Browne & R. Porter (Eds.). *Dictionary of the History of Science*, Princeton, Princeton University Press, 283-5.
9. _____ (1981b). 'Positivism', in W.F. Bynum, E.J. Browne & R. Porter (Eds.). *Dictionary of the History of Science*, Princeton, Princeton University Press, 333-5.
10. _____ (1986). *Scientific Realism and Human Emancipation*, London, Verso.
11. _____ (1989). *Reclaiming Reality*, London, Verso.
12. _____ (1991). *Philosophy and the Idea of Freedom*, Oxford, Blackwell.
13. _____ (1993). *Dialectic: The Pulse of Freedom*, London, Verso.
14. Bitsakis, E. (1993). 'Scientific Realism', *Science and Society*, 57 (2), 160-93.
15. Blackburn, S. (1995). *Oxford Dictionary of Philosophy*, Oxford, Oxford University Press.
16. Chandler, J. (1999). 'Real Basics', *The Philosophers' Magazine*, 8, Autumn, 36.
17. Collier, A. (1994). *Critical Realism: An Introduction to Roy Bhaskar's Philosophy*, London, Verso.
18. Dow, S. (1985). *Macroeconomics: A Methodological Approach*, Oxford, Blackwell.
19. _____ (1990a). 'Beyond Dualism', *Cambridge Journal of Economics*, 14, 143-57.
20. _____ (1990b). 'Post Keynesianism as Political Economy: A Methodological Discussion', *Review of Political Economy*, 2 (3), 345-58.
21. _____ (1994). 'The Post Keynesian School', in D. Mair & A. Miller (Eds.). (1994). *A Modern Guide to Economic Thought: An Introduction to Comparative Schools of Thought*, Aldershot, Elgar.
22. _____ (1996). *The Methodology of Macroeconomics*, Aldershot, Elgar.
23. _____ (1997a). 'Methodological Pluralism and Pluralism of Method', in A. Salanti & E. Screpanti (Eds.) (1997). *Pluralism in Economics: New Perspectives in History and Methodology*, Cheltenham, Elgar.
24. _____ (1997b). 'Mainstream Economic Methodology', *Cambridge Journal of Economics*, 21, 73-93.

25. _____ (1999). 'Post Keynesianism and Critical Realism: What is the Connection?', *Journal of Post Keynesian Economics*, 22, 15-33.
26. _____ (2000). 'Historical Reference: Hume and Critical Realism', paper presented to the *Cambridge Realist Workshop Conference, Critical Realism in Economics: What Difference Does it Make?*, Cambridge University, May.
27. Downward, P. (1999). *Pricing Theory in Post Keynesian Economics: A Realist Approach*, Cheltenham, Elgar.
28. Hegel, G (1969). *The Science of Logic*, tr. A. Miller, London, Allen & Unwin.
29. Lakatos, I. (1978). 'The Methodology of Scientific Research Programmes', in J. Worrall and G. Currie (Eds.), *Philosophical Papers*, Cambridge, Cambridge University Press, Vols. 1, 2.
30. Lawson, T. (1997). *Economics and Reality*, London, Routledge.
31. Mäki, U. (1998). 'Realism', in J. Davis, D.W. Hands, & U. Mäki (Eds.), (1998). *Handbook of Economic Methodology*, Cheltenham, Elgar.
32. Mearman, A. (2001a). 'On Sheila Dow's Concept of Dualism: Clarification and Development', unpublished.
33. _____ (2001b). 'On Open Systems', unpublished.
34. Putnam, H. (1978). 'Realism and Reason', *Meaning and the Moral Sciences*, London, 123-140.
35. Rorty, R. (1980). *Philosophy and the Mirror of Nature*, Oxford, Blackwell.
36. _____ (1987). 'Thugs and Theorists', *Political Theory*, 15, November.
37. _____ (1999). 'Interview (by P. Fosl)', *The Philosophers' Magazine*, 8, Autumn, 40-42.
38. Sarré, P. (1987). 'Realism in Practice', *Area*, 19, 3-10.
39. Sayer, A. (1981). 'Abstraction', *Radical Philosophy*, Summer, 6-15, reprinted in M. Archer et al (Eds.), 120-143.
40. _____(1992). *Method and Social Science: A Realist Approach*, London, Routledge.
41. _____(2000). *Realism and Social Science*, London, Sage.
42. Setterfield, M. (2000). 'Critical Realism and Formal Modelling: Incompatible Bedfellows?', unpublished.
43. Stones, R. (1996). *Sociological Reasoning: Towards a Post-Modern Sociology*, Basingstoke, Macmillan.
44. Viskovatoff, A. (2000). 'Critical Realism from a Kantian Point of View', paper presented to the *Cambridge Realist Workshop Conference, Critical Realism in Economics: What Difference Does it Make?*, Cambridge University, May.