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Educational 'crises' and the rhetoric of reform: The Arnold/Huxley debate reconsidered

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ABSTRACT
In 1982 we sat over lunch with a prominent American educator and researcher a leading exponent of progressive reform over the last three decades. We bemoaned the advent of the New Right, the resurgence of the basics movement and the disarray of liberal and left learning political parties in the United States and Canada. But, he noted optimistically, a series of major reports were due to be released. He believed that these reports - in the American tradition of the "School Survey" - would change the nature of American and, by extension, Canadian education.

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The Crisis Reconsidered[1]

> Functional adjustments belong to the domain of the symptoms of crises, not to the domain of the real problems which may generate them ... for - if we may borrow an image from epidemiology - it is a standard axiom in the treatment of illness that the only time it is legitimate to treat symptoms, rather than disease is when the disease is beyond a cure.
>
> - Anthony Wilden, "Cybernetics and the Machina Mundi" (1980)[2]

The public school system is an exemplary case of an institution which has been beset with claims of "crisis" since its inception. The perception of crisis historically has led to "reform" movements, from which a distinctive discourse of educational reform has arisen to represent and rationalize both educational change and stasis. Currently, the popular press, mass-circulation periodicals, scholarly and teachers journals, government-sponsored assessments and international reports accuse the public educational systems of Britain, the United States, Canada and, more recently, Australia of failing to provide "functional literacy" and basic general education. In spite of increases in educational investment, levels and patterns of educational achievement remain apparently unimproved. Judged by its own criteria of success and failure, the public school system appears to have failed.

In terms of American general education, the Educational Testing Service has reported that between 1963 and 1982 the average total score on the Scholastic Aptitude Test declined by nearly 10%.[3] A representative sample of Canadian provincial surveys is the *British Columbia Reading Assessment*, which reports that although reading skills at grade 4 increased slightly over a four year period, scores in "word attack"[4] "word meaning", and "passage comprehension" at the grade 12 level had decreased. The 1981 National Assessment of Educational Progress reported a similar pattern for the United States as a whole: between 1971 and 1980, the reading achievement of 9 year olds increased; 13 year olds increased only marginally; while 17 year olds showed significant declines in more difficult "higher order" comprehension tasks.[5] There are of course conflicting, and in cases, overtly politicized interpretations of test score data, but among reading researchers there is a consensus on several trends: while children show improvement in the fundamentals of literacy, achievement in "higher order" interpretation, critique, analysis and composition is apparently in decline. Similar data are available for Britain and Australia.

Perhaps the most vocal claims of crisis come, however, not from psychometricians but from academics in tertiary institutions. University professors particularly from Departments of English Literature, contend that the majority of high school graduates have not achieved the kinds of competences requisite for the university curriculum. While employers voice some dissatisfaction, complaints from this sector are varied, suggesting a lack of organizational and social skills, oral language deficiencies deficits in "computer literacy", and an overfamiliarity with formal academic composition at the expense of technical and practical writing skills. Dispute over the literacy of the roughly 80% "literate" in English speaking post-industrial nations, then, does not focus on quantitative measures of literacy, but on qualitative matters, matters of value and kind of literacy achieved by the 'products ' of mass schooling.

In the face of diminishing public confidence, manifest in persistant revivals of the "basics", the educational system must attempt to persuade the public that perceived failures result from a temporary and remediable problem - and neither from any structural deficiency inherent in the public system itself, nor from any fundamental contradictions in its relationship with society at large. If this attempt at (institutional) self-justification is unsuccessful, the educational system faces what Habermas has called a legitimation crisis: a situation in which the dominant culture cannot maintain the requisite level of mass loyalty to its public institutions to eliminate, diminish or deflect attention away from perceived failures or contradictions.[6] It is the rhetoric of legitimation - both contemporary and historical - with which this paper is concerned.

Crisis into policy: High technological reform

In response, the wheel is once again being reinvented in the production of a modern discourse of reform. In *A Nation at Risk*, Ronald Reagan's commission on "educational excellence" has called for major policy changes to address perceived deficiencies in public schooling practice.[7] Schools are seen as failing to provide the kind of scientific expertise and basic vocational competence necessary for America to maintain its position of political, technological and economic leadership. Consequently, the authors of the report have called for a reemphasis on more specialized scientific training in secondary schools, yet another renewal of literacy teaching, and basic skills training at all levels. These emphases do not amount so much to a significant structural change in pedagogy and curriculum, but in a reallocation of financial resources, marking a change in the priorities for the allocation of public school funds. Placed in the context of the kinds of reforms that began with the Competency Based Education Movement in the mid 1970's, a familiar scenario is unfolding: standardized testing continues to increase in order to 'improve' public and political accountability; at both secondary and tertiary levels humanities and arts curricula are being eroded by applied and theoretical sciences, both industrial and post-industrial high technology skills curricula. At least on the level of stated intents, then, the spate of surveys, commissions and position papers would appear to be a part of a general historical movement to better align the practices, contents and goals

of mass schooling with what are perceived to be the emergent labour demands of that vaunted and mystified entity known as the "information society".

One cannot help but wonder whether this latest generation of reformers is destined eternally to recover a not so distant educational past. We might benefit by reviewing the present debate in the context of an earlier reformation of education and state schooling which also aimed to realign educational practice with a 'modern' economic and sociocultural order: the 19th and 20th century emergence of 'industrial' educational reform. Then as now, there was a stated concern with the effectiveness of existing pedagogies and curricula in servicing the needs of a technological revolution; then as now, the debate was seen in terms of polarized and dichotomous educational philosophies. Two obvious North American historical antecedents to the present crisis come to mind: the Human Capital models of the post-Sputnik era and the early 20th century Progressive reform advocated by Dewey, Thorndike, Judd and others. In both cases, as with current proposals, the aim was to better attune the output of the educational sub-system with the alleged technological and economic needs of the societal macro-system.[8] A simple formula emerged: alterations in dominant modes of cultural production (and information exchange) were seen to require educational change. Both movements furthermore claimed that "industrial progress" would yield individual development with socioeconomic benefits for all.

The 'crisis' literature draws parallels with Depression-era and 60's reform, pointing to the disjunction between the purported intents of reformers the rhetoric of reform - and concrete historical outcomes.[9] We should like to revisit here, though, a less often discussed but quite complementary 'series' in English educational history within which parallel questions were addressed and parallel remedies proposed. Ironically, but not coincidentally, the Victorians also begged central questions about the actual social and economic consequences and concomitants of educational reform. We wish to identify - in the passage and implementation of the *Revised Code* in mid-19th century Britain and in the subsequent academic discourse between Matthew Arnold and Thomas H. Huxley over the aims, purposes and contents of the curriculum - a widely ignored historical antecedent to the current crisis. In pointing to the parallels with the current educational debate, we set out to specify crucial social concomitants and effects of educational reform, to clarify the kinds of educational questions which now, as then, have preoccupied educators, governmental officials and academics in periods of alleged crisis. Furthermore we wish to identify the rhetoric by means of which more fundamental, structural sociocultural concerns may be effectively obscured within educational debates thereby functioning to legitimate the state of affairs under criticism not by persuading or revealing but rather by deflecting attention away from the it.

The Revised Code: Minimum Competency and Basic Skills

While mid 19th century schooling in North America was still firmly entrenched in traditional 3 R's and Classical educational theories and practices, English education - mired in successive financial and ideological "crises" - was encountering the beginnings of systematic scientific scrutiny: the administration of the first tests of minimum competence and functional literacy. In Victorian England, the *Revised Code of 1861* proposed the universal testing of students to assure the acquisition of minimum skills. Subjective by modern standards, the introduction of standardised instruments altered the authority of the archetypal school inspector, transforming his role from that of connoisseur/subjective expert to that of administrator/marker (and later, statistician, manager and psychologist). The shift in institutional apparatus for assessment marked a redefinition and redivision of the labour of inspectors and teachers. As well, the use of an 'objective' evaluation to determine the continued financial existence of individual schools and teachers redefined fundamental relationships of educational power. Where the subjective and authoritative 'word' of the school inspector had sufficed, the new proposal was that standardized tests should become the impartial arbiter of educational achievement and pedagogical efficiency.

The parallels with the current and aforementioned early and mid 20th century crises are striking. The use (or, in Modern North American parlance, the "deployment") of competency examinations resulted from the perceived inability of existing education to satisfy a perceived need for increased functional skill levels in industrialized society. Following the recommendation of the *Newcastle Commission*, parliamentarians like Robert Lowe aimed to increase administrative and pedagogical efficiency by tying payment to examination results. Lowe, and more generally the group Raymond Williams characterizes as the "industrial trainers"[10] were obsessed with the emergent ethic of industrial efficiency. The *1861 Revised Code*, then, came to be known as "payment by results" because it was a central component of a system whereby the funding of schools would be contingent on the capacity of elementary students to demonstrate basic skills competences in the 3 R's. This legislation was a response to heightened political and economic pressures for increased accountability in light of rapidly escalating expenditures in school financing and to the later discredited report by H.M.I. Norris that only 25% of school children were receiving an adequate education.[11] Between August of 1861 and May of 1862, politicians, journalists, literati of all ilks, and the public at large waged a heated debate over the code.[12] Nonetheless, various political and economic exigencies led to its passage, among them the fact that the Crimean war had been costly and there was considerable popular opposition to increased financing of education. The Bill was implemented with minor amendments in 1862.

The *Revised Code* prescribed minimum literacy skills: six and seven year olds, for instance, were expected to read a "narrative in monosyllables", and to "form on blackboard and slate, from dictation, letters, capitals and small manuscript". A twelve year old was required to exercise practical skills, "to read a short ordinary paragraph in a newspaper or other modern narrative" and "to transcribe a paragraph slowly dictated once by a few words at a time".[13] As with present day criterion referenced minimum competency tests (e.g. *The Florida Tests of Basic Skills*), Victorian students were tested on the exercise of practical mercantile skills such as the filling in of "bills of parcels".

The intent of the Code, then, was to refocus instruction on the teaching of social and vocational basic skills, and thereby to eliminate institutional "waste" and "inefficiency". Lowe promoted the bill in Parliament, stating that "We know that there will be a loss (of finances) where the teaching is inefficient. This is our principle - that where the teaching is inefficient the schools should lose."[14] The skills orientation proposed for government financed schools, which had significant appeal to an increasingly influential middle-class, was allied with the Utilitarian imperative that schools produce socially efficient individuals who literally would "enrich" society - an early version of what would subsequently come to be known as the "human capital" rationale for education. The achievement of educational equality, moreover. was equated with pedagogical efficiency in the transmission of basic skills which could be operationally defined and measured via testing. This emergent ethic of education qua "industrial worth" was forwarded on both egalitarian and fiscal grounds. It was the kind of justification which enabled a kind of rhetorical oscillation between divergent, and actually contradictory grounds for legitimation.

For some school inspectors this move violated what was for them a meritorious Classical educational philosophy. At once, it threatened to alter their traditional roles as guardians of standards and excellence; at the same time, it purportedly granted them broad and sweeping new control over individual teachers careers and entire schools. In fact, a newly rationalised basis for inspectorial authority emerged: Her Majesty's Inspectors found themselves in the awkward position of supervising and marking tests which to a large extent appropriated their prior forms of control over schooling; a redivision of their labour, previously a personal 'connoisseurship', was underway. While the state of the art of test construction and marking was fallible by later standards, the tests successfully initiated an historical trend towards more 'objective' appraisal of school efficiency through the mass testing of student performance. This kind of empirical assessment predated the psychometric work of Galton, Binet and the likes of Thorndike and Terman in the U.S. Considering its basic skills and curriculum content orientation, it is perhaps a more direct antecedent to today's

criterion-referenced tests of minimum competence than, for instance, Binet's scale or Terman's early pencil and paper assessments of IQ.

Arnold: In Defense of the Humanities

From 1851 to 1886, poet and critic Matthew Arnold served as Her Majesty's Senior Inspector of Elementary Schools. Arnold tells us that school inspecting Was "not the line of life I should naturally have chosen" but explains that he "adopted it in order to marry".[15] Yet it would have been difficult to find a candidate for school inspector more deeply committed to the preservation of cultural tradition than Arnold, who would stand in defense of Classicism throughout his public and literary career. Arnold's response to the *Revised Code* was immediate: he considered the tests a threat to the autonomy of judgement exercised by inspectors. "The mass of minute detail", he argued, eliminated the "free play of the inspector".[16] And he sensed that the universal administration of such tests would result in the degradation of the educational process. They were, he commented, "mechanical contrivances".

By 1874, Arnold was explaining that the mastery of socially utilizable skills obscured the true goal of schooling: to operate "as a civilizing agent, even prior to its interest as an instructing agent". Arnold saw schools as agencies of holistic 'high cultural' development, not as means for the inculcation of basic skills. In his estimation, learning was being reduced a "mechanical art, nor will the most elaborate drill enable dullness and ignorance to wear the appearance of intelligence."[17] And what of the foundational Classical competence of literacy? In the essay "Twice Revised Codes", Arnold explained that:

> Intelligent reading - reading such as to give pleasure to the reader himself and to his hearers - is a very considerable able acquirement; it is not very common even among the children of the rich and educated class … , they owe it not to the assiduity with which they have been taught reading … but partly to natural aptitude, far more to civilizing and refining influences … in which they have been brought up.[18]

Arnold, then, considered the acquisition of literacy a developmental process engendered best by the "civilizing influences" more likely found in the "educated upper classes. By contrast, he sensed that the basic skills emphasis on mundane "operations which occur in the ordinary business of life"[19] created within Victorian classrooms a "deadness, a slackness, and a discouragement which are not the signs and accompaniment of progress".[20]

This vigorous attack on the Code and the testing system was wholly consistent with Arnold's conceptualization of the nature and purpose of education and culture. regarding the content, institutional mode of transmission and purpose of modern education, Arnold and contemporaries like John Henry Newman defended Classicism against the increasingly popular movement ''for outlasting letters from their old predominance in education and for transferring the predominance ... to the natural sciences."[21]

Among the vociferous advocates of "scientific" modernization of education was biologist Thomas H. Huxley, who was convinced that the Classical educational-model had run its course, that it was -an impediment to the advance of the natural sciences and the generation of "industrial worth''. Huxley's demand for the curricular integration of natural sciences was paralleled by the Utilitarian redefinition of social and institutional domains as appropriate objects of scientific inquiry. By the 1880's Arnold and Huxley's ongoing scholarly repartee on the selection, transmission and use of educational knowledge framed the historical polarization of Classicists and educational modernists.

For Arnold, Greek and Roman literature and philosophy, and subsequent historical works of quality formed a body of valued knowledge (an ideal curriculum), a prescriptive set of methods (an appropriate pedagogy), and the criteria for aesthetic and social criticism (evaluation/application). According to this neo-Classical poetic and critical tradition, Antiquity was the idealized state of man:

the historical and cultural epoch "when society was in the fullest measure, permeated by fresh thought, intelligent and alive".[22] This archetypal cultural environment, or the reduplication thereof, would foster the exercise of creativity, "the highest function of man", and criticism, the recognition, evaluation and appreciation of that creativity. Responding to Huxley's demand for the replacement of Greek and Latin with modern "useful" subjects (a demand echoed by Dewey and Thorndike early in the next century), and for the replacement of Graeco-Roman literature with more contemporary English literature, Arnold wrote,

> If the instinct for beauty is served by Greek literature and art as it is served by no other … we may trust to the instinct of self-preservation in humanity for keeping Greek as part of our culture. We may trust to it for even making the study of Greek more prevalent than it is now.[23]

Within this "humane letters" curriculum, then, the truly "educated" individual would acquire the capacity to create, appreciate and criticise literature. In "Literature and Science" - a lecture delivered during his 1883 tour of the United States - Arnold staunchly defended Plato's hierarchical educational model on the grounds that Classical education was universal, "fitted for all sorts and conditions of man", and that it would be valued by the "intelligent" regardless of historical epoch. Yet even Arnold acknowledged the effects of the late 19th century realignment of social class and labour; he conceded that Plato's "scorn of trade and handicraft is fantastic, and that he had no conception of a great industrial community as that of the United States, and that such a community must and will shape its education to suit its own needs". foreshadowing the early 20th century American negation of the same Classicism he defended, Arnold noted that ... if the usual education handed down to it from the past does not suit it, it will certainly drop it and try another".[24]

Nonetheless, Plato's view of education was seen as valuable ''whether we are preparing ourselves for a hereditary seat in the English House of Lords or for the port trade in Chicago". Although he defended the continuation of an academic, hierarchical educational system, Arnold anticipated popular discontent with any system of education, American or British, which perpetuated class and aristocratic values and failed to address the needs of those ''cultivators of the ground handicraftsmen, men of trade and business, men of the working professions".[25] As in much of Arnold's poetry, there was here a sense of apprehension, perhaps even stoicism towards the seemingly inevitable advance of industrialized and scientised culture.

Arnold more generally countered Huxley ' s claim of the diminishing social utility of Classical education with his argument - advanced still by present day Neoclassical philosophers of education - that the ontological state of being cultured' was of value in and for itself, irrespective of changing forms of social and economic relations. In fact, the threat to traditional and high culture Arnold perceived made the defense of that culture all the more imperative His oft cited claim "that the aim of culture" - and consequently of education was "to learn and propagate the best that is known and thought in the world"[26] was tautological: "being cultured", "being educated" was its own end. By asserting that ideas and aesthetic expression were valuable in and for themselves Arnold offered educators a doctrine of intrinsic worth: that text, the Classical works of art, and implicitly education itself, could be evaluated according to terms of "laws of poetic truth and beauty". Contraposed against the Utilitarian doctrine of extrinsic social use and Romantic vision of art as a means of personally apprehending and engaging the world was Arnold 's deliberate dichotomy of theory and practice: "Ideas cannot be too much prized in and for themselves; but to transport them abruptly into the world of politics and practice, violently to revolutionize this world to their bidding, this is quite another thing".[27] Poetry and art, then, would provide the basis for a true "criticism of life": a "disinterested endeavor'' undertaken from afar, divorced from the mundane and practical.

In Arnold 's total critique of education, then, the Classical curriculum was maintained as a defense against the abuse and erosion of its own status as the arbiter of cultural and social worth. Beseiged by the "Philistines" of popular culture and advocates of the ''new science '' alike, Classical education was rationalized as its own end; only it enabled the truly educated, like Arnold's poetic persona the Scholar Gypsy, to transcend "this strange disease of modern life, with its sick hurry, its

divided aims."[28] Its purpose was not to transform social reality, nor even to accept that which was mundane or Philistine – but to apprehend that reality in idealized categories. Yet while Arnold adamantly claimed that man is moved toward the Good and the Beautiful, he recognized that in an age of cross-disciplinary application of methods and knowledge, in an age of social and industrial "progress", that "men of culture and poetry … are again and again failing, and failing conspicuously, in the necessary first stage to a harmonious perfection, in subduing the great obvious faults of our animality".[29]

Huxley: Towards a New Monopoly of Science

It was this very ''animality'' that Darwin, Galton, Huxley and others were reconstructing from a radically different methodological perspective, that of the natural and empirical sciences. The socio-economic transformation of late 19th century England gave rise to contending educational metaphors, and therefore, to contending educational models. In place of Arnold's Neo-Classical allusions, we have the idiom of the machine. Huxley's version of the educated person identified the body as a "mechanism", the intellect a "clear, cold logic engine … in smooth working order; ready, like a steam engine, to be turned to any kind of work, and spin the gossamers as well as forge the anchors of the mind".[30]

In the 1870's, Huxley was arguing for increased instruction in the natural sciences. He shared with J. S. Mill the belief that scientific inquiry could be applied to Brahman cultural domains of religion, ethics and education. Huxley furthermore forwarded the extrinsic social and scientific application of educational knowledge, conceiving of education as "the instruction of the intellect in the laws of nature, under which I include not merely things and their forces, but men and their ways".[31] In his estimation, the Classicists' rejection of scientific methodology and social utility served to maintain and uphold privileged control over what would count as academic and, for that matter, culturally significant knowledge. These "modern humanists" possessed a "monopoly of culture u which was premised on claims of their exclusive inheritance of the spirit of antiquity".[32] Huxley's sense of the matter, then, was that the Classical organization of knowledge and inquiry ignored those legitimate social and scientific concerns which did not conform to Classical canons of cultural worth.

Both he and Arnold carried their personal debate to America. In an 1876 address at John Hopkins, the newly founded university devoted exclusively to graduate level study and advanced research, Huxley noted the "encouragement of research" in American universities. Indeed, Hopkins was on the verge of becoming one of the foremost centres of psychological research in North America. And during the following decade Hall, Cattell, Munsterberg and others recently returned from Leipzig would begin setting the stage for the scientific modernization of American education. At Hopkins, Huxley caustically labelled Arnold "our chief apostle of culture", who proposed that "literature contains the materials which suffice for the construction of such criticism". He juxtaposed for his American audience the two sides of the 'great debate':

> How often have we been told that the study of physical science is incompetent to confer culture; that it touches none of the higher problems of life; and, what is worse, that the continued devotion to scientific studies tends to generate a narrow and bigoted belief in the applicability of scientific methods and search after truth of all kinds?

Huxley further explained his alternative:

> … I hold very strongly by two convictions: The first is that neither the discipline nor the subject matter of classical education is of direct value to the student of the physical as to justify the expenditure of valuable time upon either; and the second is that for the purpose of attaining real culture, an exclusively scientific education is at least as effectual as an exclusively literary education. (our emphasis)[33]

A pure advocacy of science? Perhaps, but Huxley's metaphor of education as "expenditure" suggests that he had succumbed to the rhetoric, if not the principles, of industrial training. Huxley explained the relationships of the sciences and scientific education to the existing educational structure, arguing that natural science should be fully integrated into the curriculum, and that education itself was the potential object of scientific method and inquiry. Huxley recognized the nascent relationship of the scientific reform of educational practice with the emergent necessities for industrial and scientific expertise, and for skilled labour. He concluded that "the diffusion of scientific education is an absolutely essential condition of industrial worth".

It was this demand for "social utility", scientific reform, and industrialism against which Cardin al Newman reacted so strongly. In *The Idea of the University*, the Victorian essayist and critic characterized the proponents of science and practicality in education:

> They insist that Education should be confined to some particular and narrow end, and should issue in some definite work, which can be weighed and measured. They argue as if everything as well as every person, had its price; and that where there has been a great outlay, they have a right to expect a return in kind. This they call making Education and Instruction "useful", and "Utility" becomes their watchword.[34]

Newman here criticized the explicit equation of education to quantifiable skills which could in turn be assigned a recognizable "market value". Attacking the epistemic grounds for such reforms as the *Revised Code*, Newman believed that the ethic (and metaphor) or "Utility" brought with it an objectification of educational endeavour into measurable categories (of marketable expertise) which would be used to ascribe "real worth in the market of the article". He opposed the modernist reform of educational practices as one which potentially divided the totality of Classical knowledge into distinguishable and thereby measurable units. Indeed, Newman noted with dismay, the Utilitarians aimed to use education to "advance our manufactures" and to "better our civil economy".[35]

For Arnold and Newman, then, these identifiably industrial reforms threatened not only the educational system, but the very continuity and worth of culture For Huxley, individual, societal and economic development depended on the reconstruction of educational practice. The terms of the debate, then, read as binary oppositions: culture vs. industry, literature vs. science, intrinsic worth vs. social utility, elite culture vs. basic skills, accountability vs. waste.

But is it sufficient to conclude that the kind of historical dualism exemplified in the Arnold/Huxley exchange, as well as in more contemporary educational debates, reflects real, recurring historical alternatives in educational practice? Are the histories of educational ideas and of educational reform - as so many commentators past and present would have us believe - inevitable series of "swings of the pendulum"? Or is such dualistic thinking a means for suturing over, for omitting from public and academic discourse more fundamental, structural concerns?

The Rhetoric of Efficiency and Progress

> The possibility that other nations may outstrip us in inventiveness and productivity is troubling to Americans … Highly skilled human capital has always been important to our economy.
>
> - Task Force on Education for Economic Growth, *Action for Excellence: A Comprehensive Plan to Improve Our Nation's Schools* (1983)[36]

> Progress is our most important product.
>
> - Ronald Reagan, *The General Electric Theatre* (c.1957)

Since the industrial revolution, the terms, rules and limits of the educational debate over 'modernism' have been clearly marked out for all participants: any educational model which claims contemporary pre-eminence must not only address recognizable shifts in political climate, and resultant alterations in the role and direction of the state in the selection of educational policies and practices, but as well must be responsive to perceived necessities of economic and technological change. Reform of educational systems has become yoked inextricably to perceived economic and social 'needs v of modern industrial and post-industrial states. We have seen that in mid and late 19th century England - as in early 20th century North America - the increasingly evident divergence between the Classicist vision of society and a progressively more urbanized and industrialised social and economic milieu implicated 'traditional' educational models as inhibiting individual, social and industrial development. As in the present "crisis", mass testing, an emphasis on basic skills, "functional" literacy, and scientific/ technical training were posited as logical adjustments to the system: the Arnoldian "monopoly of culture" was gradually being superseded by an industrial rationale which (upon ascribing to itself the status of 'science') would evolve historically into what Callahan's classic study of 20th century American schools has termed "a cult of efficiency".[37]

When viewed against the backdrop of the development of British schooling, the Arnold/Huxley debate appears as a rhetorical mystification of a major shift in labour, culture and social relations towards an industrial model. It was in this period that the *geist* of educational modernism - mass state schooling - entered an era of sustained quantitative growth and extension: the *Revised Code* was followed in 1870 by the *Elementary Education Act*, which provided for a state system; subsequent legislation in the 1890's and the 1900's led to the provision of '' general education'' to the age of 16[38]. Since the end of the 19th century, advocates of scientific and vocational education have been at odds with self-proclaimed guardians of literate culture[39], notwithstanding attempts from Spencer to Dewey to unmask this false dichotomy. That such attempts have consistently failed is, we believe, due to the fact that these successive Great Debates by one generation after another of educational reformers have unwittingly collaborated in the obscuring of the actual directions of change, both in social and economic life, and in educational practice.

For if we look beyond the discursive positions forwarded by Arnold and Huxley and towards the historical concomitants of Victorian educational reform and expansion, it becomes apparent that what was then at issue, and what remains at issue today, is in no sense a simple choice between Technicist and Classicist, between the provision of literate, skilled labour and the maintenance of elite culture. Social histories of the spread and distribution of literacy in industrial England, and 19th century Canada and the United States[40] indicate that while school reformers had as their stated aim the enhancement of industrial and social progress, the net social effect was far more mundane - the extended social and ideological control of the working populace previously excluded from 'official schooling. Richard Johnson argues that early Victorian educational reforms undertaken under the auspices of industrial development did not in fact yield increased vocational competence: "...it is difficult to see how a process that often involved deskilling and the destruction of previously literate communities can have produced, by main economic force, an educational revolution" (our emphasis).[41] His analysis of Victorian reform is complemented by Graff's study of 19th century Canadian school reform and Soltow and Stevens' study of literacy in 19th century American schools: while advocates of modernization had as their stated goal the provision of a literate, capable work force, this goal was "embedded in all kinds of other aims", namely mass socialization. Graff identifies the hidden agenda of early Canadian school promoters as one of "assimilation, control and discipline".[42]

With this broad overview on the social and educational effects of early state education in English-speaking countries - and with an eye to the discrepancy between actual historical outcomes and the stated intents of particular educational models - we can attempt to deconstruct and reinterpret the current situation. We can do so by rereading the discourse of the current policy reports for various rhetorical and thematic cues. The consensus of the recent reports is that schools are failing to provide technological competences, both 'lower order' hardware and management

skills and 1 higher order' competences of systems research and development. This is blamed variously on poor teaching performance, rampant permissiveness and resistance, the excesses of today's versions of 'child centered' Progressivism in both family and school socialization, irrelevant scholastic and humanist curricula. The remainder of the formula is by a cliche shred by journalists, educational consultants and administrators, and post-industrial trainers: we are told that a vast majority of high school graduates will be employed in "high tech" information based scientific fields, rather than the industrial and resource based occupations of their parents generation. Higher levels of literate and scientific competence will of course be necessary and, as one report puts it, "skills once possessed by only a few must now be held by the many".[43] The logical simplicity and egalitarian appeal of the argument are impeccable: further development of the economic (and sociocultural) system is said to require as significant a curricular transition as did the move from rural to industrial economics in the last century. Those who contest this argument stand labelled as Arnoldians at best, if not modern Luddites.

This is indeed a rhetoric of inclusion, which appeals to putatively mutual and common needs and interests in an effort to generate social cohesion and solidarity. But, as Newman astutely recognized, the presupposition of modernist (both industrial and post-industrial) reform is that the state system by definition exists for the production of, the U.S. Task force on Education for Economic Growth reminds us, "highly skilled human capital". In both the Human Capital argument (of Conant, Rickover, Kerr and others in the 1950's and 60's) and the present rhetoric of "excellence", moreover, the alignment of the educational system into a more complementary relationship with the economy is said to benefit the historical 'outsiders' of state education: ethnic minorities and lower socioeconomic classes. In the rhetoric of educational reform, then. expansion of the nation state, economic progress and equality are forwarded as necessarily intertwined imperatives.

Are we, then, to take the promise of economic progress and expansion with social justice on its word (that is, for the development of "the many") as the likes of Huxley, Dewey and Thorndike did? Or need we look to historical precedents to specify quite different social concomitants to the industrial/technological rationale for education? The suspicions harboured by many are that this new labour force will become - as was its Victorian industrial predecessor - progressively deskilled:[44] that is, hardware "user" skills, basic "functional literacy", and "service" training are indeed precisely what they appear to be: quantifiably transmitted and evaluated units of un-selfconscious skills of execution divorced from conception, to be institutionally deployed according to the still dominant rules of managerial systems inherited from early 20th century industrial psychology.

In this respect, it should surprise no one that many non-state multinational corporations have both developed surrogate educational systems for employee training and corporate indoctrination while extending their fiscal interests into the state educational system. For a paradigm case consider, for instance, MacDonald's Corporation's *Hamburger University* in the American Midwest where prospective managers and franchise owners must complete diploma courses after studying a range of aspects of the operation of a franchise (e.g. the "MacDonald's philosophy", the standardisation and surveillance of social relations at the workplace, uniform food and product preparation, marketing strategies and community liaison). The extension of corporate influence into public education is obvious: in addition to the extensive control of educational publishing by multinationals (e.g. Gulf-Western, IBM, Xerox)[45], other firms like MacDonald's provide schools with a range of services including community education and traffic safety curricula. This taking over of educational functions, including early childhood socialization by corporations - exemplified, if hyperbolically. in the "cradle to grave" services provided by many Japanese corporations[46] - is a widely overlooked aspect of the structure of mass education in post industrial societies. It would certainly seem to complement, as did its industrial predecessors, the recasting of the school to produce a range of corporate sensibilities, what Michael Apple calls "possessive individuals".[47]

Harvard psychologist Eleanor Duckworth recently pointed out that in the United States, the need for "high technology" workers will be far outstripped by the need for "fast food" workers,

secretaries/word processors, nurses aides and orderlies, janitors, sales clerks and cashiers.[48] While the 1984-5 series of corporate failures and mergers, firings and layoffs among Silicon Valley firms does not place in doubt the future of 'high tech' expansion, it underlines the problematic nature of wholescale (educational) conversion of the workforce. Neglected in the current debate is the observation that a post industrial society traffics in much more than information and technological hardware: for the foreseeable future the vast majority of workers will assume roles in "service" occupations.[49] Indeed, service worker and manager alike will work in technologically saturated environments, requiring rudimentary (and non-critical) operation of "user friendly" software and hardware.[50] For that matter, the historical occupation of "housewife" will undergo a similar conversion with the advent of digitalized microwave ovens, household appliances governed by microchips, teletext information and monetary exchange, and domestic robots. But we can surmise that in this new labour force, centralized and automated decision-making (a mere extension rather than structural alteration of Taylorism) will require 'higher' and authentic cognitive, creative and literate competences of only an elite few. It seems important to point out that service occupations are not productive in the usual sense because, corporate slogans aside, service is not a product *per se* but rather a social relation. And it is a kind of social relation which replicates pre-industrial and industrial relations of master and servant. If indeed this is the case, we should not be debating the kinds of educational "fine tunings'' necessary to aid technological progress, but rather we should in 'educating' be generating dialogue about, or as Freire would have it, "problematising'' the ultimate influences of technological change on the character of labour and culture.

However, the presuppositions and parameters of policy debates past and present preclude us from raising questions such as these. It remains ' outside' the present debate to query the very nature and direction of that sociocultural system which is at present realigning a vast array of institutional systems (and hence social and economic relations), among which schooling is only one. This is assigned to a related, but distinct group of debators in "think tanks'' of the Left and Right (e.g. Hudson Institute and The Club of Rome in the U.S., the Fraser Institute in Canada, various University based 'schools of thought', and of course Corporate research branches) whose discourse of course remains circumscribed and constrained by the interests of both state and non-state funding. The taken for granted assumption of current school surveys is that social consensus on broad social and national goals has been or can be reached. It becomes, accordingly, the 'duty' of educators to assent to the new hybrid of 'high tech'/industrial training in the 'humanistic' interests of social progress. As in previous periods of reform the rhetoric of nationalism is invoked: the President's Commission - citing as scholarly evidence Paul Copperman's popular polemic, *The Literacy Hoax*[51] - goes as far as to label miseducation a potential "fifth column" far more dangerous than any foreign power. Making the point more explicitly. one American academic recently argued that "the connection from here to there, from schoolhouse to missile strength, is quite clear".[52] In lieu of considered alternatives clearly linked to actual social consequences, then, we encounter a kind of what Wilden calls "rhetorical symmetrization"[53]: educational reform or the betrayal of manifest destiny, equality or excellence, science or humanities, permissiveness or discipline, job skills or creative and expressive arts. These alleged "policy options" and related pedagogical and curricular reforms deflect public attention from the "domain of real problems" in modern legitimation crises, the very restructuring of economic and social relations which appear to be the source of correlative crises in a host of other state and non-state institutions in addition to the public educational system.

How is this done? If public debate and popular controversy about the state of public education is thought overtly conflict-ridden, nevertheless covertly legitimating of a dominant educational policy about which consensus is neither publicly announced nor, therefore, actually achieved - then we must try to give some account of the processes of mass rhetorical seduction by means of which we are kept (and keep ourselves) active, engaged, and yet on another level blindly acquiescent. The discourse of reform appears to contrapose but in fact embraces two particular themes: one group (consisting of members of both the political Left and Right who see themselves as disfranchised from the existing system) articulates its perceptions in terms of qualitative deficiencies using the

rhetoric of wholescale structural reorganization and systems crisis; the 'opposition' (consisting of people who work within, are associated with or otherwise see their vested interests in the continuance of the existing system) frames critique in terms of quantitative deficiencies, using the rhetoric of efficiency, "fine tuning" and "systems problems".

For a sense of how such symmetrised debate can in fact suppress and mystify, we can turn to the Marcuse's[54] and Habermas' understanding of how dissent is tolerated and encouraged. In liberal democratic societies, legitimation can rarely be achieved by overt suppression of dissent. We cannot merely silence by force the (many and varied) individuals and groups from whom complaints about the inadequacy of the public educational system are forthcoming - particularly since many arise from the primary agencies of social control themselves, such as the aforementioned surveys and commissions staffed by politicians, academics and corporate leaders. In post industrial societies which rely on mass media for social cohesion, legitimation can best be achieved by publicizing dissent, by bringing previously esoteric matters directly into the public domain, and thereby assimilating the conflicting 'sides' within the all encompassing domain of popular culture. As in Arnold and Huxley's time, and again in the Progressive era when muckraking American journalists writing in popular magazines like *Harpers* and the *Atlantic* set educational controversies before the public gaze, so today in the "Year of the Reports", educational matters have again become fodder for public consumption (e.g. in the form of television documentaries, cover stories in all kinds of popular magazines, investigative and feature articles in newspapers). As Marcuse explains in his "theory of repressive tolerance", once embraced by mainstream media and popular culture, the potential of truly divergent thought and action can become correspondingly neutralised. Consider the incorporation of slogans of the Black Power movement and 'counterculture' (c.1968) into advertising campaigns as a case in point.

Part of the explanation for the neutralising effect of the mass-scale publicizing of dissent stems from the necessity to simplify, to make "mythologies"[55] of and about, what are in fact highly complex ideas and ideologically charged social issues, in order that they may become accessible to those with minimal background knowledge about and little understanding of the domains of social praxis in question. And this is of course necessary when matters and concerns previously restricted to professional/expert discourses are to be interpolated for mass dissemination and consumption. This applies as well to the rhetorical re-presentation of nascent and visibly divergent social movements: we saw resistance movements of the 1960's reconstructed into imaginary (and corporately generated) identities of "flower children"; third world struggles against military dictatorships grasped in terms of yet another mythological set of imaginary beings - the "freedom fighters'' - a group, ironically enough, terminologically indistinguishable from the generations of American "heroes". Yet in the text of mass circulation periodicals, news reports (and even conference proceedings and academic journals) these rhetorically established identities all to often appear non-contradictory, and non-paradoxical.

In the eras of reform we have discussed - the time of the *Revised Code*, the period of Progressivism, and the modern era of "educational excellence" - we see parallel dynamics at work. Dissent, dissatisfaction and the resultant demands for justification are rendered impotent and ineffective through their public debate. Recast into categories of the Imaginary - diametrical oppositions - they can enter into the domain of popular culture, there to be mass consumed with little threat of indigestibility or skepticism towards the alternatives proffered.

What else needs to be said about this? Well, most centrally it needs to be pointed out that what is being achieved in discourses of reform is a rupture, a disjunction between educational theory and practice. If our foregoing interpretation of the Great Debates is sound, what the current debate is about will have very little real relation to, and hence minimal impact on, actual educational practice. For what is being debated is neither educational theory nor educational policy. The value of the debate {apart from the obvious increase in prestige, status and power for the public interlocuters, surveyors, consultants and commissioners) is not in what it brings about. For it always yields

nothing, or at least nothing different from that which has been largely pre-selected by the (state and non-state) socioeconomic system within which and by which education is constrained. The value of the debate becomes, as Arnold might have put it, "intrinsic" - it becomes a self-serving and self-perpetuating dialogue on the Imaginary.

Lessons from History?

Hayden White, in *Tropics of Discourse*[56] explains that the writing and reading of history has less to do with the is closure and grasping of historical facts and far more to do with the deployment of metaphors in the creation and comprehension of narratives. He notes as well that rhetorical forms and narrative structures have been most useful tools in the hands of conservative and radical historians, narrative and social historians alike in rendering the historical record subservient to contemporary and future oriented agendas.

Our interest here is not with the literal 'facts' of the historical theory and practice of education - but with the way in which history and educational theory are reconstructed, the way in which they are "told". By noting parallels between previous periods of "crisis" and "reform" we mean not to extract particular lessons, nor to impose particular ideological templates over the past. Rather we have been concerned with the formal structure of popular, political and academic debate, its rhetorical function as a discourse or legitimation, and its relationship - or rather the lack of it - to actual educational problems and practices.

Above all, we see the need to master a new way of "reading" historical and contemporary debate which moves us beyond the mere notation of similarities and the extraction of historical "lessons", "universal" conditions, principles and the lot. The current reports are fraught with this - for self-interested reading of historical texts and utterances, characterised by the omission of historical contradictions, is all too easily achieved and all the more tempting for it. For we should surely be on guard when we perceive that Arnold, though clearly a conservative who called for a retrenchment of Classical culture and the preservation of traditional connoisseur-based authority, was concerned at the same time with the protection of holistic/qualitative aspects of culture and of education: hence, his and Newman's current appeal to humanists of both the Liberal Left and the New Right as defenders of culture against those who would see education in terms of mechanical efficiency and quantitative "output". Ironically, the modern educational Left - insofar as its pedagogical agenda remains an unhewn and often confusing amalgam of Freire's radical pedagogy, 60's countercultural and humanistic education, and Deweyianism - itself evolved in historical response to both Arnoldian Classicism and industrial vocationalism. And what indeed did Arnold's vehement opposition to Huxley's position amount to, if he was able to say, as he did, that "indisposition" to "science and systematic thought" was "our great intellectual fault". He argued further that "the result is that we have to meet the calls of the modern epoch … with the idea of science absent from the whole course and design of our education".[57] What can we make of Huxley's opposition to Arnold, when we find him writing that "I am the last person to question the importance of genuine literary education, or to suppose that intellectual culture can be complete without it"[58] As one commentator on the Arnold/Huxley debate recently put it: "Each … claimed sufficiency for his own field only if such a choice were forced on him".[59]

It never was. And even if such a choice had been "forced" on these or other eminent 'public/academic' figures (a rare status now shared by modern commissioners and consultants, and one only enabled by the mass transmission of the discourse of reform), it would have not made any more than cosmetic difference to what went on in public schools before the "choice" or after. From the standpoint of structure. the discourse on educational reform then and now is an historical setting of antitheses, each of which is equally removed from, and serves to conceal the domain of real problems. From the standpoint of function, the Great Debate is a rhetoric of legitimation.

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