School Effectiveness Research: an Ideological Commitment?

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As the international momentum of the school effectiveness movement continues, its exponents remain largely impervious to criticism. This paper argues that while they may not readily align themselves with the individualistic aspects of Conservative social philosophy, their methodology necessarily *secretes an atomised social ontology. The charge of ideological commitment rests on the fact that the essentially positivist epistemology employed by school effectiveness researchers presupposes an ontology of closed systems and atomistic events. Thus any notion of the* structuring *of life-chances is automatically ruled out of court. The reciprocity of social ontology and methodology is explored in order to account for the myopia of the school effectiveness movement.*

INTRODUCTION: THE INEXORABILITY OF IDEOLOGICAL COMMITMENT

Research on 'school effectiveness' has become a major international industry. As Barber and White note (1997), although it took a decade to happen, school effectiveness research has now had a major impact on policy-making at the national, local and school level. Indeed, the then Department of Education and Science

> established a School Effectiveness Division in 1994 which has become increasingly influential in the years since then. It has sought explicitly to learn from the research ... and to apply its lessons to policy on, for example, failing schools. . . The revival of local education authorities in recent years has been built around the same body of research. Indeed, it would be only a slight exaggeration to say that it saved them from extinction. (*ibid.*, p. 1)

The intimate connection between school effectiveness research and past Right-wing and present Labour education policy is transparent. The marketisation of the education system and the concomitant idealised drive for efficiency ('value for money') have been aided by the factorial

prescriptions designed to ameliorate 'average' or 'failing' schools that have emanated from the school effectiveness research. Many critics (Angus, 1993; Ball, 1990, 1995; Chitty, 1997; Davies, 1997; Elliott, 1996; Hamilton, 1996) have convincingly demonstrated that such research is being used to lend spurious support to right-wing[1] policy because it advocates an approach in which it is assumed that 'educational problems' can be fixed by technical means and that inequality is an *intra*-school affair — to be managed within the classroom — and can be easily remedied as long as teachers and pupils alike adhere to the common-sense truisms[2] proffered by school effectiveness researchers.

However, it must be recalled that from the very beginning the school effectiveness movement had some sensible things to say about the practical ways in which schools could work to improve the quality of education for all their pupils. In contradistinction to the widespread pessimism and fatalism of the 1970s, the movement 'provided a jolt to schools that *were* failing to make efforts or make changes or take "educational common sense" on board. It also provided a much-needed warning to those who might be expecting far too little from those they taught' (Benn and Chitty, 1996, pp. 57–58). Yet the whole thrust of the critique of the school effectiveness movement is grounded in its frustrating inability to transcend its epistemological framework, to detach itself from its epistemic premises (and concomitant ontological presuppositions), to step back and acknowledge its intimate complementarity with right-wing social philosophy and policy. In a recent riposte to their critics, Mortimore and Sammons evince palpable indignation at the accusation that research studies into school effectiveness are the 'products of an ideological commitment, rather than research, which merely provides a legitimating gloss to mask this fact'. For Mortimore and Sammons, 'How can anyone who understands research methodology . . . make such an unfair accusation? We reject — utterly and completely — this accusation and challenge its makers to provide evidence for the statement or to withdraw it' (1997, p. 185). This paper will uphold the accusation of ideological commitment, focusing specifically on the ontological secretions of the school effectiveness movement's methodology. In view of New Labour's endorsement of Office for Standards in Education (OFSTED) (and its head's evident disdain for philosophical reflection)[3] this paper has particular salience. Unwittingly or not, what is 'new' about Labour in the context of education policy is its tacit adoption of an instrument whose philosophical underpinning is individualist.

It would seem that Mortimore and Sammons are genuine in their denial of 'ideological commitment' and indeed many school effectiveness researchers would not align themselves with right-wing social philosophy and policy. There is a blind spot here which has generated a situation in which exponents and critics are effectively talking past each other. More cynical analysts would maintain that such indignation at accusations of 'ideological commitment' is mere rhetoric or humbug. They would maintain that school effectiveness researchers have real

material vested interests in maintaining the steady flow of publications, conference proceedings and Department for Education and Employment (DfEE) sponsorship and are cognisant of both the material advantage that accrues to them and the role that their work plays in complementing and buttressing right-wing social policy. The continuing flow of research money certainly provides school effectiveness researchers with vested interests for promoting and defending their work. However, to stress this point alone would be to deny the important regulative role of epistemology (and concomitant ontology). In other words, Mortimore and Sammon's repeated denial of 'ideological commitment' does not derive solely from material interests, since their commitment to a positivist epistemology (and thereby actualist ontology)[4] *itself* causally conditions their indignant response. In sum, it is being argued that exponents of school effectiveness research are unable to see the full force of the criticisms levelled against them since the causal mechanisms postulated by critics (which are held to be relatively independent of the events they generate) are deemed to have no real existence and thus are held not to be permissible contenders in their explanatory framework.

However, the accusation of ideological commitment is quintessentially *not* an issue of cynicism. The adjudication of the applicability of the charge does not of course rest with those subject to arraignment. Such a charge is *transcendentally* derived from the nature of social reality.[5] In other words, precisely what *must* school effectiveness researchers be studying in order to affect policy prescriptions? Transcendentally they are researching relatively independent causal socio-cultural properties in order to undertake their research in the first place. The power of head-teachers to discipline staff derives not from the properties of individuals *qua* individuals but from the causal properties of irreducible social relations between individuals. It is the temporal preexistence of social relations that establishes their autonomy as possible objects of social scientific investigation and their causal power that establishes their independent reality. The underlying thread of the critique of school effectiveness research is the commitment to positivist epistemology (and its ontological secretions, which may only be tacitly acknowledged) that necessarily has congruity with right-wing social philosophy, for positivism *denies* that social (or natural) reality is differentiated and structured. It is the denial of social reality has having ontological depth that facilitates and justifies the formulation of policies that accentuate inequality, since the *prior structured distribution of resources is disavowed by positivism*. 'Society' is held to be constituted solely by constantly conjoined events, somehow brought about by externally related individuals and their doings. Positivism cannot sustain the notion of necessity: that is, of internally related structures and the relations between them that underlie events. Consequently, inegalitarian social structures are thereby *reduced* to individuals and it is this fallacy of composition[6] that provided the (implicit) philosophical backdrop to the Conservative government's marketisation of, *inter alia,* the education system.

Thus individual teachers are to blame for inefficient and wasteful schools. The implicit atomistic ontology underpinning Conservative policy enables the finger of blame to be pointed firmly at individuals rather than at relatively enduring social structures. And it is precisely the individualistic nature of school effectiveness research that accounts for its use by the DfEE. Pre-structured inequalities can be safely ignored for they are not derivable from underlying generative mechanisms, such as capitalist social relations. Hence the accusation of ideological commitment, for school effectiveness research *conceals* the reality of structured inequality and simultaneously provides legitimation for its continuation and exacerbation. Thus to Ball:

> The ideological work done by effectiveness research, linked to notions like accountability, school review and school improvement, should not be underestimated. Again these concepts draw upon industrial metaphors and practices and link ideologically with the key notions of efficiency and value-for-money. Such terms operate judgementally within the input-output logic of the commodity form and displace and exclude other criteria of judgement. (1990, p. 89)

The fact that the school effectiveness research either ignores or plays down social class is not an instance of methodological indolence or unwitting omission but a *necessary concomitant* of a commitment to the positivist paradigm. Now, in rejoinder school effectiveness researchers have maintained that

> . . . the use of MLM [multi-level modelling] has enabled us to tease out the impact of a school on pupils with quite different educational backgrounds and to make the case on their behalf. We do not accept that the use of our data could dehumanize pupils more than any description or measurement does. We maintain that the availability of sophisticated data is actually more likely to help rather than harm those people from whom it is collected, hence the arguments in favour of ethnic or gender monitoring in relation to both educational and employment statistics. (Mortimore and Sammons, 1997, p. 185)

The notion of 'educational background' is not defined, yet Mortimore and Sammons do point out that work commissioned by OFSTED on 'contextualising school performance by taking note of the important impact of socio-economic disadvantage' (p. 184) was eventually rejected in a letter by the head of OFSTED. The key issue, however, is the emphasis accorded to multi-level modelling. Indeed, Mortimore and Sammons conclude that

> *More complex models are needed* to reflect the complexity of the educational processes and the difficulties of studying it. . . In general, we seek to use a range of quantitative and qualitative methods . . . depending on the nature of the problem and the theoretical approach being employed. (pp. 186–187; emphasis added)

Here we reach the impasse generated by the commitment to positivist methodology: the quasi-religious search for more sophisticated models that adequately reflect in quintessential scientific manner the complexity of social reality. The importance of socio-economic position has been belatedly acknowledged, yet simultaneously unremitting commitment to positivist methodology has led to mere statistical incorporation of the latter. The reality of social class is transformed into a statistical variable that more complex mathematical models somehow 'take into account'. This explains the repeated denial that school effectiveness research is ideological. Indeed, how can it be? For such research (now) incorporates social class — did not the head of OFSTED reject their findings? Inconsistency, however, does not constitute release from the prison of ideological commitment. Such inconsistency consists in the fact that social class presupposes a relational or structured social ontology, which positivism disavows.[7] This must not distract us from the fact that commitment to positivism remains firmly intact. The quasi-umbilical link with OFSTED remains, as does the charge of ideological commitment.

The charge cannot be refuted precisely because the positivist framework remains fundamentally unaltered by school effectiveness researchers. As Hamilton notes, in 1994 the School Effectiveness and Improvement Centre of the London University Institute of Education was commissioned to summarise current knowledge about school effectiveness and respond to the request for an analysis of the key determinants of school effectiveness. Whilst the Institute of Education recognised *contra* OFSTED that causality cannot proceed on the basis of a straightforward linear model, 'The notion of key determinants is abandoned, to be immediately replaced by "key factors" ... The key factors are packaged in "an accessible [i.e. tabular] format". The preamble to this denotes them as "correlates *of* effectiveness", whereas the table itself is headed "eleven factors *for* effective schools"' (1996, p. 55). The focus on correlates clearly exemplifies the positivist anchorage. In fact, the OFSTED inspection process remains essentially unchanged here. (The major change has been a considerable reduction in the number of evaluation criteria to be observed in making judgements.) The belated acknowledgement of such factors as social class, gender and ethnicity, whilst a welcome development, does not vindicate any claim to have superseded past criticisms. Indeed, the methodological injunction that more complex models be developed should be rejected entirely. In order to substantiate this claim and to tease out the inexorability of 'ideological commitment', this paper will examine closely the nature of positivist methodology and ontology, and show how it is *in social practice that the ontological presuppositions of positivism become ideological*. It is not the theoretical presuppositions *per se* that are ideological, but the social uses to which they are knowingly or unknowingly put. Whilst it is contingent that the (implicit) presuppositions of school effectiveness research are compatible particularly with the Hayekian inflection of Conservative philosophy, such contingent

compatibility cannot be wished away and is part and parcel of the charge of ideological commitment.

EXORCISING THE GHOST OF HUME: ESTABLISHING THE IMPOSSIBILITY OF POSITIVISM

Constant conjunctions and correlations: causal or descriptive?

The overriding concern of the school effectiveness research is with that which can be *observed* and *measured*. This is of course the staple diet of any positivist research methodology. Positivism has its origins in Francis Bacon and the British empiricist school of the seventeenth and eighteenth centuries. Particularly influential within the empiricist school was Hume. One of Hume's aims was to show that the idea of necessity essential to causation could not be derived from observation of the external world, but instead from the perceptions of the mind. For Hume the external world consists of nothing more than contingently related events; the job of the scientist therefore is to discover constant conjunctions of events. There are no *real* or *necessary* connections between, say, *A* and *B*. Instead of *A* caused *B*, we have *A* occurred followed by *B*. Clearly, to say that *A* occurred and then *B* happened does not imply that *A* caused *B*. Yet to say that *A* caused *B* is to say that the occurrence of *A* is a necessary and/or sufficient condition for the occurrence of *B*. In adhering to Hume's charter, we are not dealing with causation at all. As Layder argues, the Humean notion of causality as expressed in the notion of observable, regular conjunctions of events is not an adequate conception at all:

> since in essence it reduces to what amounts to a *description* and/or prediction rather than a true explanation of them [conjunctions of events]. For the realist a true explanation must go beyond the establishment of observed regularities and posit causal or generative mechanisms which underlie these regularities (conjunctions of events) and actually produce them. Thus for the realist, to say that B was caused by A on the basis of an observed regularity between the two is a *misapplication of the concept of causality*. (1990, pp. 12–13; emphasis added)

In everyday life we experience mechanical causation, that is, the displacement of physical masses in time and space, in terms of transitive verbs such as 'pushing' and 'pulling' which cannot be explicated *ostensively*, but rather embody an *intensional* relationship between cause and effect (Bhaskar, 1997, p. 90). This is simply a complicated way of saying that such verbs cannot specify the generative mechanisms that, for instance, enable Jane to shut the door. Causality concerns not a relationship between discrete events (Jane turns the handle, pushes and the door opens) but the *causal powers* or *liabilities* of objects or relations or their *mechanisms* (their 'ways-of-acting'). In other words, what is it *about* Jane that enables her to push open doors? As Sayer puts it:

People have the causal powers of being able to work ('labour power'), speak, reason, walk, reproduce etc. and a host of causal liabilities, such as susceptibility to group pressure, extremes of temperature etc. [. . .] The particular ways-of-acting or mechanisms exist in virtue of their objects' nature. The nature or constitution of an object and its causal powers are internally or necessarily related: a plane can fly by virtue of its aerodynamic form, engines, etc.; gunpowder can explode by virtue of its unstable chemical structure . . . people can change their behaviour by virtue of their ability to monitor their own monitorings; and so on. If the nature of the object changes then its causal powers will change too; engines lose their power as they wear out, a child's cognitive powers increase as it grows. (1992, p. 105)

The Humean notion that our knowledge is exhausted by constant conjunctions of events is readily discernible in the school effectiveness literature. The methodology aims to establish a number of 'outcomes' or 'indicators' on which the performance of schools can be measured. Such outcomes are directly measurable: assessment results, truancy rates, dropout rates, frequency of graffiti and so on.[8] Those schools that perform well enjoin an examination of *correlations* between directly observable and measurable 'factors' in order to provide practical solutions for those schools which are under-performing or 'failing'. In typical Humean fashion, then, there is a quest for observable and measurable factors that are held to lend themselves to the establishment of correlation coefficients; such correlations are held to *cause* 'successful' (or 'failing') schools. Here we reach the generic flaw in the research, for in effect the research has *no explanatory function whatsoever*. If we are only dealing with observable constant conjunctions of events then logically such events cannot be explained. And of course, to establish a correlation between regularly occurring events, say, between success at English examinations and the invariant colour of one's hair, is not to warrant the existence of a causal connection between them. This example would undoubtedly be construed as ludicrous by school effectiveness researchers since any reasonable social analyst would dismiss the significance of hair-colour. But they can only provide such a rejoinder in virtue of examining the *causal* properties of such phenomena as hair-colour and the conditions that may either facilitate or interfere with pupil ability, thereby contradicting their own positivist criteria.[9] Indeed, to recognise that certain 'factors' may intervene to preclude full realisation of academic ability would be to admit to society as an open system, thereby further contradicting positivist criteria. As Davies puts it:

Certain factors may be *associated* with good performance; but this is not to say that they *cause* them. A good school may be found to have high expectations of its students; but those high expectations may be a *result* of having a good student intake over a number of years who are likely to produce good results. (1997, p. 33)

Thus, to Fielding, 'the isolation of variables is particularly susceptible to distortions typical of atomistic understandings of the social world which tell us nothing about the interactions, interconnections and contradictions of lived reality' (1997, p. 140). Indeed, variables such as reading ability are *un*observable and thus any 'measurement' of them immediately contravenes positivist criteria. Moreover the measurement process itself *presupposes* the irreducible social setting of the school. Scott (1997) makes the important point that measurements of performance do not refer to levels of competence reached by the pupil and that the gap between competence and performance for individual pupils varies and cannot be measured. However, whilst it is now recognised by some (for example Hopkins, 1996) that the generic effectiveness findings are of no use because of their correlative nature, a complete rejection of the paradigm is not forthcoming. Instead, 'It is hoped that the next generation of school effectiveness studies will be able to build on and test out existing findings...to assist in the construction of a more coherent and developed theoretical body of knowledge concerning the ways schools influence their students' outcomes' (Sammons, Mortimore and Thomas, 1996, p. 25). Yet for Hopkins, 'The so-called ''effectiveness correlates'' however sophisticatedly defined are no substitute for models or theories of how schools function. Without this knowledge it is difficult to see how the field can progress' (1996, p. 30). Of course, it is logically impossible for the field to progress. Hopkins argues for a 'paradigm shift', whereby socio-cultural conditioning is properly incorporated. But a complete rejection, rather than shift, is required. For positivism quite simply cannot sustain any notion of the irreducible causal efficacy of socio-cultural properties. Thus it cannot *theorise* the conditions that maintain for socio-cultural change or stability. Hopkins rightly underscores the confinement of analysis to the level of events in the effectiveness research and his move away from an actualist ontology is welcome and long overdue. However, a paradigm *shift* does not denote a *complete* rupture with positivism. Any residual incorporation of positivist structures will only serve to undermine the reorientation that Hopkins rightly enjoins.

Mathematical models: the final nail in the coffin

The essentially *a*causal nature of school effectiveness research has not been confronted by the majority of its advocates. To reiterate, to accept the untenability of the Humean approach to causality would necessitate a complete abandonment of the positivist paradigm. Critics should therefore not be too surprised at the response embodied in the recent injunction to establish more sophisticated mathematical models. The development of more sophisticated mathematical models constitutes the school effectiveness researcher's last line of defence. As Sayer notes (1992, p. 174), how could anyone doubt the precise, unambiguous language of mathematics which can extend our powers of deductive

reasoning and moreover is subject to *internal* rather than empirical check? What needs to be emphasised is that the logic of adhering to positivist methodology entails that the charge of ideological commitment will always be deemed to have no validity. This is because the secreted atomistic social ontology 'blinds' its advocates to the transcendental realist alternative of ontological stratification (*inter alia* of social structure constituting an objective level or stratum of social reality).

Whilst mathematics may be the model *par excellence* of positivist methodology, it is quintessentially an *a*causal language. As Sayer puts it, mathematics 'lacks the categories of "producing", "generating" or "forcing" which we take to indicate causality. Mathematical functions such as $y = f(x)$ say nothing about what makes y or x . . .' (1992, p. 179). At best, mathematics records the *effects* of underlying generative mechanisms and by its very nature cannot provide an explanation of such effects. Such effects are extracted at the level of observable events; hence the use of mathematical modelling by school effectiveness researchers for the identification of necessary internal or external relations is logically impossible. The inability of mathematics to distinguish necessary from external or contingent relations invites the positing of spurious correlations. This is not to suggest that mathematics *per se* presupposes an actualist social ontology, but rather a positivist methodology of which mathematical modelling is an integral yet contingent part. One can easily use mathematics to quantify such phenomena as levels of truancy, examination results differentiated according to gender, and so on. But this is only part of the story: causal mechanisms (in the form of irreducible structural and cultural properties) need to be brought in to *explain* the latter.

Finally, mathematical modelling assumes the existence of a *closed* system. Thus the continuing positivist impulse to construct mathematical models contradicts the burgeoning acceptance of the *open* nature of any educational system (see, for example, Fitz-Gibbon, 1996). A real tension exists here, since whilst it is recognised that schools are 'adaptive' systems (that is, open), the simultaneous commitment to positivism clearly undermines this. Crucially, it must be recognised that schools operate within an open educational system, whose differential malleability (degree of governmental control, relative bargaining power of teaching unions. . . .) is historically variable and is not tractable to any form of mathematical modelling. In brief, a closed system exists *only* when two conditions for closure are met. The first condition has been termed by Bhaskar the 'intrinsic condition for closure'. Here there must be no change or qualitative variation in the object possessing the causal powers if the mechanisms are to operate consistently. The second condition for closure — 'the extrinsic condition' — requires a constancy of relationship between the causal mechanism and those of its environment if the outcome is to be regular. Yet as Bhaskar points out, 'in general, and outside astronomy, *closed systems* . . . must be experimentally established' (1997, p. 33).

Given the Humean underpinning of positivism, it is hardly surprising that until very recently school effectiveness research focused on school factors alone. The *statistical* incorporation of socio-economic factors into more complex models is attributable to the indubitable significance of social class *and* the commitment to positivist methodology. In other words, the reality of class cannot rationally be ignored yet at the same time positivist methodology necessarily forecloses an analysis of social class as *sui generis* reality, whose properties cannot be modelled mathematically; only its *effects* are tractable to measurement. Instead of recognising that society is an open system given its *human* constitution, social class, *inter alia*, is reduced to a statistical variable that ostensibly can be controlled for. In fact, I would suggest that whilst the *extrinsic* condition for closure is clearly making school effectiveness researchers uneasy, the *intrinsic* condition is implicitly presupposed. However, this entails the empirically somewhat dubious assumption that the structure of the school remains the same (constant and invariant) and thus effectively denies human agency. Yet the very *raison d'être* of school effectiveness belies this: is not the aim of the research to document and assess structural *change* and its implications for 'efficiency' and 'effectiveness'?

POSITIVISM, SOCIAL RESEARCH AND METHODOLOGICAL INDIVIDUALISM

There is a hard-and-fast distinction to be made between ontology and epistemology. To reduce the latter to the former would be to commit what Bhaskar has termed the 'epistemic fallacy', that is, the fallacy that statements about being can be reduced to our statements of knowledge about being. To reduce epistemology to ontology would be to commit the 'ontic fallacy', namely 'the definition or assumption of the compulsive determination of knowledge by being' (1993, p. 397). However, epistemology is irreducibly dependent upon ontology in the sense that one cannot sensibly start to talk of knowing *something* without that something having (or not having) an ontological status. It thus follows that whilst school effectiveness researchers would maintain that their research is underpinned by essentially epistemological concerns, such concerns *presuppose* a particular social ontology. In this case, an *atomistic* or depthless ontology whereby only events have incorrigible ontological status; underlying generative mechanisms are ruled out of court. Thus to Bhaskar:

> Positivism is a theory of *knowledge*. But any theory of knowledge presupposes an *ontology* — for it must be assumed, implicitly if not explicitly, that the world is such that it could be the object of knowledge of the specified type. Thus the Humean theory, which forms the lynchpin of the positivist system, presupposes an ontology of closed systems and atomistic events, constituting the objects of actual or possible experiences. (1989, p. 49)

In sum, the social ontology presupposed by positivist methodology *rules out any form of causal explanation, at best reducing effectiveness research to selective description.* But the transcendental realist case against the effectiveness movement has elicited indignation. How, then, are we to explain the apparent blindness of much of the research, as exemplified by the statistical incorporation of extra-school factors? One needs to examine the crucial role of ontology. For instance, crude Marxists either shun or dismiss the intransigence of 'gender divisions' in society: it is asserted that once we have a socialist society up and running inequalities between men and women will inevitably disappear. It is because of the ontological primacy accorded to the relations of production that the causal efficacy of gender ideology is not deemed to be of any explanatory import. Even when it is, such ideology is held to be an epiphenomenon — not to be analysed in conjunction with the relations of production. It therefore follows that, methodologically speaking, crude Marxist ethnographers would *not* be predisposed towards undertaking research that attempts to theorise, for example, the interplay between gender ideology, teachers' perceptions and actions, and pupil attainment.

Equally, positivism's implicit social ontology enjoins that social class can only be incorporated statistically. But there is a more fundamental point to be made about the reciprocal relationship between ontology and epistemology. For

> any theory of knowledge presupposes a *sociology* in the sense that it must be assumed, implicitly if not explicitly, that the nature of human beings and the institutions they reproduce or transform is such that knowledge could be produced. Thus the Humean theory presupposes a conception of people as passive sensors of given facts and recorders of their given constant conjunctions, which has the corollary that knowledge can always be analysed in a purely individualistic way. (Bhaskar, 1989, pp. 49–50)

Contra Mortimore *et al.* the accusation of 'ideological commitment' is transcendentally possible by virtue of the social ontology that their research methodology presupposes and the social uses to which their research is put. Given their positivist-induced myopia, one should not be surprised that they feel somewhat indignant at the accusation of ideological commitment, for their (implicit) ontological commitment *precludes* understanding of the philosophical reasons behind it. The congruity between the social ontology secreted by positivism and the individualist constituents of Conservatism is irrefutable. To conduct research on the basis of an implicit denial of the structured and differentiated nature of social reality is at best to provide inadequate accounts of 'school (in)effectiveness'. Yet the charge of ideological commitment derives its strength from the fact that such accounts feed into, and are buttressed by, government machinery which itself is parasitic upon individualistic social philosophy (see note 1). Indeed, positivist ontology necessarily degenerates into hyper-voluntarism since

differentially constraining social structures are ontologically erased at a stroke, thereby placing inordinate pressures on those deemed responsible for 'improving' schools (that is, heads and their staff). What are ignored, of course, are the structural *limits* to 'improvement'. As Bhaskar argues, positivism functions as an ideology for social practices 'by encouraging, by injunction or resonance, certain substantive conceptions of the nature of nature, society, persons and their interconnections' (p. 50). He rightly argues that just as for Marx the social function of the wage-form is to conceal the reality of exploitation, unpaid labour and so on, the social function of the 'constant conjunction form' is to conceal the reality of structures irreducible to events and the irreducibility of societies to individuals.

In other words, positivism's sociology is implicitly methodologically individualist. In essence, methodological individualism asserts that social phenomena such as banks, armies, universities, schools, and so on can in principle be *reduced* to statements about individuals and their day-to-day activities. The notion that structures are irreducible to their makers and relatively enduring is immediately taken to entail *reification*, that such structural configurations are somehow above-and-beyond us — namely supra-human phenomena. Yet to argue for the irreducibility of social structure is not to license reification. Rather, it is to provide sociology (and any substantive social research) with its *object* of study, namely the enduring social relations that agents create and maintain or transform and which condition subsequent social interaction. The transcendental claim that structure is pre-existent and relatively enduring — that students enter educational systems not of their making — signals its *sui generis* causal efficacy. To maintain that structure is *of its own kind* (which is what *sui generis* means) is not to reify it. *Sui generis* structures or 'emergent properties' only arise through the *combination* of internally necessary social relations. Such relations necessarily presuppose individuals for their relative endurance and causal efficacy. In other words, structure only works *through* people, not in spite of them (the error of reification).

There is nothing sinister or mysterious about the notion of structure as an emergent property possessing *sui generis* causal powers and liabilities. The defining feature of an emergent structural property is its internal relationship. This is what Durkheim meant when he compared the liquidity of water to society, for the properties and powers of society cannot be reduced to individuals; this applies equally to water since hydrogen and oxygen as separate entities are highly inflammable yet when combined possess distinctly non-flammable properties. Water, as an emergent, irreducible entity, is such by virtue of the fact that the two elements *necessarily* presuppose each other, and when combined produce irreducible powers. Let us take the example of a university. The individuals who teach, study, clean, and so on in a university reproduce the university in their daily actions, yet are causally affected by that which they reproduce. Such causality resides in the relations of student/lecturer, cleaner/cleaning supervisor. These social relations are

irreducible for the powers and properties that pertain to individuals *qua* individuals are modified in fundamental ways. This modification arises from the combination of internally necessary relations, that is, lecturer presupposes student, cleaning supervisor presupposes cleaner. The day-to-day behaviour of the individuals who fill the latter positions is *structured* in specific ways. A lecturer cannot award him/herself a doctorate just as a student cannot revoke the decision of a degree classification board. Such powers do not reside in the properties of individuals *qua* individuals but in the *social relations* that simultaneously presuppose such individuals for their enduring efficacy.[10]

By denying *sui generis* causal efficacy to structure, methodological individualism thereby removes the very ontological rug from under its epistemological feet. In brief, it is constitutive of school effectiveness research methodology in its attachment to actualism. The atemporal focus on discrete events — on what atomised individuals do here and now — results in hyper-voluntarism. It would conceivably be denied that school effectiveness research focuses on the 'here and now'. But methodological individualism implicitly suspends temporality Archer, 1999). It has to do this because to incorporate time into one's analysis is to acknowledge the temporal priority of socio-cultural conditioning. In other words, social analysis is possible because of the fact that structure and agency are not co-extensive. It is because 'structure and agency are phased over different tracts of time [that we are able] to formulate practical social theories in terms of the former being prior to the latter, having autonomy from it and exerting a causal influence upon it' (Archer, 1996, p. 694). For example, any substantive study of the imposition of the National Curriculum and assessment procedures for all 7, 11 and 14 year-olds requires an analysis of (a) the education system *before* promulgation of the latter (that is, structural conditioning), (b) interaction between corporate groups and central government (social interaction) and (c) the subsequent outcome (stasis or elaboration). The a–b–c sequential schema is predicated on the fact that structure and agency are not coterminous — they operate over different tracts of time. Thus school effectiveness methodology (or 'theory') cannot even begin to provide an adequate account of the contextual factors that causally condition what happens in schools. The limits to what can be realistically achieved within the macro parameters of local management of schools, standardised testing arrangements and quasi-market mechanisms can never be considered, let alone theorised, by positivist methodology.

CONCLUDING REMARKS

The purpose of this paper has been to defend the accusation of 'ideological commitment' levelled against the school effectiveness movement. The continuing inability of the majority of school effectiveness researchers to step back from their methodological injunctions has led one commentator to highlight the 'distressing blindness to the

ideologically and epistemologically situated nature of its own intellectual position' (Fielding, 1997, p. 139). The defence of the accusation of 'ideological commitment' consists in an elucidation of the relationship between the social ontology that positivist methodology presupposes and its implications for social policy. It has been argued that positivist ontology is congruent with specific constituent elements of Conservative social philosophy. Furthermore the 'distressing blindness' to the latter is not simply attributable to vested interests. Ontology itself plays a regulative function in conditioning those who remain committed to the positivist paradigm. The charge of ideological commitment stands, for it is precisely the ways in which school effectiveness research intertwines with past Conservative (and present Labour) education policy. Indeed, what is distinctively ideological about the research is the ways in which it lends credence to, and informs, policies which place the burden of 'improving' schools squarely on teachers' shoulders, thus concealing the reality of structured inequalities that necessarily delimit the extent to which 'improvement' can take place.

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NOTES

1. As with the epithet 'Thatcherism' considerable caution needs to be exercised here. The employment of 'right-wing' is a portmanteau. Its components do not comprise a neatly woven web of logical complementarities. The contradictions within 'Thatcherism' are not variations along a Conservative theme, since *inter alia* some of its constituents do not adopt an individualist social ontology, that is, an ontology of the world as flat, undifferentiated and unstructured. However, the generic basis for education policy during the 1980s *did* draw upon individualism, however inconsistently enacted in practice. Hayek, the key figure here, was a major inspiration who developed the notion of 'catallaxy', namely the spontaneous relations of free market exchange between individuals. According to Riley (1998, p. 73), Hayek's *The Road to Serfdom*, in which any form of state intervention was decried, was made compulsory reading for Sir Keith Joseph's civil servants. But as Sayer (1995) rightly points out, absent from Hayek's image of capitalism as an unimaginably complex mass of individuals responding to one another through markets is any notion of major social structures. Thus to Sayer, 'There are affinities here with Karl Popper's critique of revolution and his advocacy of "piecemeal social engineering". Though not based on such extreme aversion to intervention, Popper's critique suffered from the same neglect of major, enduring social structures which could be unlikely to yield to piecemeal change . . .' (p. 77). The argument of this paper is that it is precisely the individualist constituents of Conservative philosophy that are compatible with the secreted ontology of both school effectiveness and OFSTED methodology, which when executed provide the basis for the charge of ideological commitment. This is because both ontologically extinguish the referents of society, namely the *sui generis* nature of organisational forms and the irreducible relations between them. It is not ideological simply in the sense of justifying structural arrangements, for such structures may be held (correctly) to possess an ontological status *sui generis*.
2. School effectiveness research has emphasised 12 generic 'factors' which are held to be causally constitutive of 'successful' schools, namely: purposeful leadership; the involvement of the deputy head; the involvement of teachers; constituency among teachers; structured sessions; intellectually-challenging teaching; work-centred environment; limited focus within sessions; maximum communication between teachers and pupils; record-keeping; parental involvement; positive climate (factors taken from Chitty, 1997; pp. 53–54).

3. In a recent contribution to the debate on the National Curriculum, Chris Woodhead's predilection for pragmatic expediency — for 'what works' — is exemplified by his assertion that 'pragmatic step by step revision' of the curriculum may lack 'the glamour and excitement of a radical philosophical upheaval, but is likely to prove of more practical use' (Woodhead, 1993, p. 30).

4. 'Actualism' is a term developed by Roy Bhaskar (1997). It signifies the view which, while allowing the reality of things and/or events, nonetheless denies the real existence of underlying generative structures which account for things and/or events.

5. Transcendental realism makes claims as to what reality *must* be like in order to enable social scientific analysis of which *a priori* propositions can be advanced. Bhaskar's (1997) appropriation of Kant's term 'transcendental' is not done without qualification. The difference consists in the fact that while Kant's arguments lead to a theory about the structure-imposing power of the mind *vis-à-vis* the world, Bhaskar's lead to extra-discursive conclusions, namely about what the world must be like. This is where Bhaskar parts company with Kant, since we are not dealing with unknowable things-in-themselves.

6. This is the assumption that, in all cases, what is possible for an individual must be possible for all individuals at the same time. Hence the view among some sections of both the working and middle classes that *all* children have the same opportunity to go to university and subsequently enter one of the professions. The fact that all children have *differential* access to educational opportunities is thereby repudiated for there is no notion of *structured* inequalities, that the education system requires success *and* failures. Equally, the introduction of competition via examination League Tables *presupposes* a structured context for winners and losers.

7. One notable, consistent exception is Fitz-Gibbon, who maintains that '. . . we need value added measures based on cognitive measures and student-level data, not on home-background measures and not on aggregated data' (1997, p. 150).

8. In view of positivism's inability to countenance the non-measurable, a consistent approach ineluctably degenerates into reductionism. Thus Standard Assessment Tasks (SATs), for example, bypass the cognitive processes by which children learn and develop. Indeed, as with all performance indicators, the SAT grossly distorts reality in its dependence on proxies for measured outcomes. The intangible character of outcomes means that measures are ever dependent on constructs, which attempt to generate proxies for the outcome. The central difficulty, therefore, lies in the fact that the proxy can be criticised for failing to capture the character of the outcome (Cutler and Waine, 1994, p. 35). Cutler and Waine rightly emphasise the impossibility of measuring whether, for example, 'quality of life' has improved. But given positivism's advocacy of the fact/value dualism, this is hardly surprising. Such issues are consistently played down by OFSTED (despite nebulous references to pupils' spiritual development and school ethos). Indeed, the achievement of 'procedural objectivity' (Eisner, 1991) underpins the OFSTED framework and Handbook and is designed to eliminate the scope for personal judgement. In short, *why*-questions are consistently eschewed. If the dropout rate is 25% — why is this so and moreover why is it important? White neatly sums up thus: 'We are left in ignorance of how effective schools are in bringing about outcomes of a non-measurable sort . . . This is a central difficulty with the SER programme and cannot be emphasized too much' (1997, p. 51).

9. It *may* be that a pupil's hair-colour is a significant causal factor with regard to examination success, but positivism cannot tell us whether this is a contingent or necessary fact. As Angus argues, school effectiveness research 'assumes a positivistic, rational-empirical notion of theory-building based on what works as indicated by statistically significant correlations between specified factors and measured outcomes. There is little consideration of how or why particular factors lead to particular results; it is enough that there is a statistical correlation' (1993, p. 338). One of the central premises of this paper is that positivism disavows any consideration of the necessary or contingent relations that account for such results.

10. See Archer (1999) for an extended discussion on internal and external social relations.

REFERENCES

Angus, Lawrence (1993) The sociology of school effectiveness, *British Journal of Sociology of Education*, 14, pp. 327–339.

Archer, Margaret (1996), Social integration and system integration: developing the distinction, *Sociology*, 30, pp. 679–699.

Ball, Stephen (1990), *Politics and Policy Making in Education: Explorations in Policy Sociology* (London, Routledge).

Ball, Stephen (1995), Intellectuals or technicians? The urgent role of theory in educational studies, *British Journal of Educational Studies*, 43, pp. 255–271.

Barber, Michael and White, John (1997) Introduction, in: J. White and M. Barber, (eds.), *Perspectives on School Effectiveness and School Improvement* (London, Institute of Education).

Benn, C. and Chitty, C. (1996) *Thirty Years On: Is Comprehensive Education Alive and Well or Struggling to Survive?* (London, David Fulton).

Bhaskar, Roy (1989), *Reclaiming Reality: A Critical Introduction to Contemporary Philosophy* (London, Verso).

Bhaskar, Roy (1993), *Dialectic: the Pulse of Freedom* (London, Verso).

Bhaskar, Roy (1997), *A Realist Theory of Science* (London, Verso).

Chitty, C. (1997) The school effectiveness movement: origins, shortcomings and future possibilities, *The Curriculum Journal*, 8, pp. 45–62.

Cutler, T. and Waine, N. (1994), *Managing the Welfare State: The Politics of Public Sector Management* (Oxford, Berg Publishers Limited).

Davies, Lynn (1997), The rise of the school effectiveness movement, in: J. White and M. Barber, (eds), *Perspectives on School Effectiveness and School Improvement* (London, Institute of Education).

Eisner, E. W. (1991), *The Enlightened Eye* (New York, Macmillan).

Elliott, J. (1996) School effectiveness research and its critics: alternative visions of schooling, *Cambridge Journal of Schooling*, 26, pp. 199–224.

Fielding, Michael (1997), Beyond school effectiveness and school improvement: lighting the slow fuse of possibility, in: J. White and M. Barber, (eds.), *Perspectives on School Effectiveness and School Improvement* (London, Institute of Education).

Fitz-Gibbon, Carol (1996), Monitoring school effectiveness: simplicity and complexity, in: J. Gray, D. Reynolds, C. Fitz-Gibbon and D. Jeeson, (eds.), *Merging Traditions: The Future of Research on School Effectiveness and School Improvement* (London, Cassell).

Fitz-Gibbon, Carol (1997), *Monitoring Education: Indicators, Quality and Effectiveness* (London, Cassell).

Hamilton, David (1996), Peddling feel-good fictions, *Forum*, 38, pp. 54–56.

Hopkins, David (1996), Towards a theory for school improvement, in: J. Gray, D. Reynolds, C. Fitz-Gibbon and D. Jeeson, (eds.), *Merging Traditions: The Future of Research on School Effectiveness and School Improvement* (London, Cassell).

Layder, Derek (1990), *The Realist Image in Social Science* (London, Macmillan).

Mortimore, Peter and Sammons, Pam (1997), Endpiece: a welcome and a riposte to critics, in: J. White and M. Barber, (eds.), *Perspectives on School Effectiveness and School Improvement* (London, Institute of Education).

Riley, Kathryn (1998), *Whose School Is It Anyway?* (London, Falmer Press).

Sammons, Pam, Mortimore, Peter and Thomas, Sally (1996), Do schools perform consistently across outcomes and areas?, in: J. Gray, D. Reynolds, C. Fitz-Gibbon and D. Jeeson, (eds.), *Merging Traditions: The Future of Research on School Effectiveness and School Improvement* (London, Cassell).

Sayer, Andrew (1992), *Method in Social Science: A Realist Approach* (London, Routledge).

Sayer, Andrew (1995), *Radical Political Economy: A Critique* (Oxford, Blackwell).

Scott, David (1997), The missing hermeneutical dimension in mathematical modelling of school effectiveness, in: J. White and M. Barber, (eds.), *Perspectives on School Effectiveness and School Improvement* (London, Institute of Education).

White, John (1997), Philosophical perspectives on school effectiveness and school improvement, in: J. White and M. Barber, (eds.), *Perspectives on School Effectiveness and School Improvement* (London, Institute of Eduation).

Archer, Robert (1999), Structure, agency and the sociology of education: rescuing analytical dualism, *British Journal of Sociology of Education*, 20, pp. 5–21.

Woodhead, Chris (1993), Do we need a new National Curriculum?, in: John White and Philip O'Hear, (eds.), *Assessing the National Curriculum* (London, Paul Chapman Publishing).