An adequate theory of educational administration demands an emphasis on understanding rather than legitimation; the inclusion of qualitative as well as quantitative constructs; and the incorporation of philosophical concerns, especially those dealing with epistemology and ethics. Developments in the "new sociology" of education and in the ethnography of schooling offer the possibility of developing such a theory which would focus on the relationships between structures of knowledge and control, the influence of educational administration in mediating such structures, and its impact on the processes of cultural negotiation and transmission. The new sociology of education claims that previous studies of education have failed to examine the assumptions that lay behind the sociological analysis of schooling. Over the past decade, a substantial body of ethnographic and observational data has become available that cannot be adequately interpreted within the currently dominant bureaucratic/organizational models of schooling. The established need to include assessments of people's understanding, aspirations, meanings, and interests in any analysis of educational organizations is clearly capable of amalgamation with the traditions of educational ethnography. The alternative theory, outlined here, might be based upon Weick's application of loose coupling to educational administration, with the addition of a cultural dimension. (Author/WD)
EDUCATIONAL ADMINISTRATION,

THE TECHNOLOGIZATION OF REASON AND THE

MANAGEMENT OF KNOWLEDGE:

TOWARDS A CRITICAL THEORY.

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Administration is too serious an activity to be left either to the unsynthesized and endless inquiry of quantitative methodology or to the pragmatic indifference of administrators themselves.

Hodgkinson, 1978: 199
Introduction

The historical development of educational administration as an organizational profession has prevented the achievement of an adequate theory of educational administration. On the one hand, the appeal to industrial models of efficiency and effectiveness by practising administrators has demanded theories of legitimation rather than theories of understanding. On the other hand, imitation of the quantitative methods of the natural sciences by academic researchers has led to the exclusion of any theory of value and to the trivialisation of explanations of the essentially social and political processes involved in education administration.

This paper argues that what is demanded of an adequate theory of educational administration is a) an emphasis on understanding rather than legitimation, b) the inclusion of qualitative as well as quantitative concerns in the construction of theory, and c) the incorporation of philosophical concerns, especially those dealing with epistemology and ethics.

In the pursuit of such a perspective it is argued that developments in the New Sociology of Education and in the ethnography of schooling offer the possibility of developing a critical theory of educational administration. Such a theory would be focussed on a) an examination of the relationships between structures of knowledge and structures of control; b) an analysis of the influence of educational administration in the mediation of such structures in schooling; and c) the impact of educational administration on the processes of cultural negotiation and transmission.

Understanding and Legitimation

As a number of authors have pointed out, the historical rise of particular professional groups is invariably associated with processes of public legitimation of their altered social and economic status through
ideological appeals to esoteric knowledge, special talents, public benefit and social progress (Bledstein, 1976; Larson, 1977). The rise of educational administrators as a social category is no exception. The particular mystique claimed by educational administrators was initially based upon the ethic of practicality, efficiency and effectiveness, borrowed from a dominant and successful business community (Callaghan, 1962). Subsequently appeals have been made to the various mystiques of scientific management, bureaucratic rationality, human relations theory and social and management science (Bates, 1980a, 1980b; Callaghan, 1962; Katz, 1975; Tyack, 1977; Tyack and Hansot, 1980). The main ideological functions of such appeals were those of legitimating the newly won occupational status of educational administrators; justifying the procedures of control they adopted within educational systems and maintaining public commitment to the expanding financial demands made by schools.

The theories expounded by educational administrators were only partly attempts to understand the nature of their task. More often they consisted of didactic lists of principles to be applied in the management of schools or of ideological justifications of practice calculated to develop public support for the pragmatic demands of institutional growth. This is not to say that such appeals should be condemned, simply that the function of theory, as far as most educational administrators were concerned, was not an empirical understanding of their practice but rather a pragmatic and persuasive justification of it.

The Dominance of Technical Rationality

Necessarily such attempts to legitimate practice led administrators to appeal to the spirit of the times, or at least to those identifiable features of contemporary social and economic life which would best serve the interests of institutional and occupational development. Three features
in particular appear to have been especially important. The first was the idea of social progress (whether advocated by Social Darwinists or the Eugenicists). The second was that of scientific understanding (in both its pragmatic and romantic forms). The third was that of technological control (which was based upon scientific understanding and contributed towards social progress).

Clearly as scientific understanding was basically a process of knowledge production and technological control a process of knowledge application the knowledge industry was fundamental to the acceleration of social progress (Holmer and Marx, 1979). Thus, education was a key institution of basic importance to the progress of mankind. Such arguments not only justified the expansion of educational institutions (and the educational professions along with them) they also came to dominate them. The dominance of the logical positivism of science whereby knowledge was defined exclusively in terms of what could be 'scientifically proven' led to the curriculum of schools being constrained in a particular fashion, both in terms of its balance, its content and its criteria of evaluation (Apple, 1979; Bernstein, 1975; Giroux, 1979).

Essentially the incorporation of the scientific model of knowledge led to the demotion or exclusion of alternative forms of knowledge such as aesthetics, historical, social, political and religious knowledge, or to their reinterpretation in terms of the scientific method. Moreover the application of science to practical problems which constituted the basis of technological control also came to dominate the procedures of education. Efficiency and effectiveness in the communication of knowledge became the criterion by which the productivity of administrators and schools was to be judged. Indeed the influence of technical rationality in schooling is a reflection of the dominance of the machine model and its effects on the incorporation of individuals into rationally organised systems (Edwards, 1979; Emery, 1969; Hamilton, 1980; Horkheimer, 1974).
The Importance of Personal Knowledge

What is excluded from the highly rationalised model of mass schooling presented and defended by educational administrators is any recognition of the value of social, historical or ethical debate. The appeals to legitimating ideas of scientific understanding, technological control and social progress have been incorporated into mass education systems in ways which devalue those forms of knowledge which relate to other facets of human experience, especially those which allow the development of critical rather than technical consciousness: aesthetics, ethics, historical, political and social knowledge. Both personal knowledge (Polanyi, 1958, 1966) and critical consciousness (Habermas, 1971, 1972) are ill-served by systems which are both devoted to and dominated by an exclusive reliance on scientific understanding and technical control.

What is crucially missing from such theories of educational systems is a critical awareness of the relations between the production and communication of knowledge and the processes of social and cultural control. A similar absence of critical consciousness is evident in theories of educational administration (Bates, 1980, 1981; Foster, 1980).

Knowledge and Control

It is precisely the development of a critical assessment of the incorporation of particular social, political and economic interests into education systems that has been the focus of what has come to be called the New Sociology of Education. The initial volume of papers which launched the New Sociology of Education was devoted to the exploration of relations between structures of knowledge and structures of control (Young, 1971). The basic problem was argued to be that the sociology of education had for too long 'taken' its problems rather than 'made' them. In essence the argument was that a number of unexamined assumptions lay behind the
sociological analysis of schooling and that there was a need to tackle these assumptions in a critical fashion, incorporating questions regarding them into the analysis. The sociological analysis of the curriculum, for instance was to be concerned not only with the comparative analysis of curriculum content but also with a critical investigation of those interests which were served by particular curricular structures and, moreover, with the question of how alterations in curriculum structure might be brought about in the interests of competing social groups (Young, 1971). Similarly, the analysis of teaching and learning was to be conducted in terms of a critical analysis of the power relationships involved and the interests served by the establishment of associated behavioural norms (Esland, 1971; Keddie, 1971). What counts as knowledge in schools was argued to be the result of particular social influences. It was also argued that the incorporation of such interests into schools had more to do with the relative power of such interest group than with the structure or value of knowledge per se (Young, 1971; Blum, 1971). This relativistic position has been a major source of controversy (Bates, 1980; Clarke and Freeman, 1979; Pring, 1973; White, 1975; Young, 1975).

Whatever the merits of the relativism of the New Sociology of Education its attempt to develop a critical consciousness of its own assumptions and of the relations between schooling and social structure was the forerunner of several subsequent attempts at critical analysis. In England Bernstein developed a series of analyses of the relations between school structure and social structure (1967); the influence of ritual in the maintenance of reproduction of such social structures (1966); the nature of the classification and framing of the curricular message systems of schools (1971); and the forms of pedagogical control employed in particular types of school (1973). Such work was critically important in the analysis of class reproduction.
In France Bourdieu was developing a similar theory of cultural reproduction whereby the school was regarded as a legitimating device which transformed the 'cultural capital' of the dominant elite into forms of public recognition of their superiority while simultaneously confirming in the consciousness of the dispossessed the notion that their dispossesion was in the nature of things (Bourdieu, 1971a, 1971b, 1977).

In the United States Bowles and Gintis (1975) argued the case for a theory of correspondence which saw not only the content but also the organisation and the behavioural outcomes of schooling as engineered to correspond with the interests of capital in the production of a docile, compliant and minimally skilled workforce. In this they both articulated and gave a historical and social context to the criticisms of a number of other authors. Apple (1979, 1980) took Bowles and Gintis' argument a step further, arguing that in the post-industrial society it was not so much the production of a skilled and compliant workforce that was required of schools but rather the efficient production of technical knowledge for the development of the technical basis of production in capital intensive industry.

What these critical analyses of the relations between education and social structure have in common is a basic and critical concern with the ways in which structures of knowledge and structures of control are brought together in education systems in ways which incorporate minority social interests and exclude the interests and understandings of the majority of the school's population.

Administrative Structures and the Mediation of Control

It is at this point that the analysis of administrative theory as a legitimating device and the critical theories of the New Sociology of Education converge. For if any credence at all is given to the perspective
of the New Sociologists of Education then the analysis of the administrative structures through which the relations between structures of knowledge and structures of control in the wider society are incorporated into the structures of knowledge and control in schools becomes crucially important (Bates, 1980c).

As yet, little work has been done towards such an analysis. However, the direction of such a critical perspective seems fairly clear. Firstly, attention much be paid to the ideological appeals of conventional theories of educational administration as legitimating devices in the engineering of public support for the growth of both educational institutions and professions. It seems likely that these ideas are precisely those which form the ideological basis of the technocratic society - scientific understanding, technological control and social progress. An analysis of the ideological underpinnings of educational administration is a good starting point and some of the necessary work has already been undertaken (Callaghan, 1962; Tyack, 1977; Tyack and Hanson, 1980).

Secondly, the elaboration of such appeals in the theories of organisation which justified the practice of educational administrators was based upon a selective reading of social theorists. For instance, Weber's model of bureaucracy and his description of it as a rational form of organisation was quoted approvingly in the literature of educational administration as the paradigm of educational organisation towards which educational administrators should strive. Weber's pessimism about its dehumanizing effects, the probability of its exploitation by dominant interests in society as a means of social control, and his advocacy of the method of 'verstehen' in the understanding and analysis of social action were ignored. The reincorporation of such insights in a critical fashion into theories of educational administration is a second necessary requirement of an adequate theory.
Thirdly, the effects of organisational structures on ways of thinking is an important part of an adequate theory of educational administration. For instance, if Berger, Berger and Kellner (1973) are correct about the influence of the bureaucratic design of organisations on the development of bureaucratic consciousness, the shaping of schools according to such principles of organisational design may well have similar effects on the consciousness of pupils. Moreover the ritualisation of relations required under such circumstances may well deny the frequently espoused aims of developing independent, enquiring, critical and imaginative ways of thinking in children. Certainly the cognitive style of bureaucratic consciousness identified by Berger, Berger and Kellner incorporating the principles of orderliness, componentiality, arbitrariness, predictability, abstraction, moralised anonymity and passivity seems more in keeping with the requirements of a highly rationalised social structure than with visions of human innovation, creativity, independence and dignity which are supposed to sustain the idea of liberal democracy. A critical appraisal of administrative practices in education which takes account of such concerns is the third component of an adequate theory of educational administration.

Fourthly, as Wake (1979) points out the principles of organisation employed by administrators appealing to bureaucratic theory as a legitimation of their activities imply not only the production of bureaucratic consciousness in members of the education system but also a special treatment of knowledge itself. Indeed the epistemology which underlies bureaucratic forms of organisation is similar to that underlying the production of bureaucratic consciousness. Both have roots in the logical positivism of traditional science. The constituent basis of this epistemology derives not so much from a coherent theory of knowledge, but from the demands of bureaucratic organisations which require that knowledge be divided into discrete components; that the components be ordered in
sequence; that communication of knowledge be technically simple; that acquisition of knowledge is recordable in quantifiable form; that knowledge be objectified; that knowledge be stratified in a hierarchy of value or prestige; that knowledge based upon abstract principle be valued over the knowledge gained from personal experience (Wake, 1979). These principles are argued to be directly related to the incorporation of bureaucratic principles of organisation in schools. Their aim is to facilitate the administration of the organisation. It is this fourth consideration which is the most crucial in the development of a critical theory of educational administration for it is at this point that the structures of knowledge and control of the wider society and those of the school combine in practice. It is the effect of administrative structures on that practice which is the focus of analysis.

Administrative Structure and the Control of Schooling

The processes of schooling are structured through three message systems: curriculum, pedagogy and evaluation. Curriculum defines what is to legitimately count as knowledge. Pedagogy defines what is to count as a proper means of transmission. Evaluation certifies what is to count as the proper achievement of knowledge.

The logic of administrative/bureaucratic rationality is a crucial factor in the structuring of these message systems. The three principles appealed to in this structuring - scientific understanding, technical control and social progress - have many direct effects. For instance, scientific understanding - at least in the logical positivist tradition - is directed towards the determination of generalisable laws which form the basis for prediction, and subsequently for technical control in the furtherance of social progress. Technical/administrative rationality is directed therefore towards the generalising and legitimation of universal solutions to curricular, pedagogical and evaluative issues. In this process
issues that relate to social progress tend to take a subsidiary position to issues of a technical nature. Alternatively, social progress is defined in technical terms as the greater rationalisation of social as well as productive processes. In this way the authority of experts can be appealed to as the source of judgment over the ends as well as the means of organisation. Thus, a large degree of neutrality is presumed which denies the inherent social and political conflicts which surround the definition of schooling.

In this process competing definitions of worthwhile knowledge which are related to cultural and personal ideals are redefined as 'basic skills' thus making them both neutral and amenable to processes of technical manipulation and control. Such procedures are seen at their most extreme in the increasingly sophisticated curriculum packages which specify not only content but also pedagogy and evaluation. The net effect of such packages is to technologise learning, standardising content, pedagogy and evaluation. The result is argued to make the processes of schooling increasingly subject to external control and reduce the capacity of teachers to adapt content, pedagogy or evaluation to the cultural or personal interests of their students (Apple, 1979; Bates, 1980b, 1980c, 1981; Giroux, 1980; 1981; Kemmis, 1980; Popkevitz, 1979, 1980; Wise, 1977, 1979).

The appeal of such packages to administrators lies in their attempted neutralisation of social and political conflicts; their standardisation of content, pedagogy and evaluation; their conformity to the institutional requirements of bureaucratic organisation, consciousness and epistemology and their capacity for legitimation through appeals to scientific understanding, technical control and social progress.

Problems in the Technologization of Reason

The technologization of schooling based upon such principles and articulated through processes of rational administration can be read as part
of the attempted rationalisation of the wider society (Gouldner, 1977; Habermas, 1971; Horkheimer, 1974) and the integration of various sectors of production. While it is possible to argue that the technologization or rationalisation of society is proceeding at a steady pace, and the technologization of schooling along with it, it is also possible to argue that this process is not without its problems. For instance as Kogan (1979) points out, most governments in the Western hemisphere are finding it increasingly difficult to legitimate their planning processes according to the historically accepted rhetoric that scientific understanding leads inevitably to the development of processes of technical control which can shape the economic, social and political future in ways which increase wealth, freedom and happiness. Indeed, the current crisis of planning is arguably centred around the legitimation crisis whereby governments can no longer produce evidence of economic or social progress which will buy the diffuse mass loyalty needed for the continuance of government (Habermas, 1976, 1980). Moreover, as the rational planning model is shown to be ineffective in dealing with this crisis, the legitimating ideal of the meritocracy of ability is also challenged (Bates, 1979; Husch, 1979; Carnoy and Levin, 1976). In key areas of administrative theory (Bates, 1980a, Erickson, 1979; Griffiths, 1980); curriculum theory (Apple, 1979, 1980; Giroux, 1980; Whitty, 1980); evaluation theory (McDonald, 1976; Kemmis, 1980) and pedagogical theory (Anyon, 1979, 1980; Popkevitz, 1980) the scientific language of the organisational professions is under attack as simply disguising the entrenchment of particular interests.

The crisis of planning is responded to at one level by increasing emphasis on developing even more rationalised or technological administrative procedures of control. (Having lost sight of our objectives we redouble our efforts!) Through such methods still further contradictions are being produced especially in attempts to rationalise the relationship between schooling and work (or non-work) (Callaghan, 1978; Apple, 1980; Williams,
1979) and in the rationalisation of inter-sectoral planning and coordination between government agencies and the economy. At the same time the limits of rationalisation are also being realised (Kogan, 1979; Wise, 1977, 1979) and rationalised planning models are becoming differentiated and less predictive in the face of demands for regionalisation, localisation and participation (Archer, 1978; Kogan, 1979).

In education the pressures towards greater rationalisation of administration, curriculum, pedagogy and evaluation are increasingly recognised as failing to alter the relative outcomes of the education system (Halsey, Heath, and Ridge, 1980; Husen, 1979; Jencks, 1979). Moreover there is a growing recognition that demands for accountability within hyper-rationalised systems cannot be met (Apple, 1980; Wise, 1977, 1979).

Again, there is an increasing tension between the demands for accountability channeled through centralised systems and the ability of such systems to meet locally or sectionally based demands (Archer, 1978; Habermas, 1976; Pusey, 1980, 1981). Decentralisation, however, appears to lead to substantial problems of articulation between government sectors (Kogan, 1979; OECD, 1977) and between government and the structure of work in the corporate economy (Ashenden and Gallagher, 1980; Bell, 1976; Braverman, 1974; Edwards, 1979; Feinberg and Rosemount, 1975).

The technologization of schooling on the basis of scientifically legitimated generalisable solutions to problems of curriculum, pedagogy and evaluation, and its incorporation into administrative structures of control is therefore in a certain tension with other social developments and is also caught up with the de-legitimization of such processes as their ideological appeal fails to meet the crisis of development currently being experienced.
Empirical Challenges to the Veracity of Theory in Educational Administration

If the legitimating ideology of theory in educational administration is being attacked from outside, then so is the descriptive basis of its claim to empirical accuracy being attacked from within the educational community. Over the past decade or so a substantial body of ethnographic and observational data has become available which cannot be adequately interpreted within the dominant bureaucratic/organisational models of schooling current among educational administrators. Smith's portraits of classrooms and schools do not, for instance, depict them as systems of rational decision making and orderly control. Indeed his attempts to articulate theories of teaching based upon direct observation uncover a number of quite crucial disparities between administrative models of curriculum, pedagogy and evaluation and the reality of classroom and schools (Smith and Geoffrey, 1968; Smith and Keith, 1971; Riffel's 1977 account of the pupil culture of schools questions the presumed relationship between the formal organisation of schools and the cultural patterns of pupil activity. Cusick's (1980) attempted explanation of the networks of influence presumed to operate within the organisational context of schooling ended up describing the independence of teachers from such internal networks and the close articulation of their idiosyncratic allegiances to external sources of support. Willis (1977) showed the primacy of cultural norms external to the school in transforming pupils awareness of and relations to schooling. Ashenden et al (1980) and Bates et al (1981) in their explorations of the community understanding of schooling show how such understandings are at best obliquely related to the administrative myths of schooling. Wilcox (1980) in her review of ethnographic studies of schooling reaches similar conclusions: schools do not operate in the ways which administrative theory in education says they should.
Towards a Reformulation

This increasing awareness of the gap between traditional administrative theory in education and the reality of life in schools has led to a serious questioning of the empirical adequacy of such theories (see Bates, 1980a, 1981a; Erickson, 1979; Foster, 1980; Griffiths, 1979). It has also led to a variety of attempts to devise alternative metaphors for the analysis of educational administration. Greenfield (1973, 1975, 1979) for instance was among the first to recognise the need for and the potential of, a cultural approach to administrative theory. Unfortunately, the phenomenology advocated by Greenfield is ultimately incapable of providing a firm foundation for a theory of valuation because of its implicit relativism (see Bates, 1980d, 1981b; Bernstein, R. 1976). However, what Greenfield did establish was the need to include assessments of people's understanding, aspirations, meanings and interests in any analysis of educational organisations.

Such a position is clearly capable of amalgamation with the traditions of educational ethnography discussed above (Wilcox, 1980). It is also compatible with the philosophical analysis of administration provided by Hodkinson (1978). Moreover, such a position will allow the satisfaction of several of the criteria established in the opening sections of this paper. But what might such an alternative theory look like?

Bates (1981c) has argued that the transformations of 'loose coupling' theory proposed by Meyer et al (Meyer and Rowan, 1977, 1978; Myer, Scott and Deal, 1980) on the basis of Weick's (1976, 1980) original application of this 'sensitizing concept' to educational administration may provide the underpinnings of such a theory. Arguing that the tight/loose dichotomy proposed by Weick and the internal/external, technical/institutional dichotomy proposed by Meyer et al provide an incomplete structure for the
analysis of administration, Bates (1981c) suggests that a further dimension rational/cultural needs to be added. This distinction is directed towards the analysis of the forms of coupling engaged in by organisations and their environments.

On the one hand rational coupling refers to the processes of technical control, evaluation and accountability which use the logic of empiricism or systems theory as a basis of negotiation and legitimation. In such rational coupling questions of value and interest are frequently submerged or disguised in the focus on the rational articulation of relationships and processes.

Cultural coupling, on the other hand, refers to the processes of negotiation and legitimation of activities based on a wider appreciation of the understandings, aspirations, interests and values of individuals and groups. Such interests are often expressed in forms of action which are 'non rational' i.e. not subject to technical manipulation, but are nonetheless vivid and powerful representations of understandings and interests. Some of these representations are made via metaphor, myth, ritual, ceremony, drama and performance which produce empathy, insight and understanding and integrate personal knowledge with social experience.

Meyer and Rowan (1977, 1978) argue that educational organisations coordinate and legitimate their activities through ritual and ceremony rather than through technical procedures. The idea of cultural coupling extends this concept into an arena where administrative theory may be based on cultural analysis rather than the logical positivism offered by the 'theory movement' or the ideological appeals of 'management science'.

The tools for such an analysis extend beyond the range offered by the quantitative empiricists into the techniques and concepts employed by cultural anthropologists in their analysis of language, ritual, performance, ceremony, in the construction of thick descriptions (Geertz, 1973) of the
meaning of social activity. To these may be added the range of analytic and conceptual tools derived from the analysis of aesthetics in, for instance, theatre (Grumet, 1980), literary criticism (Eisner, 1979) and art (Beyer, 1977). The relevance of such approaches is demonstrated by their capacity to portray personal, social and political ideals and understandings in ways that allow their discussion and negotiation.

However, such cultural analysis must be combined with a structural analysis of education systems if it is to provide a comprehensive account of administrative processes in education. Such a perspective is provided by the New Sociology of Education in its attempts to locate explanations of particular educational activities within social, and historical analyses of the influence exerted on those activities by various social interests (Bates, 1980a, 1981b; Giroux, 1980; Young and Whitty, 1977; Whitty and Young, 1976).

If educational administration is regarded as a mediating process which articulates particular educational activities with wider social interests then the relevance of such a perspective becomes clear. Moreover the proposed reformulation of theory in educational administration may well be richer, more sensitive and more accurate than that based upon quests for empirical generalisation and appeals to standardised, routinised models of rationalised structures. The major advantages of such a perspective in the practice of educational administration lie therefore in:

a) its empirical validity, in that the thick descriptions it provides are fuller and more complete than those derived from quantitative methods of analysis, b) its reflexivity, derived from its critical stance towards the assumptions on which its analysis is based, c) its epistemological sensitivity, in that the necessary relation between understanding and social structure is recognised, d) its ethical awareness, in that it includes rather than excludes questions of value and responsibility, and e) its contextualisation.
of administrative activity in its recognition of the particular influences of social and historical action. While the precise formulation of such a critical theory of educational administration is a matter for further exploration and development, the main outlines are fairly clear and indicate an impending transformation of the field.
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