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ABSTRACT

An understanding of the organization called "school" is dependent not primarily on "scientific" constructs, but on sets of values and other phenomena that elude precise measurement and yet influence people's behavior. These phenomena have been largely ignored by researchers in educational administration. The social sciences have tended to dominate research into educational administration. However, the generally accepted "ideal" scientific approach provides only a partial explanation of the behavior of participants. Definitions of the word "theory" have tended to be based on the hypothetico-deductive approach; we have tended to ignore the argument that science also progresses by the contribution of courageous individuals who put forward irreverent, unorthodox ideas. (Author/JG)

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VALUES, UNORTHODOXY AND THE "UNSCIENTIFIC" IN
EDUCATIONAL ADMINISTRATION RESEARCH

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In Stenenvolf Herman Hesse claims that "Human life is reduced to real suffering, to hell, only when two ages, two cultures, and religions overlap." He might have added "...when some fundamentally opposing and one-eyed academics meet at a conference on educational administration"! As one of those responsible for the planning of the third International Intervisitation Program I am still shaken by the heat engendered by Barr Greenfield's now famous (or infamous) paper on phenomenology and the theory of organizations.¹ I was not particularly excited by the paper so competently delivered in Bristol during July 1974 and I must admit to being not particularly excited by it to-day. Dr. Greenfield had a point to make and he made it very well. Like most participants in the programme I found arguments with which I did not agree (for example, the assertion that the social sciences seek a grand over-arching theory to explain ultimate reality) - and those with which I did agree (for example, Burns' belief that the better manipulation of numbers cannot substitute for the emptiness of the concepts to which they apply). A first rate scholar, Greenfield opened new doors for some and pricked the pretensions of others who were hiding behind closed doors.

Greenfield obviously pricked some too assiduously, for in the course of the following two or three years there emerged a pompous polarization marked at one extreme by those who claim that organizational behavior can be fully understood only through "hard" data derived by empirical means from theories based on Feigl's "purely logico-mathematical procedures" and at the other by those who claim that such behavior can only be understood through "soft" data derived from phenomenological procedures such as the hermeneutic-emancipatory approach of Habermas.² The controversy has produced several publications, including a spirited series of articles in U.C.E.A. Review.^{3,4,5}

This polarization, though productive of healthy argument, also reflects a sad naivete regarding the ways in which human knowledge has advanced. In a sense the controversy is reminiscent of that which followed C. P. Snow's Rede Lecture, The Two Cultures and the Scientific Revolution delivered in Cambridge almost two decades ago. Snow brought to

the surface the contemporary split in Western intellectual life between the so-called "sciences" and the so-called "humanities". Responses, like those experienced by Greenfield, were often emotional and harsh things were said by men and women trained in the objective, cool tradition of scholarship. As one observer, whose sympathies were only too obvious, put it, "Humanists are ignorant of science and are ashamed of it; scientists are ignorant of the humanities and are proud of it."

One could be excused for hoping that by the mid 1950's (to say nothing of the mid 1970's) academic man would have recognised the need for careful analysis rather than argumentum ad hominem. After all, our civilization has by now had much experience of new ideas and of foreign gods - even if the latter have rarely hailed from Canada! Two thousand years ago Horace described how "captive Greece took captive her rude conqueror" and a thousand years later the mediaeval world ultimately admitted the benefits of the reintroduction by the Arabs of Aristotelian logic. As Henle points out,

...The second article of St. Thomas' Summa Theologiae asks whether sacred doctrine is a science (utrum sacra doctrina sit scientia). This is a question which could not have been asked in tenth century Christian culture.⁷

There is in academe an urgent need for a little more humility and a good deal less pontification. We do not have to spend much time in resurrecting ghosts to come up with the haunting names of Socrates, Jesus, da Vinci, Pasteur, Darwin and Einstein. These men had much in common: not only were they irreverent, eccentric, unorthodox and in recent cases "unscientific", but they were all laughed at. In this regard it is a sobering thought that the word "science" did not appear in the Oxford Dictionary until 1867 and that as late as 1884 Arnold Toynbee could deliver his lectures on The Industrial Revolution in England without so much as mentioning the word "science".

A study of the politics of scholarship, to take one small part of the spectrum of learning, suggests that the acceptance or otherwise of a theory or of a fact was almost invariably dependent upon the influence of powerful contemporary value systems and the groups which espoused those systems. While historical examples of this generalization are legion, Feyerabend reminds us to peep behind the test tube and the computer to-day, also.

Formal education has always been dominated by value frameworks as befits a social institution established to transmit selected aspects of the cultural heritage. While it is true that the "Darwinian cue" as Harold Rugg calls it stimulated the application of science to education, thus beginning a long and perhaps incestuous relationship with psychology, a very great deal of attention is still paid to the area loosely known as Philosophy of Education. It is an interesting observation that in North America at least, little attention is given in preparation programs for school administrators to the question of values while the literature in the field of philosophy and educational administration is miniscule. Research projects in the area appear to be very few and far between.

The emphasis upon the social sciences in the literature of educational administration has in the past tended to support the rather rigid interpretation of science presented by Feigl⁹: the world is a system or machine made up of objects of which man is one among many to be controlled or to control. It is difficult to ascertain from the social science literature as it relates to educational administration that the world of science itself has undergone a revolution. The modern physicist, for example, now sees the world as a system of ever-moving and ever-interacting components as inseparable from man as he, the observer, is inseparable from them. Moreover, contrary to the nineteenth century¹⁰ viewpoint, absolute certainty now escapes physicist and mathematician alike. Let me make it crystal clear that I am not denigrating the role of the social sciences in helping to explain and predict organizational behavior; I am merely asking to what extent we are likely to achieve certitude in the study of the complex social system we call "school" when certitude is no longer achievable in mathematics.

In the study of educational administration theories emanating from the social sciences are now commonplace (it does not concern me that the majority of these theories were developed outside of educational institutions). But where are the theories from religion, ethics, mythology, history, poetry, drama and the novel? It is worth reporting here that when U.C.E.A. was tooling up for the preparation of the book Social Science Content for Preparing Educational Leaders Crane and myself wrote to the editors asking for the inclusion of a chapter or chapters

concerned with the above areas of enquiry. Our suggestion was politely rejected (a decision which I still regret), but we did manage to squeeze one or two commercials about our prejudices into another chapter we were invited to write.¹³

This is an appropriate time to ask whether the life of human organizations can in fact be understood without reference to these fields, irrespective of how "unscientific" they may be. Some simple examples from life will, I hope, make my point :

1. On an island in the South Pacific is an agricultural co-operative, which produces crops for the common good, advice of a technical nature being given by an Australian expert. A year or so ago the crop of taro root was so good that there was sufficient available for export to neighbour-islands. The co-operative refused to agree to export. When pressed for an explanation they said, "Yes, we would like the extra income, but what does the taro think?"

2. In an excellent case published by the Harvard Business School the story of the decline and fall of the Saturday Evening Post is analysed in detail. In spite of vast data-gathering resources, strong financial reserves and much expert advice an executive stood by the Post, selling much more profitable enterprises in order to keep his much-loved journal on the news stands.

3. A school with which the writer is closely associated is owned by the Church of England. It is a boarding and day school for boys only and it has served the region of several thousand square miles for nearly a century. The headmaster was a Rhodes scholar and is a graduate of Oxford University. Irrespective of how burdened he is with administrative duties he always teaches a class and considers it essential that he personally coach the first cricket team.

4. Another school known to the writer is a church school for girls. Recently an ex-member of the teaching staff wrote a thinly-disguised novel about the personal lives of three previous headmistresses, one of whom was described as a lesbian.

One could go on at length with examples like these. It is only too obvious that unless certain non-scientific information is available to the researcher he is likely to miss seeing the real institution altogether. In the cases above not to have knowledge of religious beliefs in the case of 1, personal commitment in the case of 2,

tradition in the case of 3, and literature in the case of 4, would have involved looking at only half or less of the institution.

Feigl once described the history of our culture as a long upward struggle against "the dogmatic, other-worldly, super-naturalistic, gender-minded, rationalistic, parochial" towards "the critical, worldly, naturalistic, fact-minded, empirical, experimental and universally-applicable ways of thinking." I myself once subscribed to this viewpoint but now find myself rather less enthusiastic. Indeed, it now seems to me that in order fully to understand an organization, and especially its more elusive characteristics, traditions and functions we may be forced to consider adopting the very approach which Feigl by implication rejects. It is, of course, possible that Feigl was overstating his case. In a little-known work Paul Feyerabend describes a meeting with Feigl in Vienna during 1954, when to the surprise of those present the Master admitted that formalization was not the last word in philosophy. To quote Feyerabend,

"There was still a task for philosophy in the traditional sense! There was still room for fundamental discussion - for speculation (dreaded word!); there was still a possibility of overthrowing highly formalized systems with a little common sense!"¹⁵

Inexorably the question of values returns us to the nagging question of theory, that much-maligned and ill-defined phenomenon upon which consciously or unconsciously we base our hypotheses and propositions. As Dan Griffiths pointed out so convincingly nearly twenty years ago there is no avoiding theory : we all make decisions within a supporting conceptual framework and we all attempt somehow to explain and predict behavior. Truly, theory is inescapable. In the words of Andrew and Pyke, "The most important ^{reason} for bothering with theories is that we have no alternative."¹⁶

Yes, but what is this phenomenon we call "theory"? A few years ago, following Willower,¹⁷ I defined it as "a set of logically interrelated propositions with potential for explaining and predicting events and for producing new knowledge." In recent years, as I have spent more time in the schools of other cultures I have begun to wonder about the words "logically interrelated". Logical to whom? To the researcher? To the subject? To the organization? But surely Darwin was the most illogical

man on the "Beagle" in the eyes of many of his distinguished contemporaries. Surely the South Sea islanders who left their taro to rot were illogical in the eyes of the Australian agricultural scientist.

I have now come to the view that any set of propositions, logical or illogical, with potential for explaining and predicting events and for producing new knowledge is an adequate theory. After all, as Heisenberg puts it, arguing from his experience with physics, "Even the most important decisions of life must always contain this inevitable element of irrationality."

A crucial aspect of good theory development, however, relates to the area of systematic and repeated observation. Thus while it is possible to explain or predict a behavior on the evidence of a single observation the prediction is very much more powerful if it is systematically and repeatedly observed. Putting all of this in another way, while we can agree with Cronbach that there is little of value in "casual reflections upon casual observations", if systematic and repeated observation leads to systematic and repeated recording of illogical or irrational propositions then those propositions certainly cannot be ignored.

Having waded this deeply into the mire it seems appropriate to refer to the now-hallowed "is-ought" controversy in theory building. Contrary to my thinking of a decade ago I no longer have difficulty in envisaging an is-ought theory continuum. Indeed, I fail to see how I could approach a study of schools in Afganistan without first familiarising myself with the Koran or the schools of Boston without some reference to the "ought" rulings of the United States Supreme Court. Meehan, a political scientist, puts my point well :

"Explanatory systems that seek to relate political phenomena cannot avoid reference to human values and the means chosen for their achievement. One may study amoeba for a lifetime and yet not feel called upon to criticize their way of behavior." 20

I am only too well aware that a discussion like this one could easily deteriorate into what someone has called the "pretentious muddle" of existentialism, but I do consider it essential that hard-nosed researchers do not gloss over, or worse still, ignore the observation that there are principals and superintendents, not to mention teachers, who perceive their organizational behavior as being

profoundly influenced by Buber or Maslow, for example. Somehow, influence of this variety must be built into the theory-practice-research game.

One has only to list at random names like Tead, Vickers, Urwick and Barnard to buy into a fight about where social science begins and the humanities end. I can recall asking myself the same question when as a graduate student at the University of Illinois, McClure insisted that I read not only Machiavelli's Il Principe but also Cardozo's Nature of the Judicial Process and Frank's If Men Were Angels. I was not sure of an answer then; but I am sure now. The answer is, "Don't bother about arguing over trivia. If it helps illuminate the life of the organization, use it." Nowhere does the pointlessness of the social science-humanities argument become more obvious than in the discipline of anthropology. One simple example makes the point well: the productive "emic-etic" dichotomy. The model was adopted from linguistics, in which phonetic notation is a general system which can describe all sounds in all languages, while phonemic notation is used to describe sounds which occur in one language. The question of cultural values in using this dichotomy is vital. We might consider the following example given by Brislin:

"If, for instance a German and an American mother are both asked how they would punish misbehavior both may give the same answer. However, the German mother may have interpreted 'misbehavior' to mean 'being ten minutes late for dinner', the American mother perhaps 'not coming at all'. 21

Examples of the application of this dichotomy to administrative situations will readily occur to researchers in the field.

The unshot of this discussion is the pressing need for a variety of ways of knowing to which researchers might turn amid the buzzing confusion of the organizational-administrative-management-policy literature. It will be recalled that some years ago Andrew Halvin referred to "ways of knowing" and made the point that there was more than one gateway to the kingdom of knowledge. That, to me, eminently sensible and scientifically-responsible statement sums up the thrust of this paper. The same point is made well by Robert Henle, who contrasts Descartes with his dream of all human knowledge in a single concatenation, homogeneous in method and formality, with Aristotle and Aquinas who see in the whole of human knowing a unity in formal diversity. Henle concludes that "the facts of human knowing experience demand and dictate

a pluralistic epistemology." He proposes five formally distinct refined ways of knowing :

1. The scientific way of knowing
2. The humanistic way of knowing
3. The philosophical way of knowing
4. The mathematical way of knowing
5. The theological way of knowing.

These divisions are generic but individually different and therefore give rise to formally different groups of disciplines which involve formally different methodologies.

This call for a plurality of ways of knowing opens the door to a massive range of theory bases and hence of research techniques. It accommodates all of the theories with which I am familiar, and opens the door for such unorthodox concepts as March's "superstitious learning" (learning gained from experience but not based on fact) and Boulding's "agoraphobia" (limiting of the agenda because of the fear of open spaces in the mind). It also readily accommodates systems theory while at the same time welcoming Descarte's cogito, ergo sum and the extrapolation by Deutscher, cogitamus, ergo est (we think, therefore it is). There is no implication of superiority on the part of one way of knowing, though there is perhaps the implication that the more ways of knowing that are employed the greater chances of arriving at meaningful explanation.

Further, the ways of knowing permit the use of a wide spectrum of disciplines. Just as General Booth, founder of the Salvation Army, could see no reason why the devil should have a monopoly of the best tunes I see no reason why English or Ethics, Art or Anthropology, Poetry or Psychiatry should have a monopoly of the best research techniques. Nor do I see any reason why any technique, irrespective of its unorthodoxy, irreverence or lack of "scientific" base should be excluded from the repertoire of the organizational researcher.²³

I suppose that an inevitable criticism of this paper will be that because it does not take sides it is a coward's way out of an academic impasse. I can only point out once again that I did not see an impasse in 1974 and that I do not see one to-day. I should also point out that my own graduate students have been employing a wide range of ways of knowing and that inspection of our wares is invited!

As we each adopt the way or ways of knowing which seem most appropriate for our individual theorising and researching it would be good for all concerned if we could avoid emulating the bull elephant, which, according to no less an authority than Antony Jay, marches around its own particular domain, trumpeting loudly and defecating copiously. If any one of us does wish to emulate the elephant I suggest that the rest of us give him a wide berth - and that we all tread very carefully indeed.

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