

1. Leadership as Administration

*Leadership is an incantation for the bewitchment of the led.*¹ This proposition² draws our attention to the deficiencies of the term leadership in its conventional usage. Typically the word is uttered with a disregard for its sense or reference,³ both of which tend to be either confused or diffused to the point of vacuity or, at the very least, vagueness and imprecision. And yet the term is immovably entrenched in the English language, is here to stay, and has obvious rhetorical advantages.⁴

The terms leader and leadership must, however, be distinguished from each other at the outset. The former, in contrast to the latter, can be applied to a formal organizational role or rank with a relatively precise meaning, sense and reference. The Waffen SS, a highly efficient and effective military organization despite its police provenance, made the point as assigning to each rank from the lowest (*Scharführer*) to the highest (*Obergruppenführer* and *Reichsführer* SS) the suffix fuhrer or leader. This was, of course, an explicit recognition by connotation of the larger concept of leadership (*Führung*).⁵ The suggestion was that leadership was diffused throughout the entire organization.

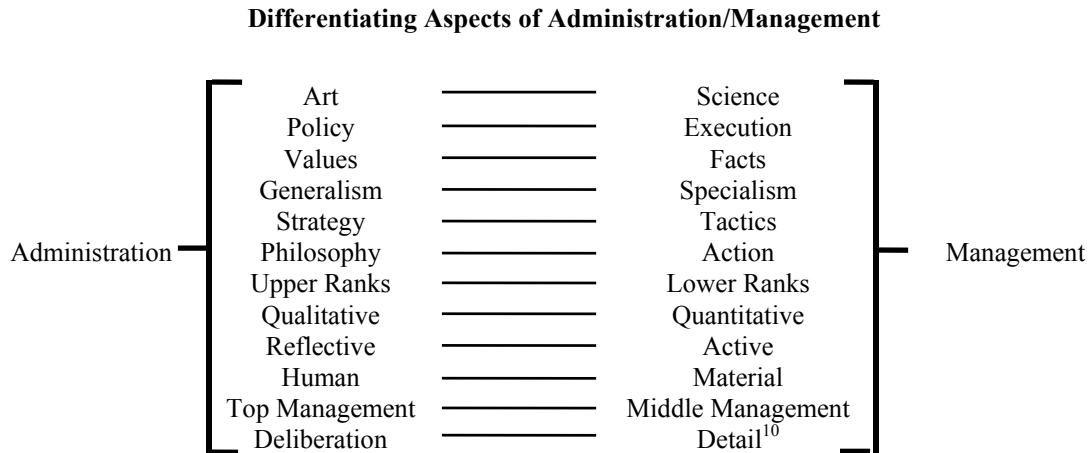
Given this initial distinction we return to the concept of leadership itself only to find that it is not so much lacking definition as swamped by an embarrassment of riches. There have been well over one hundred serious scholarly attempts at definition⁶ and the consequence is a profusion of contesting or overlapping views that frustrate clarity or simplicity and render the concept protean, impenetrable, elusive and delusive. How can this intellectual muddle be avoided and the Gordian Knot cut?

In this paper the problem is resolved by a convention, as follows: Leadership is administration; administration is leadership.⁷

Shifting the definiendum in this way permits us to engage in an analysis of administration and its cognate 'management' and this convention will be used throughout the paper. It being understood that any reversion to the parent concept of leadership can be made at any time by the reader, provided that *mutatis mutandis*, judicious allowance is made for losses and gains in translation.

Before proceeding further a brief illustration of the emotive power of 'leadership' and its 'word-magic'⁸ may prove salutary. Conduct the following thought-experiment. Is there any administrator, or manager, or holder of a line position in an organizational hierarchy who would profess to have no leadership status or abilities? Say, perhaps, by modestly claiming only technical competence? Is the statement 'I am a good officer' compatible with 'I have no leadership qualities'? Or with, 'I am just a functionary'?⁹

Figure 1



It should be apparent from Figure 1 that the items on the left refer to the more value-laden, philosophical and, in both the military and ordinary senses of the word, *general* properties. Those on the right to the more practical, reality-based, ‘sharp-end’, ‘coal-face’ and technical *field* properties. Occasionally disparaged or referred to as ‘sordid managerial details.’ The distinction between field and general ranks, between GHQ and trenches, is thus inherent in ordinary language. This distinction should be, in logic at least, devoid of derogatory connotations. It is just the way things are. The domain of leadership encompasses both. But the terminology of administration and management, the latter a subset subsumed by the former, allows us to more objectively and dispassionately define our terms. It also permits us to conceive of leadership as encompassing the whole administrative-managerial cycle from policy making to implementation.

Administration then is the pursuit of ends through organizational means. Everything follows from this. Ends are established somewhere—whether within or without the organization or both need not concern us at this point—and thereafter—with whatever degree of commitment need not now concern us either—means (human, technical, financial, material, etc.) are brought into play. If the ends are accomplished then ‘leadership’ can be claimed (throughout or at various points within the hierarchy) but what has transpired is essentially ‘good’ administration. And conversely, of course.

While the province of administration is primarily that of ends and the province of management means some other points of distinction are worthy of note.

- (1) British and American usage differs. There is a present tendency in the U. K. to exalt management as the term of status despite the anomaly of a Royal Institute of Public Administration and the system of classes in the public service that refers to its ‘mandarins’ as administrators. American usage also favours the neutral term ‘executive’ and especially the title of CEO.¹¹

- (2) Because administration is hierarchically (systemically) superior and a priori to management, this does not entail a value judgment that the former is somehow better than the latter. In fact, organizations can persist longer without administration than they can without management and this observation might be peculiarly relevant to the Canadian Forces. On this criterion management would represent the stronger set of functions. Value judgments can, of course, be made if appropriate criteria are established.
- (3) Which end drives which? There is systemic feedback between administration and management. Clearly this can affect the relation between ends and means. If Revolution in Military Affairs (RMA) is a reality then this would illustrate clearly this process. The relations between specialist experts and line officers is another well-studied example.¹²
- (4) The terminological differentiation is a matter of emphasis. Both functions permeate the organization. The lowest ranks can perform administratively and the highest managerially. (The micro-managing Minister and the good soldier Schweik phenomenon are simple examples.) The point is to avoid the distinction becoming lost in organizational pathology.¹³
- (5) Anyone, in principle, can do administration. Not anyone, either in principle or practice, can do management. The Anglo-Saxon constitutional theory is that the expert should be ‘on tap’ and not ‘on top.’

It can be allowed, however, that leadership (i.e., administration) is a complex dynamic function which has at least the following analytic dimensions: the nature of the task; the psychological relationships between leader and led; the power and authority of the leader; the structure and attributes of the followership; the favourableness of the situation from the standpoint of the leader;¹⁴ the character and characteristics of the leader; and the organizational structure, command of resources, history, philosophy, and context.

The alternative viewpoint (i.e., conventional non-quantitative and synthetic approaches to leadership theory) is represented in the expositions of Weber, Barnard, Simon, and MacGregor Burns.

Weber’s analysis of leadership¹⁵ is a classification into the categories of traditional, rational, and charismatic. Traditional leaders come to their role through social conventions (monarchy, primogeniture, nepotism, oligarchical or kinship privilege) and rational leaders are appointed on the basis of expertise (legalistic, technical, professional, and bureaucratic) but it is the charismatic category that is philosophically intriguing. There is general intuitive recognition of the type of leader who, by way of forceful or magnetic personality or intrinsic “spiritual” endowment, possesses the elusive quality of charisma. This quality is not properly understood; it is mysterious but its possessors seem capable of inducing extraordinary fealty on the part of their followers, and also seem able to exert their will in an extraordinary way upon the

led. This what MacGregor Burns has described as transformational leadership.¹⁶ Though the concept is vague the phenomenon itself is only too real. It constitutes a problem for administrative logic that transcends and supervenes ordinary logic. One is inclined to hypothesize that the charismatic or transformational leader has access to a source of power deriving from the unconscious desires of the followership. The leader voices desires that are inchoate, that they cannot properly express, thereby imparting a sense of meaning or purpose. In the search for purpose, meaning, vocation, fulfillment man will reach beyond life itself. And certainly beyond logic. Therein lies not only philosophical perplexity but political hazard.

Barnard¹⁷ and Simon¹⁸ offer contrasting views. The former enters wholeheartedly into the moral arena and offers the model of the leader as moral exemplar drawing his power and authority not simply from the structures and functions of organization but from personality and character. This view, though authoritative by virtue of Barnard's status, is unorthodox and tends to receive short shift in the administrative literature. More conventional is Simon's declared logical positivist position that reduces the leader-administrator to a mere executive-manager, effecting as efficiently as possible, the values derived from the policy-making subset of the organizational system. Power here is simply a straightforward function of role which can presumably, be derogated or augmented by personality and sundry extraneous or exogenous factors.

It is interesting, if paradoxical, that Barnard—the great exponent of the democratic principle that ultimately powers resides in the *lower* levels of the organizational hierarchy—should insist upon the *moral* superiority of leadership, its especial capacity for moral excellence and moral “complexity.” Now, this is not something that can be constructed or even “specified.” Formal authority may indeed be designated, legislated, structured but the Barnardian (and Burnsian) quality of leadership is something that has to be *conceded from the followership*. Though it tends to be claimed by administrators as a specific and transferable competence it is organization-bound to the extent that it is dependent upon follower perceptions and upon the phenomenologically conceived and invented social reality within an organization. In other words charisma may not travel. It requires some critical mass of followership reaction. To that extent it cannot just be traded in the market-place of unemployed executives.

Barnard's explanation is that there are two dimensions of leadership, both representing a kind of superiority. The first kind results in technical proficiency and is a superiority “in physique, in skill, in technology, in perception, in knowledge, in memory, in imagination. The second is

‘the more general; the more constant; the least subject to specific development; the more absolute; the subjective; that which reflects the attitudes and ideals of society and its general institutions. It is the aspect of individual superiority in determination, persistence, endurance, courage; that which determines the *quality* of action; which often is most

inferred from what is *not* done, from abstention; which commands respect, reverence. It is the aspect of leadership we commonly imply in the word “responsibility,” the quality which gives dependability and determination to human conduct, and foresight and ideality to purpose.’¹⁹

Note here Barnard’s distinctive contribution. The paragon leader possesses a special quality of restraint, detachment, abstinence, or aloofness—it is deciding when *not* to decide, not deciding what should be decided by others, that which is not *done*, that which is *abstained from* which is important. He also describes leadership as “the power of individuals to inspire cooperative personal decision by creating faith; faith in common understanding, faith in probability of success, faith in ultimate satisfaction of personal motives, faith in the integrity of objective authority, faith in the superiority of common purpose as a personal aim of those who partake in it.”²⁰

Such language moves beyond rationality. Faith. Integrity. Inspiration. And, having identified leadership as the strategic factor in achieving cooperation, he then analyzes its components as (1) technical competence, (2) moral “complexity” and (3) a “propensity for consistency in conformance to moral factors of the individual.” Power and authority now derive not from logic but from value. Power, authority, and leadership coalesce around and are synthesized by values.²¹

The question now arises whether there is anything special about military administration? Is it entitled to its own disciplinary subset within the general discipline of administrative studies as , say, hospital administration, educational administration, business administration, and so on. The answer is unequivocally Yes. Indeed one might go so far as to say that military administration is archetypically unique. Any branch of administration, at the highest levels, is intrinsically philosophical as we have shown above in the emphasis on values. All are concerned with ends apart from means; with Whys rather than Hows; but the military alone lays claim to a legitimized monopoly on violence. Moreover the military form of life²² involves and invokes certain values and metavalues that are distinctive of an enclave or subculture (in some ways parallel to religious communities) set apart from ordinary civilian or pedestrian life. To take the Queen’s shilling is, *in extremis* (but also in law), a contractual commitment to sell one’s life for that price. The metavalues²³ of duty and obedience and values such as honour and ‘glory’ are highly irrational or a-rational as contrasted with, say, a university or large corporation. Indeed it is the very nature of value itself that is at issue here and which needs to be understood in order to fully appreciate this distinctiveness. To that we now turn.

2. The Domains of Value

In this section we shall consider the single administrator whose values are to a large extent (occasionally to a *complete* extent) determined by contextual factors. Whatever values these may be enter into the decision-making process since only a purely mechanical or technical decision can be logically considered value-neutral or value-free. Authentic decision-making is declared to be the central function of the administrative role by such classical theorists as Simon,²⁴ Vickers,²⁵ and Barnard.²⁶ While there is concurrence on this general point it has to be observed that there is disagreement on the *place* of values in the policy process. Simon, a logical positivist, insists that the crucial organizational decisions about ends are derived externally to the organization. “An organization is a bus and the administrator the driver.”²⁷ His position may be congenial to a certain cast of military or bureaucratic mind ‘Not ours to question why...’ but it can be argued that this reduction is over-simplistic, naïve, and unsophisticated. And in any event too managerial.²⁸ Sir Geoffrey Vickers who won the Victoria Cross, had no qualms about placing values up front and foremost in the decision-making process²⁹ and Chester Barnard, a successful practicing CEO, went so far as to make moral considerations the central feature of executive functions.³⁰ It may be interesting to note here, also, his trans-managerial orientation in the following statement:

*The fine art of executive decision consists in not deciding questions that are not now pertinent, in not deciding prematurely, in not making decisions that cannot be made effective, and in not making decisions that others should make.*³¹ (italics in original)

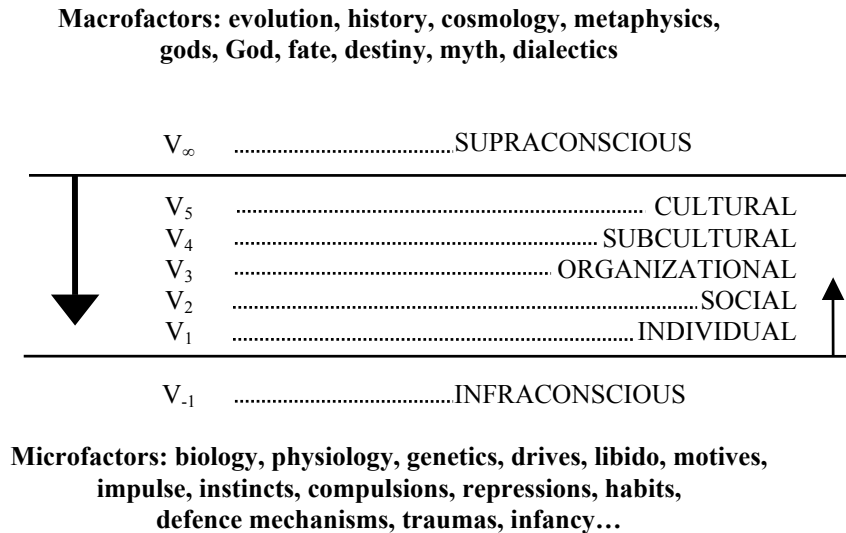
There is more than a hint or nuance here of the aphorism that “War is too important to be left to the generals” but, more properly, there is a tacit recognition that the domains of value need to be carefully taken into account in the administrative art.

For the purposes of this paper the complexity of contextual decision can be considered as having three basic components: facts, values, and probabilities. Let us call them F, V, and P factors. In the ensuing discussion F factors can be largely elided, it being acknowledged that they are always present but never fully comprehended.³² The administrator perforce seeks to have as much grasp as an administrator can of the facts of the case but essentially they are *givens*. And in complex issues they may have to be simplified or abstracted. When one goes to the doctor for medicine one does not want a disquisition on molecular biology. The facts, moreover, will change as the context itself changes. States of affairs are in flux, dynamic. Note that facts are logically distinct from values (see next section) even though facts are always inseparable from values in experience, in the same way that substance cannot be separated from quality. Any state of affairs is a conjuncture of facts which in themselves are devoid of value; but all sorts and degrees of value may be imputed to and superimposed upon them. We never see the pure facts nor can we be so objective as to subscribe to the pseudo-scientific Dogma of the Immaculate Conception. The number of casualties in battle can be ‘cold-bloodedly’ assessed but it obviously has all sorts of value connotations for all sorts of people,

including the victims themselves up to the point of expiry. Sangfroid and ‘cool’ have their place but it is in administration that values play out both a priori and ‘after the fact,’ Value as such will be more fully treated and defined in the next section but for now it can be considered as a complex array or set of domains that impinge on the individuals. See Figure 2.

Figure 2

The Domain of Value



The value levels shown can also be conceived as concentric ‘spheres’ with the individual at the centre. This version has been explicated by Professor Paul Begley at the Ontario Institute for Studies in Education.³³ He has also conducted much empirical analysis of this and the paradigm in Section 3 by way of value audits in Canada, Australia, the U.S, and Sweden.³⁴

In Figure 2 the individual actor or self whose own values are represented as V_1 is subjected to value *impress* from descending layers of influence. Below the level of consciousness the individual is affected by the micro factors symbolized by V_{-1} . Needless to say these are powerful determinants. Ascending the scale the V_2 social influences (peers, work groups, family, friends) contribute to value determination at V_1 by programming and conditioning, whether conscious or otherwise. Of particular interest to the administrator is level V_3 which embraces the organizational values and the symbolic means of indoctrinating and reinforcing those values as, for example, in the military instance by uniforms, parades, music, badges, decorations, etc. But organizations and institutions do not exist in a vacuum; they subsist within a cultural environment upon which they are dependent for crucial survival inputs. These levels are represented by V_5 the larger and V_4 the smaller and more immediate environment. French language V_4 s may diverge from English language V_4 s with consequent nuances and variations in the overall value conditioning. Bureaucracy is not the same in Turkey as it is in Greece. V_4 shifts may be subtle or significant depending on context. Afghan ethos (V_4) has its own

distinctiveness. Yet all the levels are subject to the overriding impress of V_5 , the overall culture of the *Zeitgeist*—characterized in the West by postmodernism and value relativism. At this level Western values are in conflict with Islamic values. The V_5 domain, failing a single global monoculture, is always in value contention. The values of Confucian nations are not ours. The values of ‘multiculturalism’ are not theirs.³⁵ Yet it should be noted that techno-factors such as the Internet, globalized economics, and the electronic advances in communication presaged by McLuhan do function in the direction of homogenizing the V_5 culture. This can easily be observed in world travel where one airport is much the same another because it *has* to be, even in Mongolia or Uzbekistan.

Finally, the above-the-line symbol V_∞ refers to transcendental or metaphysical elements and influences beyond conscious reach and beyond manipulation. These cannot be discounted since they impress downwards through the potent means of belief systems. They are here referred to neutrally as macrofactors.

The point of this analysis is indicated by the long and short arrows. These are intended to emphasize the limited degree to which our values are freely chosen and the overwhelming conditioning and programming impress upon each individual’s value orientation. We shall return to this topic later in Section 4 under the heading “will” but already it can be seen that whatever “free” will might exist at V_1 is diminutive indeed. Which is not to say that the small upward arrow on the right is inappropriate. But consider how difficult it would be for an individual, of any rank, to affect the domain of V_3 in a significant way, much less overcome the downward impress of V_∞ -- V_4 .³⁶

The first stage of any real-time value audit is the attempt to identify the values and their respective domains that are relevant to the decision or policy process.

3. The Value Paradigm³⁷

The preceding section provides us with one analytical tool for exploring the axiological or value constraints of an administrative situation or leadership problem. At its heart is the concept V_1 . V_1 in turn can be further analyzed or ‘exploded’ to provide an understanding of value itself, to this point undefined. Since it is only individuals (V_1 s) that can act in any context (collectivities are not sentient beings but unconscious entities) the importance of this analysis is self-evident. The analysis follows; it refers to the value universe as experienced by a value actor. It provides an analytic model for the identification of grounding, and consequently the level of commitment for all possible types of value, and all valuational phenomena.

We may now define our central term, value. This can be done simply. Value is *a concept of the desirable*.³⁸ Somewhat more exactly, values are concepts of the desirable with motivating force or, concepts of the desirable which tend to act as motivating determinants of behaviour. But now the concept is becoming more vague and punctured with loopholes such as ‘tend to’ and with obscurities such as ‘motivating’. The point is, of course, that we can have values without their being ‘operant’. We can continue to eat gluttonously while subscribing to the desirability of slenderness. In fact it may seem at times as if a central function of value is to interfere with our straightforward enjoyment of the senses. Let us return to this later. For now let us contemplate the simple definition.

Values are subjective because they are concepts. And they have to do with the phenomenology of desire. Neither of *these* things is simple. Though desire has been much studied, introvertedly by philosophers and artists and extrovertedly by psychologists and social scientists, usually under the head of motivation, we are far from clarity and understanding about it. Theories ramify and contest with each other. Errors of logical typing are endemic. Desire manifests itself at different ontological levels and exhibits different relationships to consciousness. It can range from totally unconscious deep psychic drives and complexes to superlatively conscious and highly sublimated intentions of will. Furthermore, the nature of mental constructs such as concepts is again not fully understood. With phenomenology itself they take us to the frontiers of ignorance and thorough scrutiny would bring the searcher rapidly to intractable problems such as the nature of intuition and creativity, the mind-brain problem, the existence or otherwise of the ‘self’, and the nature of consciousness. Again one is tempted by Wittgenstein’s aphorism, ‘Whereof one cannot speak, thereof one must remain silent.’³⁹ But no such resort to silence, however wise, can advance our discourse and discourse is necessary in the field of action. And since Aristotle we have had the notion of *praxis* or practical philosophy whereby men, precisely through their actions, seek to lead or find the good life. The wonder is that with all the infinite ramifications of complexity and mystery hidden just below the opaque surface of language we can still understand and comprehend with practical simplicity and utility the far from simple notion that “Values are concepts of the desirable.”

With this in mind we now proceed to the paradigm outlined in Figure 3. This paradigmatic typology of value emerges because, so far as it is possible to determine,

four and only four kinds of answer can be given to the question, why is an object or action or event deemed to be *good* or *right*? The four grounds or justifications for valuing are principles (Type I), consequences (Type IIA), consensus (Type IIB), and preference (Type III). Let us consider these in the reverse order or ascending order.

Figure 3

Value Paradigm

Value Type	Grounds of Value	Psychological Faculty	Philosophical Orientations	Value Level
I	PRINCIPLES	conation willing	religion existentialism intuition	I
IIA	CONSEQUENCE (A)	cognition reason	utilitarianism pragmatism humanism democratic liberalism	II
IIB	CONSENSUS (B)	thinking		
III	PREFERENCE	affect emotion feeling	behaviourism positivism hedonism	III

Type III preference justifies a value on the grounds, pure and simple, that the object or action is *liked* or preferred by the subject. In this sense all animals possess values and all their values are self-justifying. Human animals likewise have their Type III values and the imponderability of such preferences is recorded in every language: *de gustibus non est disputandum, chacun à son goût, bei mir ist es so Sitte*. I prefer tea to coffee and Turner to Picasso and red to blue and this employee over that one and that's the way it is. Such preferences may be innate. They may also in the human condition be learned. Hence great efforts are expended by commercial and political persuaders everywhere to effect changes in the schemes of Type III preference of their audiences.

Type II values, whether subset A or subset B, are justified upon the general ground of rationality. This can appear first as consensus (II B), as, say, when one discovers abortion to be wrong (not good) because there is an expressed social consensus manifesting in the form of a given statute or law which so declares (all of this being achieved, presumably, by some sort of rational process such as the assessment of public opinion and its translation through parliamentary and legal channels). Individual preference is here aggregated, averaged or summed. Next, at a higher level of rational process, a claim is laid to establish the value upon an analysis of the consequences of holding it. Murder is wrong (and non-murder right) because the consequences of undeterred murderous indulgence would be unpleasant. An ethic of non-killing is cost-beneficial in other words. Less need for police, prisons, taxes and so on. Honesty is right

because it makes for a better, more efficient and effective organization or social context. The test of a value judgment or act is its consequences and much ethical and moral disquisition is devoted to analytical reasoning of this kind.

Type I values are transrational; they go beyond reason. They imply an act of faith or intent or will as it is manifested in the acceptance of a *principle*. Though such principles may often be defended by rational discourse they are essentially metaphysical in origin or location. Often they derive, or it is claimed that they derive, from such rationally intractable phenomenological entities as conscience and intuition. Adultery is wrong at this level because it is so chiseled into the tablets of stone brought down from Mount Sinai. Death on the battlefield for the honour of his regiment and in front of his men is right and good. because the ethic of *dulce et decorum est pro patria mori* has been subscribed to by that particular officer. Poverty, chastity and obedience are good according to the moral insights of some saint or seer and I make them mine by monastic vow. Notice that one may or may not have Type I values, but the resort to the claim of principle is usually reserved for the highest and final court of appeal in the attempt to justify or ground a value. Thus we may have organizational loyalty because of affective attachment (III), because of group suasion (IIB), or because of net benefits such as economic return (IIA), but all these pale before the patriotic commitment to membership in a nation-state organization which may make ultimate claims on its membership of the *dulce et decorum* variety but which can only ground such claims in the last analysis on metaphysical or transrational foundations. ‘My country right or wrong’ is a Type I organizational allegiance.

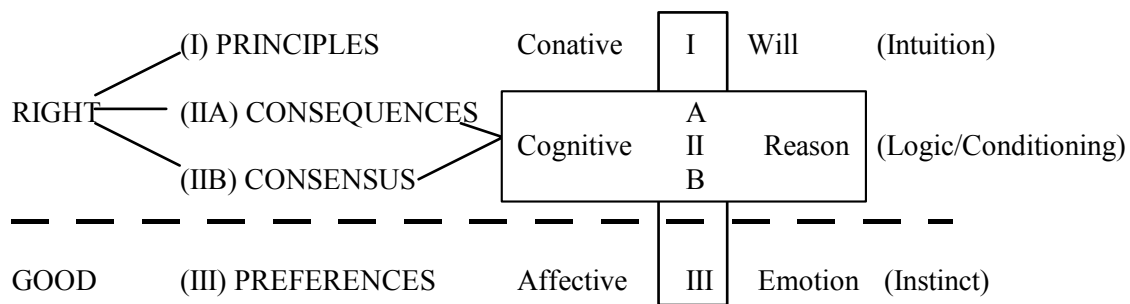
For each of the value types and levels shown in the paradigm there are equivalent psychological and philosophical correspondences. Type III values are emotive, affective in source. Type II employ the cognitive-rational faculties, and Type I invoke the aspect of the will. A degree of freedom of the will is necessary, one can say absolutely necessary, to make the act of commitment which in turn is necessary to embrace and maintain a principle. On the other hand reason or predisposition suffice for the lower levels of value.

Philosophically the categories shown in Figure 3 are roughly indicative of the broad streams of orientation appropriate to each value class. Thus, the logical positivists are inclined to reduce all values to the emotive level of explanation (Level III) and behaviourists generally incline to the side of determinism in their view of the world.⁴⁰ At the other extreme (Level I) the existentialists and their philosophically allied cohorts make great play about freedom of the will, responsibility to choose or commit or engage oneself, and the attendant agonies of choice. This orientation is shared by those who hold to a religious world-view. The modal level for administration generally is Level II where the philosophical tendencies in so far as they can be labeled at all are inclined towards the pragmatic and the utilitarian. It is understandable, after all, that most executives would have an automatic nomothetic (organizational) bias by virtue of their role and hence a *prima-facie* concern with the greatest good for the greatest number within the field of their authority and power, and with the pragmatic, getting things done, the art of the possible.

These are the essential elements of the paradigm. Other aspects can be added and other parallels can of course be drawn. The levels correspond, for example, with the Aristotelian good (III), better (II) and self-conscious and free (I). The paradigm provides us with our basic logic and our principal tool of analysis. It should be noted that *any* value can be manifested or held at *any* level. Thus Type I honesty would be grounded on principle, Type II honesty would be valued because it is reasoned about or because it is the norm of the group, and Type III honesty would be considered desirable simply because it is preferred to dishonesty (less trouble than having to lie or because that is how one feels at the time the question arises). A preference for tea over coffee may be merely that (Type III tea valuation), or a consequence of living in English society (programmed or socially conditioned Type IIB tea valuation). Or because research has shown its caffeine content to be less noxious than that of coffee (Type IIA reasoned tea valuation). And *in extremis* the whole act of drinking tea can be raised to a mystical quasi-religious level as in the Zen tea ceremony (principled Type I tea valuation). Such illustrations could be produced endlessly since all aspects of human action are susceptible of such analysis. Indeed, the crucial thing about any value is its level or type. To fail to discriminate type is to commit the homogenetic fallacy and to clear the path for confusion, argument and the breakdown of communication and understanding⁴¹

An alternative representation of the paradigm is given in Figure 4.

Figure 4
Value Paradigm



This version omits the associated philosophical orientation of Figure 3 and introduces a distinction which seems to fit but may be contentious between instinct and intuition. The dotted line indicates the distinction between animal and human. All animals have *values*, even an amoeba progresses or regresses in the direction that for it is preferable or instrumentally good. Only humans, however, are concerned with the problem of right which can be split into Level II morals (typically conditioned or rational-utilitarian) and Level I *ethics* which can assume almost any form but are usually keyed to an ideology or belief system and which invoke or demand Type I commitment.

Metavalues

A metavalue is a concept of the desirable so vested and entrenched that it seems to be beyond dispute or contention. It may thus pass unnoticed as an unspoken or unexamined assumption into the value calculus of individual or collective life. Examples of metavalues would be health or life itself. In a democratic society democracy is a metavalue. Amongst academics education and rationality are common metavalues. It is not so much that metavalues are absolute or quasi-absolute that makes them problematic as that they go, for the most part unquestioned, implicitly unproblematic, *beyond* value and so they intrude unconsciously and continuously to affect value behaviour. Amongst them we may distinguish some of the principal organizational metavalues. These include maintenance, growth, efficiency and effectiveness.

Maintenance

If the first law of nature be self-preservation then the first law of organizations is likewise to survive, to maintain themselves. This is most palpable in new and emergent organizations but when an association, organization, firm or institution has become established and apparently secure then the level of consciousness of this value recedes. It does not disappear, however. Organizations do not question their need to be because the desirability of their existence is an a priori given. The metavalue manifests in the principle of organizational and group loyalty. New members are rapidly indoctrinated to a perception of themselves as “us” and a correlative perception of non-members as “them”. Threats to the collective interest or security may cause the level of consciousness of this metavalue to rise. It can also be assumed that the maintenance of the organization is pre-eminent in the motivational complex even though irrational responses may lead to dysfunctional effects. Thus a trade union, for example, may put itself and its employers out of business by killing the goose that lays the eggs but this merely shows the distinction between factual “rationality” and valuational transrationality or subrationality.

Katz and Kahn put it this way:

Since any organization must survive in order to carry out its basic functions, survival becomes a salient goal for organizational decision makers. {Dynamic forces generated by maintenance structures} have as their implicit, and sometimes explicit, goal the survival of present organizational forms. For many administrators and officials, concern with the preservation of the bureaucracy assumes primary significance. Indeed, the term bureaucracy is often used, not in the Weberian sense, but in the sense of an officialdom absorbed only in the preservation of its structure and in the ease of its own operation.⁴²

For the administrator it goes without saying (is beyond value question) that the first duty is to maintain the organization. Without an organization there is nothing to administer. None of which denies the occasional necessity to eliminate dysfunctional subsystems—acts of maintenance surgery that merely reinforce the maintenance metavalue from the leadership standpoint.

This metavalue is a fundamental part of the administrator's value orientation. It is ineluctably nomothetic. To escape it one would have to ask the unaskable question, Should my organization exist?

Growth

The second metavalue is a logical corollary of the first. Organizations seek to expand both by the dynamics of competition and by way of insurance against future downsizing. Resources are always limited, change and flux are unpredictable, and growth augments the possibility of environmental control. The metavalue applies within organizations as well as without and the study of bureaupathology is replete with instances of dysfunction traceable to this metavaluational impulse.

Barnard observed that 'The maintenance of incentives {...} calls for growth, enlargement, extension. It is, I think, the basic and, in a sense, the legitimate reason for bureaucratic aggrandizement in corporate, government, labor, university, and church organizations everywhere observed. To grow seems to offer opportunity for the realization of all kinds of active incentives—as may be observed by the repeated emphasis in all organizations upon size as an index of the existence of desirable incentives, or the alternative realization of other incentives when size is small or growth often so upsets the economy of incentives, through its reactions upon the effectiveness and efficiency of organization, that it is no longer possible to make them adequate.'⁴³

Note that the status of this second metavalue is less secure than the first. It is acknowledged in Barnard's quotation that bigness of itself does not always provide the necessary and sufficient conditions for goodness, or even for maintenance. It is understood that excessive growth can be dysfunctional. Facile biological and evolutionary analogies are sometimes made to cancer and to dinosaurs but the metalogic of survival continues to support placing as many bulwarks as possible between prey and predator, target and threat. Many subordinates mean more protective cover, sacrificial cover if need be. And organizational expansion, even in non-threatening supportive environments, serves to preclude the birth or growth of potential competitors. Growth implies power (itself an administrative metavalue). To gain power is both an administrative and an organizational reflex. It is metavaluational. Perhaps *megavaluational*.

Effectiveness

Effectiveness is the accomplishment of desired ends. An organization is effective if it can achieve its purposes; what in personal terms is called success (though here with overtones of fame, prestige, and power) is in organizational terms called effectiveness. As a metavalue it is tautologous for it simply means the desirability of accomplishing desired ends and, because of this tautological quality, it goes unexamined: Who seeks ineffectiveness?

The only way in which the metavalue can be challenged or raised in consciousness is by an examination of latent functions. These are the unforeseen, unintended, or unpredictable consequences of any means-end chain of action initiated by

the pursuit of goals. They are to be contrasted with the manifest or declared functions associated with the same goals. Paradoxically (or hypothetically) latent functions may subvert the manifest as when, say, a conference has as its manifest function the reading and discussion of presented papers but this function is valuationally outweighed by the latent functions of social intercourse, interaction, intelligence exchange, and “networking”. Here the metavalue of effectiveness remains operative but just what is meant by goal achievement is ambiguous and ambivalent. The metavalue is tautologically incontestable but awareness of it can give rise to important administrative questions about the sought and unsought consequences of the ends of action.

Efficiency

The concept of efficiency has caused some confusion in the classical literature because of its idiosyncratic interpretation by Barnard who related it to the satisfaction of individual motives. Organizations were for him efficient to the extent that they succeeded in eliciting individual cooperation. The efficiency of a cooperative system would be its capacity to maintain itself by the individual satisfaction it affords.

More conventionally the idea of efficiency is essentially the ratio of output to input. In an imperfect universe this is always less than unity. Engineering technology seeks to maximize such efficiency. Accounting measures of efficiency such as productivity are essential to commerce, trade, and industry. More generally the primary economic fact of life is the scarcity of resources. The consciousness of this reality underlies all administrative decision making and establishes a criterion of choice wherein one seeks the largest result or pay-off for any given application of resources. Taking the term efficiency in this ordinary sense it is a metavalue because, on the face of it, no administrator would consciously choose, *ceteris paribus*, the less efficient of two alternatives. But let us scrutinize this basic administrative assumption.

Efficiency entails that (a) given alternative means with the same cost attaching to each means one will seek the maximum return, that is, maximization of ends; or (b) given alternative goals with the same end value one will choose ends so as to minimize the cost of means. In both (a) and (b) there are two possible sources of fallacy: the one having to do with the meaning and specification of costs and the other with the meaning and specification of goals or ends. In each case there are major conceptual and philosophical obstacles which include the incommensurability of quantity and quality, the imponderability of value and intentional factors in decision making, and the problem of ascertaining all cost and benefit functions. Efficiency as a metavalue is applied forward, to the future: but as a value it is measured backwards, in regard to the past. We fly first and pay later. Perhaps this explains why so much inefficiency is to be observed in all organizations despite the universal subscription to the metavalue. Again the metavaluation is incontestable. Administrators cannot choose to value inefficiency but can probe, if they wish, the devious and sometimes intractable implications of the efficiency metavalue itself.

The metavalues described are not exhaustive. In a techno-bureaucratic, legalistic organization or institution logic and rationality are prime contenders. This contrasts with

military axiology which has a powerful Type I component leading to the possibility of values such as duty, obedience, loyalty to comrades and the like being eventually, either by indoctrination or willful adoption, reduced in level of awareness to a near-instinctive or metavaluational acceptance *sans* question.

Power, of course, is an administrative metavalue. Indeed, *Power is the first term in the administrative lexicon.*⁴⁴ A leader rarely wishes for *less* power even though the metavaluational status does not deprive the reflective leader of actual valuational misgivings about it. In the military domain, as in the political, there is a natural tendency to embrace the axiom *Macht macht Recht* and Clausewitz's dictum that war is a continuation of politics by other means is applicable here.⁴⁵ The danger of all metavalues is that they escape conscious scrutiny. They are axiological assumptions. It should be the role of the conscientious administrator to periodically and deliberately examine them; take them out and dust them off.

Of what use is this second tool of value analysis? Perhaps the simplest response is a modification of the Socratic principle: "*If the unexamined life is not worth living then the unexamined value is not worth holding.*"

4. Fallacies

Fallacies habitually plague all of our best intentions and thought processes. It might be said that the roads to administrative, political, and military hell are literally paved with them. It is a fallacy in its own right, for example, to assume that the whole subject of fallacy can be dealt with in the textbooks of logic; or parked in the studies, libraries, and offices of academics and philosophers. It is also a fallacy to suppose that the subject is a narrow one. On the contrary it is broad enough to embrace everyone and certainly the officer corps, especially in its higher reaches. In addition to the standard textbook fallacies there is a whole array of valuational and axiological pitfalls that beset the man of action, even more so than the man of contemplation.

The leader or administrator has constantly to be on his guard in his passage through the daily minefield of rhetoric and fallacious argument. The function of this section is not and cannot be to list in its entirety the whole catalogue of possibilities of error, or even to list the common or garden varieties of crooked thinking.⁴⁶ Instead, an illustrative and cautionary sample is given of some of the more popular distortions in the value domain. Whether there should be a specialized subset of *military* fallacies is a very interesting question.⁴⁷ but one which cannot be entered into in a paper of this scope. Here then are some principal fallacies which an administrator, military or otherwise, should be on guard against.

1. *The Naturalistic Fallacy*

The Cambridge philosopher G. E. Moore, author of the Edwardian classic *Principia Ethica*, is credited with showing that notions of the good are irreducible primitive terms and *sui generis*. In the end good can only be defined in its own terms. It is unanalyzable and, therefore, values are of a different ontological category from facts. No facts, nor indeed any amount of facts or factual information, can *prove* a value. Or, in Popper's famous phrase, You can't get an *ought* from an *is*.⁴⁸ Since one cannot get an 'ought' from an 'is' the question may arise, From whence then *can* one get an 'ought'? The answer, of course, is from the fundamental justifications of the value paradigm at Level I and II, as shown.

Administrators, like lawyers, are particularly given to consulting the facts of the case. They would very much like to get an ought from an is. But the world of fact cannot of itself yield any value other than that which is projected or superimposed upon it. The world of facts is *given*, the world of values *made*. A thing is but a thing, an event but an event. Yet because values are inseparable from facts in experience and so constitute a sort of psycho-social set of facts in themselves the problem is subtle and complicated. The temptation is ever present to deduce values from the facts and so commit the naturalistic fallacy. Nor can administrators, being men of action, avail themselves very much of Wittgenstein's suggestion of silence. They are forced to speak from time to time as well as to utter value judgments, if not in speech then in action—but they must beware the temptation to derive their subjectivities (“oughts”) from their objectivities (“is's”).

Values are certainly inextricably intertwined with facts but this does not mean that there is any intrinsic or causal relation between the two categories.⁴⁹

2. *The Homogenetic Fallacy*

Even when values are carefully discriminated from facts there remains the potential error of treating values as if they were all of the same kind, homogeneous. As the value paradigm reveals to the contrary values are themselves amenable to hierarchic analysis. They are heterogeneous by rank. When this hierarchical distinction is confused or forgotten the homogenetic fallacy occurs. Values are not all of a kind. Two men may both subscribe to the value of honesty but the one's candor may be the other's lies. One may have a sentiment for his native country but another may be prepared to die for it. Level I is ontologically distinct from Level II and both from Level III.

3. *The Excisionistic Fallacy*

This fallacy, as much favored by positivists as by administrators, is the error of appearing to solve or resolve value problems by excising the source of the problem and thus removing the apparent need for its consideration. For example, if the source of a value conflict can be traced to a particular organization member then that member can be transferred, removed, promoted, side-pocketed, or expelled from the organization altogether. A delusory appearance of having resolved the value issue is thus created. Nothing is said to the *truth* of the rights or wrongs of a case by the mere exercise of power. The occluded offender may have been right, may have been wrong. Removal speaks to neither possibility., it simply exhibits the distribution of power among the value actors. The root value question is not addressed, it is avoided. Burying Lenin neither invalidates nor validates his ideology.

4. *The Militaristic Fallacy*

This fallacy, itself a version of excisionistic thinking, is named after its most obvious devotees. It occurs when ends or terminal values are radically divorced from means or instrumental values, often to the point where the former are lost sight of through preoccupation with the latter. It conflates the ethical error of the ends justifying the means and the vulgar concept, not peculiar to sports, that "winning is everything." The fault is by no means confined to the military, however, and can as easily be ascribed to technological, bureaucratic, political, commercial, scientific, and systems thinking generally insofar as all these orientations share a propensity to factor, fractionate, and atomize problems into means-ends chains. In doing so the proximate devours the ultimate. Within administrative philosophy the position is exemplified by Simon and the logical positivists⁵⁰ and wherever administrative value questions are presumed not to exist by virtue of all critical values having been predetermined extraneously by putative policy makers. The countervailing position is that value problems pervade all organizations throughout all levels of the authority hierarchy. Excessive rationality and its attendant value myopia or anesthesia becomes a pathology, a sort of fascism of the intellect wherein value sensibilities are attenuated or eliminated by an inappropriate military dressage. The Holocaust of the 1940s is only the cruelest example of this fallacy at work.

These four fallacies do not exhaust the possibility of error. They have been selected from a potential universe of errors in value logic because of their peculiar salience in administration and their special relevance to organizational life. It would be fair to assert that each is committed with greater or lesser degrees of severity many times each day in the average executive's life. Most often, if not invariably, the error is unconscious. To achieve a constant level of awareness of these temptations would represent an incalculable advance in administrative philosophy. In the advance towards that degree of sophistication the first step is recognition and the second, understanding.⁵¹ Other illustrations follow:

5. *The Biological Fallacy*

Organizations are not organisms; they do not live. They are contrived social entities which find their reality and make their historical mark through the power they can exercise in human affairs. In general this power will reside with the administrative subsystem, although all organization members may contend from time to time for influence and participation. The administrator's philosophical task is to establish the value bases for control of this power. The organization's goals are neither autonomous (the biological fallacy) nor directed by the environment (the teleological fallacy) nor derived from the membership (the humanistic fallacy). The basic leadership difficulty with the pervasion of purpose seems to be that of reconciling the rational Type II explanations of human behavior in organizations with the larger view which would embrace the transrational and subrational elements of value. And this difficulty is compounded by the fact that organizations themselves may be classed as Type I, Type II, or Type III.

The meaning of an organization is twofold. One source of this meaning grows out of the collective phenomenology of its members, which is to say that human chemistry determines morale (as well as morals). The other source derives from logic, whether that logic be grounded in economics, politics, sociology, or ideology. This too yields ethics, ethos, morals, and value. The administrator is positioned at the interface between these two realms of value, and must accommodate both.

The biological fallacy is a variant of the 'pathetic fallacy' whereby human feelings, qualities and reactions are attributed to inanimate and non-human objects. A version of this occurs when the names of naval ships are 'reincarnated' or regiment titles and battle honours assume a "life" of extra-human dimensions in the interests of motivating the ranks.

6. *The Fallacy of False Equation*⁵²

This is a variant of the homogenetic fallacy. Both Nietzsche and Aristotle have lashed out at this one. The latter asserted that there is no inequity greater than the equal treatment of unequals while the former, with typical vigor, expostulates: 'The doctrine of equality!...But there exists no more poisonous poison: for it *seems* to be preached by justice itself, while it is the *termination* of justice...."Equality for equals, inequality for unequals" *that* would be the true face of justice: and, what follows from it, "Never make equal what is unequal."'⁵³

Equity issues are characteristic of and endemic to our V₅ culture including its military V₄ component. They are a preoccupation of postmodernity and are usually couched in terms of right rather than responsibilities or duties.⁵⁴ They are closely linked to identity politics in that rights tend to accrue to groups rather than individuals and hence V₁ orientations may become identified with if not identical to some V₃ or V₄ subculture. Gender, ethnicity, religion, age, impairment or endowment are typical examples. The confusion here is partly semantic. Original usage of the word equity denoted justice or fairness. Not sameness. Plato defined justice as receiving one's due but his *Republic* is also a caste system and different strata of society receive different dues. In this sense military V₄ and V₃ could be classified as Platonic ('rank has its privileges'...etc.). The fallacious tendency, however, is to equate equity with equality or homogeneity. Paradoxically this results in different treatment under the law—and quotas, either overt or covert,⁵⁵ are implicated in social organizations and institutions, including the military.

In extremis one finds one's identity not as an individual but as a member of a group. And it is a canon of trade unionist ideology, for example, that the strength of the union is the strength of its weakest member. Written at its very largest this fallacy can lead to the radical communism of the Pol Pot or insect hive variety. Military tradition would, on the surface, appear to be antithetical and antagonistic to egalitarianism but it is hardly, and cannot be, immune to the powerful V₅ and V₄ impress of postmodern culture.

7. *The Paragon Fallacy*

Strictly speaking this is a psychopathology of administration rather than a logical fallacy. But it is sufficiently close and relevant to all studies of leadership that it can be treated at some length especially as the consequences of military error have such an order of magnitude.

Administration can go wrong in an infinite number of ways. Much of this can be traced to a lack of theory. No substantive or overall theory exists. In this, administration parallels education—another great generalism—and suffers in consequence in its aspirations to a fully professional status. Despite the best efforts of social science, and despite the technological infrastructure available through electronics, managerial proto-science and administrative theory itself have hardly progressed beyond the mutually contradictory sets of proverbs famously castigated by Simon.⁵⁶ But this need not be cause for pessimism; it is rather a reaffirmation of human will and complexity. Human organisms are notoriously perverse in refusing to sit still under scrutiny and submit to the quantitative reductions and simplicities demanded by scientific methodology. Their complexity will not be contained. But, nevertheless, it breeds its own version of error.

Because administration is irreducibly unscientific and yet so obviously vital to so many interests, quite apart from the common interest, it is easy to attribute sterling characters and superlative qualities to its role incumbents. Add in the facts that reward systems and the distribution of honours are commanded by administrators, that a long conditioning to authority is universal across cultures, and that the executive competencies are supposed to be wise decision making and leadership. The Milgram studies in

particular and bioethics in general support the concept of susceptibility to the agentic state on the part of followers.⁵⁷ All things considered it then becomes easy, partly out of sloppy thinking (we have seen how vague are the concepts of leadership and decision making), partly out of a perception of the gravity and complexity of organization, and partly out of herd instinct, to impute paragon proportions to the administrator. Job descriptions for administrative positions bear out this assertion. The sought leader is not only to be wise and virtuous but to be extensively and intensively experienced and should have this and the other qualification from academic credentials to the politically correct attributes of gender, age, race, and ethnic or subcultural affiliations. In the end the executive searchers fill the role with a mere mortal, often promoted from within—a mortal draped, however, with an authoritative mantle as a result of the paragon fallacy. The organizational world is very familiar with the phenomenon of the presidential honeymoon; and the fairy tale of the Emperor's new clothes should be required reading for any administrative aspirant, indeed for all who would understand organizational behaviour.

Because the paragon fallacy works to the advantage of executives, and because it is a construct of skeptical critique, it may feed into a certain spirit of anti-intellectualism in administrative ranks. This tendency may be compounded by a trait of machismo or pseudo-machismo not uncommonly affected by powerful executives. Administration and management are seen as practical affairs; the former a subset of politics, the latter a non-reflective set of skills, and both misperceived as strictly or simply pragmatic. Both call for action and decisiveness to the discount of passivity and reflection. Though it would be improper to generalize the accusation of administrative and anti-intellectualism, administrators (with notable exceptions such as Barnard and Vickers) are not renowned for their contributions to scholarship. More usually, when they write at all, they tend to add substance to the paragon fallacy by additions to the self-vindicating autobiographical literature of "great men". The memoir of Robert S. McNamara, an apologia for his conduct of the Vietnam War, is unusual in its acceptance of blame and admissions of error.⁵⁸

A peculiar affirmation of this fallacy derives from another American source: the unique and freakish circumstances of the Watergate affair whereby an American president was forced to reveal the administrative intimacies of his executive suite. However idiosyncratic these data may be they indicate at the highest levels of echelon the hidden subsurface quality of administrative discourse and they do give ample evidence of the machismo and anti-intellectualism associated with the paragon fallacy. Although other examples abound in the arts—the prizewinning German film *The Wannsee Conference* is a poignant example—the Watergate transcripts are authentically empirical and it is a matter of academic regret that decades after the event serious administrative and sociological research has not yet been conducted on this material. This case study would seem especially worthy of the attention of administrative scholars because the principal actors in the drama were committed to success, the work ethic, and apparently a number of Type I values. Moreover the often-cited pathology of administrative secrecy, itself a derivative of the paragon fallacy and superficiality, is open to academic scrutiny

in an intimate and informal exhibition. Other pathologies such as disengagement, compartmentalization, vanity, and aggression are also accessible for study.

Of course it should be noted that an administrator may *be* a paragon, Plato and Barnard would have him so, but the fallacy lies in the belief that the acquisition of office endows the incumbent with paragon proportions.⁵⁹

8. *The Faute de Mieux Fallacy*

This may be considered as a variant of the paragon fallacy but in the reverse direction. An administrator may be persuaded to seek an office or an assignment not out of personal ambition but simply to prevent someone else deemed less meritorious or competent from getting the job. The practice is particularly rife in politics generally and may endow the practitioner with an unjustified sense of self-sacrifice or even duty. The motivation may also be honourable in that the greater good of the collectivity may be placed above the self-interest of the actor. Nevertheless, the problem here is accuracy of perception and estimation of outcomes (see Section 5). If inaccurate the judgment may lead to dangerous and unsatisfactory outcomes not only for the administrator but for the collectivity. Fundamentally, the error might be construed as a lack of faith in selection processes and organizational democracy in a situation where more rather than less faith is justified. Still, it is one of the lesser evils of organizational pathology.

9. *The Politically Correct or Crimestop Fallacy*

Political correctness is perhaps the most sinister of all impediments to clear thinking since it infects the very thought process itself; designating certain words and topics first as unspeakable and thereafter as unthinkable. It could also be called the sacred cow or ideological fallacy. The phenomenon is well known and its critics are numerous⁶⁰ but the disease has spread throughout the English-speaking world and is especially entrenched in the Canadian academy, media, and political arena. Despite continuous critique there is no hint of an abatement in this form of thought control or censorship. *Au contraire* the movement thrives upon and is supported by an industry of paid professionals and enforcers that have been legally established to maintain it. It also feeds upon careerist compliance by the ambitious although this last is a pathology rather than a fallacy per se.

Two illustrative examples are indicative of the whole. George Orwell noted the genesis of the problem as early as the Spanish Civil War and Robert Fulford writes as recently as the post-bombing terrorist concerns in the U.S.A.

‘Crimestop means the faculty of stopping short, as though by instinct, at the threshold on any dangerous thought. It includes the power of not grasping analogies, of failing to perceive logical errors, of misunderstanding the simplest arguments...and of being bored and repelled by any train of thought which is capable of leading in a heretical direction. Crimestop, in short means stupidity.’⁶¹

‘...my observation is that when it comes to moral paralysis, pervasive self-deception, and general all-round pusillanimity, the 1990s make McCarthyism look harmless.

It is a style of thought that puts limits on the way we can speak about even the subtlest issues. It imposes a party line on public life and on life within public institutions. It turns everyday human relations into an emotional minefield.

...race has become the most potent word in our culture. It has unprecedented force. It paralyzes judgment and ends argument.

We are cowed into silence or acquiescence by the magic authority of a word.’⁶²

10. *The Fiedler Fallacy*

This fallacy, which could also be called the psychometric or correlative fallacy rests upon the endemic confusion and incompatibility between knowledge and *understanding*. Professor Fiedler, an eminent authority on leadership, devoted a distinguished career to empirical studies of leader behaviour and is the author of a theory, popular in the past with the Canadian Forces, known as the contingency theory of leadership.

The full critique of this theory is given in *Administrative Philosophy*⁶³ but for present purposes it suffices to quote the following paragraph:

The final critique has to do with comprehensibility. Notwithstanding the misgivings already detailed I am prepared to acknowledge that the general productive effort of this type of research, and its particular embodiment in Professor Fiedler’s work, amounts to the best empirical theory that we have to date. Yet it yields, even so, this paradox: The closer such theory approaches the *truth* the more incomprehensible it becomes. Present theory is already unwieldy and confusing, perplexing even to its exponents. An analogue may exist in the field of particle physics and sub-atomic phenomena. Van Fleet and Yukl concluded that research over this past century clearly demonstrated that leadership is not a simple, indivisible construct. In astronomy the Ptolemaic theory gave way to the Copernican in a revolutionary paradigm shift when the former grew artificially over-complex. Perhaps ultimately the empirical study of leadership may achieve a

corresponding simplification but there is no real sign of this as yet. What contemporary theory does have is pedagogical merit in that it may sensitize its students to the existence and interconnection of the multitude of critical variables in the field of executive action.

These ten examples should be sufficient to sensitize the reader to some of the dangers of common error in administrative thought but some of the more general standard-issue errors should be briefly acknowledged. These include classics such as *post hoc ergo propter hoc*, *petitio principii*, emotive language, confusion between quantifiers (all, some, any), faulty syllogisms, confusion of words with facts or abstractions with particulars, avoidance of thought by prejudice, examined or unexamined; stereotypical shorthand where inapplicable, false analogy, and on and on.

No one said clear thinking was easy but the reason for our dwelling on this topic at such length is a conviction that officers, the higher the rank the moreso, should not be immune from or immunized against intellectual difficulties. These cannot safely be left to the sole discretion of political masters. It is in everyone's interests, given and granted the constraints of reality and circumstance and character to promote the best possible development of clear thinking and sophisticated valuation. This sentiment adumbrates aspects of Sections 9 and 10

5. Contingency⁶⁴

In the preceding sections it has been shown that decision making is central to administration/leadership and consists of F, V, and P factors. F factors are the so-called reality constraints and are the givens in any particular administrative context although the extent to which they are comprehended or understood must always fall short of the ideal. V factors and their complications have been discussed and two analytic tools for their comprehension have been presented. It remains to give some consideration to the problems associated with P factors.

The world in which administration is conducted is always unpredictable.⁶⁵ In a real sense administration is the attempt to impose some sort of order upon the future but, despite all our best efforts at control, regimentation, organization, bureaucracy, systems theory, IT, PPBS, OM, R & D and all the myriad of acronyms; attempts at structure, planning, and direction the ultimate control eludes us.⁶⁶ This is so in the marketplace no matter how many Nobel prizes are awarded in economics. It is patently obvious in the political arena, and painfully so in ordinary life. One never knows when the cancer will be diagnosed, when the ice will crack, or when good luck will appear out of the blue. The fortunes of war is a phrase as well understood by civilians as by soldiers. But luck aside what one might know in certain circumstances is the probability or p factor of an occurrence and the confidence level that can be attributed to that knowledge.

Science and applied technology at their best are capable of achieving *some* increase of control over those aspects of the human condition that are prey to the randomness of chaotic and fortuitous chance. But science itself is open-ended. Expansion of knowledge also enlarges the frontiers of ignorance or nescience. In a curious paradox the more we know, the more we know about the less we know.⁶⁷ And randomness is always with us. The unforeseen as well as the unknown. At the micro-level of quantum physics⁶⁸ it is a fact that knowledge is absolutely limited; Heisenberg's uncertainty principle being the accepted proof.⁶⁹ Reality does not manifest until observation and the so-called collapse of the probability wave function occurs.⁷⁰ In other words the P factors are imponderable. At the molar level of mechanical physics this could be illustrated by the example of 100 people buying a lottery ticket. Each then has a known $p = .01$ until the draw is made and only one person has a $p = 1.00$ of taking the prize whilst the p 's of all the other punters revert to zero. A new reality is created.

The relevance for administration is that gambling is unavoidable. If this were not so administration could be equated with management. The everyday world, after all, can be reduced to quantum mechanics. If *this* were not so then there would be no foundation for physics. Winners in the game of administration are credited with 'leadership'. The administrative subset of military affairs is also highly susceptible to matters of chance, choice, chaos, randomness the effects of which can be summed up as just plain luck (good or bad). Napoleon is reputed to have required of his marshals that, in addition to

standard competence in the profession of arms, they also possessed the prime qualification of being lucky in battle.

Luck is intrinsic to gambling and it is noteworthy that probability theory was born in a period of history marked by wars and warfare. One scholar attributes it to the fact that soldiers need to kill time during inactive periods as well as ‘take their chances’ in action.⁷¹ (War as long periods of boredom punctuated by short spasms of sheer terror.)

Because the incidence of chance so thoroughly pervades all of everyday life it often escapes attention and is relatively neglected by academic writers on administration. Nevertheless, mathematicians from Pascal on have done their best to, as it were, tame luck. Anything more than ‘taming’ would result paradoxically in removing one of the main elements that makes the life experience tolerable.⁷² Actuaries and statisticians provide us with tables of life expectancy and accident incidence that are of significant assistance in figuring the ‘*p*’ odds in many sectors of the economy and civil life, collateral damage from military action excepted. Coupled with various insurance arrangements these increase our efficiency and effectiveness in decision making and allow a certain sense of rational control. Yet it must be remembered that the best insurance contract in the world is still a bet. Punters against the house. Furthermore there are many areas where *p*’s and confidence limits are simply not calculable. And even if a calculus were available the outcomes flowing from the decision making process would be subject to the Law of Unintended Consequences (Murphy’s Law in the vernacular). Military gaming is also subject to this logic.⁷³

The *p* factors, ineradicable in all administration—indeed, a fundamental aspect of the human condition—can be considered as a kind of fact. A soft F, the degree of softness depending upon the case, so that *p*’s can be subsumed under Fs. And since, *The world of fact is given; the world of value made*,⁷⁴ it can be asserted that the essence of administration pivots upon the V factors. Axiology, defined as ‘The philosophical theory of value in general, embracing ethics or the philosophical theory of morality, but extending far beyond it to include aesthetic, technical, prudential, hedonic, and other forms of value. Any field of human discourse in which the general value terms “good” and “ought” figure falls within the range of axiology, even that of scientific method with its principles about the degree of belief one *ought* to give to a hypothesis in the light of a given body of evidence.’⁷⁵ It follows that all military administrators are by definition axiologists. They are also, by the above analysis, risk-takers or punters, especially in combat but also in strategic planning, subject to the vagaries of chance. The problem then becomes one of practical wisdom: how to increase exposure to good ‘luck’⁷⁶ and to minimize exposure to bad. Extremes are represented by the SAS motto ‘Who dares wins’ on the one hand and the administrators who retained all their assets but failed to reach Baghdad on the other. And it can be noted in passing that asymmetric warfare inflates the V factor since with F and P conflated; the difference between terrorists and their opponents is precisely that between Type I and Type II values.

Since axiology is of the essence in administration it is desirable for leaders to acquire a degree of sophistication in the subject. This is not ordinarily the practice.

Institutes such as the Centre for the Study of Values and Leadership at OISE/UT⁷⁷ are the exception rather than the rule. And since v factors embrace both the rational and irrational it seems even more desirable, given the postmodern condition, to undertake from time to time (and certainly at crucial decision points) some form, however rough-hewn, of value audit.⁷⁸ It is also of the essence to take as much account as possible, and feasible, of the *irrational* elements in play in any given case. Military administration has a certain unique status in this respect and this will be further treated in Section 7. Before that, however, it is worth remembering that military affairs and military organizations do not exist in a vacuum, nor are they ever simply academic abstractions. Consequently it is worthwhile to revisit context (V_4 , V_5) once again. This time in the form of a P-type overview of the first two decades or so of the present century. To look any further than that evokes Lord Keynes' comment that it's the short run that counts. In the long run we're all dead.

6. 2020 Vision

This section will attempt to give an administrative leadership perspective on the next few decades. This overview cannot be either exhaustive or definitive but can be illustrative, indicative and suggestive. It is also authoritative to the extent that it draws upon acknowledged expertise. The views expressed were given shortly before the new millennium. Two main sources were consulted and studied. First, a selection of experts at the University of Cambridge and secondly, a random selection of leading intellectuals worldwide. Their responses are, of course, personal and speculative but they are all subjects of the *Zeitgeist* and citizens of their time and place. Consequently, given the strictures placed in Section 5, it was thought permissible to edit, paraphrase, and reduce the original material to digestible gist-statements in abbreviated or telegraphic form.⁷⁹ The items excluded military aspects on the assumption that scenario building in that domain is already taken care of.

Population: By 2050 two-thirds as much more protoplasm than we have today: 10 billion bodies. But food production efficiency outpaces population growth. Risks to the environment, however. ‘Better governance, better institutions, better markets, better schools’ will be necessary. But desire for progeny may decline.’

Climate: Nothing really bad until at least 2050. Need to get rid of present type of cars, however. Scientific opinion is split. Hotter? Colder? We don’t know.

Water: Massive pipeline shifts, Canada to U. S. Also, dams don’t exist forever, they’re aging. Water will soon be metered like electricity. The poor already have a water crisis. A problem of equity rather than engineering.

Energy: Plenty of it but again the environmental problem. Correlated to living standards as one might suspect. New cars needed. ‘Globability and 24-hour, hyperactive, interconnected, e-mail fueled, sleep-deprived’ new millennium is upon us.

Superpowers: Present condition is an historical first (if one excludes Rome). Other powers on the rise, e.g., China and a re-vitalized Russia. And ethnicity a problem. Presently Pax Americana.

Trouble Spots: China still long way behind U. S. The Middle East, of course. Africa and the heart of darkness. Bio-chemical weapons. Nuclear waste. Drugs. Human rights. Terrorism. (A plateful.)

United Nations: Richest 20% have 86% of the world’s wealth. Poorest 20% have 1%. U.N. is aging now, too. Like the dams.

East and West: China’s tough line on population control has been ‘a great contribution to humanity’. Europe? Conflicting theories: Britain wants ‘community’, France ‘nations’,

Germany a 'state'. But all very exciting and Europe could become number one in 30-40 years time.

Money: Capitalism is 'the permanent equilibrium state of human society. Everything else was a sideshow.' 'The motivation to compete, to own and acquire wealth is a fundamental fact of human existence, just like the need to eat or have sex.' But the mixed economy form now well established and no more crises for at least 15 years.

Markets: Stock markets will be electronic and global. Big problem of regulation. Companies must grow or die. But double-entry bookkeeping will remain, as it has, since the 15th century.

Electronics: The symbol of the 80s was the personal computer. The symbol of the 90s is the web. The next thing will be sensors. These will be low-cost, very high performance, and they'll be everywhere, 'from McDonald's fries to insulin delivery for diabetics'. We will soon have entire PCs on a chip. But information technology will be supplanted by biotechnology. The genome and all that.

Internet: This could be a liberating force in the Third World. Can also be cultural dumbing-down (Hollywood and porn). It's an information toy but how long can interest be sustained ?

Cars: Next big step the automated road: regulating vehicles in convoys. Sensors can make this a reality. 'You would just pay a toll, couple your car into an electronic convoy and sit back to enjoy the ride'. Adelaide already has automated bus routes.

Aircraft: Flight has lost its glamour. Passengers are bored and uncomfortable. The aim will be speed. Airlines will either have to get you there faster or make flying more enjoyable. Fuel and turbulence set technological limits and problems.

Space: Lots of other planets but life on them may have been millions of years in the past or will be millions of years in the future, our time. So don't bet on extraterrestrials.

Families: System breaking down in the West. Women can't do it all: adopting a male agenda in life 'arguably only another form of submission...' Smaller families and more childless families. Being a parent used to bring social status, it doesn't now.

Ethnicity: Very complex. Very postmodern. 'Identity' will depend more on one's set of values than where one comes from.

Crime: Up but more property crime than violent crime. Prison populations up.

Christianity: Technology cuts both ways. Contrast U. S. televangelism and the Pope. Ecclesiastical and liturgical contortions in response to postmodernity.

Islam: Growing West and East. Current modes (military and dynastic leadership) may shift towards democratic forms. Big problem remaining: Fundamentalism.

English: World language for the next half century then shift to possibly Spanish. Chinese if they can solve the orthography problem. But English will fragment. Process well underway. English teachers jobs very secure. (Even in Quebec.)

Bodies: 25% of the population will be over 60. But healthier. Cliché problem is to ‘add life to years’ rather than converse. Big educational implications.

Minds: Depression, dementia, stress, Alzheimer’s. Boomers already trembling. Four—and five-generational living families. Grandparents may be too busy minding great-grandparents to look after grandchildren.

Reproduction: Divergence between developed and developing regions. In the former sex for pleasure and conception for the laboratory. More test-tube babies, sperm and egg-banks. Chinese interventional experiments need watching.

Funding Health: 7% of U.K. GDP presently goes to Health; 9% in Netherlands, 10% France and Germany. But outcomes very comparable. Probable shift from universal coverage to ‘top-up’ or ‘opt-out’ schemes; i.e., basics paid, user-pay for the rest. Even so higher taxes and rationing on the way. (Since health and education compete for the public purse one can safely predict more stresses and strains in both systems.)⁸⁰

To the foregoing selection may be added the following:⁸¹

Race: At the beginning of the 20th century William du Bois said that he hoped that the issue of the century would be Race. He was right, but he probably assumed that it would be solved by the end of the century. Well, it wasn’t...Chinua Achebe⁸²

Biology: ...It is our duty to go into the era of human genetic engineering in as responsible a manner as possible...no matter how tempting it might be to try to ‘improve’ ourselves with this powerful new technology (French Anderson)⁸³

Philosophy: I believe that during the 21st century the ancient philosophical mind-body problem will be solved, and solved not by philosophers but by scientists (Richard Dawkins)⁸⁴

Feminism: Patriarchy is dying a slow, slow death; but patriarchal power still tyrannizes women in households and in brothels. I expect to see deeper and more massive resistance from women in this century, especially in the Third World (Andrea Dworkin)⁸⁵

There is a lot of evidence that women approach politics, particularly international politics, very differently from the way men do. In the United States, women have

consistently failed to support military intervention, defence, and power competition generally, by about 9-10%. (Francis Fukuyama)⁸⁶

Military Affairs: Let's face it, most of the trouble in the world is caused by young men, or else Saddam Hussein types who want to lead young men into various kinds of adventures. Certainly, societies in Europe, North America and North-East Asia, are moving very rapidly away from politics involving military intervention, defence, and power competition. I think that is good for democracy because one of the things that democracy implies is fully equal participation in the political process. But I think the very nature of the politics will change as a result. (Francis Fukuyama)⁸⁷

The greatest of changes is that from nuclear devastation. The last century provided the means to destroy all life on the planet. The end awaits only the authority of some insane politician or military delegate. (J. K. Galbraith)⁸⁸

Evolutionary Biology: Any forecast about the future must consider the incendiary instability generated by interaction between technological change and the weird ways of human conduct, individual and social...Pasts can't imply futures because a pattern inherent in the structure of nature's materials and laws too often disrupts an otherwise predictable unfolding of historical sequences. (Stephen Jay Gould)⁸⁹

Society:...the individual human being will be monitored and manipulated in the next century on a scale never before contemplated—from their genes and molecules through to their mental worlds...2084 is a much more accurate prediction of the 1984 scenario. We may end up with a society of increasingly standardized individuals, drawn from a far smaller gene pool. (Susan Greenfield)⁹⁰

Genetics: The belief that we could find the genes for complex cultural traits such as intelligence or environmentally induced diseases was one of the biggest money-wasters of the 20th century...Instead of seeing an inert molecule like DNA as life's fundamental particle, we shall recognize that the wall-less bacterial cell, this tiny, self-forming entity, is in fact the 'atom', the basic unit of evolution (Lynn Margulis).⁹¹

Germ-line manipulations will be attempted for the same reasons that somatic gene therapy will earlier have been explored...Though mistakes will naturally be made in such attempts, we must not lack the courage to use science to challenge the all too often grossly unfair curses of human evolution. (James Watson)⁹²

Climate: Greenhouse effect will become more noticeable. Problem is multifaceted, expensive, and far from solution. Energy production in 2100 will still depend on fossil fuels. (Sherwood Rowland)⁹³

Gender: The new century will bring new paranoias, new hysterias, new conspiracies and new imaginary illnesses; and if history is a guide, women will be the majority of believers and sufferers. (Elaine Showalter)⁹⁴

Computer Science: Already researchers have enabled a man to move a cursor around a computer screen, via a brain implant. Essentially he has learnt to operate the cursor by thinking about it. The possibility of interaction with computers in such a way therefore appears to be realistic...(Kevin Warnick)⁹⁵

Physics: The largest impact of advances in fundamental physics will be cultural rather than technological. They will reinforce the view that nature is governed by impersonal laws, laws that do not give any special status to life, and yet laws that humans are able to discover and understand. (Steven Weinberg)⁹⁶

Psychology: Psychoanalysis is all about not being able to understand the unconscious. That unknowability spells freedom. (Slavoj Zizek)⁹⁷

Education: NASA engineers have concluded that the technical infrastructure supporting the European aircraft industry is, for the first time, equal to that of the U.S. and Europe is on an upward while the U.S. is on a downward trend...In 1998 4000 more U.S. students were earning degrees in parks, recreation, leisure, and fitness than in electrical engineering (as compared to a reverse 24:5 ratio in 1986)...NASA has twice as many employees over sixty as under thirty. (Daniel Boldin)⁹⁸

Philosophy: [We may] advance understanding of fundamental human nature, though in ways that cannot be predicted with any confidence. Nevertheless, they still fall far short of classical problems that remain as mysterious as ever, for example, problems of will and choice---...(Noam Chomsky)⁹⁹

Space: {By 2021} the first humans will land on Mars and in 2057, the centennial of *Sputnik* {humans will be on the Moon, Europa, Ganymede, and Titan...(Arthur C. Clarke)¹⁰⁰

Brain Science: Nobody knows what human consciousness is or how it is caused...The hard problem is to understand the subjective side of conscious: *qualia*. Could a machine feel qualia and report on them? Some researchers think so. (Paul Davis)¹⁰¹

These ‘bites’ are of course to be approached with caution, notwithstanding the eminence, authority and expertise of the sources. At least they can serve the administrator by providing a feel or sense for the short-term future and the shape of things to come. They can also suggest implicitly, but not explicitly, the nature of V_{4.5} context and its translation into the human condition. At the risk of introducing a concatenation of multi-syllabic abstractions it seems fair to say that for the next decades at least there will be a general

pattern of dialectic between rationalistic legalistic bureaucratic scientific technological pragmatics and relativistic hedonistic narcissistic materialistic nihilism. That is, between Type II utilitarianism defined by the power structure and Type III reactive alienation as practiced by the masses.

The onus for the military administrator is to be able to read the cultural and sub-cultural signals and locate his specific concerns within the postmodern condition, That condition is clearly a difficult one. There is no consensus in the value domain. There is not even an agreement about truth—‘The truth about truth is that there is no truth.’¹⁰² And there is an ominous, looming problem of existential meaninglessness in the general culture. There is also widespread value confusion and conflict. Through all this the administrator must respond to an increasing demand for ‘leadership’. In a world where wars are increasingly fought on television and in the media; where RMA is offset by ‘asymmetry’; and where the line between warfare and crime are increasingly blurred 2020 vision may not come easily.¹⁰³ But the responsibility of being axiologically alert is inescapable. Complexity is not chaos. Chaos is the total absence of order; complexity is order the pattern of which we cannot fully discern. Administrators are pattern-seekers and to those who are better at it than others goes the accolade of leadership. This need for a higher, longer, larger perspective is fundamental for the administrator; that the followership may not desire or be capable of sharing this vision is what discriminates the leader from the led.

7. Character

In the foregoing sections an attempt has been made to treat the respective topics objectively, analytically, and impersonally. Adverbs that only apply to practical administration to a limited degree and are frequently marked by their total absence. Attention must now be given and homage paid to the truth that '*Administration is humanism.*'¹⁰⁴ The great art of administration lies in the fact that it is practical-wisdom-in-action. A definition which allows both for works of great benefit to humanity but also for dysfunctional folly and *inaction*. Schiller's famous remark that "In the face of human folly even the gods themselves are helpless"¹⁰⁵ is borne in upon us, leaders and followers alike, everyday. Administrative systems, however detailed, structured, and enforced are never impersonal. This accounts in part for the aureole of 'leadership' which attaches itself to even the most rational structure of technical roles. There is no escaping the 'human element.'

Two sets of distinctions are necessary in any consideration of human relations in organizations. The first is between nomothetic and idiographic;¹⁰⁶ the second between characteristics and character.

Nomothetic refers to organizational structure as a set of roles and role expectations. An assembly of job descriptions about mission statements without reference to any living role incumbents. The organizational chart is its skeletal essence.

Idiographic refers to the flesh and blood value-laden personalities who actually occupy roles. In real life they are often in conflict or dispute and, in any event, may see themselves as only vaguely and remotely committed to any mission statement, especially if such statement itself is abstract, obscure, and 'motherhood.' Sergeants, generals, and technicians are in the first instance examples of roles in the nomothetic dimension. In fact each and every role is occupied by a person with a distinctive biography and value orientation. *No one is indispensable; everyone is irreplaceable.*¹⁰⁷

In consequence the group chemistry (V_2 , V_3) is a flux and the fine art of administration (leadership) is about reconciling (fusing if possible) the nomothetic and idiographic dimensions about the organizational purpose. The difficult but not insuperable task of leading others where necessary above and beyond their self-interest. This also goes by the name of motivation: a concept that subsumes all of the mysteries of human nature and the human condition.

The second important distinction is between character and characteristics. Characteristics are personality traits that are observable in behaviour and are subject to psychometric quantification. Examples would be IQ, energy level, deportment, performance on paper and pencil tests, and the like. They are outward indices that have been and continue to be well researched.¹⁰⁸ Early studies of characteristics led to the now discredited trait theory of leadership. Later studies are more sophisticated but still may be characterized (*sic*) as quantitative rather than qualitative.

Character, on the other hand, refers to the deep structure of the personality. It can be and often is disguised and may pass unrecognized even by the actor portraying the character. It is a function of a person's core values and consequent value orientation at a more surface level. We may have difficulty in defining it but there is no difficulty in experiencing it in human interaction. In old-fashioned usage in the military it was referred to as moral fibre.¹⁰⁹ Barnard referred to it as moral complexity.¹¹⁰ Despite the fact that it runs to the heart of role incumbency and probably, in the last analysis is the ultimate criterion of leadership it goes, in the academy at least, largely unstudied. Because of the qualitative-quantitative differentiation in research methodology the major source of information and understanding tends to lie in scholarly biography and reflective anecdote by accomplished practitioners. It is axiology at its most meaningful and is profoundly relevant to all administration.

This unmapped terra incognita of leader character (as opposed to traits) includes vast areas of potential exploration such as motivation, commitment, and will which cannot be treated adequately within the scope of a single paper. Nevertheless, some mention must be made of some of the elements of leader characterology.

Typologies: Despite the caveats inherent in the character-characteristics distinction the desire for simplistic stereotypical categories of leader personality persists especially if such leader-types can be rendered psychometrically accessible. This desire for simplicity may be frustrated by the complexity of reality but certain classic 'ideal types' continue to be acknowledged with some validity; most notably Weber's ideal types¹¹¹ based on his analysis of power and authority, namely: the charismatic, the bureaucratic (rational-legal), and the traditional types of leader. The value paradigm also suggests a similar set of categories: Type I charismatic; Type IIA bureaucratic-technical, Type IIB political; Type III informal and ad hoc.¹¹³ MacGregor Burns's discourse on transformational leader-types is also relevant here.¹¹³

At this point it is appropriate to note that the value paradigm can be applied to *any* axiological phenomenon, as in the next subsection.

Motivation: Motivation is always personal (V_1) and motives always tend to be mixed. Barnard talks of the 'moral complexity' of the leader in this regard and also of an 'economy of incentives'.¹¹⁴ From the standpoint of the paradigm the Type III values are affective, idiographic, and tend to be relatively impermanent or transitory and thus amenable to persuasion. (An entire advertising industry is built upon this premise and political propaganda at its most intense is capable of elevating or transmuting Level III values to Level I.) Type II values are either consensual (B) or consequential (A). The associated motives are reinforced by group dynamics or social conditioning at Level IIB (V_3 & V_4) and by the metavalues of rationality at Level IIA. It is at the ideological or principled level of Type I values that axiology goes, as it were, into overdrive. Strong characters exemplify such values and such leaders may have transformative or charismatic effects on followers to the extent that they condition, program, influence, or otherwise persuade the lower level value orientations of subordinates. Lord Alanbrooke's

military disagreements with Churchill provide an interesting case study of value conflict at the higher levels of typology. Not to mention Hitler and his general staff.

As the leader's task is to motivate to nomothetic ends it follows that any effort expended in gaining as deep an understanding of human nature and the human condition as possible or feasible is intrinsically worthwhile. Hitler excelled at reading an audience¹¹⁵ and playing upon values other than Type IIA: 'Do not listen to your reason, it will betray you. Listen to your heart, it always tells the truth.' It is commendable for a leader or administrator to have not just an intuitive but sophisticated knowledge of motivation, intrinsic and extrinsic. And in an age of technological weaponry and digitalized bureaucratic infrastructure the Roman military virtue of *dulce et decorum est pro patria mori*¹¹⁶ is more likely to be subscribed to by terrorists and irregulars than by a soldiery with an eye to promotions and pensions. Which is not at all to say that the rhetoric of honour, duty, and patriotism nor the notion of an officer and a gentleman is entirely anachronistic even under politically correct post-colonial post-industrial post-Christian postmodernism.

The arts of rhetoric and imagery are as appropriate today as ever, even if computerology makes it more difficult. Men are still, as Napoleon pointed out, 'led by baubles' even if armies still 'march on their stomachs'. By and large the military in the last century learned this lesson well but it always has to be updated. The world wars may have helped to bring on, or even cause post-modernity but they were not fought against a backdrop of postmodern disorientation. An heretical question might well be, 'How much and in what ways has feminization affected the IIB/V₃ complex?'

Hierarchy: Rank or hierarchy is an ancient and traditional subset of motivational conditioning. It embraces both status and perquisites and both extrinsic and the intrinsic rewards. Ambitious careerists are motivated to scale ladders and the general theory is that organizational benefit will accrue from the efforts involved in such competitive climbing. Police and military organizations are especially noteworthy in their lines of hierarchical longitude and the elevation of their organizational pyramids. In contrast, the distance between parish priest and Pope is negligible compared to that between constable and commissioner or between private and field marshal (even if the former does have the baton in his knapsack). The moral implications for character are vast and complex but beyond the scope of present analysis.

Irrationality: As already illustrated, the field of motivation sensitizes the administrator to the pervasive presence in organizational life of the irrational. It is always there, just below the surface of every rational interaction. The fault of most standard texts, and of the academic approach generally, is that both tend to assume the rational and ignore the pathological.¹¹⁷ This is so even with the simplest of instances where an intense (or even mild) dislike of one organization member for another can lead to all sorts of dysfunction, from a souring of morale or group climate to outright sabotage. Examples proliferate to every organizational level. *Sex trumps reason* as President Clinton can attest. But, whatever the source of the irrationality, it is clear that it manifests through (by and with the consent of) *character*.

Nor is irrationality necessarily wrong. The warrior ethos, and its particular manifestation in the Airborne Regiment, was deemed to be so in the Canadian case but this is an instance of a much larger V_5 phenomenon wherein it could be argued (at least by certain postmodern theorists and professors of women's studies) that the whole notion of armed forces for waging war (as opposed to 'keeping peace' or 'peace making') was irrational. An evil that might be in some sense necessary but an evil nonetheless. To be contained. On the other hand evolutionary biologists might offer quasi-rational apologiae referring to the limbic system and the IIA developmental process. Shakespeare simply writes it off as a normal stage for the male of the species: 'seeking the bubble reputation even in the cannon's mouth.'¹¹⁸ Once again, the topic is axiologically profound.

Commitment: As much as any organization likes to have committed members, military organizations have to pay particular attention to the commitment of their members because of the demands placed upon them. Most likely militaries are today almost alone as anachronistic enclaves demanding a type of commitment best described as 'subjugation of the self,' that was once consistent with religious life, but now a casualty of postmodernism and political correctness.

Commitment to an organization is the manifestation of the degree of congruency or agreement between individual and organization value systems, moderated by the roles individuals occupy. It may be analyzed as follows: (1) Individual members occupy organizational roles. (2) A consequence of role occupancy is the meeting of two realities: The phenomenological reality of the individual and the external reality of organizational life, especially the roles scripted by the organization. (3) As a consequence of these two realities coming together, individuals examine their own personal goals. (4) Individuals evaluate their own personal goals in the context of role demands. (5) Individuals conduct a value audit, analyzing the value grounding of what their own values are all about compared with those of the organization in general and role demands specifically. (6) Individuals make decisions regarding their value audits. (7) If the decision is positive in the sense that there is perceived agreement between what they stand for and what the organization stands for, then commitment takes hold. If the decision is negative in the sense that the perceived agreement between what the individual stands for and what the organization stands for, then commitment is highly unlikely. (8) This final step in the commitment process involves motivation, where the strength of the decisions made determines the strength of commitment. Specifically, where individuals decide that there is strong agreement between what they stand for and what the organization stands for, then their commitment will be strong. If the decision on agreement is weak, then so will be commitment. The last step of the commitment process interprets motivation as the energy or strength of one's value system. This is consistent with the definition that values are not only concepts of the desirable but also have a motivating force.¹¹⁹

An individual's commitment to an organization is a dynamic interaction between the individual's values and the values of the organization. The values of the organization come through three primary reality dimensions: ideology, culture, climate.

Organizational ideology answers the questions, “What does the organization stand for?” “What is its *raison d’être*?” The reality here is the world of ideas; it is philosophical. Ideology comes from mission statements and sets forth the principles which justify the existence of the organization. Organizational culture is the translation of ideology into sociological reality—the familiar do’s and don’ts. Culture gives behavioural anchors, benchmarks, parameters for a member’s life in the organization. It is the manifestation of ideology. . Ideology by itself is nothing more than ideas. Culture by itself is a set of pre-proscriptions established by the upper levels of the hierarchy to enhance some degree of conformity and hopefully commitment. Culture is the means to ideology’s end. But culture needs a catalyst to make it happen. This catalyst is the leader. And what the leader does is create a climate through actual behavioural events. It is these events which can be readily observed and especially felt by followers, e.g., making followers feel that what they are doing is important for the organization; giving them encouragement and supporting them in organizational and personal difficulties.¹²⁰

It makes sense to think of commitment in terms of the types of values previously discussed. For example, commitment based on Type I values—characterized by faith, will, principle—begets unswerving loyalty. Missionaries, zealots, with all the attendant good and evil. Pragmatic-based commitment is calculative and rational all the way, balancing individual-organizational needs. Consensus-based commitment is book-follower and authority-dependent; totally influenced by peer pressure. Emotion-based commitment is simply that: commitment based on how one feels; leaving the organization as soon as discomfort dictates.

Commitment cannot be ordered up. As much as it is an asset it can be equally a liability. Leaders’ roles in inculcating commitment in others requires them to be aware of the different value groundings, to be aware of their own commitment structure and to be aware of the values emanating from the organization’s ideology, culture and the climate that they—the leaders—generate. Consequently it is a function both of sophistication and of character.

Will: The problem of free will has been with us since the beginnings of philosophy and it remains intractable. Comment must necessarily be brief but the issue of will is clearly related to character. In terms of the paradigm a strong-willed personality is simply one with strong desires, that is, strong values. These Vs may be at any of the paradigmatic levels but if the values are of Type I then they may be considered dominant and possessing the potential not only to align all lower-level value impulses within that personality but also with the power to affect and influence group values. Strong will or determination may then assume charismatic or megalomaniacal proportions.

The philosophic and scientific problem, however, is whether there can be *free* will. There is any amount of will (desire) as such. The question is rather to what extent is it determined, programmed, or conditioned by the cause and effect sequences of influences external to the individual? It must be acknowledged that the scientific consensus is deterministic. And, of course, even at the common sense level every event *is* determined *ex post facto*. The administrative and political question then becomes to what

extent can *power* be acquired over the determination of events *ante facto*, before the event?

To return to *freedom* of will in military affairs it could appear that discipline and martial order are designed first on the assumption that free will exists and secondly on the assumption that it should be extinguished or, at least, totally aligned with the organizational will. The Prussian automaton is one example, the Japanese Kamikaze pilot another, the suicide bomber another, and the trench warfare soldier going over the top yet another. In all these instances any gap between nomothetic and idiographic is closed or, if it isn't, it can be put down to a failure of conditioning. Yet these illustrations are mere restatements of that robust distinction between administration and management with which this paper began. Leadership in the administrative sense is *presumed* to have degrees of freedom or will to choose between options. Whether or not that is the case takes us beyond the scope of the paper but brings us to the topic of power. Let us note in passing, however, the philosopher David Hume's famous 'Fork': 'Either our actions are determined, in which case we are not responsible for them, or they are the result of random events, in which case we are not responsible for them.'¹²¹

*Power: Power is the first term of the administrative lexicon.*¹²² Commonsensically the administrator must assume that will abounds (whether free or not) and such will is manipulable and hence a fundamental part of administrative praxis. Ordinarily, for example, Type III value orientations tend towards a state of confusion, multiplicity, and indecisiveness upon which a 'strong-willed' value actor (one who has clarified his own values) can exercise a polarizing influence. The analogy could be between a magnetized and un-magnetized set of iron filings. This logic also lies at the base of all propaganda and media influence. Where will is weak persuasion is easy. To persuade is to influence. To possess influence is to have power—the core concept of political science and political process.

In itself power is axiologically neutral but it is obvious that an impotent leader cannot lead. Part of power comes from office and is nomothetic but perhaps the most significant part comes from personality, from idiographic character, and it is this aspect which is of concern in administrative philosophy.

One can assume that the higher echelons of the officer corps are familiar with Lord Acton's *mot* about power if not with its less familiar continuation 'Great men are almost always bad men.'¹²³ Or perhaps more recently a quote from the historian Tuchman: 'We all know that power corrupts. We are less aware that it breeds folly; that the power to command frequently causes failure to think; that the responsibility of power often fades as its exercise augments.'¹²⁴

These remarks confirm our intuitions about the negative aspect of power without denying its positive necessity in administration. They do, however, stress the need for sophistication about its acquisition and its use. This section has been about aspects of administration that deal with the character of the leader. As a prelude to the next section, as well as a conclusion to this, the words of Plato may be cited:

Philosophers must become kings in our cities or those who are now kings and potentates must learn to seek wisdom like philosophers, and so political power and intellectual wisdom will be joined in one. Until then there can be no rest from the troubles for the cities, and I think for the whole human race.¹²⁵

8. A Mirror for Leaders

There is a connected logic in Sections 1-7 which is intended to bring the reader to this point. There is also a genre of literature in administration and political science known technically as Fürstenspiegel¹²⁶ (German: ‘a mirror for princes.’) This genre includes such classic works as Plato’s *Republic* and Machiavelli’s *Prince* but also extends even further back into Aryan Vedic times and further forward into the modern writings of Nietzsche and Foucault. It is also well represented, if not officially recognized as such, in the arts and humanities generally but tends to be ignored or elided in the social scientific texts where the assumption prevails that the administrative actor is either a moral cipher or a politically correct factotum. The text which follows makes no such assumptions, it aspires only to provide a ‘look in the mirror’ for those administrators who would sincerely undertake the exercise. The idea was first introduced in 2000 at an administrative conference in Edmonton¹²⁷ and later with modifications at an international conference in Barbados.¹²⁸

In its present form and protocol three sorts of *personal* benefit may be hypothesized: (1) diagnostic, (2) ascriptive or comparative, (3) prescriptive or remedial. Any *impersonal* or general benefit of the test lies in its implications for curricula strategy.

The mirror consists of seven simple questions as shown on the last page of this section.

The questions may be simple but answering them is not. This is because the questions are qualitative not quantitative and philosophical not psychometric. They also derive logically from the preceding text as follows:

Questions 1 and 2 are axiological and relate to sections 2 and 3. Question 3 is logical and relates to section 4. Questions 4 and 5 are philosophico-sociological and socio-psychological and relate to sections 5 through 7. Question 6 is the ultimate philosophical question, *die Urfrage*, while question 7 is essentially pragmatic, empirical and job-related. It returns us to Section 1.

Protocol

CAVEAT: To examine oneself in this mirror is likely to occasion, if done authentically and objectively, a certain degree of discomfort or self-dissatisfaction. We are all conditioned and leaders especially so, to seek high performance ‘scores’ or, if not perfect, then at least the highest possible. It is best therefore to study the protocol before attempting what is indeed a kind of test, in the same way as looking in a real mirror each morning is a test. A test of our objectivity and self-honesty if nothing else. And it should be remembered that very few see the same face looking back as would be seen by an objective onlooker. Truth can be demanding even if all postmodern truth is perspectival. Truth is also *reflective*.

INSTRUCTIONS: Answer each question in the first instance with a straight Yes or No. Consider the interlocutor behind the second person questions to be your deepest most introspective self.

After the first round answers can be modulated according to the respondent's wishes: e.g., by introducing qualifications such as 'It depends...'; 'On a scale of 1-10...'; 'As compared with...' etc. Initial responses should, however, be remembered.

It should be noted that (though unlikely) it would be logically possible to answer questions 1-6 in the negative and question 7 in the affirmative. And conversely!

Answers can be treated as dichotomies (Yes or No), or Continua (Neither Yes nor No but somewhere in between), or both (Yes *and* No, depending)

Fürstenspiegel

- 1. Do you really know how to tell right from wrong?**
- 2. Do you really know how to tell good from bad?**
- 3. Can you tell a sound argument from a fallacious one?**
- 4. Do you know enough about human nature?**
- 5. Do you know enough about the human condition?**
- 6. Do you really know yourself?**
- 7. Do your answers to the above satisfy you in your role as leader or aspirant to leadership?**

9. *Curricular Implications*

If Section 8 is taken seriously, and if its internal logic is defensible, then certain fairly obvious implications follow:

- (1) It is desirable for leaders to achieve some degree of axiological sophistication.
- (2) It is desirable for them to have skills in both logic and rhetoric.
- (3) A depth understanding of human nature and the human condition is fundamental to their art.
- (4) If the understanding of others is important then the understanding of oneself is a logical, psychological, and philosophical prerequisite. It is *a priori*.

The question then arises as to *how* these curricular values may be implemented. A secondary question, given the distinctions made between administration and its subset of management, is *for whom?* Taking the second question first it can be noted that the emphasis of this paper has been on the senior levels of hierarchy up to and including the political interface. The question of *how* will be considered in the concluding section.

It may be noted also that the general thrust of this essay has been a tacit defence of the seniority principle and to some extent a vindication of promotion in these terms. This follows from the fact that some of the responses of introspection depend upon life-experiences and consequently on life-duration. Even small children can exhibit great logical (but not rhetorical) acuity but it requires the passage of time to acquire knowledge (but not necessarily *understanding*) of how things work in the 'real world.' None of this debates the principle that merit should be preferred over duration of service but it is of interest that Japanese industry and bureaucracy adhere rigidly to seniority promotion (assuming managerial-technical competence) and this is buttressed by Asian-Confucian philosophical orientations.¹²⁹ *Leadership is the conjunction of technical competence and moral complexity.*¹³⁰

The paper has also been directed towards perceived needs for clarification and perceived lacunae in leadership curricula. A more general resumé covering the entire spectrum of leader education can now be given. It is based upon experience with an elite Japanese school of government and management dedicated to the cultivation of international leaders for the present century¹³¹ and applies the value paradigm to leadership generally.

The central assumption here is that, as we have argued earlier, administration can be conceptually identified with leadership. It then follows that this leadership function permeates the entire organization from the highest levels of hierarchy, which are most symbolically associated with leadership, to the lowest levels, which are more typically associated with followership. In other words, every member of the organization both has and ought to have some element of leadership responsibility. Even the lowliest member of an organization has the power to commit or not commit to the organization's purposes

and that, of course, is an administrative and hence a leadership act. This constitutes Level III and, as shown in Figure 5, corresponds at the individual level of analysis to the value focus of the 'body' as the seat of the basic interests and emotions.

The next level of the hierarchy is occupied by field and technical staff. These constitute an informal as well as formal organization. Here the leadership function is to maintain social cohesion and a consensus of values which incorporates *esprit de corps*. A neglect of this function on the part of the technical staff undermines the motivational climate which is so important in the organizational culture. This real but abstruse concept, the socio-psychological climate, establishes the V_2 value context or hidden curriculum. It is the nomothetic (V_3) value orientation. It also influences and sets the standards for performance tasks. A commitment to high standards or excellence is transmitted more through hidden curriculum, officers' attitudes, and group chemistry than through any formal rhetoric or protestation from higher levels of the organizational hierarchy.

Level IIA is the level of formal organization. The relevant values or metavalues are rationality and logic. At this level, the philosophical function is the implementation of the metavalues and the logical accomplishment of organizational purpose. From the policy maker's standpoint, this is the level at which leadership initiatives are translated into practice.

According to the logic of Figure 5 it is at Level I that we should find the initiating philosophical drive mechanism, as well as the formal structural leadership, for the organization. At this level is generated the organization's *raison d'être*. Note, however, that this level need not exist. The leadership function of an organization can be merely rational or bureaucratic. That is, it need ascend no higher in the paradigm than Level IIA. But if the organization is conceived about a grand project or idea in which there is some element of charismatic commitment or enthusiasm, then it will be characterized as Type I and leadership will then embrace the added functions of vision and mystique as shown.

The analysis also implies that while grand projects and great ideas manifest at Level I, it is the function of Level II to realize these ideas by means of innovation (structural or otherwise) at IIA and by invention (the development of appropriate curriculum and instruction methodology) at IIB. Ultimately, the test of the great organizational idea is whether it captures the allegiance of followers; thus, followers in effect compose the quality circles that prove or disprove the leadership initiatives.

It is paradoxical that leadership at Level III must be termed 'followership'. Ordinary language is defective in providing us with no other word because the experience of the human race is subliminally conditioned to the leader-follower duality. Even in the technical literature, despite the work of Barnard and many others, the leadership function of rank and file members of the organization goes largely unacknowledged.

Figure 5
Leadership Value Analysis

Value Type	Value Focus	Hierarchical Level	Philosophical Functional	Curriculum Content
I	Higher Interest and Emotions (Ideals)	Administration	Vision Leadership Policy Charisma Mystique Grand Projects Great Ideas	PPE Psycho- biography Arts- Production Dramaturgy Aesthetics Moral Education Protegeship Adventurers
IIa	Rational Interests and Emotions	Executive- Managerial (Formal Organizations)	Rationality Logic Efficiency Effectiveness Technology Innovation	Organizational Theory Administrative Theory OR PR Finance and Law Projects Networking Internship Logic Writing Critiquing Economics Political Science
IIb	Social Interests and Emotions	Staff- Technical (Informal Organization)	Organization Morality and Morale Group Processes Teamwork Participation Invention	Group Psychology and Dynamics HR Demystification Values Education Sabbaticals
III	Lower Interests and Emotions	Rank and File	Discipline Integrity Production Quality Circles Followership	Organizational Culture Rituals Myths Ceremonies Parades Publicity Games-Sports Apprenticeship

We have thus traced correspondences between the types of value and the philosophical or valuational distribution of the leadership function across the organizational hierarchy. Likewise, the analysis implies a corresponding distribution of emphases if we turn our attention to the matter of leadership training, preparation and development. This is shown in the last column of Figure 5.

Leadership Preparation and Development

Structured leadership education can be either pre-service or in-service; either inside or outside the organization. At the apex of the paradigm there is the established academic concept of the administrator as a generalist—one whose work is concerned with a level of problem solving and decision making which makes intellectual demands that are best developed through a general knowledge of the human condition rather than through narrow specificities or technical disciplines. This is typified, for example, in the higher reaches of the British Civil Service with its reliance on the Oxonian curriculum of PPE (philosophy, political science, and economics). The paradigm (see Figure 54) additionally suggests an intensive and extensive study of such items as psychobiography, the arts, ethics and aesthetics. Again, actual practice of the arts, such as writing, staging, production and direction of film or play, can involve the aspirant leader in the actual doing of leadership, with all its attendant human and technical difficulties, and also with some experience of the risk-taking involved. Indeed, the lively arts can be a convenient microcosm of administration and a laboratory for leadership. It is only to be wondered that more advantage has not been taken of this obvious connection. Human sensitivity and ruthlessness are simultaneously demanded from the successful director, and all the qualities of leadership are invoked in the translation of an aesthetic idea into its final appearance in the marketplace. Aesthetics, on the other hand, is recommended if only to compensate for the general absence of this sensibility in the world of board rooms, executive offices, military planning and political action. An Oriental instance of this is the tea ceremony, which was conceived not as elite dilettantism or effete aestheticism but as an actual recuperative and inspirational device for the warrior leader.

The location of moral education at this level goes without saying, if we accept the proposition that leadership/administration is a philosophical and moral enterprise. A word needs to be said about protegeship, however. Protegeship is at Level 1 what apprenticeship is at Level III. It is an invaluable teaching-learning arrangement. Opportunities for mentoring may not, of course, be always available. The will and the energy for it may be lacking. Moreover, the device is essentially in-service and in-organization and dependent upon imponderable conjunctions of personality, but it should not be overlooked, especially where leader-succession is taken seriously. Of course, protegeship is itself open to corruption, to the possibility of stultifying leadership through dysfunctional executive succession, and this risk, too, should be taken into account.

Finally, at Level 1, there remains what can be called adventures. These are projects conceived by the learners themselves in which they put themselves at actual risk in the world. Thus, at the Matsushita Institute of Government and Management in Japan students conceive overseas projects by themselves and then go abroad to carry them out.

To cite an actual case, a student interested in a political career went to the U.S.A., found employment as an aide to a U.S. congresswoman, and helped her to win her election campaign. He himself is now a successful elected politician in Japan. Adventures such as these are more than conventional projects, in that they require the student to take risks. They must go abroad on their own, find their way in foreign culture, be prepared for failure as well as success. In short, it is leadership learning by doing, and at the most advanced level.

Let us refrain from commenting at length on the Level IIA implications for curriculum because in this one domain at least, the preparation of leaders by and large, may be well provided for at the academic level. The content items listed in Figure 5 are fairly typical of curricula in M.B.A., M. P.A., and M.Ed. or M.A. programs.¹³⁴ Such preparation can be accomplished either pre- or in-service within the formal academic setting. If such programs fall short, the weakness is likely to be in the areas of logic, writing, and critiquing. These largely philosophical skills are subsumed by the PPE of Level I but, in addition, one has some general sense that our educational establishment could profit from providing training in the ability to perceive logically faulted arguments and from more practice than at present in the art of lucid, concise, and persuasive writing.

If we now continue our analysis at Level IIB , we discover that the paradigm here calls for an innovation. This is indicated by the word demystification. The intent here is to suggest that technical-professional staff generally should have at least enough formal training in either administrative or organization theory, or both, to become familiar with the general logic of those disciplines and, thereby, to disabuse themselves of the notion that administration is a mystery or that leaders are of necessity charismatic. (Or for that matter, either fools or knaves.) They should at least be able to understand the difference between the authority deriving from the power of veto and that deriving from the power of expertise. The value logic here is as follows: If we accept the maxim that knowledge is power, then we may further assume that an enhancement of power at this level of hierarchy can become an empowerment, which will encourage and advance leadership at this level.

Technical knowledge in group processes and human relations is also implicitly advocated as stemming from the special philosophical function shown. As for values education, the general point of its merit in understanding organizational duties, responsibilities, obligations and powers is enhanced for officers by the ideological purposes of the military. No educator can be truly that without some special grasp and understanding of the values problem.

Included at this level are sabbaticals because professionals of all kinds, not merely the officer corps, need leave to avail themselves of opportunities for formal and informal learning, to maintain contact with advances in their disciplines, and to refresh and renew their commitment—both to the military and their field of expertise. The special applicability to all organizations derives from the psychological stress factors associated with demanding and multiple daily human interactions. Administration is a vital pursuit but emotional wear and tear can take an excessive toll.

We now move to consider curriculum content at Level III and this brings us forcefully to consider the realities of organizational culture. At this level these are composed of rituals, myth, ceremonies, and the other items shown in Figure 5. These aspects of leadership (or followership) curriculum are well known but perhaps not so well understood from the standpoint of value logic. The general intent of such curricular devices is to appeal to and condition the emotions of organization members. In this respect at least one might say that the other subsets of administration have more to learn from the military than vice versa.

10. Summative Recommendations

- (a) Administrative philosophy should be a required component of officer education. The more senior the rank the more so.
- (b) Administrative philosophy should not be studied in academic departments of philosophy but rather in those schools and departments of administration and leadership studies competent to offer this component.
- © In principle all the requirements of *Fürstenspiegel*¹ can be met outside the academy.
- (d) Notwithstanding © the academy can provide assistance and support to the military establishment by way of its specialized disciplines, facilities, and faculty expertise.
- (e) All the necessary modes of curriculum delivery already exist with the formats specified in DND Officership 2020.
- (f) The facilities offered in (e) can provide appropriate delivery systems for contingency analysis and applied short courses in logic and rhetoric.¹³²
- (g) Officers should be alert to axiology at lower ranks, sophisticated in axiology at middle ranks, and educated in axiology at higher ranks.
- (h) A permanent think-tank associated with or emergent from CFLI (call it CFLIT) should be established to consider all aspects of cultural context and administrative philosophy.
- (i) CFLIT should have a permanent military core and a peripheral transient membership drawn from other subsets of the administrative discipline, including laymen and academics.
- (j) It would be essential for CFLIT to be apolitical, autonomous, and free to consider any and all relevant issues.¹³³
- (k) The guiding maxims for CFLIT members should be to “Do one’s damndest with one’s mind—no holds barred”¹³⁴

Notes and References

1. Christopher Hodgkinson. *Towards a Philosophy of Administration*. Oxford: Basil Blackwell, 1978, 1982: Proposition 6.4 p. 219. (hereinafter TPA)
2. The proposition is a play on Ludwig Wittgenstein's famous assertion that philosophy is a battle against the bewitchment of the intelligence by language. Cf. *Tractatus Logico-Philosophicus*. London: Routledge & Kegan Paul, 1974. Prop. 4.0031 *et seq.*
3. Gottlob Frege. 'On Sense and Reference' in Maria Baghramian *Modern Philosophy of Language* London: Dent, 1999: 6
4. There is no suggestion that the term be abandoned in military usage; it is an essential part of the political language game also. For 'language games' see Ludwig Wittgenstein *Philosophical Investigations* Oxford: Basil Blackwell, 1974 2nd ed.
5. Strictly speaking German has no exact equivalent for the English 'leadership'. Führung implies more 'direction' in the French sense of *dirigiste*.
6. Christopher Hodgkinson *Educational Leadership. The Moral Art*. Albany: State University of New York Press, 1991: p. 49.n.1 (hereinafter EL)
7. Christopher Hodgkinson *Administrative Philosophy* Oxford: Elsevier Science, 1986: 48 Prop. 19 (hereinafter AP)
8. 'Word-magic' is the emotional use of language for rhetorical suspect purposes. See Robert H. Thouless *Straight and Crooked Thinking* London: Pan, 1974 : 11ff.
9. See n. 4AP 27, Sir Geoffrey Vickers refers to this distinction as 'robust'.
10. EL 51
11. Victor A. Thompson *Modern Organization* New York: Knopf, 1961 was an early recognition of the conflict between professional expertise and line authority.
12. AP Chap. 10
13. F. E. Fiedler and M.M. Chemers *Leadership and Effective Management* Cearview, Ill: Scott, Foresman 1974
14. Max Weber *Economy and Society: An Outline of Interpretive Sociology* Vol. 1 Berkley: U.of California Press, 1978, 215-216
15. J. M. Burns *Leadership* New York: Harper and Row, 1978. It should be noted, however, that transformational leadership appears to be confined to a benevolent sense and would therefore be subsumed under a larger interpretation of charismatic leadership.
16. Chester I. Barnard *The Functions of the Executive*. Cambridge, Mass.: Harvard University Press, 1972 (hereinafter FOE)
17. Herbert A. Simon *Administrative Behavior* New York: Free Press, 1965 (hereinafter AB)
18. FOE 260 ff.
19. *ibid.* 260
20. AP 80-2
21. Wittgenstein *Philosophical Investigations* 19, 23, 241
22. See Section 4
23. AB *op. cit.*
24. Geoffrey Vickers *The Art of Judgment* New York: Basic Books, 1970 and *Human Systems are Different* London: Harper and Row, 1983

25. FOE *op. cit.*
26. AB Intro.
27. See pathology of managerialism TPA 123, 214; EL 114-5
28. Vickers, *n* 24 and *Responsibility—Its Sources and Limits* Seaside CA: Intersystems Publishing, 1980
30. FOE This is the gist of Barnard's classic statement, *ibid.*
31. *ibid.* 194
32. AP 105. Note also the impossibility of ever knowing all of the facts even in a rigidly specified situation and Nietzsche's aphorism that 'there are no facts, only interpretations,' Friedrich Nietzsche *Will to Power* Walter Kaufmann ed. New York: Vintage, 1967: Section 481; *Beyond Good and Evil* tr. R. J. Hollingdale Harmondsworth: Penguin, 1961: I, 22 IV 108.
33. Paul Begley ed. *Values and Educational Leadership* Albany: State University of New York Press, 1999; Paul T. Begley and Pauline E. Leonard *The Values of Educational Administration* London: Fulmer, 1999—Also Centre for the Study of values and Leadership at Ontario Institute for Studies in Education, University of Toronto (OISE/UT) and affiliate Center of Study for Leadership and Ethics, University of Virginia.
34. For value audit concept see AP 241-2 and implementation *n*. 36
35. The multiculturalist persuasion is perhaps not 'ours' either, despite its official status. The point is that it fits within the 'politically correct' orthodoxy of the day and in this sense is 'ours' *pro tem*. In French, *autre temps, autre moeurs*.
36. It is at this point that truly charismatic leaders (Christ, Hitler) can effect change in the overall axiological domain. Such effects may be long term (Christianity) or short term (Nazism) but are totally disproportionate in the relative scale of things.
37. The term paradigm is used in view of the fact that the model has been exposed to the philosophical and critical community for over 25 years without refutation or radical modification.
38. AP 111
39. *n*, 2 prop, 7
40. B. F. Skinner *Beyond Freedom and Dignity* New York: Knopf, 1971
41. The foregoing is a recension of *Philosophy of Leadership* (hereinafter POL) 36-61
42. Katz and R. Kahn *The Social Psychology of Organizations* New York: Wiley, 1978: 165-266
43. FOE 159
44. TPA 217, Prop. 6
45. Karl von Clausewitz *Vom Kriege*; the German translates as Might makes Right.
46. Thouless *n*. 8 *loc. cit*
47. Norman F. Dickson *The Psychology of Military Incompetence* London: Cape, 1976
48. Sir Karl Popper 'What can Logic do for Philosophy?' Proceedings of the Aristotelian Society 1948 : 154. While the prevalent postmodern orthodoxy is subjective and relativistic it must be acknowledged that contrary opinions obtain, e.g., Aristotle *Nicomachean Ethics* Book 3, (4) and St. Thomas Aquinas *Summa Contra Gentiles* Book 3 Chaps. 3-16.

49. See Christopher Hodgkinson 'The Epistemological Axiology of Evers and Lakomski' *Journal of Educational Management and Administration* 1993, Spring for a refutation of attempts at denying the validity of the value-fact separation.
50. James G. March and H. A. Simon *Organizations* New York: Wiley, 1958: 130, 169
51. The foregoing is a recension of AP 123-5
52. Christopher Hodgkinson *Theoria* paper presented to British Educational Management and Administration Society University of Manchester Institute of Science and Technology, September 1999: 17
53. Friedrich Nietzsche *Twilight of the Idols* R. J. Hollingdale tr. London: Penguin 1990:113 See also Peter Ribbins 'Synthesis' UMIST n. (53)
54. The paradigm case is the Canadian Charter of Rights and Freedoms
55. More typically the latter.
56. AB intro
57. Stanley Milgram *Obedience to Authority* New York: Harper and Row
58. But while 3 million Vietnamese and 58,000 Americans died McNamara was rewarded with a sinecure at the World Bank. (AP 287 n. 16)
59. A recension of AP 174-5
60. See Fraser Institute *Critical Issues Bulletin III* 1993, Michael A. Walker ed. & current research, U.W.O.
61. George Orwell *1984* Harmondsworth: Penguin, 1949
62. Excerpts from Robert Fulford 'From Delusions to Destruction' *National Post* Oct. 6, 2001: A17
63. *op. cit.* 88
64. The term is not used in the technical Fiedlerian sense (n. 63) but in the ordinary language sense of 'if this then that'.
65. N. Rescher *Luck: The Brilliant Randomness of Everyday Life* New York: Farr Straus Giroux 1995. Rescher coined the term 'impredictability' in contrast to 'unpredictability', the former indicating absolute unknowability.
66. Which is not to say that these effects have not been enormously assisted by digital technology and its associated global infrastructure.
67. *Pace* P.Bridgman, Nobel physicist, who declared that the scientific method consisted of just this retrospective discovery in 1953 of the structure of the DNA molecule is also illustrative of the point.
68. The macro-level of astrophysics the analogue would be singularities, black holes, and dark matter.
69. Isaac Asimov *Understanding Physics* Vol. III New York: Barnes and Noble, 1966:263
70. *ibid.* 103-5
71. A. Morel-Fatro Conteras *Bulletin Hispaniques* vol.3 (1911) 135-58.
72. Total foreknowledge of predestination would be intolerable. Nietzsche makes use of this proposition in his thought experiment of eternal recurrence
73. John Tydeman, James Cutt and Robert Mitchell. 'Planning under Uncertainty: A case Study of Possible Application to Defence' *Australian Journal of Defence Studies*, 1976.
74. AP 133 Prop. 85; TPOA 220
75. Lord Quinton *Modern Thought* 2nd ed. London: Fontana, 1988, 64

76. The term is placed in quotes to stress the nuance that luck is neutral, oblivious to human desires—an a-moral natural force, although other theses are admissible, e.g., Oriental theories of karma or the law of moral cause and effect. *Cf.* Also Christian beliefs that ‘as you sow so you reap.’
77. See n. 33
78. Value audits are analogous to military appraisals and hence contingent on a given situation, circumstance, and problem. The difference is that the value paradigm and its contextual aspects form the central units of analysis.
79. A technique not unknown or uncongenial in high administrative echelons. Churchill was a notable exponent
80. Direct quotations are indicated by quotation marks, otherwise paraphrase and commentary. The headings are those used in the source CAM No. 28 Michaelmas 1999 and the authorities are respectively: Population (Economist Sheila O’Connell), Climate (Judge Institute’s Chris Hope) Water (Geographer Bill Adams), Energy (Consultant Dan Yergin), Superpowers (Centre for International Studies’ James Mayall), Trouble Spots (Guardian editor Ian Black), United Nations (Dame Margaret Anstee, former U.N. Under-Secretary), East and West (Chiran Thapu, M. C. to King of Nepal), Money (Anatole Kaletsky, chief economist of The Times), Markets (Judge Institute’s Richard Barker), Electronics (Paul Saffo, Silicon Valley Institute director), Internet (David Ignatius, editor Washington Post), Cars (David Newland, Engineering Professor), Aircraft (Shon Ffowes Williams, Rank Professor on Engineering), Space (Jacqueline Mitten, Royal Astronomical Society), Families (Penelope Leach, research psychologist), Ethnicity (Sue Benson, anthropologist), Crime (Andrew von Hirsch, Institute of Criminology), Christianity (Michael Nazir-Ali, Bishop of Rochester), Islam (Akbar Ahmed—scholar and author), English (Gillian Brown, director Research Centre for English and Applied Linguistics), Bodies (Kay-Tee Khaw, Professor of Clinical Gerontology), Minds (Felicia Huppert, director Research Centre on Aging), Reproduction (Nick Mascie-Taylor, head Dep. Of Biological Anthropology), Funding Health (Sandra Dawson Master of Sidney Sussex).
81. Paraphrases refer to expert’s central ideas or theses while footnotes refer to main sources of work.
82. Chinua Achebe *Things Fall Apart* Oxford: Heinemann, 1958
83. French W. Anderson ‘Human Gene Therapy: Why Draw a Line?’ *Jnl. Medicine and Philosophy* 14 (1989) 681-93
84. Richard Dawkins *The Blind Watchmaker* New York: W. W. Norton, 1996
85. Andrea Dworkin *Pornography: Men Possessing Women* New York: Penguin, 1981
86. Francis Fukuyama *The Great Disruption: Human Nature and the Reconstitution of Social Order* New York: Simon & Schuster, 1999
87. *ibid*
88. J. K. Galbraith *The Good Society: The Human Agenda* London: Houghton Mifflin Co., 1996
89. Stephen J. Gould *Questioning the Millennium: A Rationalist’s Guide to a Precisely Arbitrary Countdown*: London: Random House, 1997
90. Susan Greenfield *The Human Brain—a Guided Tour* London: Orion-Phoenix Press, 1998

91. L. Margulis and D. Sagan *Slanted Truths: Essays On Gaia Evolution and Symbiosis* New York: Springer-Verlag, 1997
92. James D. Watson *Molecular Biology of the Gene* 4th ed. London: Benjamin-Cummings, 1987
93. A contemporary instance is human cloning. This capability or possibility directly encounters the philosophical problems of mind-body and nature-nurture as well as the intractable problems of consciousness and free-will.
94. E. Showalter *Hystories, Hysterical Epidemics and Modern Culture* New York: Columbia University Press 1997
95. Kevin Warwick *In the Mind of the Machine* London: Arrow, 1998
96. Steven Weinberg *Dreams of a Final Theory: The Search for the Fundamental Laws of Nature* London: Pantheon Books, 1993
97. Slavoj Zizek. *The Ticklish Subject: The Absent Centre of Political Ontology*, London: Verso, 1999.
98. David Goldin *Atlantic* Sept 2001: 28
99. Noam Chomsky *Language and Problems of Knowledge* Cambridge, Mass., 1988
100. Arthur C. Clarke *Greetings, Carbon-Based Biped!* *Collected Works, 1936-1998* New York: St. Martin's Griffin, 1999.
101. Paul Davies *The Fifth Miracle: The Search for the Origin of Life* New York: Simon & Schuster, 1998. n.b. There is a clear consensus in the scientific and philosophic communities that consciousness is the 'hard', and so far intractable, problem.
102. Walter Truett Anderson ed. *The Truth about the Truth* New York: Putman, 1995
103. Philosophical confusion and politico-military consequences arise out of the terminology and rhetoric of terrorists, freedom-fighters, liberation, peace-making, peace-keeping, prisoners of war, *inter al.*
104. The general theme of TPL: EL, AP.
105. *Mit der Dummheit kämpfen Götter selbst vergebens.*
106. J. W. Getzels and E. Guba 'Social Behavior and the Administrative Process' *School Review* Winter, 1957 and AP 63-6
107. POL 229 Credo 3, 111
108. An ambiguous example is Professor Fiedler's LPC (Least Preferred Co-Worker) scale
109. The acronym LMF was used in World War II as a circumlocution for cowardice, L standing for low.
110. FOE 271ff
111. Max Weber see N. 15
112. POL Chap. 6
113. Burns *op. cit.*
114. FOE Chap. 11
115. Albert Speer *Inside the Third Reich: Memoirs* New York: Macmillan, 1970
116. 'It is sweet and proper to die for one's country'.
117. H. A. Simon ignored this and, in personal communication, said he 'didn't wish to be bothered by it'. An appropriate response considering his post-Nobel career was devoted to AI. Cf AP Chap. 10 and POL *passim*.
118. *As You Like It* II. 7
119. TPA 121; POL 36; EL 94: AP 110-11

120. Donald Lang *Values and Commitment: An Empirical Verification of Hodgkinson's Value Paradigm as Applied to the Commitment of Individuals to Organizations*. Unpublished Ph.D. Dissertation University of Victoria, 1986. Also, 'A New Theory of Leadership: "Realwert" Versus Apparent Good.' *Educational Management & Administration* 1999 Vol. 27 (2), 167-181.
121. David Hume *Inquiry concerning Human Understanding* (IV) (i) and *Dictionary of Philosophy* London: Pan, 1979: 156
122. POL 228 Prop. 6
123. Lord Acton *Historical Essays and Studies* Appendix
124. Barbara Tuchman *The March of Folly* New York: Random House, 1986: 32
125. Plato *Republic* V 473
126. POL 88 ff. And 70 ff.
127. Christopher Hodgkinson 'Then-Now-Next: A Postmodern Peek at Everything' *Journal of Educational Administration and Foundations* Vol, 15, 1. 2000: 10
128. Christopher Hodgkinson 'Tomorrow and Tomorrow and Tomorrow: A Post-postmodern Purview' *Conference of the Centre for Study of Values and Leadership* Barbados, 2000. Also *International Journal of Leadership in Education*, 2001, Vol. 4, No. 4, 297-307.
129. K. Matsushita *Not for Bread Alone: A Business Ethos, A Management Ethic* Osaka. PHP Institute, 1988
130. AP Prop. 65
131. *Matsushita School of Government and Leadership* Tokyo, Japan
132. E.g., By using a lay text such as Thouless (*op. cit.*) and current newspapers combined with intensive seminars over 4-8 wks. Many variations are possible.
133. Including issues of great sensitivity such as, 'Is Canada in Decline?'; 'Should Canada adopt the Icelandic model?'; 'Is union with the U.S. an option?'
134. F S. Rowland and M. Molina 'Ozone Depletion: 20 Years after the Alarm' *Chemistry and Engineering News* 1994, 72, 8-13

Sources Consulted

- Achebe, Chinua. (1958). *Things Fall Apart* Oxford: Heinemann.
- Alanbrooke, Field Marshal Lord Alanbrooke. (2001). *Viscount Alan Brooke war diaries, 1939-45* Alex Danchev and Daniel Todman (Eds.). California: The University of California Press.
- Anderson, French, W. (1989). 'Human Gene Therapy: Why Draw a Line?' *Jnl. Medicine and Philosophy* 14.
- Anderson, Walter, Truett. (Ed.). (1995). *The Truth about the Truth* New York: Putman.
- Asimov, Isaac. (1966). *Understanding physics* Vol. III. New York: Barnes and Noble.
- Baghramian, Maria. (1999). *Modern Philosophy of Language* London: Dent.
- Barnard, Chester, I.(1938/1972). *The functions of the executive*. Cambridge, Mass: Harvard University Press.
- Bass, Bernard (1998). *Transformational leadership: Industrial, military and educational impact*. London: Lawrence Erlbaum Associates.
- Begley, Paul (Ed.). (1999). *Values and educational leadership* Albany. State University of New York Press.
- Begley, Paul & Leonard, Pauline, E. (1999). *The values of educational administration*. London: Fulmer.
- Burns, James, MacGregor. (1978). *Leadership*. New York: Harper and Row.
- Chomsky, Noam. (1988). *Language and Problems of Knowledge* Cambridge, Mass.
- Clarke, Arthur, C. (1999). *Greetings, Carbon-Based Bipedes! Collected Works, 1936-1998*. New York: St. Martin's Griffin.
- Conteras, A. Morel-Fatro *Bulletin Hispaniques* vol.3 (1911) 135-58.
- Davies, Paul. (1998). *The Fifth Miracle: The Search for the Origin of Life*. New York: Simon & Schuster.
- Dawkins, Richard. (1996). *The blindwatchmaker*. New York: W. W. Norton.
- Dickson, Norman, F. (1976). *The psychology of military incompetence*. London: Cape.
- Dworkin, Andrea. (1981). *Pornography: Men Possessing Women* New York: Penguin.
- Evans, Robert, C. (1998). *Moral leadership: Facing Canada's leadership crisis*. Toronto: McGraw-Hill Ryerson.
- Fiedler, Fred, E.(1967). *A theory of leadership effectiveness*. Toronto: McGraw-Hill Book Company.
- Fiedler, Fred, E. & House, Robert, J. 1988. Leadership Theory and Research: A report of progress. In, C. L. Cooper & I. T. Robertson (Eds.). *International review of industrial an organizational psychology*. Toronto: John Wiley & Sons.
- Fiedler, Fred, E. & Chemers, Martin, M. (1974). *Leadership and effective management*. Clearview, Ill: Scott Foresman
- Fukuyama, Francis. (1999). *The Great Disruption: Human Nature and the Reconstitution of Social Order* New York: Simon & Schuster,
- Fulford, Robert. (2001). From Delusions to Destruction *National Post* A17
- Gal, Reuven. (1986). *A portrait of the Israeli soldier*. New York: Greenwood Press.
- Galbraith, J. K. (1996). *The Good Society: The Human Agenda* London: Houghton Mifflin Co.
- Getzels, Jacob & Guba, Egon. (1957). *Social Behavior and The Administrative Process*

- School Review*, Winter.
- Goldin, David. (2001). *Atlantic*, 28.
- Gould, Stephen, Jay. (1997). *Questioning the Millennium: A Rationalist's Guide to a Precisely Arbitrary Countdown*: London: Random House.
- Greenfield, Susan. (1998). *The Human Brain—a Guided Tour* London: Orion-Phoenix Press.
- Griffith, Samuel, B./ Sun Tzu (1971). *The art of war*. S. B. Griffith (tr.). London: Oxford University press. Harvard Business Review, December, 2001.
- Hersey, Paul, Blanchard, Kenneth, H. & Johnson, Dewey, E. (1996). *Management of organizational behavior*. (7th Ed.). Upper Saddle River: Prentice Hall.
- Hodgkinson, Christopher. (1996). *Administrative philosophy*. Oxford: Elsevier Science.
- Hodgkinson, Christopher. (1993). The Epistemological Axiology of Evers and Lakomski. *Journal of Educational Management and Administration*.
- Hodgkinson, Christopher. (1991). *Educational leadership: The moral art* Albany: State University of New York Press.
- Hodgkinson, Christopher. (1983). *The philosophy of leadership*. Oxford: Basil Blackwell.
- Hodgkinson, Christopher. (1978). *Towards a philosophy of administration*. Oxford: Basil.
- Ignatieff, Michael. (1998). *The warrior's honor: Ethnic war and modern conscience*. Toronto: Viking
- Katz, Daniel & Kahn, Robert, L. (1978). *The social psychology of organizations*. 2nd.ed. Toronto: John Wiley & Sons, Inc.
- Keegan, John. (1991). *The mask of command: A study of generalship*. London Pimlico, Jonathan Cape Ltd.
- Kotter, John, P (1999). *On what leaders really do*. Harvard Business School Press.
- Kumar, N. Siva & Rao, U. S. (1996). Guidelines for Value Based Management in Kautilya's Arthashastra. *Journal of Business Ethics*. 15, 415-423.
- Lang, Donald. (1999). A New Theory of Leadership. *Educational Management & Administration*, 27, 167-181.
- Lang, Donald. (1986). *Values and Commitment: An Empirical Verification of Hodgkinson's Value Paradigm as Applied to the Commitment of Individuals to Organizations*. Unpublished Ph.D. Dissertation University of Victoria.
- Long, George, (tr.). (1980). *The meditations of Marcus Aurelius Antoninus*. Connecticut: The Harvard Classics.
- Machiavelli, Niccolo. (1984/1532). *The prince*. Peter Bondanella (Ed.). Peter Bondanella & Mark Musa (tr.). Oxford: Oxford University Press.
- Machiavelli, Niccolo. (1965/1521). *The art of war*. (Revised Ed. of Ellis Farnsworth tr.). New York: The Bobbs-Merrill Company Ltd.
- March, James, G. & Simon, Herbert, A. (1958). *Organizations*. New York: Wiley.
- Margulis, L. and Sagan, D. (1997). *Slanted Truths: Essays On Gaia Evolution and Symbiosis* New York: Springer-Verlag
- Matsushita, K. (1988). *Not for Bread Alone: A Business Ethos, A Management Ethic* Osaka. PHP Institute.
- Milgram, Stanley. (1974). *Obedience to authority*. New York: Harper and Row.
- Morrell, Margot & Capparell, Stephanie. (2001). *Shackleton' way*. Toronto: Viking.
- Nietzsche, Friedrich. (1967). *Will to power*. Walter Kaufmann (Ed.). New York: Vintage.

- Nietzsche, Friedrich. (1961). *Beyond good and evil*. R. J. Hollingdale (tr.).
Hermansouth: Penguin.
- Nietzsche, Friedrich. (1870) *Twilight of the idols* R. J. Hollingdale tr. London: Penguin.
- Northouse, Peter, G. (1997). *Leadership: Theory and practice*. London: SAGE.
- Orwell, George. (1949). *1984* Hermansouth: Penguin.
- Plato. (1974). *The Republic*. (2nd ed.). Harmondsworth: Penguin
- Popper, Sir Karl. (1948). 'What Can Logic Do for Philosophy?' *Proceedings of the Aristotelian Society*.
- Prabhupada, Bhaktivedanta, A.C., Swami *Bhagavad-Gita: As It Is*. (1972). (Abridged Ed.). New York: The Bhaktivedanta Book Trust.
- Quinton, Lord. (1988). *Modern Thought* 2nd ed. London: Fontana.
- Rescher, N. (1995). *Luck: The Brilliant Randomness of Everyday Life* New York: Farr Straus Giroux.
- Reynolds, Cecilia & Young, Beth. (Eds.). (1995). *Women and leadership in Canadian education*. Calgary: Detselig Enterprises, Ltd.
- Rowland, F. S. and Molina, M. (1994). 'Ozone Depletion: 20 Years after the Alarm' Chemistry and Engineering News.
- Schein, Edgar. (1996). Culture: The Missing Concept in Organization Studies. *Administrative Science Quarterly*, 41, 229-240.
- Schein, Edgar. (1996). *Organizational culture and leadership*. (2nd. Ed.). San Francisco: Jossey-Bass.
- Senge, Peter, M. (1994). *The fifth discipline: The art and practice of the learning organization*. New York: Doubleday
- Showalter, Elaine. *Hystories, Hysterical Epidemics and Modern Culture* New York: Columbia University Press 1997
- Simon, Herbert, A. (1965). *Administrative behavior*. New York: Free Press.
- Skinner, B. F. (1971). *Beyond freedom and dignity*. New York: Knopf.
- Speer, Albert. (1970). *Inside the third reich: Memoirs*. New York: Macmillan.
- Thompson, Victor. (1961). *Modern organization*. New York: Knopf.
- Thouless, Robert, H. (1974). *Straight and Crooked Thinking* London: Pan, 1974.
- Tuchman, Barbara. (1986). *The march of folly*. New York: Random House.
- Tydemann, John; Cutt, James and Mitchell, Robert. (1976). 'Planning under Uncertainty: A case Study of Possible Application to Defence' *Australian Journal of Defence Studies*, 1976.
- Vickers, Sir Geoffrey (1983). *Human systems are different*. London: Harper and Row.
- Vickers, Sir Geoffrey (1970). *The art of judgment*. New York: Basic Books.
- Walker, Michael, A. (1993). Critical Issues Bulletin III. *Fraser Institute*.
- Watson, James, D. (1987). *Molecular Biology of the Gene* 4th ed. London: Benjamin-Cummings.
- Warwick, Kevin. (198). *In the Mind of the Machine* London: Arrow.
- Weber, Max. (1978). *Economy and Society: An Outline of Interpretive Sociology* Vol. 1, Berkley: U.of California Press.
- Weinberg, Steven. (1993). *Dreams of a Final Theory: The Search for the Fundamental Laws of Nature* London: Pantheon Books.
- Wittgenstein, Ludwig (1974). *Philosophical Investigations* 2nd. ed. Oxford: Basil Blackwell.

- Wyatt, Thomas, C. & Gal, Reuven. (1990). *Legitimacy and commitment in the military*.
London: Greenwood Press.
- Zizek, Slavoj. (1999). *The Ticklish Subject: The Absent Centre of Political Ontology*,
London: Verso.