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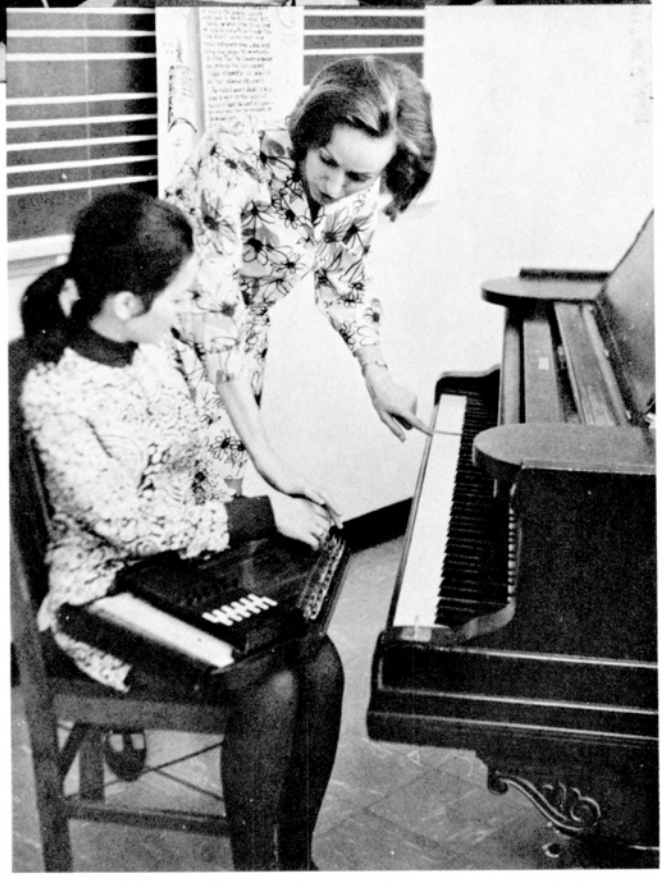
EDITORIAL

Farewell Macdonald

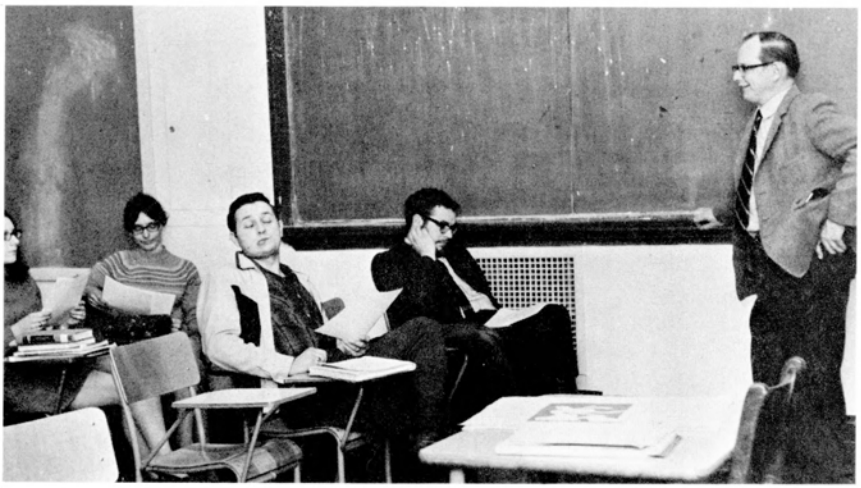
After sixty-three years on the campus endowed by Sir William Macdonald, McGill's teacher preparation program returns downtown. This Fall, the Faculty of Education moves to a new building on McTavish and Peel, but leaves behind these glimpses of the Class of '70, the last graduates in Education from Mac.

In recent years the trend has been away from large lectures towards small group work



Or individual instruction.

But . . .



. . . No format is perfect!

Students work independently

In the Library,

Enthusiastically

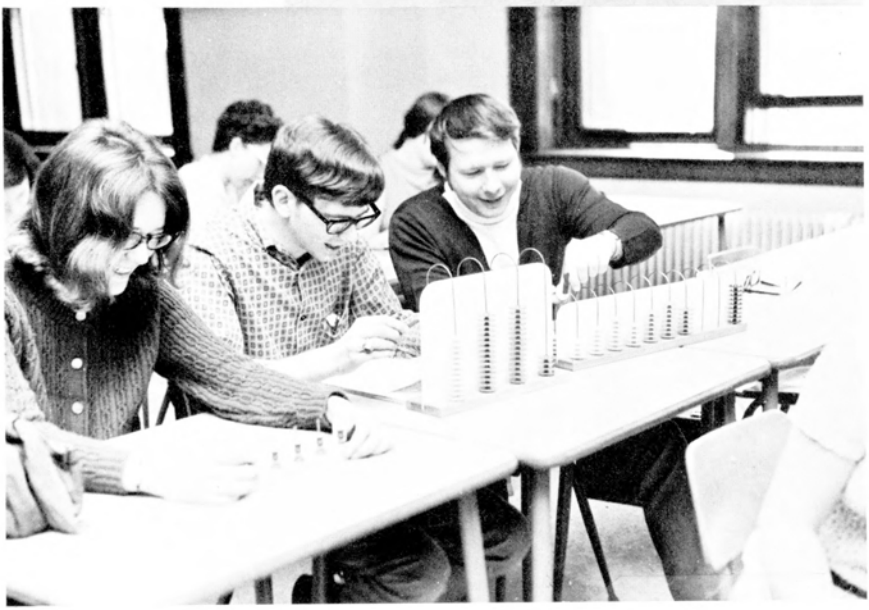
at

Creative Dramatics,

Experimentally with Gadgetry,

Cooperatively
in Methods.

This must be New Math.



Then there's Art and Science.

Methods,

Academics,

Foundations

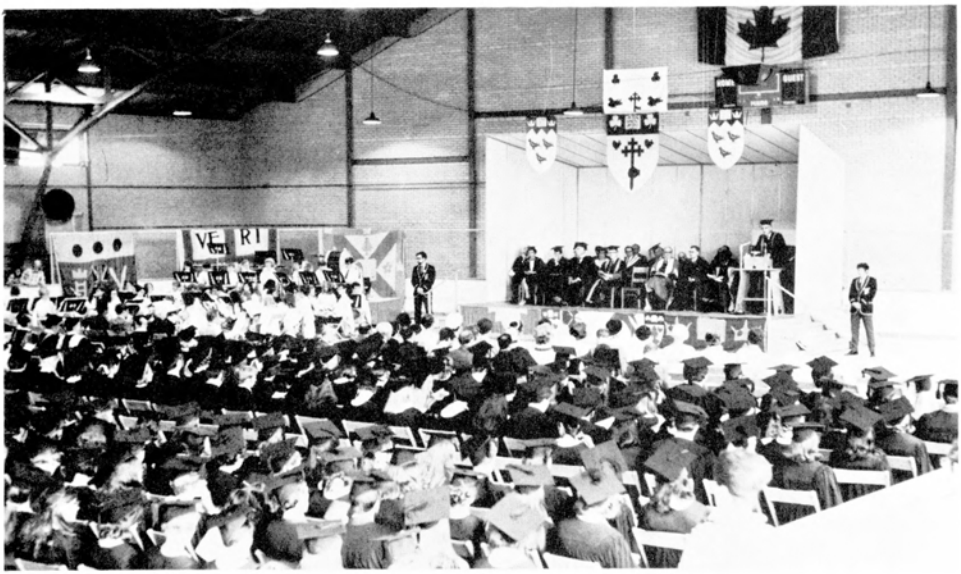
and

Practice Teaching

all lead

to

GRADUATION . . .



The last Education Commencement in Glenfinnan Rink, June 1, 1970. David C. Munroe, former Director of the Institute of Education, receives an honorary LL.D.

Farewell,

Macdonald!

Photographs:
M. Hineline
P. Hearsey

The nostalgia of times past will stay with us for a while, but in our next **Journal** we shall also focus on the excitement and expectations of things to come. Our Spring 1971 issue will be a "special" to celebrate both the official opening of the new Faculty of Education building and McGill University's sesquicentennial anniversary.

Meanwhile, in this issue, we have an extraordinary number of fighting words. The nom-de-plumed "M. Josephus Poole" repeats David Riesman's judgment about the collision course of the American university.* "The American university is not run at all . . . it is going to pieces," he says and, "The whole conception of administration provided by Grayson Kirk and expounded by Jacques Barzun is hollow idiocy."

— "Today . . . the very existence of the university as an academic institution seems in jeopardy," Brian Hendley.

— "The guerrilla teacher sees schools as essentially political institutions and only secondarily, when at all, as educational ones . . . ," Fred Staab.

— "The school may be, but is not necessarily, an educational institution," Mark Braham.

— ". . . demonstrably, a large segment of our national educational establishment is disoriented, discredited, and visibly breaking down at all levels . . . But, . . . is the Savage in fact as Noble as he is cracked up to be? and are we, in fact, on the eve of the Apocalypse?" Gerald Kamber.

Read on . . .

M.G.

* **Cf.** David Riesman, "Inflation in Higher Education," **M.J.E.**, Spring 1970, pp. 3-12.

THE TEACHER IMAGE IN FICTION

John Farrell

A talk's a talk; it drops down dead
After the bloody thing is said.
A talk becomes mere fossilization
When stripped of flesh for publication.
A thing of leftover woofs and warps,
Like making out with a day-old corpse.
Vanished the mild and magnificent eye,
The scintillant wit, the mellifluous cry,
The well-timed gesture, the anecdote,
The slotted pause, and the comical quote.
Once a talk's ended, its body is slain.
Only the cold bakemeats remain.*

Our lives should be floodlighted by two kinds of truth: the truth of science and the truth of literature. The truth of science has been dominant over the last century. Yet, while science provides the picture tube, it isn't much help in deciding for us what pictures to show. Education texts can tell us about the theories of teaching, but only fiction, perhaps, can bring to life the teacher as an individual. Only fiction can convey the very private Gethsemane of such an individual facing a jeering class each morning.

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*This paper is based on a talk Prof. Farrell gave at the Learned Societies meeting in Winnipeg, May, 1970 — hence this caveat.

Each of us wishes to remain an individual despite efforts to number us, punchcard us, and feed us into IBM monsters. We refuse to become Auden's unknown citizen. We want to withdraw into our uniqueness. I feel that Shakespeare and Dostoevski and Goethe knew this, but I never really feel that the new-day scientists of the Western world, the economists, the psychologists, the sociologists, see me as any more than a nondescript ant on a statistical ant-heap.

Clearly, in the twentieth century one cannot be against science. The trouble comes when you begin *to equate* science with education, when you try to make human relations and love and teaching and values the slaves of standard deviations, coefficients of correlation, and all the other abracadabra. Among educators I always seem to hear too much about science and the need for research and too little about values and literature and instincts and people. Here is where literature provides a useful, I would say, indispensable corrective.

Suppose we look specifically at the image of teachers as found in literature, past and present. For convenience I have arranged these images into ten categories.

I — The Birch-cane Image

The first class we could call the "Birch-cane and Hard-bench" type. He is a male and he teaches boys. He is one part God, one part Mephistopheles, and two parts Regimental Sergeant-major.

Here is a description from Tudor times:

> His next care must be the demeanor of his countenance: he looks over his scholars with as great and grave a countenance as the emperor over his army . . .
>
> As he sits in his seat, he must with grace turn his moustachios up; his sceptre lies not far from him, the rod; he uses martial law mostly, and the day of execution ordinarily is the Friday . . .

In American literature he appears as Ichabod Crane, "with hands that dangled a mile out of his sleeves, feet that might have served for shovels, and his whole frame most loosely hung together." "He was a native of Connecticut, a state which supplied the Union with pioneers for the mind as well as for the forest." And he's rough on the kids. Tom Sawyer's teacher is of the same vintage.

Dickens is full of these sergeant-major types and they run what some modern principals like to call "a tight school," closer to a marine boot camp than a fount of knowledge. Mr. Wackford

Squeers in *Nicholas Nickleby* had one eye, you remember, "when popular prejudice runs in favor of two." He and his wife rammed treacle and sulphur down the throats of their students at Dotheboys Hall much like Mussolini forcing castor oil down the throats of tepid Fascists. One thing to be said for Squeers, he believed in student activity. The boy would be asked to spell "window" (W-I-N-D-E-R) and then translate the orthography into relevance by spending the rest of the morning cleaning the windows. Mr. Creakle in *David Copperfield,* brutal headmaster of Salem House, spoke in a whisper, but it was a most terrifying whisper. Laurence Olivier contributed a little gem to the recent television performance of *David Copperfield* playing the role.

A slightly offbeat variation of this type is Fagin in *Oliver Twist.* He taught the boys (his "little dears") to pick pockets and he performed this immensely utilitarian task with tremendous success and verve. He has, of course, renewed his literary immortality recently in the successful musical *Oliver.*

Another variation is the sinister Svengali who hypnotizes Trilby into singing divinely in that popular late-Victorian novel by Gerald Du Maurier, forebear of Daphne Du Maurier. Trilby's last name was O'Ferrall. I have had an affinity with her ever since my early reading days. What did Svengali have, what power over women, that she would turn down nineteen proposals of marriage to follow him? Maybe that's why I decided to be a teacher and mesmerize impressionable young ladies. You remember that Svengali died in the opera box while listening to Trilby. As a result Trilby lost her voice forever. But Svengali added his name to the long list of English eponyms.

II — The Governess Image

The governess is now virtually extinct like the bustle she wore. Jane Eyre is the prototype. And she always worked for low salaries in eccentric families with Gothic groans coming from demonic attics. She had no security of tenure unless she married the boss, as Jane Eyre ultimately did with Mr. Rochester. This wasn't easy, since there was usually a wife in the woodwork somewhere who frequently had bats in the belfry. The course of study seemed rather heavily slanted to French, needlework, Czerny piano exercises, and decorum.

Mrs. Malaprop in Sheridan's *The Rivals* outlines what every young woman should be taught by her governess: "She should have

a supercilious knowledge of household accounts, should be mistress of orthodoxy, learn about contagious countries of Europe, and any other such inflammatory branches of learning."

A rather irreverent example of the governess type is Lady Carlotta who teaches by the Schartz-Metterklume method in a maliciously sardonic story by Saki.

> "I shall talk French four days of the week and Russian in the remaining three," says the ineffable governess.
>
> "Russian?" says the alarmed mother. "My dear Miss Hope, no one in the house speaks or understands Russian."
>
> "That will not embarrass me in the least," says Lady Carlotta coldly.

Miss Carlotta decides to dramatize some history. "It's the Schartz-Metterklume method to make children understand history by acting it themselves; fixes it in their memory, you know," she tells her employer.

So Irene and Viola and Claude and Wilfred were caught by their fond mother acting out, of all things, the Rape of the Sabine Maidens. Miss Carlotta's term of employment ended rather abruptly. She did not request a board of reference. You will all be relieved to know that Lady Carlotta had had no teacher training.

III — Anne-of-Green-Gables Image

We now come to the commonest of all early types of teacher literature on this continent, what I call the "Lil-Abner-Daisy Mae" type. It involves the rural school, the box social, the plugged-up chimney, the many grades, the meadowlarks, the spelling bee, the ginghammed girls and the barefoot boys with cheeks of tan. We read it in order to refurbish our nostalgias. Many of us had our first contact with schooling in this kind of school, now gone with the buffalo and the buckboard and the buggy whip. We look back fondly on such schools and such teachers. We conveniently forget the inconveniences, but remember the Christmas concert and the swain who used to pull our pigtails.

One of the early examples of this pioneer fiction is *The Virginian,* a sort of Ur-Western by Owen Wister, not to be confused with Thackeray's *The Virginians* or with the television show. Molly Wood came from the east to teach at Bear Creek, Wyoming. She was pretty — God, she was pretty! — how pretty you can tell by the fact that the Virginian purloined her delicate handkerchief on their

very first meeting. These were rough, tough, ridin', shootin' men, these were. Their idea of fun was to switch babies and baby clothing at a barbecue so that the mothers rode miles and miles jouncing over potholed trails only to discover when they got home that they had the wrong baby.

But Molly Wood, our cow-country culture carrier, tamed them, or at least one of them. She taught the Virginian how to read. This was such a successful stepping stone to matrimony that dozens of other rural teachers in later novels tried the same gambit with like success. At one stage, the Virginian lynched some thieves. As a result of this Molly nobly refused to marry him, but she realized that she was being a little sticky about it when the Virginian pointed out in his new-found articulateness that he was merely doing his duty. They were married and spent two months high in the Rocky Mountains where no other humans ever went. The curtain is best drawn at this point on the question of whether the reading instruction continued in the mountain retreat, or whether this high-minded couple found some equally diverting way of passing the lonely hours.

Two other famous examples of this idyllic backwoods literature are *Hoosier Schoolmaster* (Edward Eggleston) and *Glengarry Schooldays* (Ralph Connor). *Susan Cornish* (by Rebecca Caudill) has appeal for young people of the non-grass-hash-acid brigade and is a more recent version (1955). There are dozens of other examples. One should not leave them without mentioning the best of them all from a literary standpoint. *Where Nests the Water Hen* (Gabrielle Roy). It is written by a Winnipeg woman. It is set "deep within the Canadian province of Manitoba, remote in its melancholy region of lakes and wild waterfowl, where lies a tiny village known as Portage des Pres, or Meadow Portage." It is there that Mlle. Cote, fresh from Winnipeg Normal School, comes to find her vocation.

IV — The Dominie Image

The fourth teacher image is what I call the "Dominie" image. The school-master is the scholar, the learned man, the fountain of knowledge, the father image, often monastic. You find him in small villages as in Goldsmith's "The Deserted Village," where,

> Amazed the gazing rustics ranged around;
> And still they gazed, and still the wonder grew
> That one small head could carry all he knew.

However, the dominie is not limited to the small village school. You find him in *Goodbye Mr. Chips* with his erudite jokes in Greek. You find him in Kim's *Lama.* You find him as Dr. Max Gottlieb in Sinclair Lewis's *Arrowsmith.* You find him as Father Zossima, Alyosha's teacher, in Dostoevsky's *The Brothers Karamazov.* You find him in feminine guise as the influential teacher in *The Corn is Green* and *How Green was My Valley.* You find him in William Gibson's beautiful book, *A Mass for the Dead.*

You find him as Mentor Graham in Robert Sherwood's *Abe Lincoln in Illinois.* Abe boarded with him. He taught Abe the rudiments of grammar. He awakened a love for oratory and poetry in the gawky youth, and he understood Abe's melancholy. He advised Abe to go into politics, for "there are only two professions open to a man who had failed in everything else — schoolteaching and politics."

V — The Cloud-Cuckoo-Land Image

Often confused with this Dominie is the "Cloud-Cuckoo-Land" type. This man is the pseudo-academic, the dilettante in professorial garb, the compulsive talker with little to say, the shallow thinker who tries to cover his paucity of ideas with a plenitude of words, the spouter of jargon like this:

> The teacher in an educational institution must find a viable methodology for dealing with the disadvantaged child. This involves an exploration in depth of the rationale of the socio-economic continuum in which the child finds his entity.

Of one philosopher it is said that he sounded as though he had fallen into an automatic washing machine with Immanuel Kant. Well, some of these jargoneers sound as though they have fallen into a mixmaster with John Dewey.

Let none of us be too contemptuous of this Cloud-Cuckoo-Land type. The danger of slipping down the academic slopes into this Slough of Gooptalk is ever present. One of the best antidotes to the danger is to keep reading the satirical literature in this field. It is plentiful. It begins with Aristophanes and *The Clouds;* it comes right down to the present.

There are the mock academics in *Gulliver's Travels* on the Island of Laputa. On Laputa and at the Grand Academy in Balnibarbi, the self-styled scholars are engaged in hundreds of research projects of

a most impractical nature. It is fortunate that such mock research has completely disappeared from Colleges of Education!

There is the soft-headed Dr. Pangloss in Voltaire's *Candide*, a dithering fellow who taught Candide, his pupil, "metaphysico-theologo-cosmolonigology" and assured Candide "that all was for the best in this best of all possible worlds."

Joyce's *Ulysses* is full of trenchant fun, as Joyce mimics English teachers — Stephen Dedalus mildly and Mr. Deasy maliciously. Joyce's parodies of literary styles should be forced reading for all teachers of English once a year, preferably before the fall semester.

In more recent days, Mary McCarthy's *Groves of Academe* flays university types. Ed McCourt of the University of Saskatchewan has performed the same function for the prairie pundits in *The Wooden Sword* and *The Fasting Friar*. Read Chapter 9 of *The Wooden Sword* for an account of a faculty meeting whose authenticity will make you wince. I'm sure Prof. McCourt can only get away with it because he came originally from the University of Alberta, and all Saskatchewan professors assume he is depicting Edmonton and all Edmontonians assume he is depicting Saskatoon. Both end up happy that they are not as other men in other places. Incidently, it is not parochialism, I hope, that makes me consider both of McCourt's books much more worthy of attention than Kingsley Amis's *Lucky Jim*, a rather amateur novel about academics.

VI — The Puff-Spot Image

Image Number Six we might call "Dick-Jane-Puff-Spot." This teacher is a woman, usually unencumbered by a husband and, as found in literature, she falls into two categories. Oscar Wilde has said that "a woman begins by resisting a man's advances and ends by blocking his retreat." Well, Category One concentrates on those who resist a man's advances and Category Two concentrates on those who block his retreat.

The exemplar of Category 1 is the divine Miss Dove in Frances Gray Patton's *Goodmorning Miss Dove*. She has no interest in men as sex objects (to steal a phrase from the Women's Liberationists). She is only interested in men as former students who have made good as a result of her teaching. She is a thoroughly delightful creature, a sort of flannel-board Mary Poppins.

I am ashamed to say that I stayed away from this book for years because I suspected that it was marshmallow fiction. I was

wrong. It is one of the best books about teachers that I know. It is almost impossible to quote from the book without giving the wrong impression of the affectionate irony that pervades it.

> Her children left the classroom refreshed . . . for within its walls they enjoyed what was allowed them nowhere else — a complete suspension of will . . .
> [They] drew pictures of robins. They drew them in crayon on eight-by-eleven sheets of manila paper. They did not draw them from memory. They copied the bird Miss Dove had drawn for them on the blackboard. (She knew exactly how a robin looked and saw no sense in permitting her pupils to rely upon random observations). They left an inch-wide margin, measured with a ruler, around each picture. (Miss Dove believed in margins — except for error!) All the first-grade's robins would look alike. Which was as it should be. Which was true of robins everywhere. Miss Dove was concerned with facts, not with artistic impressions.

Two examples of the other category, the man-seeking female teachers, are Blanche Dubois in Tennessee Williams's *A Streetcar Named Desire* and Rachel in Margaret Laurence's *A Jest of God.* One is a fine play and the other a fine novel (made into a movie as *Rachel, Rachel),* but the teaching side of these women is incidental to their traumatic sexual experiences.

VII — The Milquetoast Man

The seventh teacher image involves the "Milquetoast Man." He is the sheep before the classroom wolves. He is the pedagogic lamb being led to the classroom slaughter. He is the foolscap Christian being fed to the classroom lions.

He is Mr. Parkhill in *The Education of Hyman Kaplan,* surely one of the funniest books about teaching or anything else that we have been blessed with in this century. True, teacher Parkhill tends to fade into the background before his most rambunctious pupil, the unsinkable Hyman Kaplan, with his accent, his blonde wavy hair, his two fountain pens in his outer pocket, and his ability to fracture the English language by giving the degrees of comparison of "sick" as "sick, worse, dead."

Then there is Ursula Brangwen in D. H. Lawrence's *The Rainbow.* The novel contains a fine chapter about the agony of the teacher whose class is out of control. Ursula carries the starry eyes of youth into her first classroom. Chapter 13, a long one, shows in

harrowing fashion her disillusionment and her hardening under the pressures of realities. I have seen the same thing happen too often with many young teachers. Teachers seem to spend their days either on beds of spikes or Cloud 9.

VIII — The Ghetto Image

The most popular recent image of the teacher is the one I call the "Ghetto" image. A fresh young teacher, attuned to the voices of today and tomorrow rather than the dull tones of yesterday, enters a slum classroom in a big city and teaches high school students who comprise, in the main, knife-toting males and thigh-flaunting females. He has a bad time at first because the rest of the teachers, from the stuffy principal down to the sterile old history teacher, have ruined the students by their insistence on old-fashioned regimen and Victorian curricula.

The forerunner of this type of book is *Blackboard Jungle* (genus melodramatic). It was followed by *The Way It 'Sposed to Be* (cynical), *Up the Down Staircase* (humorous), and *To Sir, With Love* (sentimental). The fundamental philosophy is outlined by one teacher as follows:

> There is no generation gap. My students and I are looking at the same things. No one view is right . . . Everyone is entitled to their opinion and no one is right or wrong . . . I learn more from the students than they do from me. The teacher's role is not to tell the students facts . . . Schools should wipe out the distinction between academic and non-academic students.

Up to a point, I can go along with this image of the teacher as simply another student who has been aged in the wood . . . It is a reaction (probably needed) against the Jehovah image of teachers. But beyond that point, certain things stick in my crop. Is it, basically, as realistic as its proponents argue? Are future employers going to go along with the notion that no one is right or wrong in his business and that the greenest bank teller knows as much as the bank manager? Are universities going to go along with the complete lack of distinction between academic and non-academic students? Is the future doctor going to be able to tell his patients, "I learn more about yanking gall bladders from you than you learn from me"? And who is going to be willing to put his money into such a bank or his gall bladder under the scalpel of such a doctor?

IX — The Robot Image

I now come to the final two teacher images, images that have suffered an almost complete neglect in fiction. The first of these I would call the "Robot" image.

This image depicts the modern teacher as a sort of superefficient machine manipulating thirty-odd other machines who sit in desks, and he manipulates them by means of still other machines known variously as teaching machines, audio-visual aids, emotional inventory tests, overhead projectors, intelligence tests, programmed learning devices. The teacher is a sort of super-manager in a firm devoted to kids rather than corn-flakes. Education is a science and reflexes are conditioned, and nothing should be left to such chancy things as unresearched instinct and vague sentiments like affection for students and personal involvement with children. This gospel embraces the view that as long as you have a whole lot of stuff in a school that plugs in and lights up and costs a lot of money and has chrome trimmings, you can replace teachers and books in the future education of children.

A machine is efficient, accurate, fast. The trouble is that it just doesn't give a damn about children. It is aloof, impersonal. It has no sense of values. It is part of the dehumanization of our society. It does not laugh, it does not cry. It does not care. Teaching by machine is like procreating children by artificial insemination. It may be efficient but it isn't much fun on a cold Canadian night. It lacks human warmth, human dignity, human understanding, human love. Robot education can lead to robot products. In education as in sex, it's impossible to leave out the personal factor.

Is this a straw man I'm building? Well, let's admit that I may exaggerate for rhetorical purposes. But is there not a strong trend in Colleges of Education to make the teacher simply one more fully researched item in an efficient education factory?

I detect hints of concern about this robot trend in books like *Fahrenheit 451, 1984, Brave New World,* where learning has reached a stage of almost complete mechanization, which means a stage of almost complete brainwashing. There are also hints of this trend in John Barth's uproariously virile novel, *Giles Goat Boy,* and in John Hersey's *The Child Buyer.* These books are all dystopias, or negative utopias. Negative utopias have had an alarming tendency recently to turn into nightmarish realities. The great novel

of the teacher as ultimate robot is yet to be written. Perhaps it is simply waiting for a robot author to write it.

X — The Prima Donna Image

The final teacher image I call the "Prima Donna" or "Grand Virtuoso" image. This teacher is the grand-daddy of all the teachers — the eccentric exhibitionist. He is learned but irreverent. He has all the vibrant pride in knowledge and his own mind that the Renaissance man had. He is never orthodox, he is never boring. He believes that there is but one mortal sin in teaching — dullness. He is Falstaff with a university education. He is Cyrano deBergerac with or without the nose. He has the temperament of Callas, the language flow of Churchill, and the romantic grandeur of Don Quixote.

Each of us has a sort of approximation of such a teacher coming through vividly from the dim mists of our past. Such teachers become household names in the places where they teach and some like Osler and Jowett and Kittredge, Billy Phelps and Joseph Wood Krutch and Mark Hopkins, gain fame beyond their immediate milieu.

But somewhat curiously, these colorful dramatic teachers have not been utilized in fiction. I have had to hoard my favorite example of this type until the last. It was no easy job, since she's not a young lady who is easily suppressed. She kept wanting to jump into the other categories. Had she not been past her prime, I'm sure that I could not have held her locked in my cupboard so long. Her name is Miss Jean Brodie and she appears in Muriel Spark's delectable novel, *The Prime of Miss Jean Brodie.*

It is not easy to explain why I have developed this affinity with Miss Jean Brodie. I espouse neither her pedagogy nor her politics. She was an ardent follower of Mussolini and the Blackshirts during that part of her teaching career covered in the novel, the 1930's. She even encouraged one of the young ladies in her charge to fight during the Spanish Civil War on the side of the Falangists against the Loyalists. Unfortunately the young lady, not one of Miss Brodie's brighter lights, managed to mix up the armies, got on the Loyalist side and was killed.

Miss Brodie dominated her girls "in a mysterious priesthood." She expected them to be a scaled-down model of herself. She taught her girls to feel superior to other students, a most undemocratic course of action, I'm sure you'll agree. She resented authority and

bucked the Establishment in the form of the headmistress. When the headmistress summoned her to a 4:15 appointment, Miss Brodie said indignantly, "She thinks to intimidate me by use of quarter hours." She would interrupt her teaching of "The Lady of Shallot" by saying, "Eunice, come forward and do a somersault in order that we may have comic relief."

> "Who is the greatest Italian painter?" she asked.
> "Leonardo da Vinci, Miss Brodie."
> "That is incorrect. The answer is Giotto, he is my favorite."

She tells dramatically of her lover who "fell on Flander's Field the week before Armistice was declared. He fell like an autumn leaf, although he was only twenty-two years of age. When we go indoors we shall look on the map of Flanders, and see the spot where my lover was laid before you were born."

This touching idyll moved the girls no end.

Why do I love Miss Jean Brodie? Well, lack of space makes it necessary to capsulize it by saying, for the same reason I prefer Mephistopheles to Faust, Scarlett O'Hara to Melanie, Touchstone to Orlando. These people thrived vividly, and in living color — as did Miss Jean Brodie in her prime.

In Conclusion . . .

So much for a brief survey of the teacher image in fiction. Skill, in teaching as in anything else, is its own most effective public relations man. Mediocrity needs an artificial image. Genius is its own image.

The teacher is not just an efficient transmitter of knowledge. He is a human being. It is the teacher who can feel sorry for you, ask about your sick mother, bandage your cut finger, praise your poem, laugh at your jokes, understand that you are worthwhile even though you may have a slight problem with quadratic functions.

To put it simply, the teacher cares. This is not idle rhetoric. Perhaps caring is the most important thing a teacher can bring to her students. There is one common quality running through all the good teachers in the novels I have mentioned. They cared — some eccentrically, some prosaically, some quietly, some exuberantly — but they cared. In a world where more and more of us are caring less and less, this is not unimportant.

THE COMING OF THE GUERRILLA TEACHER

Fred Staab

> Knowledge depends on action for its fruits, but action does not necessarily depend on knowledge to be effective. Action, however, always leads to knowledge, whereas knowledge does not necessarily lead to action.
>
> Wang Yang-ming (1472-1528)

Not too many years ago it would have been unthinkable that an ordinary classroom teacher — starting alone and possessing few resources other than his wit and nerve — would undertake to overthrow the educational system of his school, district, state or nation.

That was before Fidel Castro and Che Guevara. It was before Ho Chi Minh and Caesar Chavez and the Black Panthers. It was before the grass-roots presidential campaign of Gene McCarthy. That is to say, it was before it became clear that modern states and institutions, for all their enormous power and expertise, are not absolute. It was before people realized that, paradoxically, the very power of modern institutions often makes them more vulnerable to challenge by individuals and small groups. Aware of these facts, an ordinary classroom teacher, somewhere in America today, may thus be choosing to go underground.

Though the evidence for the coming of the guerrilla teacher is, at best, sketchy, it is nonetheless real. For the most part, it is to

be found in the growing popularity of books such as Postman and Weingartner's *Teaching As A Subversive Activity**, as well as such new magazines as the Toronto publication, *This Magazine is about Schools* and the Oregon quarterly, *The Teacher Paper.* In these sources, one can find teachers advocating such tactics as

— organizing "counter" in-service days
— cutting the wires to the school's P.A. system
— tape-recording faculty meetings so the proceedings can be published, *verbatim,* in underground leaflets for community distribution
— stuffing phoney memos in the school secretary's in-basket
— alerting students to mouse-trapping their lockers on search days
— renting storefronts where evening discussions are held with parents on how schools fail their kids
— compiling, for the edification of new teachers, confidential files on administrators
— assigning A's to all students in compulsory classes
— printing counter-brochures describing a school district
— removing the plumbing-pipe-and-plastic desks from classrooms and replacing them with old sofa cushions, rugs, and prune boxes
— teaching students how to foul-up standardized tests of ability and achievement
— holding voluntary classes on weekends and in the evenings.

These are only a few of the tactics currently being suggested. *The Teacher Paper* alone printed a supplement to its December, 1969 issue listing 162 tactics calculated to make classrooms more enjoyable, learning more effective, and superintendents more ulcerous. For the most part these are the suggestions of public school teachers who exhibit a deep commitment to teaching and to their students. Though the underground teacher is generally a young one, he sometimes is an older teacher no longer able to endure patiently the bureaucratic routines which characterize so many public schools. Moreover, though this guerrilla teacher often pits himself against

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*For a review of this book, see "Trivium at the Bivium" in this issue of the *Journal* — Ed.

his administrators (since they usually exert the most direct control over a teacher's work), occasionally one finds him urging tactics which will gather support for a good administrator. For a guerrilla teacher is someone flexible enough to realize that in seeking to make schools better for students and teachers he needs all the allies he can get, and that not all teachers will be his friends, nor all administrators his enemies. So new that his numbers are few indeed when compared to the two million public school teachers in America, the guerrilla teacher does not pose an immediate threat to the public school system. Furthermore, it is important to remember that he is still at the stage where what he advocates and what he does are not yet the same thing. Nevertheless, since all majorities begin as a minority of one, what this guerrilla teacher advocates, and what he must do in the future if he is to be successful, deserve attention.

To begin with, though guerrilla teachers are suggesting a variety of tactics — some designed to revolutionize only the classroom itself, while others aim at changing the political forces which so often make classroom innovation impossible — all guerrilla teachers share a similar goal and a similar understanding. The goal is to make schools and classrooms more *humane*, to remove from the lives of children and teachers all that is joyless, dishonest, and repressive. The understanding is that to make schools more humane, *action* counts infinitely more than words, theory, and debate. As Saul Alinsky recently pointed out, all revolutionaries understand that "the action is in the reaction," that a well-chosen act demands a response, and the response may make a re-ordering of values, or of behaviour, or of power itself possible. While this response may come from authorities challenged by an act, it also comes from the person who acts. For a teacher, used to letting others make the decisions affecting his classroom, performing an unexpected act can bring psychological strength.

Thus, the guerrilla teacher advocates replacing the classroom furniture first, and inviting the principal down to see the results afterward. Or the guerrilla teacher suggests the mimeographing of exciting educational articles and stuffing them in the school mailboxes of all teachers. The guerrilla teacher says red-tape should be ignored, that teachers should take their students outside the building where they need to learn something, and leave only a note about where they gave gone. And a guerrilla teacher is one who sug-

gests using the new technology against the schools. For instance, he will say that a teacher, who works in a system where report cards are made up via computers and who is convinced the A to F grading system is unfair or educationally counter-productive for students, should simply assign all the students A's. He will argue that even after his act is discovered it may be too expensive, of time or money or institutional "image," for his supervisors to force him to change the grades and then re-run the computers. The underground teacher will further argue that, faced with such insurrection, school officials may have little option other than waiting until the school year ends before terminating the teacher's contract, and with a *fait accompli* the teacher (a) has dramatically changed the reality of school for his students, and (b) has forced his colleagues and administrators to react in some way, either negatively by denouncing him or ostracizing him, or positively by listening to, or thinking about, the teacher's rationale.

Since he sees schools as essentially political institutions and only secondarily, when at all, as educational ones, the guerrilla teacher often suggests actions which take place outside the classroom or school. He maintains that kids and teachers and learning do not count for much when schools are political on the inside (teachers jockeying for preferential assignments and favours; administrators calculating how to increase their own powers or salaries; athletic coaches competing with history, science, or language teachers over money for football helmets on one hand, and books and lab equipment on the other) and that they do not count for much either when schools are political on the outside (school boards trying to hold down taxes; textbook publishers scheming for million dollar contracts; left, right and centrist groups trying to put prayer in the classrooms, or take controversial books out, or get rid of teachers who grow beards or drink beer or don't drink beer). To change the schools, the guerrilla teacher points out, it is necessary to change the sources of power controlling the schools. To do this, he suggests teachers should short-cut the chain-of-command (the administrators) and the professional establishment (the educational associations and unions) which he has been taught, or forced, to rely on. Geurrilla teachers advocate reaching directly out to parents and community for support, doing so in a variety of ways: evening discussion centers, underground newsletters, radio, and television available now even in small towns with cable hook-ups.

But beyond the recognition that action is crucial, and beyond a few isolated examples of teachers acting on this recognition, there is today little more than rhetorical justification for claiming that guerrilla teachers exist. It is not enough to understand the value of action and to urge others. One must act. And even for true undergrounds (as opposed to mythical ones) action is only one of many principles for success. If guerrilla teachers are to grow in numbers and have an impact on schools, they will need to apply these other revolutionary axioms. They will need to solve the problem of *communications,* making their ideas, visions, and acts widely known through such media as underground newsletters (in the schools and in the community), and forums on television and radio. They will need to talk with all sorts of groups (Rotary, Kiwanis, Chambers of Commerce, unions) that teachers traditionally avoid. Guerrilla teachers will also have to *expose the failures* of the established order, and having done that they will have to go on to demonstrate that *alternatives are possible* and that the underground performs them. This may mean teaching in the evening or on weekends in order to enjoy the freedom of teaching differently. It may mean documenting the failures resulting from compulsory classes and comparing them to successes achieved in voluntary classes, or it may mean revealing how money is wasted in schools (showing how much goes for salaries and how much goes for books or art supplies or field trips). It may mean collecting evidence showing the bankruptcy of repressive discipline, or evidence that kids learn to read if they have real books rather than basal readers or dull literature anthologies. It may mean showing that more math is learned in a ten-minute period followed by games, or music, or art than can be learned in fifty-minutes of lecture and drill.

A particularly difficult task for guerrilla teachers to master is *recruitment.* Unless they can muster among their colleagues the friends and sympathizers who will share the risks and the action, underground teachers will have no lasting effect on the schools. Recruiting often means overcoming apathy, fear, rigidity, and ignorance, traits as prevalent among public school teachers as they are, say, among campesinos in Brazil or migrants in California. To recruit means to behave in the most fundamental human ways, to avoid preaching, to recognize in one's colleagues their unrealized talents, their longings to teach well and to be respected for it. It means helping fellow-teachers realize their classroom dreams and

abandon their nightmares. It means keeping a sense of humor at all times (those who lack it are often viewed as power-mad).

The last principle guerrilla teachers must practise is really the first: *Don't get fired.* Like all revolutionary principles, there are exceptions to this rule, for there may be times when getting fired, or quitting, are necessary for one's sanity or conscience. But in general, underground teachers must develop methods for survival. They need to learn how to make the firing of a teacher more costly than it is worth to school officials. And when a point has to be made, the exact amount of risk must be taken, no more, no less. For example, if the point to be made is the needless interruption of a class by incessant P.A. announcements, the teacher who disconnects the speaker in his own room will survive longer than the one who smashes the main broadcasting console serving the entire school. To survive in America's public schools today is not easy. Two-thirds of all beginning teachers are no longer teaching after five years, and to choose the life of an underground teacher in the public schools may be a frustrating choice. But it may also be the only one. It is not possible to participate in a revolution from a distance, and educational revolutionaries must deal with the fact that the public schools are where sixty-million children and adolescents will be tomorrow morning at nine o'clock. In the urban ghettos, in the suburbs and small towns and rural areas of middle-America, the problems of creating humane, effective schools persist. Until now, individual teachers have done little to confront these problems in a personal way. All too often they have resigned themselves to the way things are, or they have dropped out in despair, or they have left to work in private schools (thus managing to stay in teaching, but consigning the students left behind to those who often care least about kids or teaching).

Many educators, of course, will be horrified at the appearance of the guerrilla teacher and the subversive activities he proposes. It may be true that, like other revolutionaries, his daily frustrations may make him susceptible to romantic fantasies (he dreams of pouring limburger cheese in the confidential files, or of epoxying the principal's door shut). But it is also true that some guerrilla teachers, choosing to stay in the public schools but managing to avoid participation in their failures and deceits, offer the best hope that schools can be revitalized, and will not harden further into irrelevant, repressive, and de-humanizing institutions.

Albert Schweitzer's Ethic of Reverence for Life as an Educational Ideal

David Blackwell

Little or no attempt has been made in the English-speaking world to consider the possible significance for educational thought and practice of the late Albert Schweitzer's ethical principle of "Reverence for Life." Thus, the main purpose of this paper is to indicate the relevance for education of an ethic that claims to provide a worthy ideal, that of the civilized man.

Philosophy of Civilization

The background against which Schweitzer presents the ethic of Reverence for Life, or *veneratio vitae,* is covered mainly in the first two volumes of his *Kulturphilosophie.** (It is to be noted that Schweitzer appears to have considered this work, first published in the German in 1923, to have been the crowning achievement of his intellectual career.) The first of these volumes, *Verfall und Wiederaufbau der Kultur,*[1] serves as an introduction to the second, *Kultur und Ethik.*[2] Schweitzer tells us that his motive for writing them was his belief in the unsatisfactory and dangerous state of Western society around the turn of the twentieth century and in the period immediately preceding World War I. He did not share the optimistic views on progress that were then rife. On the contrary, he was profoundly disturbed by the widespread existence of inhumane ideas

*"Philosophy of Civilization (or Culture)." Schweitzer uses the words "civilization" and "culture" interchangeably.

and policies of *Realpolitik* or short-sighted nationalism. The failure on the part of the public to reject such ideas and policies had been a source of deepening concern to Schweitzer ever since his first years as a student at Strasbourg University. These earlier forebodings were more than realized with the outbreak of the "Great War."

Schweitzer attributed the current state of affairs to a *Zeitgeist* that reflected the nineteenth century legacy of positivistic and empiricistic modes of thought. Western man had failed to provide, and, in turn, to be guided by civilizing ideals. As a result, the dawn of the twentieth century was witnessing, under the pretext of "realism," an exaggerated faith in science. Overemphasis on the investigation of scientific law (the "how" and the "what") existed at the expense of consideration of the duty and responsibility of individuals to mould reality (or employ knowledge of facts) in accordance with the demands of ethics and morality (the "ought" factor).

Schweitzer believed that the reconstruction of the age lay in the need for a florescence of a type of utopian thinking reminiscent of the eighteenth century Age of Reason. Such thinking must take the form of visions projecting a better man and a better society. Hopefully, this might in turn lead to the eventual sway of a new world-view *(Weltanschauung)* in which the ethical and, therefore, civilizing disposition could somehow be rooted.

How could reflection lead man to a desire to act and behave in a civilized or humane way? How could the habit of humane thinking and conduct become felt as necessary for the individual man and woman? Such are the basic issues of Schweitzer's ethical thought.

In his *Kultur und Ethik,* the second volume of *Kulturphilosophie,* Schweitzer approaches the problem from an historical perspective (an approach somewhat similar to that taken in the celebrated *Quest of the Historical Jesus*[3]). A major part of this volume consists of an interpretative survey of the world's great religions and philosophical thought systems of the past. Provision of a rationale for dedicated endeavour and action is only briefly dealt with in the concluding chapters. Originally *Kulturphilosophie* was intended to comprise four volumes, of which the third was to be devoted to a fuller exposition of the Ethic of Reverence for Life. Another volume remained in manuscript form at the time of Schweitzer's death in

1965 and still awaits publication. The nature of *veneratio vitae* has, therefore, to be gleaned from these few concluding chapters of *Kultur und Ethik* (which were intended as an introduction to the unpublished volume), and from his other writings.

Little understanding exists of Schweitzer's ethical thought in the context of *Kulturphilosophie*. At least five reasons help explain why this has been the case: (1) the content of *Kulturphilosophie* is not academically respectable because it fails to correspond to any of the traditional disciplines; (2) his views on Christianity would probably be disturbing to many who hold orthodox religious beliefs (Babel, for example, suggests that Schweitzer is nearer the position of his existentialist cousin, Jean-Paul Sartre, than a superficial knowledge of his life and work may appear to indicate[4]); (3) *Kulturphilosophie* is not written in a way that makes it suitable for popular reading; (4) the brevity of material directly concerned with explaining the Ethic of Reverence for Life leaves too many unanswered questions; and (5) Schweitzer involves himself in his writings in a way that again may not be considered academically respectable.

On the other hand, this lack of understanding need not detract from the possible importance for education of one of the widely acclaimed teachings of our time. Dr. George Seaver, a leading authority on Schweitzer, has written:

> Although Schweitzer tried to develop a *philosophy* out of this ethic [Reverence for Life] I do not think he succeeded. I regard it rather as an intuition than as a system of thought. But as such it is of paramount importance, and most certainly an Ideal in Education.[5]

Education and World View

In his *Kulturphilosophie* Schweitzer makes only incidental references to the subject of formal education. By and large these have as their purpose to illustrate the perilous state of civilization around 1920. The flagrant disregard of objectivity in the writing of history text books, for example, was a reflection of narrow indoctrinist aims born of the passion and prejudice ruling in society at large.[6] Over-organization of the individual in collective enterprise, as a feature of the growing industrialization, is seen in the case of the school teacher whose spontaneity and creativeness become ever more curbed by rules and superintendence.[7] The impersonal behaviour and lack of humaneness resulting from the overcrowding and stress of urban life likewise find a counterpart in the educa-

tion and school literature of the day. Schweitzer specifically mentions the waning use of such a book as Defoe's *Robinson Crusoe,* in which the hero is continually endeavouring to abide by the standards of humane conduct. Instead of being considered by the schools as a prime necessity in the developing personality, the encouragement of humane feeling and sympathy is all but ignored.[8]

Of fundamental importance to education is the underlying concern of *Kulturphilosophie* with the diminished influence of the religious and philosophical world-views that had in the past helped provide an inspiration for dedicated service to the well-being of one's fellow man and society. Before the relentless advances of the natural sciences, traditional beliefs about the nature and destiny of man in relation to the universe stood revealed as incompatible with the new knowledge. Such was the extent of this failure that, by the turn of the twentieth century, the need for a consciously thought out philosophy of life was lost sight of in the glitter of scientific and technological achievements.

The triumph of science was apparent in the overemphasis on imparting specialized training and knowledge in the name of education. Schweitzer's indictment of specialization takes on added meaning in the following translation of a terse statement on education (in the sense of the German *Bildung)* that is perhaps the most penetrating reference to the subject extant in his published writings:

> Education, in the profound sense of the term, exists when the principal features of the entire domain of human knowledge are comprehended and then consolidated into a unified *Weltanschauung,* which makes the individual conscious of his position in the world surrounding him, and which determines his judgement and actions. This trend to a *Weltanschauung* is deep down in man's soul. The sciences as such can never satisfy this need; only philosophy meets it. Philosophy sums up the respective positions of the sciences and relates the resulting image to the moral and religious interests of the individual, as well as of society as a whole.[9]

This co-ordination of the different branches of knowledge and the utilization of the results to form a world-view is in response to a need characteristic of the human species. Because of his powers of reflection, man is in a unique position to appreciate the hazards

and uncertainies of life. *Homo sentiens* is aware of helplessness and insignificance vis-à-vis the course of events. Consequently, he strives for an integration and harmony between the aspirations of his will and the pessimistic facts of knowledge. This striving takes the form of attempting to devise a coherent outlook on the world that serves as a guide and inspiration to the desirable or good life.

Education would certainly be seen from Schweitzer's point of view as ministering to such a need through the development of the world-view of Reverence for Life. He accordingly presents the civilized man of *veneratio vitae* as an educational ideal.

The world-view of Reverence for Life does not portray man's duty with reference to furthering some universal or cosmic purpose. Schweitzer implicitly rejects as wishful thinking a Christian world-view dating from the *Aufklärung* period that, for example, offers the hope of immortal life as a sanction for morality. In the same context he cautions against teaching Christianity as a religion that claims to fathom the unfathomable.[10]

Reverence for Life unequivocally asserts that reality must be faced in the endeavour to clarify duty to self and to others. Intellectual honesty can only lead to a recognition of the human dilemma. No wholly benevolent Creator is at the helm of events. Injury and destruction of life are as much a feature of reality as co-operation and good will. A slight change in the temperature of the earth, for example, and civilization, as currently understood, is at an end. Because of forces beyond human control, man cannot *intellectually* escape the fact of the underlying insecurities of existence.

The educated man is consequently humble in the face of his own ignorance. He recognizes a total and utter dependence on the Great Unknown. The ineffable mystery of the experience of cosmic loneliness has taken hold of him. But because of his adherence to the truth, he resigns himself to the chilly facts of the Galilean universe.

Mere resignation, however, does not satisfy the impulse of the will-to-live to enhancement and perfection. A central task of education is to help raise the potential in man for altruistic concern to a level of unmistakable compulsion to serve the cause of life.

Thought and Ethical Consciousness

Schweitzer lays special stress on the role of thought in arousing ethical consciousness (and in so doing fails to provide an adequate

description of moral development as far as the psychological side is concerned[11]; for example, he overlooks or ignores the pioneering work of a contemporary, Sigmund Freud, on the role of the unconscious in personality formation). Reverence for Life is portrayed as the outcome of a certain kind of reflection, or meditation. This reflection does not have as its purpose the acquisition of scientific-type knowledge. Its aim is rather to deepen awareness of a sense of the communion of Being ("life"). Instead of treating phenomena as objects — that is, externalizing the world and treating it as something alien to the self —an individual must "think into" a "feeling with" and a looking out, as it were, through the "eyes" of the other in a way that recognizes an affinity of the I and the It. A type of identification, or — to use a term familiar in current humanistic psychology — "empathy," takes place. Will becomes fused with will in the experience of a mystical union and ethical compulsion that Schweitzer denotes by the phrase, "Reverence for Life."

To the man who has truly attained to knowledge (in religious terms, the Knowledge and Love of God) all life is sacred. Unlimited responsibility is felt towards every manifestation of Being in the world. This is especially so in the case of fellow man. But it includes, too, the lowliest forms of life (even the crystal!) *Veneratio vitae* refuses on a theoretical level to assign more value to one life than to another. Because it is an absolute ethic, only the promotion of life can rank as good. Any injury or destruction of life is at best a necessary wrong-doing. However, the necessity is always arising of having to expend one life in order to further another. This is the fact of evil. The decision to negate life has therefore to be made on the basis of subjective choice. Here an individual has only as his guide a feeling of the highest possible responsibility to prevent the thoughtless harming of any life. Nevertheless, the fact that injury to life must happen makes guilt inevitable. To the man under the sway of *veneratio vitae,* the assuaged conscience is unthinkable. The disquiet thus incurred carries with it an intrinsic tendency never to sacrifice life to some wanton purpose. Schweitzer has said that the day the absolutely binding nature of the inviolability of life is universally recognized will be among the most important in human history.[12]

Self-Realization

The man of *veneratio vitae* is claimed to have learnt the secret of spiritual self-realization. No answer is sought concerning the

significance of his activities in the totality of cosmic happenings. True, compared to the unceasing destruction of life he sees everywhere, his own efforts to serve life seem miniscule indeed. But he is prevented from being overwhelmed by debilitating pessimism (and guilt) through a living commitment to the service of life. In the surrender to a heightened awareness of *veneratio vitae,* he achieves a life-style of potency and exhilaration not attainable by such contrivances of modern man as alcohol, drugs and conformity to the group.

Education has a social as well as an individual aim. The man civilized through Reverence for Life is himself a begetter of civilization. Concern with the enormous political, social and economic problems of the current age of anxiety and alienation are the marks of such a man, because all have to do with the affirmation and negation of life. Before him he holds the view that civilization consists, not in promoting some narrow interests of an élite, but in the spiritual self-realization of every individual. The existence of weapons of mass destruction resulting from advances in science and technology is looked upon as inconceivable within the humanitarian ideal. There is a deep disquiet with a religion of technological progress in which the individual's creative, ethical, intellectual and artistic expressions are stifled by the rules and regulations of the bureaucratic organization. The growth of mental illness, violence and racial conflicts, the "generation gap" and the "drug phenomenon," all accompanying the general increase of material plenty in industrial society, are regarded as adequate testimony that man does not live by bread alone. Yet, the alleviation of material want takes its place, too, as an ideal of civilization. And in the pursuit of this goal, the value of the acquisition of scientific knowledge and methodology cannot be overlooked.

The man educated in the world-view of Reverence for Life has no sure answer to the means by which approximation to civilized ideals can be effected in modern society. Without the human agency the great problems of war and poverty, for example, could not have occurred. Upon that same agency, therefore, rests the burden of redirecting resources to ends that serve life. Reverence for Life accordingly entreats that concern for others become a much greater motivating force in the human disposition than now exists.

Schweitzer wrote in 1962 that "every one of us must activate all the loving kindness of which we are capable, in order that it may

reveal itself as a power to influence history and bring forth the Age of Humanity."[13] In so doing, he defined the altruization of the individual as a paramount educational task of the twentieth century.

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6. Schweitzer, *The Decay . . .*, pp. 48-49.
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9. The original reads as follows: "Bildung besteht darin, dass das gesamte Gebiet menschlichen Wissens in seinen Grundzügen erfasst wird, sich in einer einheitlichen Weltanschauung ausbildet, welche dem Einzelnen seine Stellung zu der ihn umgebenden Welt zu Bewustein bringt und sein Urteil und sein Handeln bestimmt. Dieser Zug nach einer Weltauffassung liegt tief im menschlichen Gemüte. Die Wissenschaften als solche können ihn nie befriedigen; nur die Philosophie kommt diesem Zug entgegen. Sie fasst den jeweiligen Stand der Wissenschaften zusammen und bringt das enstehende Bild mit den sittlichen und religiösen Interessen des Einzelnen, sowie der Gesellschaft in Zusammenhang." (Albert Schweitzer, "Die Philosophie und die allgemeine Bidung im neunzehnten Jahrhundert," *Das Neunzehnte Jahrhundert, ed. G. Wolf* [Strasburg: Kommissions der Strassburger Druckerie v. Verlogsanstalt, 1900], p. 68).
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CULTURE, PERSONALITY AND EDUCATION

Mark Braham

One of the essential problem areas in the social foundations of education is that of the relationships between Culture, Personality and Education. That there are very definite relationships is, of course, unquestionable. But what these relationships can, or should be, is always open to question. They are the concern of the present discussion.

I

First, three definitions: Culture, Personality and Education. By *Culture,* I understand the shared ways of believing, behaving and thinking common to a group of human beings within a particular environment and maintained over time.

By *Personality,* I understand the individual human unit as such, a nexus of genotypic and phenotypic traits, tendencies, dispositions and capacities engendered, repressed, modified or qualified by the particular cultural conditions in which he exists and with which he interacts.

By *Education,* I understand the processes of guidance and instruction through which successive generations of human young are: (a) integrated into their culture (enculturation), (b) helped to develop their potentialities and capabilities and become self-aware, (c) taught to apply and contribute their knowledge, understandings and abilities to their culture, and (d) taught to transcend themselves and their culture and contribute to the world. Transcendence is not

taken to mean personal or cultural negation or denial, but is regarded as the most positive kind of self and cultural affirmation, a contributive extension of self and culture into a wider environment. This generally depends on the achievement of a high degree of maturity.

Additionally, I should note the place of the school as a culturally developed center for instructing and guiding in the educational categories listed above. To the extent that the schools contribute to individual and cultural development, they are educative. To the extent that they repress, distort, or even destroy individual and cultural development, they are mis-or non-educative. Schools, therefore, are purportedly, but not always, educational institutions.

Schools and cultures are inseparable. Like Mary and her lamb, wherever the culture goes, the schools go trailing after. If the general tendencies of the culture are future-oriented, the schools are rapidly called upon to fulfill the culture's new demands. If the general tendencies of the culture are conservative, the schools will likewise be conservative, working possibly to strengthen or repair weaknesses in the prevailing culture structure, but providing little for change and progress. And in cultures where too much education is regarded as harmful to the existence of the status quo, schooling will be limited accordingly. Whatever the goals and aspirations or limitations that a culture accepts for itself and its progeny, the schools will accept them in their own programs and practices. It has been traditional that the schools are handmaidens of, and subservient to, the dominant interests in the culture; he who pays the piper still calls the tune.

There are many reasons why there is such a close rapport between culture and school and many reasons why there should be such rapport. The continual question, however, is whether there should always be this kind of rapport. Should the schools always be subservient to the dominant interests in the culture?

II

Schooling enters the human situation where instinct is transcended and parents are increasingly surpassed as agents in the development of human life. Nature has left the human infant with the greatest deficiency of instinctive adaptive patterns of any known life forms. Consequently, the human infant more than any other kind of offspring must learn in order to live and must go through an extended period of postnatal nurture and training in order to

become stabilized in his environment and achieve some modicum of independent functioning. Taken in a naturalistic perspective, education is not merely a cultural activity, but has a biological function as well.

The biological function of education, which is to take up where instinct has left off in the course of human development, takes us beyond culture as the sole criterion for our educative activities and introduces a second element into our thought, that of evolution. We are to understand from biology that evolution has by no means ceased, but that it has been increasingly appearing on psycho-social rather than on biophysical levels. In man, at least, evolution can be understood as the continual, if not always smooth or unbroken, transition from instinct to intelligence, and from minimally differentiated and diffuse to highly coordinated and complex intellectual functioning. This is a process that is still continuing, and man with his multiplex and adaptive mind represents the growing tip of the tree of life.

In *The Phenomenon of Man,* Pierre Teilhard de Chardin quotes Julian Huxley's somewhat poetic but serious suggestion, "Man discovers that *he is nothing else than evolution become conscious of itself.*"[1] But more pointed perhaps is Huxley's statement that evolution

> . . . is a self-maintaining, self-transforming, and self-transcending process, directional in time, and therefore irreversible, which in turn generates ever fresh novelty, more complex organization, higher levels of awareness, and increasingly conscious mental activity.[2]

From the standpoint of culture, we find that there is a consonance between "increasingly conscious mental activity" and cultural complexity such that cultural complexity can be shown to be derived from and, in a cybernetic sense, to give rise to the increasingly conscious mental activity — or rate of cognitive complexity — of its members.

In this perspective, as cultures become more complex, their requirements for living are increased, and these in turn require an extension of education, which in its turn facilitates mental activity and the development of intelligence. Thus, through the medium of education, intellectual and cultural evolution go hand in hand. Education thereby serves the biological function of enabling men to overcome their inherent deficiency in instinctive adaptive pat-

terns by helping them to learn in order to live, and it serves the anthropological function of being the means through which cultures assure their own survival and continuity by transmitting their patterns, beliefs, values and activities to their ensuing generations.

Following Huxley, we may note that "Psycho-social evolution — human evolution for short — operates by cultural transmission."[3] Or following Waddington,[4] we note that evolution in the human phase proceeds through socio-genesis; the "inheritance" of culturally acquired characteristics through the socio-genetic or transmission system of *education*. Whether we start from evolution or from culture, education is essential to both.

III

We arrive then at the fairly common notion of education as cultural transmission. However, there still remains, and no doubt there will always remain, the problems of deciding what is to be transmitted. Quite often "cultural transmission" is taken to imply the transmission through schooling of the modal characteristics of a culture, and anything that goes beyond the bounds of such transmission is considered to be beyond the office of the school, which is the culture's official transmitting agency. In contrast, those educators who have been irked at the restrictions "cultural transmission" appears to place upon education have sought to deny that the task of education is necessarily or sufficiently that of cultural transmission.

It seems to me, however, that we can usefully hold on to the notion of cultural transmission as the prime function of education, but with some essential qualifications. There is little point in limiting ourselves to a narrow view, whose criterion is stasis and whose effects, unless marked by strong discontinuities and counter-forces, are cultural stylization and crystallization. Cultural, and thus human, evolution proceeds through a three-fold transmission: the transmission of history and tradition, thus stabilizing the child in his culture; the transmission of present-time needs, interests, technology and understanding, thus orienting the student to the current problems of living; and the transmission of future possibilities, thus setting "ends-in-view" as a directive power for personal-cultural development.

Spaceships to Venus with all they imply for a new orientation to the universe are as necessary for cultural evolution as are our

most viable and fundamental values necessary for cultural stability. It is only as the new frontiers of human possibility become transmitted to the rest of us that we are able to act upon them, incorporate their meanings into our thinking, and re-orient ourselves to a continually modern world.

Significantly, there is at present a basic trichotomy (with shades of overlap) that runs through our educational thought and practice and lies at the source of many of our educational arguments and conflicts. First, we have those educators who tend to recognize an evolutionary, or at least a naturalistic criterion for education, whose orientation is future time, and who call for an education that will free us, personalities and culture alike, for the fullest expression of our potentialities and possibilities. Second, we find those educators who regard the school as primarily a reflector and servant of the dominant interests of the culture and for whom cultural conservation is a prime concern without too much emphasis either on progress or history. Finally, there has been the recent emergence of what can best be called cultural historicism, whose educational leaders call for exemplars based on history ("the grandeur that was Greece, the glory that was Rome") rather than on present-time or futuristic norms.

In general, the first category of educators seeks change, the next seeks stability, and the last seeks a return to the past, and all demand that the schools adhere to their bidding. In their responsible moments each of these positions can be shown to be internally coherent and consistent, and at every moment can usually be shown to be in direct conflict, if not contradiction, with each other. As human, and thus organic organizations, each system displays the phenomena of all organizations towards self-maintenance and perpetuation, with all the selective perception, bias and self-validation of every system that seeks to remain alive. Such diversity may be desirable, but it is also problematic for it tends towards endless argument, bickering and hostility which engenders a confusion that runs right through the educational system at large. It leads, I would suggest, not so much to cultural diversity as to cultural conflict since the culture is the recipient of the "messages" transmitted to it through its educational system.

The educator who is open to possibilities rather than to ideologies is, it seems to me, still faced with his problems. What kinds of school programs with what kinds of orientation shall he develop?

To whom does he, essentially a public servant, owe his allegiance? To the future? To present-time demands? To the cultural heritage and its historic exemplars?*

IV

I should like to shift back to some evolutionary thinking which, I believe, may suggest some resolution for the problem of education ideologies and the wider problem upon which they bear, that of the relationship between culture, personality and education. The factor of personality has been temporarily side-tracked but will be returned to as part of the present discussion.

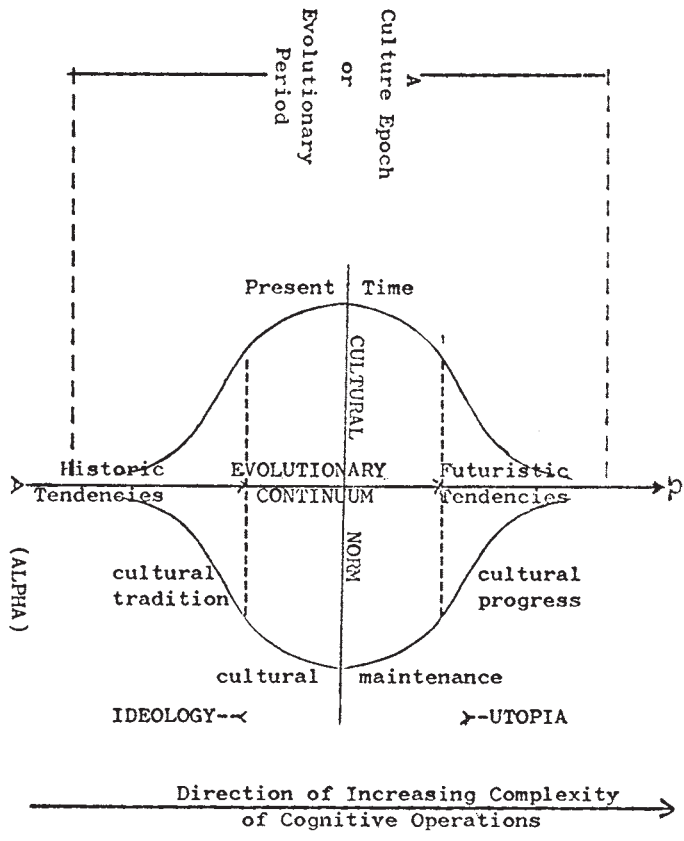
For purposes of examination I find it useful to distinguish between what we may term the *evolutionary* and *cultural* functions of education. By way of illustration we can envisage the evolutionary function being represented by a vertical continuum, a continuum of increasing complexity of cognitive operations which has its base in instinctual and non-reflective life and its upper reaches in the highest conceived state of human consciousness. In Teilhard de Chardin's terms, this would describe the transition from the Alpha to the Omega in human evolution.

The cultural function of education can be represented by a horizontal line which can be drawn across this evolutionary continuum at any given point to depict the evolutionary condition of a culture. Placed within the schema of the *normal curve* we can then hypothesize that the horizontal line represents the particular cultural "norm" within a given evolutionary period. The "tails" represent the historic and futuristic tendencies of the culture respectively.

What is then disclosed is that within any cultural period or epoch each educational faction has a legitimate, but perhaps not equally legitimate, place in educational programming and practice. There is, of course, room for a big argument here. I am not at all sure, for example, that because of its bulk the "norm" should legislate over the "tails" in our educational thinking, for to what extent norms should be normative is highly debatable.

The tension that exists between the evolutionary and cultural functions of schooling is precisely the tension we find in the education profession with the differing arguments for futuristic, present-time, or historic orientation. Without doubt, should the futuristic

*In the United States this trichotomy is neatly labelled in terms of *Progressivism, Essentialism* and *Perennialism* respectively.



concepts prevail alone, the whole stability of the culture would be in jeopardy and simply engender the kind of reaction to the recently passé Progressivist Era that has appeared in the United States with the emergence of such organizations as the Council on Basic Education and the return to *McGuffy's Reader* as a basic text.

Should the present-time concept prevail alone, possibility would be blunted and we would find ourselves with a marked increase in conflict between the demands for stasis and the pressures towards growth, which marks the existential dilemma of our time.

Should the historic concept prevail alone, we would rapidly be on the road to dysfunctionality by seeking to determine our direction from a past while living in a world that is rapidly seeking its way into the future. However, a complete denial of the historicist's concern leads to a break in the continuity from past to present to future, which gives a culture and its peoples much of their stability and identity.

The question then is can the school function as an agent of cultural progress, cultural maintenance and cultural tradition at one and the same time without endlessly contradicting itself? Or to put the point more sharply, can the school function as an agent of both evolution and culture and at the same time do justice to the requirements of personality for cultural identity, stability, and full development? Can we not say, perhaps, that there are three culture-functions for the school, all of which can be subsumed under "cultural transmission" within which evolution, understood as cultural evolution, cultural maintenance, and cultural identity are included? And additionally, from the standpoint of education in an increasingly international world, should we not also make provisions for cultural transcendence? The task, it would appear, is to find some unifying construct, some mode of integration that will enable us to order our conflicting claims and develop a more coherent set of educational principles and practices than now prevail.

V

An inter-disciplinary approach to the problem suggests a threefold relationship of cultural, personal, and educational development proceeding, theoretically at least, through four stages. Each stage can be understood as a "task" to be completed if potentialities and possibilities are to be recognized and utilized. The following general construct is suggested, which may perhaps be applicable to emergent nations (as in Africa) as well as to well-established ones.

1. We can conceive of cultures as having four developmental tasks with full regard, of course, to the time-spans involved:

1.1 The first task of survival and maintenance, leading to
1.2 The task of providing for the clarification of purposes and the recognition and development of possibilities, leading to
1.3 The task of cultural reconstruction at that point where the prevailing structure is restrictive of further development, leading to

1.4 The task of cultural transcendence, of looking beyond the level of need-satisfaction and self-interest, and of participating in a wider sphere.

Without the assurance of survival and maintenance, of being a "going concern," no culture can clarify its purposes or develop its possibilities. Neither time nor energy can be turned to speculation and exploration until a basic organization with some working patterns of action has been established. However, once purposes have been clarified, or even modified, and possibilities recognized, a point is ultimately reached where the prevailing structure becomes inadequate for progress, and reconstruction becomes essential. The failure to reconstruct means rigidity. Through the processes of reconstruction, potencies are brought to the fore and can be actualized. Participation in a wider sphere in terms of cultural transcendence is tremendously difficult, if not well nigh impossible, until a culture has "come into its own," has recognized and established its selfhood. There can be no transcendence of culture until there is in fact a culture to transcend, and from the standpoint of an internationalizing world, this must still be regarded as an envisaged necessity rather than an immediate possibility, as many emergent states are finding out.

Now, each "culture-task" requires the manpower capable of carrying it out. A culture that does not face up to its manpower requirements simply fails to develop. A culture that is restricted or restricts its manpower to any one task orientation is in danger of: (a) not evolving with sufficient rapidity to remain viable in the modern world; (b) tending towards stylization and impending dysfunctionality by refusal to reconstruct; (c) becoming so concerned with itself that it becomes blinded to the problems of a wider world in which it exists; (d) becoming so future-oriented that it literally atrophies its own heritage. In other words, a balanced and progressive orientation to each task level is a necessity.

2. Immediately then, as it is human ability that is required in carrying out any culture "task," the personality dimension is involved. Four corresponding personality "tasks" can be suggested:

2.1 The task of learning to live in a particular sociogeographic environment, the task of "adaption, assimilation and accommodation" (Piaget) of the individual in that culture in which he has been born or transferred, leading to

2.2 The task of socially directed autonomy, which means the task of intellectual development, of being able to discern, reflect, judge, conceive and construct, leading to

2.3 The task of self-recognition and affirmation, qualified by knowledge which can be applied to cultural development and reconstruction, leading to

2.4 The task of group contribution, of cultural and transcultural contribution.

These personality "tasks" correspond in general to the following actual and possible developmental phases:

(I) Infancy:	ego-centric	→	socio-centric phase;
(II) Adolescence:	socio-centric	→	egoistic phase;
(III) Young Adult:	egoistic	→	self-realization phase;
(IV) Later Adult:	self-realization	→	self-transcending phase.

3. As we are not dealing with either instinctive or innate behaviors, except perhaps at the most primitive levels, the individual must learn his personality "tasks," and in so doing, as a member of a culture, learn the culture "tasks." As a child he needs to learn to adapt to and acquire his culture. As an adolescent he needs to learn to reflect about himself and his culture. As a young adult he needs to learn how to reconstruct himself and his culture. As a maturing adult he needs to learn to transcend himself and to help, in concert with others, his culture to transcend itself. He needs to so learn for the sake of his own becoming and his culture's maintenance and evolution in which he is integrally involved. This means then that there are some corresponding educational "tasks."

3.1 The task of primary education, which is that of enculturation, of instructing the child in his cultural heritage, of helping him to participate in, and to understand his culture's themes, values and activities, leading to

3.2 The task of secondary education, which is essentially intellectual, corresponding to the development of abstract cognitive abilities in the adolescent. This is a period in which thought becomes refined, and the self as subject recognized as the agent in the act of knowing, with the accompanying responsibility and freedom for the organization and application of ideas.

3.3 The task of higher education, which builds upon the discriminating and reflective intelligence derived from later adolescence, is to provide the opportunity for self-awareness and the acquisition of knowledge and profes-

sional skills which can be synthesized into a culturally productive orientation. Thus, a basis is formed for cultural reconstruction, which demands both intelligent purposes and ability qualified by cultural — rather than simply self-interest — to effect positive change.

3.4 Finally, adult education. We may suggest here not the usual elementary or secondary education for adults (which should always be available as and where needed), but public and private, formal and informal study, leading maturing adults, who in many instances have increasing leisure time, into areas of wisdom which can utilize the increasing accumulation of knowledge which is available in the modern world.

A SCHEMA FOR THE "INTERFUNCTIONS" OF CULTURE, PERSONALITY AND EDUCATION

The Cultural Domain	↔	The Personality Domain	↔	The Educational Domain
1.4 The task of cultural transcendence; of inter-cultural consciousness.	↔	2.4 The task of self-transcendence, of group, cultural and trans-cultural contribution.	↔	3.4 Adult education, the task of attaining wisdom; the synthesis of knowledge towards humane living.
↑		↑		↑
1.3 The task of cultural reconstruction; of changes for full realization of cultural potentialities.	↔	2.3 The task of self-recognition and affirmation qualified by knowledge for cultural application.	↔	3.3 Higher education, the task of acquiring self-awareness, knowledge and professional skills.
↑		↑		↑
1.2 The task of clarifying cultural purposes and recognition and development of possibilities.	↔	2.2 The task of socially oriented autonomy, of intellectual development.	↔	3.2 Secondary education, the task of developing abstract cognitive abilities with freedom and responsibility for thought.
↑		↑		↑
1.1 The task of cultural survival and maintenance.	↔	2.1 The task of "Adaption, Assimilation and Accommodation" to the socio-geographic environment.	↔	3.1 Primary education, the task of enculturation.

VI

This is admittedly a highly compacted schema, one that is presented not as a last word, but as a suggestion for the ordering of educational thinking. Its purpose at this point is to portray what we may call the "interfunctions" of the three domains of culture, personality and education.

Seen in a naturalistic or evolutionary perspective, each stage in each domain is directed towards the increase in efficiency of form and function of that domain. Seen in cultural perspective, each stage gives limited warrant to the prevalent claims for historic, present-time, and future time orientations, with the addition of the transcendent orientation. The addition of the transcendent orientation is held to be essential, for once culture or personalities reach the stage of self-recognition and actualization, there is the danger of aggressive self-interest unmodified by a concern for other cultures or persons, and this is precisely the problem we must overcome for positive living in an already conflict-ridden world.

Although warrant is given to prevalent claims, two restrictions must be added. The first is that although having certain validity, the suggestion is that they are not valid, as their proponents would perhaps like them to be, across the range of stages, but rather represent valid central tendencies of operations at the given stages. The second restriction concerns methodology. This is to suggest that, for example, although there is a validity for "historicism" on the primary level, this does not imply that historic methods of teaching are still valid, that *McGuffy's Reader* is the best instrument. This is a matter for learning and instructional theories, which requires a separate discussion.

Finally, it should be emphasized that this is a tentative schema in which rigid categorizing is not intended and in which it is recognized that considerable overlap and blending occurs between the stages. The question which we started with — what is and should be the relationship of culture, personality and education — is not, I believe, to be answered by reference to one particular ideology whether of culture, personality, or education, nor by some eclectic pot-pourri, but rather by an analysis of, and reference to the "interfunctions" of the three domains and their respective tasks. Thus, it should be possible to conceive of a curriculum plan, a teaching methodology, or a theory of education on correlative anthropological, psychological and educational grounds.

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CULTURE AND ENVIRONMENT:

Interaction in the Classroom

Vrej-Armen Artinian

Can culture influence Man's interaction with his physical environment? This was one of the issues I wanted to investigate with my study of elementary-school environments. I was interested in the total effects of built surroundings and wondered whether French-speaking and English-speaking Canadians could have differing reactions towards their school buildings.

In his recent book, Edward T. Hall insisted that culture does make a difference, sometimes a decisive one, and mentioned how the French are accustomed to pack themselves together more closely (in their cars, for example) than the Americans. He concluded that "people cannot act or interact at all in any meaningful way except through the medium of culture."[1] Similarly the architect, Henry B. Van Loon, remarked that "culture and environment are so directly linked together that the quality of environment has as direct an effect on the quality of a culture as a culture, through its values, has on the values of space and resources of a civilization."[2]

Methodology

My study included thirty-two elementary schools built between 1950-1968 in the region of Greater Montreal. Half of these belonged to the French-speaking community (composed primarily of French-Canadians), and the other half to the English-speaking community (mostly Canadians of English, Scottish and Irish origins). The buildings were spread over lower, lower-middle, middle and upper income level districts, and urban, semi-urban and suburban localities. I interviewed first the architects then the principals of the schools and spent half a day in each school, visiting the premises and attending a regular class of the highest grade for approximately half an hour.

I distributed questionnaires to which 800 students (a sample classroom in each school) and 400 teachers replied. The responses were

analysed according to various factors. The language difference was one of these factors. The results clearly indicated that English and French* teachers and students do not react in the same way to the many aspects of the physical environment.

In this article, the teachers' responses are presented under four headings: the spatial, the thermal, the luminous and the aural environments.

The Spatial Environment

Teachers in the sixteen French schools generally show a higher satisfaction with the spatial characteristics of their classrooms (CR), than their counterparts in the sixteen English schools.

TABLE 1

	Percentage of "Adequate" Responses to the		
	CR Area	*No. of Students/CR*	*Storage Area in CR*
English	38	60	38
French	64	66	47
	$p < .001$	$p < .01$	$p > .05$

Table 1 shows the percentage of teachers who rated the spatial characteristics of their classrooms as "adequate" on a three-point scale: adequate, barely adequate, and inadequate. In each case, the French teachers gave more "adequate" responses, the most striking difference being the case of the CR area.

To what factors could we ascribe these differences? Inadequacy of area means not enough area. Do the French have larger classrooms? No, on the contrary, their CRs average 700 sq. ft. while those of the English are 750 sq. ft. on the average.** Inadequacy of area can also mean crowdedness of the CR, i.e. lack of space per pupil. But the average figures show that the English have 26.5 sq. ft. while the French 25.5 sq. ft. per pupil, i.e. 1 sq. ft. less. On the

*Henceforth standing for English-speaking and French-speaking Canadians.

**These and the following averages of the actual physical conditions are based upon the thirty-two sample CRs, and it is assumed (as asserted by the plans) that the other CRs of the schools share the characteristics of the samples.

other hand the French house 27.5 students/CR, or one student less than the English (28.5). However, I believe that this difference of one student per CR cannot cause so large a variation in the teachers' ratings as seen in Table 1. Could these differences be related to the teaching methods of the two groups?

In Table 2, *conventional* seating is the row seating (with one, two, three or even four students abreast per row), *semi-conventional* is a U-shaped arrangement, while the *activist* seating varies in form and size, and is based upon work-groups of four to six students. Logically, therefore, activist methods require larger classroom areas than non-activist approaches.

TABLE 2

	No. of CRs with Seating Patterns Being		
	Conventional	*Semi-Conventional*	*Activist*
English	8	3	5
French	12	1	3

As seen from Table 2, the English have double the CRs with semi-conventional and activist seating patterns than the French. This means that, at the time of my investigation, the new teaching methods had been implemented in the English schools more widely than in the French ones. This fact in itself may be an explanation of the dissatisfaction of the teachers with the CR area in the English schools. The French, with more traditional methods, did not feel, it seemed, the need for larger areas. However, it was found that even in those English schools with semi-conventional or activist methods, 34% of the teachers rated the CR area adequate, against 56% in the French schools of the same categories.

Another factor which could be taken into consideration is the age of the school buildings. I found that, in general, people were more satisfied in the new schools than in the old ones. This factor seems to be more decisive in the case of the students than in that of the teachers. However, a comparison of the English and French in old and new buildings shows once again the higher satisfaction of the second group (Table 3).

Could it be that these satisfactions are related to other causes which might not have any bearing upon the actual conditions of the physical environment? Could there be, as Dr. Hall indicated, ecol-

ogical, anthropological or proxemic factors? Couldn't it be that French teachers feel more at ease in relatively smaller areas than English teachers?

TABLE 3

% of Teachers Rating the CR Area "Adequate" in Schools Built in

	1951-1965	1966-1968
English	46.5	25
French	60	63.5

There could be some social implications too in these findings. In Montreal the French, less well-to-do than the English, live in more congested neighbourhoods and in more crowded dwellings. Have the French adapted themselves to smaller areas and consequently manifest lesser dissatisfaction with the spatial characterristics of their classrooms? These are a few important questions that need further investigation.

The Thermal Environment

Investigating the ratings the teachers give to the thermal environment of their classrooms, I found that the English teachers show a higher satisfaction than the French.

TABLE 4

	% of "Adequate" Responses to the	
	Thermal Atmosphere	*Ventilation*
English	69	67
French	55	49
	$p < .02$	$p \leq .001$

One wonders why. The differences could not be due to the differences in the temperature of the English classrooms, as opposed to the French CRs, since the former generally are found to be two degrees cooler than the latter (respectively 68 and 70 degrees of

Effective Temperature which takes into consideration the cooling effect of humidity). But it is the French who require warmer temperatures!

The findings show that teachers in larger CRs are generally more satisfied with the thermal environment than those in smaller CRs. It may be that English teachers, being in larger CRs, are also thermally more comfortable than the French. However, I suspect that in this case, too, there may be other underlying causes. Perhaps, the English feel better in cooler environments and the French feel better in warmer ones.

The Luminous Environment

Interestingly, no variations were found between English and French teachers in their appreciation of the classroom lighting. Both groups show a satisfaction of 88-89%. This sameness of the responses, however, makes us wonder about the unpredictable nature of human behavior. How can the same amount of satisfaction with classroom lighting conditions occur in strikingly different environments?

Table 5 shows the average foot candles measured in the thirty-two schools investigated.

TABLE 5

	Average Foot-Candles Measured in the CRs	
	On the Desks	*On the Chalkboards*
English	76	37
French	142	88

We see that the French CRs have almost double the light intensities that the English CRs have. Can we conclude, therefore, that the English feel more comfortable in less bright environments, while the French feel better in brighter ones? Could we relate this finding to the fact that the forefathers of the English-Canadians came from a country with dull skies, while those of the French-Canadians came from a sunnier clime? And could this cultural inheritance have persisted for two or more centuries?

The Aural Environment

I found that the satisfaction with acoustics and noise reduction in the CRs was almost equal in both the French and the English schools. "Adequate" ratings for acoustics and noise reduction were 79 and 63% respectively for the French and 80 and 68% for the English groups. Unfortunately I had no means of measuring the noise levels in the classrooms. Therefore a comparison between the actual conditions and the teacher responses was virtually impossible.

Consequences

What consequences can these findings have and what useful conclusion can we draw out of them? I believe the first point which becomes apparent is the need for serious investigations in the issues dealt with herein. At the present time there are very few studies conducted in these realms, and I know of none in the linguistic-cultural field, except those mentioned by Dr. Hall. The required investigations of researchers should pave the way to a better understanding of human nature in relation to its environment and make us fully aware of its diversities in this respect.

Architectural design should take this diversity into consideration. Environmental norms should be verified and be adapted to the groups and the individuals for whom the buildings are to be constructed. Architects should know how much area, heat, light and noise is adequate, comfortable or ideal for the specific type of activity and the specific type of people for whom buildings are designed. Harry Rodman refers to "the need for informed skepticism too, about the sacredness of numerical engineering criteria, for example. How important is a standard foot-candle level? Does the precision with which a temperature recorder follows the temperature measure the satisfaction of the indoor climate?"[3]

I believe that these are major problems which deserve consideration. Solutions to them will require contributions from social scientists, behavioral-scientists, biologists and other professionals as well as from architects.

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2. Henry B. Van Loon, "Earth Space & Human Culture," *A.I.A. Journal*, August 1963, 23-29.
3. Harry E. Rodman, "Designing for the Whole Man," *A.I.A. Journal*, January 1969, 38-40.

Report I

The McGill Greek Project*

A. Schachter

The McGill Greek Project was set up under a grant of US $48,520 from the Ford Foundation, to produce elementary teaching materials in Ancient Greek. The Project is directed jointly by Professor C. D. Ellis, Department of Linguistics, and the author of this paper. The text being produced under the Ford grant is in fact the third version of our materials. The first two were prepared in 1964 and 1966, and we are deeply indebted to McGill University for its moral and material assistance from the very beginnings of our work.

Rationale

Before beginning the third version, we had to make a number of decisions:

1) Concerning the immediate aim of the course. We decided to try to produce a course which would teach all the important forms and syntax of the language, and which would prepare the student — usually at the university level — so thoroughly that he would be able to proceed in his reading and subsequent work with ease.
2) Concerning the actual language which the course was to teach. The problem here was whether it would be better to introduce the "Greekless" student to an amalgam of dialects, drawn from the literature of Antiquity as a whole, or to limit instruction entirely to one dialect, as written in one place at one definable period. We chose to do the latter, on what seemed to us the sound pedagogical principle that it is more efficient to teach one thing thoroughly than to try to teach a whole range of things with varying degrees of thoroughness, and with corresponding confusion for the student.

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*Adapted from a paper read to the American Philological Association at its annual meeting in San Francisco, December 29, 1969.

3) Concerning the dialect and chronological and geographical limitations. We needed a form of Greek in which there was a large amount of original material available, so that our students, on completion of the course, would then be able to exercise their skills on a satisfactorily large corpus. We also needed a form of Greek which would provide a solid jumping off point from which to proceed to the acquisition of skill in other dialects. Almost any dialect would have fulfilled the second requirement, but only one dialect fulfils the first, namely Attic as written in the fourth century BC. Our choice here was an easy one, and in no way revolutionary.
4) Concerning the corpus. We decided that all the reading matter should be taken from the original source, insofar as this was consistent with the student's level of progress. We chose as the corpus one work of each of two Athenian authors of the period, namely Plato and Xenophon. This too, was not a startling innovation. The actual works which were to form the corpus had to be in dialogue form, largely because we wanted to be able to present the student with real Greek which incorporated the whole range of verb and subject forms. This is less easy to come by in straight narrative. Our choice fell on the *Euthyphro* of Plato — which we use in its entirety — and the *Symposium* of Xenophon — of which we use about a third. Our reason for choosing two authors instead of only one was simply that we felt it would be a good idea to present the student with two differing styles of writing in the same dialect.

Our next task was to decide what things had to be taught and the order in which they would be taught. This involved an analysis of the dialect, on the one hand, and of the corpus on the other. We have not performed an exhaustive contrastive analysis of Attic Greek and English. If we had embarked on this, we should still be at it years from now. However, we did focus on features of relevance, both morphological and syntactic, at the initial teaching level, with particular attention to the verb system; and Professor Ellis analyzed the phonology for the express purpose of developing contrastive drills. We have also relied heavily on tried and tested grammatical compendia. A careful analysis of the corpus indicated that if we concentrated in the first half of the course on the progressive stem of the verb and on all the nominal and adjectival forms, the student, by the mid-way point, would be capable of reading over

half the corpus. Frequency counts enabled us to work out the actual teaching sequence.

Units of the Text

We chose to compose the text in thirty units, each of which could be sub-divided into a varying number of class periods, depending on the nature of the school and the relative maturity of the students. The number thirty was worked out on the basis of one week per unit, assuming that the average college year contains thirty weeks. At the university level, it should be possible to get through a whole unit in three class periods of 45-50 minutes each, plus labs.

The only atypical unit is Unit One. Since our course is basically an audio-lingual one, it seemed logical to begin with the sound system.

We are very fortunate in having available recent books on the problem of the pronunciation of Ancient Greek by Professors W. S. Allen and W. B. Stanford, in addition, of course, to Sturtevant, and other works. Professor Ellis has worked to reconstruct the pronunciation up to as high a level of accuracy as one may reasonably expect to achieve. Having done this, he undertook a contrastive analysis of the sound systems of Attic and English, and based the introductory drills on this analysis. We have also restored the accentuation system to its rightful place as a pitch variation code. There are, of course, great differences of opinion as to the usefulness and feasibility of teaching the accentuation system. We can only judge by results, and the results indicate that our students have more success with the proper use of accents than we ever did as students. This may be because they are provided with a valid motivation for the study of accent as an integral part of the word.

Units Two to Thirty are composed in accordance with a single pattern. Each is divided into six sections, lettered A to F. Sections A and B are recorded on tape.

Section A presents one, or more, pieces of basic dialogue, the overall length of which is virtually constant throughout the course. In the Basic Dialogue are incorporated examples of the forms which are being introduced in the unit. Each dialogue is to be learnt from memory, although in practice we find that one can afford to be less rigorous here with university students. The idea of a basic dialogue is not a new one, and has been used often.

Section B contains drills, in which the new forms are taught through use. The drills are of three kinds. First, mimicry drills, in which the new forms are learned by rote. Without being specialists in learning theory, we are aware that fresh winds are blowing across the field. Accordingly, an effort has been made to embody useful features of both the cognitive and habit-pattern approaches by introducing a graduated sequence of questions following the mimicry drills. Second, recognition drills, in which the student is expected to show that he can identify the new forms. Third, production drills, in which he is made to produce the new forms. Most of the drills are self-correcting. The only drills in which rote learning figures are the mimicry drills, and even here, it is possible, with university students, to ring the changes on these drills, using them as production rather than mimicry drills. In fact, this is what I usually do in my own class, before sending the students to the language laboratory to work their way through them as mimicry drills. In the recognition and production drills, the correct response is often difficult to predict, and can involve complicated manipulations. We have had good success with drills of this kind.

Grammar is first introduced in the drills. For example, a production drill for the infinitive will require the student to transform indirect statement of one type to another using accusative-infinitive, having been given a preliminary model to follow. The student concentrates on producing the infinitive form, but at another level he is absorbing the mechanism of the accusative-infinitive construction.

Section C of each unit is the grammar section, in which the new forms introduced in A and practised in B are discussed, analyzed, and codified. New grammatical features employed in the drills are now brought to the fore, and commented on.

Innovations

Sections A and B, as described, do not embody any radical departures from accepted practices. Section C is straightforward grammatical exegesis intended as commentary on what has already been learned. The really new elements which this course offers are to be found in Sections D and E. But before I describe them, it will be necessary to say something about the preparation of the corpus.

The *Euthyphro* and *Symposium*, as they stand, were not suitable for students at the beginning of the course. They had to be

adapted to fit in with what the student was expected to have learned at each successive stage. This adaptation involved, not so much re-writing, as condensation and simplification of only the passages which were required for use in each unit. In fact, there has been relatively little re-writing, and even at the very earliest stages of the course, very little of the corpus material could be called "artificial."

A passage from the corpus, once used in a simplified form, is then available for re-use later in forms more closely resembling the original, until finally the student can safely be confronted with the original text, as Plato or Xenophon wrote it. Thus, as the student's repertoire grows, he is able and is given the opportunity to re-read and re-study the text at intervals throughout the course. It is this repetition factor which constitutes a very useful and effective element in the teaching of the language. The course is so arranged that, by the end of it, the students will have read the entire corpus through up to three times. So far, no signs of boredom have appeared. On the contrary, my students find it helpful to encounter familiar matter, and it is less difficult for them to absorb new material which is presented in a familiar context.

This procedure is followed not only in the basic dialogue of Section A, but also in the supplementary readings of Section D. Unlike Section A, the amount of material in D is not constant, but increases gradually throughout the course.

The purpose of the readings in Section D is twofold: first, to provide reading practice; second, review. Each Section D is based on everything learned up to the preceding unit. No new constructions are introduced here, only new vocabulary. Once again, the repetition factor plays an important rôle in increasing fluency and comprehension. The student, meeting familiar forms, can concentrate on the meaning of the entire passage. He can also see how a familiar passage can be elaborated by the addition of the new elements which he has learned since the last time he met the passage. This has proved to be a remarkably successful device with us. The reading passages are followed by content questions in Greek which further test the student's ability to understand what he is reading.

The most contentious part of the course, to judge from outside reaction, is contained in Section E, prose composition. Most new courses tend to cut down on composition or eliminate it altogether.

That we have not done so has caused some eyebrows to rise, but I think we can justify our decision to use composition.

The arguments usually advanced against the retention of composition are valid insofar as they are based on the assumption that composition must be justified as a teaching device. However, we do not see it as a teaching device. We regard composition, like the supplementary readings, as a form of practice and review.

If you are learning a modern language it is relatively easy to go out and find a native speaker to practise with. But you will never find a native speaker of Ancient Greek in any condition to converse with you. Granted, dead languages are read rather than spoken, and we have taken account of this important fact in the emphasis which we put on reading in Section D, but facility in using a language — and reading, too, must be regarded as *using* — requires practice in the manipulation of it. Modern language learners can manipulate their target language in conversation. But to students of Ancient Greek this avenue is closed.

It seemed to us that the only way in which we could provide controlled practice in manipulating Ancient Greek was through graduated pieces of prose composition. We could have devised some kind of conversation drill, but to what end? We wanted to focus the student's attention on the fact that almost all his subsequent encounters with Ancient Greek would be on the printed page. Furthermore, we wanted strict control over his use of the language, to ensure that he used all the forms and constructions of which he was theoretically capable.

So we decided that prose composition would be a useful — although limited — tool for review and practice. We then went and found ourselves a collaborator in the person of Mr. John G. Griffith, Fellow and Tutor in Classics at Jesus College, Oxford. We were very lucky in our choice.

The proses are presented first in their original English form. They are then re-cast into a form of English more closely representing a morpheme by morpheme translation of the required Greek version. This provides a necessary bridge for the student between the English manner of written expression and the Greek, and is a useful reminder that different languages are different, at least at the level of surface grammar.

The last part of the unit, Section F, deals with vocabulary, and contains among other things a list of all words first introduced

in the unit. There are about 1100 lexical items in the course, their introduction spread unevenly over the whole. We have relied on the repetition factor again to ease the burden on the student, but it is too soon to judge its effectiveness here.

At the end of the text will appear reference material, word lists, paradigms, and the like.

Evaluation

One of the questions we are asked most often is how our students adapt themselves when they go on to study Greek from other teachers using different methods. We shall not know about our current students until next year, but the alumni of the first two versions have had no difficulty in adjusting, and in going on to read more Greek and more different kinds of Greek. This may be due to various causes, but two suggest themselves to me: first, we are able to tell their new teachers exactly what they have learned from us; second, we have consciously retained almost all of the conventional terminology, on the assumption that their subsequent work will be in and through texts and commentaries which use the conventional terms.

We propose to write a teacher's manual which will include, among other things, tests, suggested timetables, supplementary drills, and background material. No teacher's manual, as we all know, can substitute for a good course in teacher training. We have in fact started a small program of our own in our Department, where I have two postgraduate students sitting in on the course, studying the method, and making up their own drills. They will also be expected to teach an entire unit of the course each. We hope to continue this program in the future, and would welcome enquiries from outside the University.

Further information, as well as a sample unit from the text and selections from the proposed teacher's manual, can be obtained without cost from the author.

Editor's Note:

As we go to press we are happy to learn that the Ford Foundation has granted the McGill Greek project an additional U.S. $17,000 for 1970-72 to enable Professors Schachter and Ellis to produce a revised version of the text.

Report II

Supervisors Look at Themselves

Patrick Babin

During the 1970 summer session in the Graduate Faculty of Education at the University of Ottawa, supervisors had an opportunity to observe their own behaviour and that of their peers in a microteaching setting. Thirty participants from universities, teachers' colleges, community colleges, government agencies, provincial Departments of Education, and school districts in Ontario and Quebec attended a six-week clinic where the focus was on performance tasks designed to improve their ability to analyze, evaluate, diagnose, and prescribe alternatives for teachers.

The rationale for such a course was based on past experience. In evaluating the extremely complex process of teaching, the tendency has been to deal with superficialities — long checklists with little substance have too often been utilized by supervisory personnel, too little time has been given to the study of teaching in a laboratory situation or in its natural setting, the classroom, disproportionate energy has been devoted to moralizing and speculating on what teaching should be, and relatively little on what it is. Now, we are gradually taking the path of the more mature sciences. If the variables at one level of phenomena do not exhibit lawfulness, *break them down.* This kind of thinking led Gage[1] to coin the term "micro-criteria" when he first wrote about micro-effectiveness in 1962. He suggested that educators look into small, specifically defined aspects of the teacher's role. A micro-analytical approach was prescribed where teaching would be viewed (a) on a small scale, (b) in manageable segments, and (c) with specific definitive treatment.

The Ottawa programs stressed the importance of behavioural objectives in all aspects of teacher education. The cognitive, affective and psychomotor realms, as set forth by Bloom,[2] Krathwohl[3] and

Simpson,[4] were reviewed through the use of audiotapes, filmstrips and programmed materials.[5] The basic laboratory elements (activity, realism, and specificity), cited by Davis,[6] were central to all planning. Elementary and secondary-school pupils hired for the summer provided descriptive feedback of the supervisors' behaviour in the microteaching situation. Meanwhile, the teaching behaviour was always under the close scrutiny of other supervisors who, in turn, were applying some of the assessment procedures studied as part of the course. Confrontations, as explained by Fischler[7], occurred between (a) supervisors and themselves, (b) supervisors and peers, (c) supervisors and pupils, (d) supervisors and videotape. This exposure helped members of the group to develop more precise terminology in dealing with teaching and enabled them to communicate more accurately with each other and with the pupils they taught.

Although microteaching provided the major vehicle for analyzing teaching, a number of other systems for observing and measuring teacher behaviour were mastered and applied in these minisessions. Included were:

a. The Withall Scale for measuring the classroom social-emotional climate[8];
b. The Technical Skills evaluation scales developed by General Learning Corporation[9];
c. The Aubertine-Johnson Teacher Performance Appraisal Scale;
d. The VanderWerf-Glennon Modern Classroom Guide for measuring essential characteristics of a desirable learning situation;
e. Team and Peer Supervision as prescribed by the State University College, Oswego, New York;
f. Self-evaluation forms published in conjunction with Minicourse One, "Effective Questioning in a Classroom Discussion," Far West Laboratory for Educational Research and Development (available through Macmillan);
g. Behavior Analysis Instrument for Teachers (BAIT) for describing teacher behaviours during classroom teaching, planning, evaluation and diagnosis;
h. Flanders Interaction Analysis concerned with recording verbal behaviour between teacher and pupil[11];
i. Cruickshank's simulation involvement, *Teaching Problems Laboratory.* Engagement in individual and group problem solving

focusing on student behaviour, motivation, individualization of instruction[12];

j. Nonverbal communication, forms of n.c. which have significance in classroom interaction[13];

k. Simulation Films, "Critical Moments in Teaching," realistic and provocative classroom problems which evoke thought-stimulating, concept-developing opportunities[14];

l. Profile of Interaction in the Classroom (PIC), a method for recording and analyzing teacher-pupil interaction — a short-cut method of Flanders Interaction Analysis[15].

One of the highlights of the summer was the application of these diverse analytical instruments to observing two micro-demonstration lessons (elementary and secondary), either live or on videotape. Master teachers from Peterborough Teachers College and Ottawa Teachers College served as models. The followup consisted of supervisor-teacher conferences and the assessment by members of the group of the videotape performances.

During the clinic, all supervisors developed "blueprints" for the implementation of new techniques for their respective institutions. One such endeavour, a group-of-seven task, was realised by an ambitious group from Ottawa Teachers College. Their plan focused on pre-service application although most of the proposals were geared to in-service use. Consensus was that, in the making of a teacher, it is highly probable that in-service training is definitely more important than pre-service training. In the former, one learns *about* teaching; in the latter, one learns *to teach*. Also accepted was the fact that teachers learn at different rates, in different ways, and through different experiences. There is no way of escaping the need to individualize teacher in-service education.

Judging from feedback, group reaction to this experimental clinic was most favorable. No one reacted adversely to the utilization of videotaping equipment although participants were expected to handle all taping. "For the first time in my graduate program, I have been treated as a professional," stated a superintendent-participant. Although not meant to constitute a new teacher education program, this attempt to analyze teaching into limited, well-defined components that can be taught, practised, evaluated, predicted, controlled, and understood, illustrates the potency of laboratory involvement as an integral part of the profession.

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Teaching and Learning Group Structures in the Elementary School: an Experiment

William E. Lamon

For some years, schools have been on the threshold of remarkable changes in elementary school mathematics, changes in *what* is being learned as well as *how* this learning is taking place. New mathematical topics have been introduced into the elementary classroom based on the belief that, at an early age, the child is able to grasp many of the important concepts previously reserved for more mature mathematical minds. Mathematics, as an hierarchical system of abstractions, imposes the need for accurately stated aims and objectives. What do teachers intend to achieve by requiring that children learn mathematics? Recent research in mathematics education has yielded new insights into the "whys" and the "hows" of learning mathematics, in that much of the value of mathematics lies in the *thinking skills* that a person acquires through the mental manipulation of mathematical concepts and abstractions. The current emphasis on thought processes as an aspect of mathematics instruction has been cogently expressed by Frank Land:

> . . . mathematics may be thought of as a highly disciplined mode of thinking. Many situations in the real world need to be thought about, assessed, appraised and criticized from the point of view which can be illuminated by mathematical thinking. By this I do not mean using mechanical computational skills, but the appreciation of the *structure* and pattern, which underlie them . . .

It is, therefore, the exploration of the structure of mathematics which forms the foundation of the learning of mathematics. It is difficult to separate what we term mathematical thinking and what is usually described as mathematical learning, especially since what is being learned is a set of concepts or structures.

There is an almost endless variety of structures with which we grapple so that we may survive in our technological society. In order to determine whether such structures can be *taught* and *learned*, experimental situations must be created in order to "discover" certain *predetermined* structures, and their related abstractions. For purposes of this experiment, the finite mathematical group structure was selected, and a controlled experimental study was undertaken at the Centre de Recherches en Psycho-mathématique, at the Université de Sherbrooke in Sherbrooke, Quebec. Two important questions were posed:

1. "Can children learn and abstract the structure of a mathematical group?"
2. "Does previous mathematical training affect the learning of mathematical group structures?"

Subjects

In order to have access to a wide range of children with exposure to different methods of instruction, 148 French-Canadian girls, from five different elementary schools and thirty-nine different classes, were selected: fifty-two fourth graders, fifty-three fifth graders and forty-three sixth graders. The sampling represented equal numbers of Cuisenaire, Dienes, and traditionally trained subjects. All subjects ranged in age from nine to twelve years and were assigned triads based on the same I.Q., socioeconomic status, age and previous exposure time to the same mathematical methodology.

Procedure

Since the participating children represented three different grade levels, three different mathematical group structures were developed. Special embodiments of the *Klein group*, the *Cyclic Eight group* and the *Cyclic Five group* were designed and prepared through concrete games, and systematically presented on individual task cards.* The experimental period was approximately eleven weeks in duration with 100 minutes per week of instructional time given by a Piaget-trained Swiss educator. During each instructional session, the child was led from an exploratory-manipulative period

*Examples of these cards are given in William E. Lamon and Lloyd F. Scott, "An Investigation of Structure in Elementary School Mathematics: Isomorphism," *Educational Studies in Mathematics*, Holland; Fall, 1970.

and a representational play period according to her own learning pace, through six distinct and ordered levels of mathematical thinking. Each level of learning embodied a different mathematical abstraction and manifested either at the pre-operational stage, operational stage or at the hypothetical-deductive stage of mental development. Those six levels were ordered as follows:

The first required recognition and understanding of the rules of the games. The second level of learning required the subjects to recognize the existence of an *isomorphic* relationship between different games having the same structure. In other words, the children had to demonstrate their awareness that in different games embodying the same structure, states and operators in one game correspond to definite states and operators in the other game. The third level of operation introduced the concept of binary operation; the fourth, the binary operation itself, required the abstraction of the concept of the particular group structure. At the fifth level of learning, the subjects became aware that if a true equation is transformed by an *automorphism,* another equation would emerge which holds true in the same system. The sixth level of abstraction was reserved for the discovery of the relationship between the *homomorphisms* and the group operation. In other words, the subjects discovered that two successive automorphisms can be replaced by a single automorphism. The level ordering was planned so that the subjects who did not reach a lower level, would not be capable of reaching higher levels.

Before a pupil was deemed ready to progress from one level to the next, she had to reach a behavioristic criterion of performance on a set of tasks. If the pupil succeeded in coping with a minimal number of the tasks, she progressed to the next level. Otherwise she was given an additional set of tasks. If the pupil failed to cope with the additional set, she was given still more tasks, until she was prepared to pass to the next level of learning.

Table 1 presents the distributions of the number of task cards, stimuli and number games by level of learning.

Findings

In order to indicate whether children can learn and abstract the structure of a mathematical group, each subject was given a score representing her highest level of performance achieved at the end of the experimental period. This score, with an assigned

value from one through six, identified the highest level of problem complexity accomplished by each subject. Table 2 presents the mean scores.

TABLE I

DISTRIBUTION OF NUMBER OF TASK CARDS, STIMULI AND GAMES BY LEVEL OF LEARNING

	Levels of Learning	*Number of Games*	*Number of Task Cards*	*Stimuli*	*Observation*
KLEIN	L^1	g^1	6	130	Compulsory
		g^2	6		
		g^3	6	36	
		g^4	4	28	
	L^2	g^1 & g^2	5	58	Compulsory
		g^2 & g^3	5	50	
	L^3	g^1	6	96	Compulsory
		g^2	6		
		g^3	6	54	
		g^4	5		
	L^4	g^1	12	154	Compulsory
		g^2	12		
	L^5	g^1	12	120	Compulsory
	L^6	g^1	10	41	Compulsory
CYCLIC 8	L^1	g^1	9	258	Compulsory
		g^2	8		
		g^3	7	137	
	L^2	g^1 & g^2	7	67	Compulsory
		g^2 & g^3	7	68	
	L^3	g^1	10	177	Compulsory
		g^2	9		
		g^3	8	84	
	L^4	g^1	11	128	Compulsory
		g^2	9		
		g^3	8	53	
	L^5	g^1	17	136	Compulsory
	L^6	g^1	7	28	Compulsory

TABLE I (continued)

DISTRIBUTION OF NUMBER OF TASK CARDS, STIMULI AND GAMES BY LEVEL OF LEARNING

Levels of Learning		*Number of Games*	*Number of Task Cards*	*Stimuli*	*Observation*
	L^1	g^1	7	156	Compulsory
		g^2	6		
		g^3	6	130	
		g^4	5	20	
	L^2	g^1 & g^2	7	58	Compulsory
		g^1 & g^3	7	58	
CYCLIC 5	L^3	g^1	7	116	Compulsory
		g^2	7		
		g^3	6	48	
	L^4	g^1	11	122	Compulsory
		g^2	10		
		g^3	10	57	
	L^5	g^1	11	70	Compulsory
	L^6	g^1	8	38	Compulsory

In general, Table 2 demonstrates a pattern of increasing performance with age. At all three grade levels, the mean performance of the Dienes' subjects are higher than those of either the Cuisenaire or the traditional subjects. To assess whether program and/or age effects existed, the raw performance scores were treated as a randomized block (factorial) design. The analysis of variance results are presented in Table 3.

TABLE II

MEANS AND STANDARD DEVIATIONS OF PERFORMANCE LEVELS FOR EACH PROGRAM WITHIN GRADES FOUR, FIVE AND SIX

	DIENES			*CUISENAIRE*			*TRADITIONAL*		
Grades	*Mean Score*	*S.D.*	*n*	*Mean Score*	*S.D.*	*n*	*Mean Score*	*S.D.*	*n*
4	3.31	1.72	16	3.05	1.40	18	2.77	1.56	18
5	4.00	1.02	17	2.00	0.94	18	3.00	0.57	18
6	5.53	0.82	15	5.46	1.02	13	5.46	0.85	15

TABLE III

ANALYSIS OF VARIANCE OF THE EFFECTS OF AGE AND PROGRAM DIFFERENCES ON THE LEVEL OF PERFORMANCE SCORES

Source of Variation	*Degrees of Freedom*	*Mean Squares*	*F*	*Level of Significance*
Programs	2	7.869	5,398	.01
Grades	2	98.605	69.156	.01
Interaction	4	4.875	3.419	N.S.
Within Replicates	139	1.426		
Total	147			

The conclusions drawn, are:

1. For the hypothesis of no program effects, an F of approximately 4.79 is required for rejection at the .01 level; hence, as the obtained F is above this, it can be stated that a difference in mathemathical training results in a significant difference in performance.
2. For the hypothesis of no-age effects, the F value for grades of 69.15 is considerably in excess of the required 4.73 and hence, performance increases with age.
3. No significant interaction effects seem to exist between programs and grades.

As previously pointed out, the levels of learning were ranked in accordance with a hierarchy of difficulty and mathematical complexity. It was therefore important to assess what percentage of the participating subjects, by grade, attained each level of learning at the end of the experimental period, represented in Table 4.

TABLE IV

PERCENTAGE OF SUBJECTS BY GRADE ACHIEVING LEVELS 1-6 AS HIGHEST LEVELS OF LEARNING AT THE END OF THE EXPERIMENTAL PERIOD

Grade	*Levels of Learning*						*Total*
	L1	L2	L3	L4	L5	L6	
4	23	15	23	21	8	10	100
5	17	6	53	13	9	2	100
6	0	0	2	19	7	72	100

From the percentage distribution of the subjects it may be noted that 62% of the fourth graders, 77% of the fifth graders and 100% of the sixth graders achieved beyond the second level of learning. The passing of this level assumed the subjects' mastery of the structure of the game presented. The passing of the fourth level, however, assumed the mastery of the structure of the mathematical group. In this instance, the fifth graders seem to have encountered difficulties: 11% of the subjects were able to tackle the tasks required of them in order to progress to the next level of performance. At the fourth grade level, performance seems to be slightly higher; 18% of the participating children were able to pass the fourth level of learning. On the other hand, 79% of the sixth graders successfully passed the tests administered at this level. This result was not expected. It reflects the theory of mental development of a child as advanced by Jean Piaget: levels one and two embodied activities at the pre-operational stage; levels three and four presented experiences at the operational stage. The hypothetical-deductive stage was represented by levels five and six, which show a small number of failures at the sixth grade level.

Some Related Classroom Observations

With the exception of the sixth graders, the children had difficulty in handling the structure of the tasks presented to them at the first level of learning. When the fourth grade subjects encountered the first criterion test, 83% of the Cuisenaire children, 66% of the Dienes children and 61% of the Traditional subjects failed. Of those who failed, 73% of the Cuisenaire, 36% of the Traditional and 8% of the Dienes subjects failed the next criterion test. And again, of those who did not pass the second test, 25% of the Traditional sample failed, while all the Cuisenaire and Dienes children passed. It would seem then, that at the fourth grade level, the Dienes children exhibited a somewhat superior performance. The fifth grade children followed somewhat the same pattern of behavior. However, the Cuisenaire children here displayed a performance inferior to the other two groups: after the third criterion test, 89% of those who failed the second criterion test (i.e., 53% of those who failed the first criterion test), failed again. All subsequent levels of learning seemed to present the same difficulties to all subjects, irrespective of their previous type of mathematical education. It seemed obvious that when the end of the instructional

period drew near, if the subjects at the fourth and fifth grades had been given additional learning time, the majority of them would have reached the sixth level of learning.

During the instructional periods themselves, attempts were made to reduce various kinds of extrinsic motivation, such as fear conditioning and/or social conditioning, which could have negatively affected the learning process. The establishment of intrinsic motivation through the use of the materials and task cards which had been developed, seemed to have highly motivated the children. During the eleven weeks of instruction, only three children out of 150 starting participants, had to be dismissed because of justified, but too frequent, absences. Furthermore, no escape strategies, such as requests for drinks of water, or use of bathroom facilities were used during the whole period of instruction.

Of special interest are the recorded observations of the classroom organization. At each instructional session, children were permitted to work together through the formation of small groups, each with a maximum of four children. Small group dynamics suggested different types of collaborative behavior in the different programs. Children in one group type had the tendency to borrow answers from the group leader without verifying the answer, while others discussed their problems with each other before putting down identical answers. The former type of behavior seemed to be more common in the Traditional and Cuisenaire groups, while the latter was more common to the Dienes group. This might be a consequence of the methods administered within the respective programs. However, the high percentage of those who copied meaninglessly in response to the tasks presented was unexpected.

Conclusions and Implications

The interpretation of the quantitative results, combined with classroom observations, seemed to indicate that if fourth, fifth or sixth graders are given a sufficient amount of learning time, they can learn and understand the idea of fundamental structure of the mathematical group. This statement does not suggest a formal representation of such a structure, but rather it indicates that if children are given concrete representations of the mathematical group, they can exhibit behaviorally the mathematical thinking and insightful learning associated with the study of the abstraction. It is difficult to reject the hypothesis that the type of mathematical edu-

cation is related to the level of performance attained by the participating children, because each grade level was presented with a different mathematical group structure. Of importance to this study, however, was the tenet that the three group structures were equal with respect to *learning difficulty,* and were all developed and presented individually in the same fashion by the same teacher. Hence, differences in observed performance could be due, not to the type of mathematical learning, but to the type of mathematical structure presented. Evidence clearly indicates increasing levels of performance in the progression from the fourth to the sixth grade. In view of the superior performance of the sixth graders, the assumption that the Klein group is a difficult structure to handle, seems to be rejected. It could be argued, however, that because those subjects were advanced in the stage of mental development and older chronologically than the fourth and fifth graders. They may have had advantages that significantly affected the level performance.

A great deal of experimental work has been and is being done, to design improved classroom techniques and the understanding of ideas in elementary school mathematics programs. The present study suggests that the presentation of concrete examples of certain mathematical groups generates learning situations which will contribute to a real appreciation of the interconnections of the various processes which children must learn. During the experiment, very few children exhibited a lack of motivation in the handling of the structures. The more abstract they were, the better the children liked them. Hence, it seems that if we continued to stretch the child's natural desire to explore, just enough to make the learning of structures interesting for them (but not so difficult as to be impossible), we would perhaps have generated a still greater enthusiasm in mathematics learning.

Before the children seemed to be fully aware of the structure of a particular concrete example, the structure had to be presented in such a systematic way as to allow the passing from concrete manipulation, first without, then with verbalization, to symbolization, requiring a time span which varied as to the rate of learning by each individual child. An important implication resulting from this observation is that, in order for the process to lead to a meaningful abstraction, a precise hierarchy of mathematical pedagogy is required.

Symbolization was a critical factor in this research endeavor. The way in which the elements in the given groups were represented had a powerful effect on the rate of learning of each child. The experiences on which the concept had to be developed in order to become operational seem to require the introduction of the corresponding symbolizations. Learning, however, was not tied to a certain particular symbol system. In order to "engineer" insights into the roles of operators and states within the structures, symbol systems varied with the physical situations. The findings of this study would suggest that if children are required to manipulate on an operational level the structure of the group, a variety of symbol systems should be presented. Verbalization of an adult type should not be necessary, since children are able to perform the tasks without relying on verbal expression, i.e., a child will understand the structure when he is able to handle it.

Suggestions for Further Research

The criterion measures used in this study should be tried with a larger sample including both male and female subjects who have been exposed to either the same or different types of mathematical education. Attempts should be made to assess the effects of the learning of concrete examples of group structures upon the formal representations of the abstractions generated by the study of the theory of groups. It seems reasonable to assume that certain types of concrete examples should allow for a better understanding and acquisition of mathematical abstractions than others. It is suggested that embodiments should be developed which differ from each other to a greater extent than those presented in this study. Another suggestion would be to present the "same" simple or complex structure to children of different grade levels to establish a more accurate study of the effects of age upon the learning of group structures. Such a presentation would be more amenable to analysis by the use of statistical techniques appropriate to comparative studies. The test items could then be more carefully constructed so that the measured behavior of the children would be more appropriate to the grade levels considered.

Similar problems in structures other than groups might also be profitably investigated. The learning of relational concepts such as equivalence and order could be subjected to experimental treatment like the one in this study. Variation in the structures used in

future studies is considered essential if any general formulation is to emerge to show how structures are learned.

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Some Concerns About Group Experiences

William M. Talley

The current interest in psychological and educational groups has created some dilemmas that could possibly be avoided if more attention were given to ethical responsibility both by group leaders and group members. This statement may appear to be advocating a simple solution to some of the confusion, misunderstanding, and polarization of opinions regarding T-groups, encounter groups, sensitivity groups, and such, but, nevertheless, it seems that closer scrutiny of some of the basic motivations and needs of persons leading and participating in psychological and educational groups is past due. In many fields of art, sensory and emotional stimulation appears to be sufficient reason for the creation of a work of art, but should this be the *raison d'être* for a group experience?

Admittedly, most groups have encouraged honesty, openness, and love as essential and basic components of meaningful groups. The movie *Bob & Carol and Ted & Alice* plays upon this theme and presents a bewildering distortion of the outcome of a basic encounter group experience. When we observe Ted and Alice's reactions to Bob and Carol, on their return from the group, we are confronted with the fact that there may be a question as to whether we are all saying the same thing when we speak of such intangibles as "honesty," "openness," and "love." There remain in many people's minds such questions as: How honest can we afford to be? Does being completely open serve any useful purpose for me or others? Which manifestation of love is the appropriate one? Thus, simply chanting some altruistic clichés does not completely dismiss some of the problems encountered by group leaders and members. In my opinion, there are at least three major areas of the group experience, both

psychological and educational, to which more attention should be directed. The remainder of this article will examine these.

I. *Must all of us have deep group experiences before we can know ourselves or give meaning to our lives?*

The "group" has come to have almost a mystical aura for some people. Some of the virtues with which it has been attributed seem very close to what some devoutly religious persons have claimed to receive from religious conversion. It cannot be doubted that countless individuals have profited from participating in T-groups, basic encounter groups, group counselling, and sensitivity groups. However, we are being less than honest if we do not present the other side of the picture and admit that not all people have profited from these groups and there are indications that many individuals have been victims of psychotic effects of the group experience. Furthermore, not all individuals need these kinds of group experiences to grow and develop as persons.

The group should not be looked upon as the ultimate in human relations. There could conceivably exist many situations in which it is more practical and satisfying to work in a one-to-one relationship. Do we dare create the impression that the group situation is the best mode of operation for all problem-solving and meaningful human relationships or that one must be successful in group relationships before he can communicate well and effectively in a one-to-one relationship? Or that group therapy and/or counselling is more productive than individual? My opinion is that we should not create that impression primarily because we do not have empirical evidence to support it; further, we have done very little research to determine which people profit most from which particular kind of group experience.

We ought not in the fields of education and the behavioral sciences develop a "caste of Brahmins" who perceive themselves as having profound understandings of themselves and others because they have experienced the group and set themselves apart from those who have not had such an experience. Some of the individuals I have known in my group experiences tend to give credence to this assertion after I observed the kind of impression they made on individuals outside the group. The group experience must be a *part* of one's total learning experience and not the *whole* of his learning.

II. *Who leads groups? What needs may group leaders be satisfying for themselves?*

It has been stated that:

> . . . . there is an almost shocking nonchalance about the responsibility of the leader for managing the forces he sets in motion. My own judgment is that a group leader has no *more* but certainly no *less* responsibility than a counselor working with individuals . . .[1]

This seems to be one of the critical issues of group leadership — taking responsibility for direction in the group and being aware of what is transpiring.

Educational leaders, as well as leaders in industry, religion, sociology, and other fields, have been eager to encourage individuals to have group experiences. It has been demonstrated that the experience has tremendous effects, both positive and negative, on individuals. The dynamics of development and process of groups have been analyzed in many ways. Yet little has been done to clarify who should lead groups. Daniel St. Albin Greene, writing in the *National Observer*, says:

> Most professional group facilitators are behavioral psychologists. But the proliferation of encounter groups in the last year or so has produced countless amateur facilitators — teachers, college students, "endemic therapists" who cite relevant experience, rather than formal education, as their qualification for conducting specific types of encounters (former dope addicts, for instance).
> The growing number of self-styled therapists is one source of concern to critics of the encounter-group movement. They also worry about the potential effects that uncontrolled emotional outpourings could have on unstable personalities.[2]

Another authority in the field has stated that:

> . . . it is high time that we recognize that as behavioral scientists we have a moral responsibility to evaluate the ways in which our activities affect society . . . we need to examine the implications for our society when counselors employ such techniques as confrontation or operant conditioning to manipulate the behavior of others.[3]

It has been suggested that group leaders or trainers should have had, in addition to a recognized advanced degree in one of the "helping professions," background preparation in personality dynamics, a knowledge of psychopathology as well as preparation in group dynamics, social psychology, and sociology.[4] This same authority suggests that they should have had an internship and extensive supervised experience.

It is obvious that we cannot set up any rigid criteria for selection or certification of group leaders any more than we can specify rigid and exact qualifications for individual therapists. Perhaps we can arrive at some general description of the kinds of persons who would be most effective as group leaders. These criteria could involve ethics, training, and emotional stability. There must, however, be some consideration given to the possibility that different kinds of groups might require leaders with different kinds of skills, qualities, and personalities.

It is understandable that in any profession, vocation, or general behavioral response, we are motivated to perform in order to satisfy certain needs. With this in mind, it is frightening to speculate what disastrous outcomes might result in a group in which the novice or untrained leader has little or no understanding of his own needs, defenses, motivations, or attitudes, and uses the group as a means of satisfying these needs that ought to be met elsewhere.

III. *What do people want from the group experience? After confrontation with one another and when defenses have been stripped away, how do we follow through with the experience so that the group members receive something constructive?*

Several writers have expressed concern about the outcomes of confrontation sessions in which quiet feelings are evoked among participants and of situations in which the leader has focused more upon techniques and processes than upon outcomes. These concerns also include the misuse of training and the responsibility of the leader to learn about the people in his group before he leads them into a deep, emotional experience.

The outcomes of the group experience, whether T-group, encounter group, or whatever, seem to hinge upon the leader's ability to understand what is going on and to know when it is necessary to provide support, clarification, or some other constructive element.

It is not sufficient simply to be skilled in helping members of the group strip away one another's defenses without being able to help them develop some other satisfactory means of coping with their environment. Some individuals may come into the group with only a minimal defense set. If this is destroyed in the group, what do we expect of their plight when they leave the group if no help is given so that they may adequately cope with life outside the group?

Certainly, a number of writers[6] emphasize that some of the prime outcomes of the group experience should be that of understanding one's behavior and the behavior of others, developing more appropriate means of interacting with others and accepting one's self, as well as helping normal people recognize their problems and solve them before they become serious. This requires skill on the part of a leader, and a knowledge of pathology, learning theory and human behavior in general.

Furthermore, the word "understanding," on the part of the group member, involves more than just observing or grasping cognitively. It includes the comfortable incorporation of this observation or cognition into the individual's system of responses so that it becomes a part of him. Indeed, he could conceivably be worse prepared to deal with life if, as an outcome of his group experience, he came to know what motivated his behavior and observed what effect his behavior had on others, or vice versa, and yet did not come to terms with it:

> If awareness is really deep or comprehensive the perceiver may discover much that is horrible in himself and in his world.[7]

No matter how well trained a leader is nor how ethical his behavior, his group could produce some disintegrated individuals. It seems imperative that we take as many precautions as we can to avoid this. The leader must be perceptive to indications of trouble and skilled at helping members of the group to define limits and integrate themselves.

Conclusions

A great deal of research is being done in the field of group experience. However, much still remains to be learned in three major areas: (1) Which people can benefit most from which kinds of

groups? (2) What qualities are relevant for leaders of psychological and educational groups that tamper with human emotions? (3) What is the *raison d'être* of different kinds of groups and what are the expected outcomes of group experiences?

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WHAT AILS UNIVERSITIES?

Brian Hendley

The university is an academic institution that has come undone. It began in the Middle Ages as a scholastic guild or a learned corporation of masters and scholars *(universitas societas magistrorum discipulorumque)* which followed a relatively set curriculum and granted the license to teach *(licentia docendi)*. Students came from many nations to hear well-known masters, and actively participated in disputations. Once they had settled in the cities, they often found it necessary to band together against unruly townspeople, unscrupulous booksellers, and unfortunate teachers. Masters united to form separate Faculties with their own academic requirements and prerogatives, with occasional public squabbles over who was supposed to teach what to whom. Civic and religious authorities soon realized the advantages of having an institutional supplier of doctors, lawyers, educated clergy and merchants, and extended their support (and at times their control) to the new universities. Somehow a balance of power was struck between opposing factions; and students, faculty, and the outside community benefited from the growth of the universities in size and importance.[1]

Today this balance has been badly shaken and the very existence of the university as an academic institution seems in jeopardy. Students are demanding more direct participation in the educational process, "relevance" of subject matter to life's problems, active criticism of society. There has been a knowledge explosion. A traditional, coherent curriculum has been split up into isolated areas of specialized inquiry. New disciplines rapidly spin-off from old, resulting in highly technical jargon and data so extensive as to be

incomprehensible except in small fragments. Then there is money. Faculty members want more of it, departments compete for it, students never get enough of it, and society wants to hang on to it. Along with money comes size — the two-edged sword whereby quantity is needed to provide resources for quality, but frequently outstrips the new resources, increasing the pressure for ever more quantity. Because of the financial pinch, a certain amount of "production" is expected, not always in the best interests of academic pursuits. And, with the appearance of vast multiversities, all the problems of dehumanization and bureaucratization endemic to large institutions rise to the fore.

These problems have brought forth a plethora of analyses and suggestions for improvement in university education, ranging from the jarring rhetoric of the neo-Marxist to the placid defensiveness of those who want no changes at all. As a philosopher who is interested in education as a formal subject and as a former student who is now a teacher and has experienced many of the difficulties first hand, I will attempt in this paper to spell out what I think ails universities and to indicate some possible directions for change. My approach will be more speculative than scientific, with a view to finding general causes of some of the more obvious problems.

To begin with, I would distinguish between (a) problems arising within the university, which have to do with personal relationships within the institution (whether those of faculty to student, or of faculty to faculty); and (b) problems having to do with the university's relationship to society.

Personal Relationships within the Institution

Many criticisms of the university by students and faculty members stem from the unsatisfactory personal relationships they have there. There are obviously too many students for them to know each other, or faculty to know them, or even faculty to know faculty. The size of the modern university is one of its greatest problems, not only from a financial, but from a personal aspect as well. Students and faculty tend to feel lost in a huge institution which cares little about them and will not miss them when they leave. The computer becomes more important than the individual and is much more difficult to replace.

The problem runs deeper than that of size, however. Donald McCulloch has made a useful analysis of what he calls "relationships

of unilateral respect and constraint."[2] Such relationships come into being "whenever two persons or groups come into sustained contact and potential conflict, perceive differences between themselves, define these differences as inequalities, and assume these inequalities to give the one person or group rights of command over the other." These relationships can be found in most large institutions because they promote utility, efficiency and productivity, while providing the security that comes with predictability. According to McCulloch, "the more nearly a task requires persons to behave like things, like extensions of machines, the more efficient do unilateral relationships become."

A case can be made for interpreting the positions of teacher and student at the university in terms of unilateral relationships. The teacher is the dominant member who knows more and better than the student and feels responsible for him. The student's role is to be taught by the teacher so that he in turn will know more and better than the incoming student. The teacher has something to dispense; the student something to receive. The relative positions are clearly established and the most efficient operation requires that they be respected and maintained. Unfortunately, creativity is usually lost in such an operation and the student resents the impersonality of his treatment and the irrelevance of what he is being taught to his own concerns.

It is an exaggeration to depict this as a "Mr. Charlie / nigger" relationship.[3] The student does indeed have rights and influence (though he may not be fully aware of their extent) and no university could continue to exist if it chose to ignore them. There is also some justification to the claim that there cannot be equality in a teacher/student relationship due to the unequal nature of knowledge itself. Charles Frankel rightly insists that the university is "a hierarchical human organization, based on the premise that some people know more than other people, and that the community cannot perform its tasks effectively unless these graduations in knowledge are recognized in its form of government."[4] The students do come to learn and the teachers are there to teach; this fact cannot be denied if one is talking meaningfully about education.

What has to be remembered is that learning is a mutual endeavour. The teacher really learns his material when he has to organize it and present it for critical inspection; the student learns by clarifying, evaluating, and trying to apply the facts and ideas

which he is presented. The expertise of the teacher, combined with the variety of different viewpoints and reactions by the students, stimulates and develops thought. Thus, to depict the university as a "community of scholars" is to ignore the real differences between teachers and students. A better description is a "community of inquirers" each of whom has something to offer and something to gain from the cooperative effort to get at and make use of knowledge. Instead of accepting unilateral relationships, McCulloch urges the fostering of multilateral relationships and cooperation.

The lack of such relationships in the university is a legitimate basis for students' demands for more active participation in their own education. We pride ourselves on up-to-date and improved primary and secondary education; we claim to be highly selective in admitting people to the university; yet all too often we treat the students we get as having little to offer. An intelligent university student has more to offer his teacher and his fellow students than rapt attention and faithful completion of assignments. Since he has his own experience and point of view, his critical reactions should be sought. This is to repeat a contention of Richard Peters and others that the manner of education is as important as the matter.[5] If we are to initiate students into the questioning, self-corrective methods of science, for example, we cannot properly do so by merely telling or showing them what to do. The student should be engaged in the activity itself as a participant with something to offer. To make university education more creative and relevant is to let the students more actively participate in it.

But how are we to foster mutual relationships of respect and cooperation between teacher and student? First, there is a clear need for some kind of decentralization. Sheer size can prohibit interdisciplinary cooperation and encourage rigid, more "efficient" approaches. Courses should be made smaller, more diversified, and more flexible. Second, students should be actively involved in the analysis of and attempted solutions to these problems. As we have said, they have a different (but not necessarily unequal) point of view to offer and their cooperation is particularly useful when the problem to be dealt with is the lack of cooperation. Third, much more experimentation with structure and content should be encouraged. This does not necessarily mean separate, off-beat centers with new approaches to education, but pilot projects in the midst of the more traditional methods.

These are general directions for improving faculty-student relationships within the university. Since this problem is endemic to institutions we can hope that the solution to it might be found in the institution with the avowed goal of pursuing truth. Here, at least, everyone has something to contribute and all have something to gain.

If faculty-student relationships are often uncreative and unilateral, those among the faculty themselves are usually little better. Academics tend to congregate with members of their own departments and, even then, largely on a social basis. Rarely do faculty members discuss problems of teaching and research with one another. This in turn inhibits their ability to respond as a group to student complaints and demands. Again, the causes for such a lack of communication have to do with size, specialization, money, and so on.

A professor feels somewhat vulnerable about his teaching and knows that the money lies with research, so the inclination is to go off on his own and let others do the same. Perhaps he is stuck on the top floor of a distant building and does not meet anyone from outside his department except at receptions and council meetings — neither much of a stimulus to meaningful communication. Moreover, the mystique of expertise is prevalent enough among the faculty to discourage critical evaluation of a fellow member's research or teaching. Of course, research and teaching are important to get the job and to get the promotion but, by and large, they do not get discussed in a serious way by the faculty as a whole. What develops is a group of conservative academics who are suspicious of change and protective of their own individual domains.[6]

This "live and let live" attitude among faculty members is one of the reasons we are following, rather than leading, student criticisms of the university. Afraid of saying too much, we have said too little and have been able to console ourselves with the importance of our own teaching and research. What student protesters have done is to prod reluctant faculty into facing problems of teaching and questions of priorities for research and considering what could be done to improve things. One thing that faculty could do is direct some of their expertise upon themselves. All of us share the experience of teaching and are committed to critical inquiry; why not discuss together the aims of university education, the best methods and subject-matter, the function and direction of research? From a

variety of specialized perspectives, we can analyze the problems of universities and evaluate proposed solutions. This should not be undertaken as yet another bureaucratic chore, but as a reasonable part of our job. If we do not like students telling us what and how to teach, surely we should sit down together and discuss the problems of teaching.

It is time for professors honestly to face the issue and decide whether they are teachers as well as researchers. Some may not feel they have any responsibilities to students other than letting them observe high-level research in action; others might admit that they do not really see the value of research in the university and would prefer that it be done in special institutes. Nonetheless, the expression of such views and the critical consideration of the issues involved would help both faculty and students. We are clearly not doing all the things the University Calendar or the President out collecting funds euphorically claim we do. We know this and the students do too; why not get down to cases and attempt to clarify what we do, why we do it, and what we think we should be doing?[7]

I think such an effort at real communication would enrich faculty relationships, while providing better direction for the university. We, like the students, would be more actively, more creatively participating in education. Recognizing mutual problems, we might also be more disposed to pay attention to our students and engage them in subjects we teach. Such an improvement of problematic relationships within the university would make it better equipped to alleviate problems of the outside community.

The University and Society

Most recent critics of universities charge them with failing to live up to their social responsibilities. The days of the ivory-tower are over, goes the argument, and universities must seriously face the problems of their surrounding communities. This does not mean mere analysis and "objective" research into society's ills — and in the process, treating people in trouble like objects in a formal exercise and leaving them no better off than you found them — but it requires active commitment and involvement in social change. Any student radical could read off a long list of alleged sins of commission and of omission perpetrated by universities upon society and he could probably also suggest an appropriate penance.

Most universities are located in urban communities which have problems of housing, transportation, air pollution, crime, poverty and ever-growing discontent. The university can provide such communities with a certain number of trained specialists, if there are jobs available for them. How much more it could offer in the way of critical analyses, diversified resources, and fresh ideas! Charles Frankel has said that "such things as intellectual discipline, mastery of fact, and refinement of taste are social instruments that can be used to improve the human condition." What he does not indicate is the fact that the urban university has an excellent opportunity to engage in more direct problem-solving in the course of acquiring discipline, facts, and taste. The urban problems to be found in the immediate vicinity of most modern universities should stimulate the formation of problem-solving theories and techniques and provide an area for their direct application and testing. What is being asked for is a restoration of the university's role as social critic.[8] This does not mean the university should merely formulate new, lofty aims for society, nor that the university must be in the vanguard of the violent overthrow of society. Rather, it means that the university should pay more critical attention to the problems and needs of its surrounding community and provide new direction and reform for society as a whole. The city offers the university a focus for many of its inquiries and a chance to apply and improve approaches to change. Society itself needs clarification and explanation of its problems and the initiation of solutions to them. The university seems best equipped to do this.

When seen in the context of an urban university, the teacher-student relationship takes on added importance. Here is a setting where academic expertise can be put to direct use in the clarification and attempted solution of real problems. The university could do much to improve city life, while at the same time making its own life more meaningful and exciting. That is to say, an urban university can make use of its location to overcome some of the financial, pedagogical, and personal causes of undesirable unilateral relationships. However, if the university is to tackle city problems in earnest, it must have greater financial support. Most of this support will continue to come from the government. When allocating funds, instead of enrolment figures, governments would have to take into account community involvement. More attention could be paid to what needed to be done and what the university was trying to do.

Disciplines relevant to city problems would be encouraged to apply their expertise directly, and students in such disciplines would gain new responsibility and stimulation from participating in problem-solving. Although I am suspicious of those who adroitly turn our worst problems into our best assets, I do think that universities can benefit from the communication, practical application of theories, and co-operation involved.

Certain qualifications must be added, however. One is that not every discipline has to justify its existence by solving some city problem. To demand immediate relevance is to deny the need for speculation, abstract theorizing, and aesthetic contemplation. It should not be forgotten that some subjects have and only need a personal relevance. We solve nothing by demanding that Classics departments consider only local problems or fold their tents, nor should we require all Sociology professors to swear their loyalty to urban causes. A balance must be struck between new-found social responsibilities and traditional intellectual requirements. This applies not only to the focus given existing courses but also to demands for lower admissions standards and for new, sometimes bizarre curricula. It is as if the black militants have seen how to play the game and are now demanding their own professors teaching their own students in their own programs. Let's face it, academic racism is no prettier than any other kind and knowledge is seldom advanced by letting the uninformed lead the way. How to remain open to community and student pressures, yet maintain reasonable curricula and happy, productive faculty is a task so formidable that the job of university president is one of the hardest to fill nowadays. Yet precisely this kind of tough-minded fairness is essential if we are not to do away with the university entirely through over-involvement in problem-solving.

Another qualification is that the university should not be looked upon as the source of salvation for all. Growing disillusionment with governments and churches has led many to point accusing fingers at the university and demand action. The university is an academic institution; it is not necessarily the best place to distribute food to the needy, launch political campaigns, find jobs, or give spiritual solace. Its primary tool is reason; and though the public chide it for not doing enough, they cannot legitimately require it to know and do everything. In many areas, the university can do something (e.g. a university health center could treat poverty

cases); but it should not take responsibility for all facets of city life (i.e. there should be city hospitals and private physicians as well). Even in regard to education, the university is by no means the only institution available to the city. Better day care centers, vocational high schools, legal aid and employment centers, and public clinics are needed first and only much later can we even begin to consider a role for the university. To claim the university has not done enough for its surrounding community is not to demonstrate that it can do everything best for the community, nor that it can be promoted as a foundation for a completely re-built community.

This is to argue that whatever new directions we give the urban university, it should remain an academic institution, where courses are taught with a fairly definite subject-matter, methods of appraisal, and a certain tradition of use. Any new course would be set up along similar lines: key texts, abiding themes, style, critical evaluations and the like. It is folly to suppose that students who come to be initiated into such subject-matter and methods should have a veto over the structure and content of a course. I would agree with the statement that: "What intellectuals know how to do best is to discover what the world is like, and the reason we send our children through years of school is that we believe it is meaningless to talk of changing things for the better if we don't know how to tell what they are like in the first place."[9]

A kind of micro-community should develop with the teacher providing initiation, guidance, and order and the students supplying vitality, fresh outlooks, questions, problems, criticisms. I see the ideal teacher-student relationship in much the same terms as I see what the city and the university have to offer each other: relevance and expertise, problems and proposals, experience and theory, reason and concern. To bully, harass, or attempt to bypass the teacher in such a learning situation is to set up another form of unilateral relationship that smacks more of revenge than of sound educational value.

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2. Donald J. McCulloch, "The Community of the University," in *The University Game*, (ed. by H. Adelman and D. Lee), Toronto: Anansi, 1968, p. 25.

3. As was done by Jerry Farber in his infamous "The Student as Nigger" article (*This Magazine is About Schools*, Vol. 2, Winter, 1968, pp. 108-16). Farber's analysis of teacher-student relationships has just enough truth to it to tempt us to swallow its grosser elements. The McCulloch article is an effective antidote.

4. Charles Frankel, *Education and the Barricades*, N.Y.: W. W. Norton & Company, 1968, p. 50.

5. R. S. Peters, *Authority, Responsibility, and Education*, N.Y.: Atherton Press, 1967, *Ethics and Education*, London: George Allen & Unwin Ltd., 1966; and *The Concept of Education*, N.Y.: Humanities Press, 1967. This concern for the manner of education can also be found in the writings of Whitehead and Dewey, among others.

6. A point raised by Clark Kerr, *The Uses of the University*, N.Y.: Harper Torchbooks, 1963.

7. A recent attempt to emphasize the teaching function of faculty members is described by Joseph Tussman, *Experiment at Berkeley*, N.Y.: Oxford University Press, 1969. The "experiment" involves a small two year program of studies in early Greek and 17th century English thought, to be followed by the normal specialization in upper-division courses.

8. Cf., for example, H. Adelman, "In Search of the University," in *The University Game*.

9. E. A. Rapping and L. A. Rapping, "Politics and Morality in Academe," *Saturday Review* (Oct. 19, 1968), pp. 64-5, 75-6.

Essay Review — I

"M. Josephus Poole"*

THE CRISIS IN THE UNIVERSITY

Especially Columbia University, in Retrospect

Being a somewhat cynical appraisal of a few of the many works dealing with the Columbia uprising that began in April of 1968, to wit:

Jacques Barzun. *The American University: How It Runs, Where It is Going,* New York: Harper and Row, 1968, xii + 311 pp.
The Cox Commission. *Crisis at Columbia* — Report of the Fact-Finding Commission Appointed to Investigate the Disturbances at Columbia University in April and May 1968, New York: Vintage Books, October, 1968, xiii + 222 pp.
Charles Frankel. *Education and the Barricades,* New York: W. W. Norton & Co., 1969, 90 pp.
James Simon Kunen. *The Strawberry Statement: Notes of a College Revolutionary,* New York: Random House, 1969.

Dust settles, smoke clears — it's only a matter of time. By now we seem to have a fairly reasonable perspective on what occurred on Manhattan's Morningside Heights during the dramatic days of April to August, 1968. It's not only that things have been fairly quiet around Columbia since then, it's more a matter of having had *everything* put in writing. We academics are not likely to recognize the reality, much less the significance, of any event until it has been elevated to print. But now we can look at it with academic detachment. I treat here only four books that, to a greater or lesser degree, were products of the uprising at Columbia University. Any reader of this *Journal* who doesn't agree with my interpretation of what happened may find many other documents to sustain his case.

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But he should also give due attention to these four, for each of them presents a controlling point of view which any overview must take account of.

Jacques Barzun added a postscript to the preface of *The American University*:

> The completed typescript of this book was in the hands of the publisher six weeks before the student outbreak of April 23 that disrupted the work of Columbia University. I have since then found no reason to change or add to the substance of what I had written months earlier.

That postscript was dated May 3, 1968. During the early morning hours of April 30, 1968, police had entered the campus of Columbia to expel students from five buildings. Six hundred ninety-two persons had been arrested, over a hundred hospitalized for more or less severe injuries; and the campus was in such a state of physical and social disarray that the "disrupted" work of the university was not to be resumed until the following fall. One might expect Mr. Barzun to find *something* in his book that he might wish to change as he pondered what was going on around him. But Mr. Barzun's decision to leave his work intact was exactly correct; we are all the better for the stern stuff of which Mr. Barzun is made. For a careful reading of Mr. Barzun's book reveals that the American University is not run at all and that it is going to pieces. The student outbreak was merely the form which disaster happened to take. But the root causes of disaster are portrayed so clearly by Mr. Barzun that he should not have been surprised, however much he may have been shocked, by what actually happened. One is left with the tantalizing question: Was Mr. Barzun fully aware that his book predicts the dissolution of what he calls the New University? Or was his apparent equanimity genuine? When he describes the inner working of the higher councils of Columbia with such composure, is he deliberately adopting a tactic which makes his revelations all the more startling? Or does he believe that the American University actually *can* act on the sixty-eight "suggestions" that form the last chapter of his book? And, even if the University did so act, that those reforms would cure the disease he had so persuasively diagnosed in the first seven chapters of the book? Perhaps it doesn't matter: Whether Mr. Barzun believes that the institution to which he has devoted his life has any chance to survive its present malaise, he would be less than a man if he failed to give Alma Mater the

wisest counsel he can summon from nearly a half century of devotion to her.

The basic disease, according to Barzun, is fragmentation, the absence of "a center" around which the university can order a limited set of related activities, such that the whole has something like organic unity. Lacking that center, the university pursues a variety of activities, the putative purpose of which is to advance some particular field of knowledge while the actual purpose is often to get money which will enable some professor and his retainers to escape the regular discipline of the university and establish a secular institute, laboratory, or special "studies" program. And it turns out that money got for such purposes *always* costs the university more than it returns, with the result that the university is always in serious financial trouble. (Even if the university gains "prestige" from the project. Barzun's most immediately practical suggestion is that we substitute the Hindi word "izzat" for "prestige," thus calling attention to the phoniness of all our talk on that subject.)

Barzun wrote this work with very little of the verbal brilliance and acerbity that we have learned to expect from his writings. There is wit, but it is infrequent. He is reticent on the identity of the authors of the preposterisms he devastates in his footnotes. But without embellishment, the story he tells is engrossing. Columbia came to recognize that rapid growth had rendered its inherited organizational form inadequate. A faculty committee labored from 1955 to 1957 and produced the Macmahon Report: *The Educational Future of the University.* Mr. Barzun, Dean of Faculties and Provost prior to 1967, sometime Dean of Graduate Faculties as well, devoted himself to translating that Report into reality, to simplifying, ordering, arranging, regulating . . . to make Columbia a reasonably *functioning* organization. The time, the patience, the self-control, the sheer drudgery required for doing those tasks are all clear enough in Mr. Barzun's book, but there's never a whimper from him. For

> administration is not troubleshooting, and these feats, though incessant and grueling, are only incidental. Administering a university has but one object: to distribute its resources to the best advantage. (p. 25)

And making a difference in the way a great university allocates its intellectual and physical resources is an activity in accordance with the highest public virtue. Despite the pain, a man might find hap-

piness doing it.

Indeed, the job of administration, so defined, is big enough to engage a man's entire being; a man who can get the job done is not likely to worry about public relations. Of course, professors enjoy the feeling that they participate in the decision-making process, whatever that phrase might mean, but more than that, they want chalk in the holder when they enter the classroom. Students of all times and places have had complaints, those of today's students are merely more frequent and more pointed. But the administrator is not obliged to give those complaints any serious attention unless the students have a valid case that their academic fare is of poor quality or not delivered so that they may receive it. Otherwise, an administrator may hold his personal opinion of the "pig-style of living" (p. 81) which is characteristic of the "new ethos," but the students' concerns and his duties have no rightful point of contact.

If this brief summary of Barzun's thesis is accurate, one can see immediately why Columbia was on a collision course with disaster. For there must be a known, accepted, and independently-measured criterion of "best advantage," else Barzun's definition of administration makes no sense at all. That criterion of best advantage derives from the central concern that individuates *this* university from all others and (dialectically, not paradoxically) relates this university to a whole civilization in which The University has been present — sometimes nobly, sometimes not, but always present. But if the New University lacks a central focus and concern, then there can be no criterion of "best advantage" independent of faculty will and student desire; hence the whole conception of administration practiced by Grayson Kirk and expounded by Jacques Barzun is hollow idiocy.

The case against Barzun is clear, but it would have to be qualified in detail. For Barzun knows that the dynamism of any university comes from its faculty's involvement in worldwide movements of ideas. His practice of administration was intended to open doors quickly and efficiently to faculty who needed encouragement and resources to pursue their scholarly activities. But which faculty? Which activities? Those involved with the infamous Institute for Defense Analysis? Those which led to the infiltration of Columbia's School of International Relations by CIA projects? There is in Barzun's administrative *morality* for the university no reason for denying those things. Barzun has expressed often and

well his distaste for generalities, for moral principles at one or more degrees removed from the world of human events and actions. And when the crunch came, Columbia University could find neither general principles nor partisan loyalty among faculty and students to sustain the institution. If you want to know the antecedent conditions for its turning out that way, read Barzun.

If you want to know the consequences, read Kunen and the Cox Commission *Report*. The title of Kunen's book comes from an incident recorded in the Columbia *Spectator* and reprinted in the Cox Commission *Report*, the *CCR*. Herbert Deane, the Vice-Dean of the Graduate Faculties

> was said to have asserted that a consensus of students and faculty should not, in itself, have any influence on the formation of administrative policy: "A university is definitely not a democratic institution. When decisions begin to be made democractically around here, I will not be here any longer." On the importance of student opinion to the Administration, he stated "whether students vote 'yes' or 'no' on an issue is like telling me they like strawberries." A short time later, Dr. Deane wrote that his remarks were "elliptically reported" by *Spectator*.

Dean Deane was giving a very accurate, albeit colorful, portrayal of Barzun's philosophy of administration. You don't need democracy when you have, e.g. as De Gaulle believed he had in 1958, great historical imperatives which you must achieve by efficient and just admiration. When you have neither democracy nor transcedent historical principles, your administration is not likely to be just *or* efficient. Rather, improvisation and rigidity — those two banes of all large scale social organization come into clear dominance. The two look contradictory at first glance, but actually they are two sides of the same coin. If one has neither fundamental principles against which to test a policy nor a democratic process to revise policy when it becomes obsolete, one acts as the Columbia administration acted throughout the period preceding and after the student revolt: one hangs on rigidly to a previous policy until events have made it useless, and then one improvises. The *CCR* is mostly a documentation of some two dozen occasions on which the Columbia administration went through that cycle.

In the end, however, the Commission could find no more justification for the students' actions than for the administration's. "Resort to violence or physical harassment or obstruction is never

an acceptable tactic for influencing decisions in a university." For such tactics "contradict the essential postulate that the university is dedicated to the search for truth by reason and civility." (*CCR*, pp. 196-7). As such, the university is a fragile institution whose only safety lies in a consensual rejection of the use of force to achieve political objectives. The *CCR* is no doubt correct on that point, but the students are unlikely to achieve such a moral consensus so long as the government of the United States kills, threatens to kill, and helps others to kill all over the world. But that's another issue.

What the *CCR* did not include, because it was prepared too close to the event, was the *real* reason why Columbia exploded in 1968 and will henceforth enjoy peace, and stagnation, unto *rigor mortis*. Although Barzun had yielded the office of Vice President and Provost to David B. Truman, the Kirk-Barzun style of administration still dominated in all dealings with the faculty. And despite a very earnest and persistent effort by faculty groups and official faculty committees, all well documented in the *CCR*, there seemed little chance of changing that style of administration within normal academic procedures.

Then the students started rumbling; their rumble amounted to a promise to get rid of Kirk, even if it took procedures that could never be described as normal or academic. The not-so-surprising thing happened: a large proportion of that part of the faculty who were really involved in the politics of the university supported the students. And the students knew it. Faculty support was a blank check they could fill out and cash whenever the right moment arose. It was to cover the cost of getting rid of Grayson Kirk. But when the students actually filled in the amount, it covered a lot more. Its face value was turning control of the whole university over to the students. The faculty had a chance to see what it would look like, and they stopped payment. If Caligula should be appointed to the presidency of Columbia tomorrow, he could count on overwhelming support from the faculty in any conflict with the students.

Why should that be so? Why are those faculty members who were once willing to interpose their bodies between the students and the charging police now unwilling to make the slightest move outside the normal channels. Well, for one thing, Kirk *was* fired, and the normal channels have been dredged to the point that faculty opinion can move to the Administration within them. But more importantly,

the faculty had a chance to see what student control might really mean. It might mean that people like James Simon Kunen would define that center, that focus, which gives point and direction to the existence of the university. That is to say, people like Mr. Kunen and, say, Professor Charles Frankel would find it difficult to join the same polity except on terms prescribed by the latter. And even then it's dicey that any such relation would be of profit to either side.

For Mr. Kunen approaches the world with a general cognitive stance very different from that of Professor Frankel or the Cox Commission. The latter went to elaborate lengths to explain the sequence of human actions that led from one event to another in the "Crisis." Their concept of explanation is a simple one; applying it to particular cases is enormously time-consuming. If you want to know why Dean Coleman acted as he did, you first find out *what he did.* He entered a building, left a building, made a statement, carried a message from X to Y, etc. Then you ask him *why he did it.* What end or goal did he have in mind? What reason did he have for believing that doing *this* will achieve *that* end? It's difficult. People's memories tend to invent plausible reasons for actions taken for no reason at all. But it's not impossible. It takes care, and probing, and 3534 pages of testimony (if we may, for once, take Kunen literally) to establish the story as a sequence of human actions. But it can be done.

But Mr. Kunen sees things very differently. He sees these events as things that happened; by coincidence, they happened to happen to him. He warns us not to take his book seriously, but his warnings are in vain. As Dorothy Parker once said, "We always write the best we can, and that's the tragedy of it." Kunen recounts a few months in his life, months in which he got himself together and his university came apart. Both are serious events, and Kunen made the best effort he could to let us know how they happened.

The contrast between the *CCR* and Kunen's book could scarcely be more extreme. They never disagree on the facts, but their modes of explanation are radically disparate. They have no common scale of importance. It's important enough for Kunen to report that he "liked" Archibald Cox; for Cox it was important to report that students were cooperative and communicative. One wants to say that the contrast is between an objective and subjective account of the events. But I believe it goes much deeper than that.

At one point in his book Kunen describes his reactions to a

new thought, that the war in Vietnam is bound up with the internal problems of an economically advanced, capitalistic society:

> That may not be terribly surprising, but it hit me kind of hard. Like it dispelled my dominant illusion.
> (We youths say "like" all the time because we mistrust reality. It takes a certain commitment to say something *is*. Inserting "like" gives you a bit more running room.)

The feeling is similar to what one experiences when smoking (grass, marijuana). One acts as does an actor, perhaps a "method" actor. One really feels, decides, moves, believes; but in doing all these things one follows a script that someone else wrote, as Kunen's friends say, a script They wrote. There are moments when Kunen does not seem to be following a script, when he *knows* that he is an agent, not merely an actor. But those moments are few. And, interestingly enough, they are not those moments when he exhibits formidable physical courage and endurance.

(The main difference between Kunen's book and the usual drug-induced reverie is that Kunen's aphorisms frequently sound fresh and illuminating to a sober reader. The play one follows while stoned is never more than soap-opera next morning. But the basic form of experience is the same.)

But look again at the *CCR*. Cox presupposes freedom: his mode of explaining events assumes that men and women make decisions and act on them. Kunen presupposes determinism: one follows the script as it unfolds. Yet Kunen cries out for freedom; perhaps he "likes" Cox because the older man has what the younger desperately seeks.

Is it possible to establish a university and a world in which They would no longer write the play? In which Kunen and those who share his values would *have* to make commitments? It might be possible, but the first hurdle would be those who should be Kunen's most trusted allies — the faculty of humane letters at the great university. And when we look at Charles Frankel we sadly suspect that the first hurdle would be insurmountable.

What can you expect of a book that has a plug on the front cover from John W. Gardner, that charter member of the politico-intellectual Establishment, and another plug on the back cover from Noam Chomsky, who is both a genuine revolutionary and a brilliant scholar in the highly technical field of linguistics? You expect and get a "balanced" view on every issue that's raised, e.g.:

> Discontinuity in policy is dangerous, but so is autocratic, thoughtless continuity. The long view is estimable, but impatience is useful too. And if inexperience is a handicap, so is experience: it dulls one to novelty. (Frankel, p. 57)

So far, so good: the balanced sentence and the balanced thought. Recognizing the need for a scheme of university governance which would strike a balance between these two poles, we might try to conceive forms radically different from those we now have. But Frankel's intent is definitely not that we should stretch our imaginations; the balance he seeks is found much more simply. Indeed, the passage quoted above is a justification of a very unimaginative proposal:

> The idea of student membership on boards of trustees raises as many problems as it seems to solve. Nevertheless, the idea is worth experimentation, even though the number of students who belong to a board, or who sit with it when certain issues are discussed, should probably be small. And there is little question . . . that machinery for regular face-to-face meetings between students and trustees is desirable . . . Trustees could learn from students things they will never learn from administrators or other trustees.

This passage, like the book from which it came, is an eminently sensible answer to an obviously important questions.* The same good sense is shown in Frankel's other writings and in his career in public service. By chance, or maybe not by chance, Mr. Frankel was a member of the original Macmahon Committee whose policies Mr. Barzun tried to bring into being. The report of that committee, now buried alongside the Harvard Report and many other similar documents, was an eminently sensible response to the practical question of a great university's continued growth. Mr. Frankel's most distinguished contribution to philosophical scholarship, *The Case for Modern Man,* presents a well argued refutation of the attack on the liberal, democratic view of man and society, the attack emanating from Toynbee, Niebuhr, and other criers of doom and repentance. In 1967, when Mr. Frankel, then Assistant Secretary of State for

*Readers of this *Journal* may wish to refer again to the review of Frankel's book by B. Hendley, which appeared in the Fall 1969 issue, pages 221-2. Hendley writes: "His asking of the questions is itself a faith in reason, a commitment to rational inquiry as a means to lift us out of the morass into which we are sinking." Very well put. But notice, if you let Frankel frame the question, you've given away half the possible answers.

Cultural Affairs, was forced to face the question whether a man of conscience could continue to serve a government engaged in an unjust war, he gave the sensible answer: he resigned, quietly and without fanfare. In sum, Charles Frankel is a productive scholar and a sensible man. When he looks at "The American University in Trouble" (title of the introduction to the book), he translates "trouble" into practical questions to which he gives sensible answers.

But Kunen is not a question and Frankel's answers are in no way addressed to *him.* Remember, Frankel is a very superior specimen of Homo Academians. He is tolerant, open, very intelligent, and deeply devoted to the humane values his discipline exemplifies. When we can find no point of contact between Frankel and Kunen (who is also a superior specimen of whatever we may later wish to call his branch of the human species), then we know that not only Columbia, but a lot of other things as well, are in serious trouble indeed.

Is there a moral to be drawn from this curious tale? One might look back at Carlton Coon's beautifully irreverent *Columbia: Colossus on the Hudson.* This volume in academic history, published in 1947, begins most suggestively: "It is no accident, perhaps, that the present site of Columbia University was once occupied by the Bloomingdale Insane Asylum." What Coon says and shows is that transforming an insane asylum into a great university was primarily a matter of raising very large sums of money when potential donors were either robber barons or their next-of-kin. Yet Coon also says with great conviction that the university had maintained its center: "at its core there is a heart and a soul too often forgotten or overlooked. That is Columbia College . . ." Contrast Coon with Kunen's comment on the same question today:

> You might say that Dean Deane is not exactly in the mainstream of Columbia life. But then no one is. There is no mainstream of Columbia life. Columbia is a lot of meandering streams up which the students struggle, vainly attempting to spawn. (p. 110)

Jacques Barzun (mentioned prominently by Coon in 1947 as an heir to the mantle) was not able to stem the tide of fragmentation. And Charles Frankel, for all his charm and good sense, can't do it either. Now, could Kunen and his ilk do better? The prospect is not only frightening, it's practically unintelligible.

But it's the only prospect which is not *certain* to be a catastrophe.

Essay Review — II

*Gerald Kamber**

Trivium at the Bivium

Neil Postman and Charles Weingartner. **Teaching as a Subversive Activity**, New York: Delacorte, 1969, xv + 219 pp.

Messers Postman and Weingartner, professors of education at Queens College, have come up with a novel pedagogical theory: subversion. Taking as their point of departure what they refer to as man's "continuing struggle against the veneration of crap" (a paraphrase of Hemingway's well-known "crap detector" statement), they call upon a number of more or less eminent social thinkers all of whom have spoken out against the long-standing sclerosis in the schools. David Riesman's " 'counter-cyclical' approach to education" is evoked ("meaning that schools should stress values that are not stressed by other major institutions in the culture," explain our authors) as is Norbert Weiner's "schools must function as 'anti-entropic feedback systems' ('entropy' being the word used to denote a general and unmistakable tendency of all systems in the universe to run down)," as well as Eric Hoffer's concept of "maintenance" (to prevent such a running down), John Gardner's "ever-renewing society," Kenneth Boulding's "social self-consciousness," and others.

What Postman and Weingartner have presented here is the *sartor resartus* or the anthropologist anthropologized by his aborigines. Two common assumptions are at the base of their reasoning: (1) the Montaigne-Rousseau hypothesis that the Savage is in effect Noble (until his nature becomes soured by contact with man-made strictures); and (2) the cataclysmic dissolution of our repressively patriarchal civilization in the not-too-distant future. Thus a good deal more than half of the book is given over to documenting the inadequacies of U.S. public education via the comments of a small army of dissenting educationists — those already mentioned in ad-

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dition to Alfred Korzybski, I. A. Richards, Adelbert Ames, Jr., Paul Goodman, Marshall McLuhan, Earl Kelly, and Alan Watts — who demonstrate quite convincingly how inadequate the system is and in just what way. The remainder of the book is concerned principally with "teaching strategies," largely of a "subversive" nature, and supposedly capable of bringing about the indispensable reforms.

Among the notions discussed and stressed by Postman and Weingartner one finds a reiteration of McLuhan's metaphorical dictum that "the medium is the message" (p. 17), a taking of sides in the ancient controversy between method and content (in favor of method) (p. 18), an attack on programmed instruction (p. 28), a word of encouragement for student-to-student (as opposed to student-to-teacher) interaction in the classroom (p. 34), a scathing reduction of humanism (p. 42), a reconsideration of Ames' statement that "reality is located behind the eyes" (p. 89), a stringent denial of the meaningfulness of empirical data in regard to behavior (p. 95), the belief that the "disadvantaged" who have become enemies of the community would have been made into useful citizens had their school experience been "relevant" (p. 156), the proposal that industry cooperate with students taught in a non-academic environment (p. 159), the concept that "electric media of communication comprise new languages" (p. 160), the exhortation that educational institutions give substantive exposure to the new media in order to increase the "relevance" of education (p. 161), etc.

The crux of *Teaching as a Subversive Activity* is, however, the following sixteen points (somewhat compressed here) calculated "to lay the groundwork for a new education":

> (1) declare a five-year moratorium on all textbooks; (2) allow English teachers to teach math and vice versa; (3) transfer elementary school teachers to high schools and vice versa; (4) require every teacher who thinks he knows his subject to write a book on it; (5) dissolve all subjects, courses, and requirements; (6) limit teachers to three declarative sentences and to fifteen interrogative ones per class; (7) prohibit teachers from asking questions to which they know the answer; (8) declare a moratorium on all tests and grades; (9) require all teachers to undergo psycho-therapy as part of in-service training; (10) classify all teachers according to ability and make the lists public; (11) require all teachers to take a test prepared by students on what they (the students) know; (12) make every class an elective and withhold

a monthly salary check if students show no interest; (13) grant a one-year leave of absence every fourth year to work in some field other than education; (14) make each teacher submit proof of a loving relationship with at least one other human being; (15) order all graffiti in toilets to be reproduced and hung on the wall in the halls; (16) declare the following words taboo: teach, syllabus, covering ground, I.Q., makeup test, disadvantaged, gifted, accelerated, enhancement, course, grade, score, human nature, dumb, college material, administrative necessity (pp. 137-140).

Certain of Postman's and Weingartner's conclusions about education in the United States today are difficult to refute since, demonstrably, a large segment of our national educational establishment is disoriented, discredited, and visibly breaking down at all levels. Their diagnosis may, therefore, be substantially correct; and undoubtedly Draconian measures are called for. But at this point, we find ourselves confronted by larger — and smaller — questions. The larger: is the Savage in fact as Noble as he is cracked up to be? and are we, in fact, on the eve of the Apocalypse? The smaller: what measures should be taken, or to put it another way: are those proposed by our authors the correct ones?

Now I am second to no man in my admiration for the pre-Lévi-Strauss primitive but *Sad Tropics* and *Structural Anthropology* have taught us that he lives at least as futile and complicated a life as we do and, furthermore, he is not one whit more disinterested or generous than we are. On the other hand, the anthropological perspective called for here can be a function, not of the average man who has in the course of recorded history been only too content to accept the *idées reçues* of his time, but rather the function of an intellectual elite — and thereby unsuitable for general consumption. In addition, while it is easy to detect vast fissures in our socio-economic system and changes will undoubtedly have to be made, Armageddon is scarcely at hand, the cultural continuum has not screeched to a total halt (*pace* Alfred North Whitehead), and after a relatively short period of accommodation, our educational system will probably return to training the largest number of technicians it can, a task it has shown itself superbly equipped to do. The premises implicit in this book then appear to me questionable or at least highly debatable.

There is, in addition, a large number of specific points with which it would be easy to cavil. For example, Postman and Weingartner deplore, rightly I think, "total homogeneity of thought among those the media reach" but fail to realize to what extent the young have been penetrated and conditioned by these very media and how much of their message they have absorbed. Nor do they seem to grasp that said media belong to and are controlled by capitalists who are, all recent remarks of Vice-President Agnew to the contrary, solidly establishmentarian, right-thinking gentlemen, moved by a powerful cupidity and sustained by a highly-developed sense of social exclusivity. Here are just some of the reasons for which the great communications networks will not, or only very reluctantly, take into the fold young people having had no more education than that afforded by the "reality curriculum" recommended by our authors. That such young people would not be prepared, psychologically and academically, for conventional subjects in a conventional curriculum (and thus be trainable only with the greatest difficulty) goes without saying.

Postman and Weingartner call for the subversion of an "anti-bureaucratic bureaucracy," but our youth doesn't want it and for good practical reasons (the very ones detailed immediately above, in fact). For somewhat the same reasons, students want and demand regular tests and exams, as any teacher can tell you. After all, the vast majority of students have been formed by a society which doesn't think the way Postman and Weingartner do, so that the straggle of Hippies, Yippies, and Bippies pales into insignificance beside the legions of relatively well-adjusted middle-class kids plugging away at a diploma and eventually a career (even though they might be a little promiscuous sexually, smoke a little pot, and wear their hair a little long). As for the disadvantaged minorities, if some of their members become enemies of the Republic it is emphatically *not* because of faulty education but because their ethos is different from that of the majority and they have not as yet been able to effect a resolution.

At a slightly more technical level, and as any good teacher can tell you, content and method are inextricably intertwined but if you have to choose, choose content, because a man who really knows his subject thoroughly will usually find some way to impart it even if it is only by inspiring in the student the will to emulate. And programmed learning (when it doesn't depend on a means of re-

sponse more complicated and exacting than the material it is presenting) has proven itself one of the sure-fire ways of getting information across. Which brings us to an even more basic point: Postman and Weingartner speak of "closed and open systems of knowables," opting of course for the open; but empirical knowledge should after all be possible and nowhere is it so much in evidence as in the teaching of mathematics, science, and language where either you're right or you're wrong. There is, too, much talk in the book about language. The Whorf-Sapir hypothesis, "that language structures our perception of reality," is brought up again and again and finally equated to the McLuhan-Carpenter theory that "the new electric media of communication comprise new languages." This is no more than an extended metaphor: we haven't as yet begun to talk "electronics," and media are emphatically not languages in any cogent linguistic sense.

Postman and Weingartner leave this reader with a rankling dissatisfaction. One never enjoys the exhilaration, as with Edgar Z. Friedenberg or Paul Goodman, of a series of brilliant insights or a chain of beautiful syntheses, however, one may disagree. The style is pedestrian and often quite awkward and their taste can be appalling. At the very beginning, for example, they state that "the survival of society is threatened" and that "something can be done," and add: "you have just finished reading this book if you do not know which is indispensable and which questionable" (p. xi). And a few pages further on: "this book was written by serious professional educators which means that we are simple romantic men who risk contributing to the mental health problem" (p. xiii). They also speak of "basic fundamentals" as a "revealing metaphor" since "fundamental" comes from "fundament" which "also means the buttocks, and specifically the anus" (p. 66). I submit that cheap, banal, self-deprecatory humor of this sort is out of place in a work of serious purpose. In the peculiar form it takes here, it is all too indicative of the shoddiness of Postman's and Weingartner's thinking and underlines the fatuousness and frivolousness of their simplistic solutions.

Essay Review — III

*Stanley M. Daugert**

The Teaching of Values

I have always had difficulty in understanding the meaning and import of the phrase "to teach values" or the larger phrase, "the enterprise of teaching values" (and all their many cognates) largely because it has never been clear to me what teacher *doesn't* "teach values." Whether intentional or not, designed or not, conscious or not, teachers communicate values — all sorts of them — as much by their attitudes and by the way they teach as in the subjects taught.

This is not to deny, of course, that a teacher can be quite deliberate about what values he wishes to teach (though knowing this doesn't guarantee his success), nor is it to deny that he can inquire rigorously and systematically into the subjects of how and what values are best taught. But, to repeat, I would claim that values of various sorts get taught whether or not teachers consciously or intentionally set out to teach them.

The foregoing remarks are not especially meant to be critical of David Lawson's book, *The Teaching of Values* (N. P., Canada, 1970) but they are meant to draw attention to serious ambiguities about such phrases as are instanced above and in the title of his book. Does the title promise to tell us *how* to "teach values" (given one part of the ambiguity mentioned, it must be admitted that none of us has a corner on that subject) or *what* values are best or what values are best taught? It turns out, of course, that Dr. Lawson is concerned more with the latter questions although the former is not ignored. His short book is basically a competent and useful summary of four thinkers' views on those questions — Adler's, Dewey's, Sullivan's and Fromm's, the views of two moral philosophers and two psychiatrists.

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However, while not critical of the ambiguities mentioned, this reviewer must note a further ambiguity which pervades much discussion of values, one which creeps into this book perhaps unconsciously. The first chapter's second section is titled, "Centrality of the Teaching of Values" and it opens with this sentence:

> Crucial to education is education in values, which enables man to discover ways of developing awareness, dignity, responsibility and a capacity for reason and for love . . .

The fact is, of course, that an education in values *may* enable someone to discover ways of developing awareness, dignity, etc., but another or different but equally crucial "education in values" may equip him, or help to equip him with precisely the opposite values (or disvalues), depending of course on who educates his values and what values the teachers have or what values they wish to try to teach. Surely Dr. Lawson would not deny that a boy brought up in a Weatherman's, a Panther's, a KKK organizer's or a headhunter's household is being "taught values" although they may not be the values Dr. Lawson cherishes. This is not to deny the "centrality" of teaching values. It *is* to deny that the words "values" or "teaching values" necessarily have the sanguine meanings built into them which Dr. Lawson seems to assume and employ. The relevance of this point is not impaired by the thought which ends the sentence quoted directly above:

> . . . in times when the values he has inherited may no longer be appropriate to the world he inhabits,

for surely that temporal qualification affects not at all Dr. Lawson's interpretation or understanding of the phrase "teaching values" or "education in values." That is, an "education in values," despite its ambiguity, would still be, in Dr. Lawson's mind, "crucial."

Generalizing one important aspect of this issue, it can be seen that Dr. Lawson follows something of an old tradition in using the English term "value" in an honorific or *pro* sense, despite the fact that he well knows that that is not its only use, that "negative" values exist as well as "positive" ones. Failure to concede this point (or in other words the failure to use a more critical value language) results in relatively cheap victories, moral as well as terminological, for no distinction being made no distinction is recognized. Hence, the author can employ his 'value' without testing it against what people do in fact value or how they use value language.

It is no argument against this criticism that, after all Dr. Lawson didn't write a sociological book wherein he might have paid somewhat closer attention to the myriad ways in which values do in fact get taught (in school and out), but that he has written a chiefly pedagogical book, narrowing that even further to a summarization of four prominent thinkers' views on values. For Lawson is as concerned to harmonize, if that is the word, his four authors' views with his own view or theory that certain values above all demand our attention and our teaching, namely, those specified in the quotation two paragraphs above. Another way of making this same point is to state that Dr. Lawson's defense of his own "theory" is relatively weak, that it needs firmer discussion and defense, say, along the lines of Hare's *The Language of Morals.*

REVIEWS

E. A. Winter and D. D. Harris. TASMANIA: REGIONS AND THEMES. Melbourne: F. W. Cheshire, 1969. 167 pp., illus., A$3.50.

Stemming partly from a deference given to man-land studies, Australia is frequently allocated at least as many lessons as India or China in the regional sections of Canadian, British and other geography syllabuses. Although a justification for the continuance of this seemingly disproportionate allocation may be based upon the criterion of total area rather than of total population number, the increasing trend toward more anthropocentric or socially-inclined approaches in school geography suggests that much greater attention should be given to the more settled parts of Australia than has previously been the case. Whether facts or concepts about Australia might be given either a relatively small or a continued significant place within a geography curriculum is a matter that can, or should, be easily decided by the individual teacher. Of much greater importance is the unsatisfied need for a variety of materials that can be readily analysed in the classroom to invoke fairly accurate portrayals of the continent. In this respect, Tasmania — still largely unknown to many Australians, let alone Canadians — has been by-passed by writers of school geography textbooks in Australia and elsewhere. By the long overdue publication of Winter and Harris' excellent book, this omission is rectified.

Each of Tasmania's nine succinctly-written chapters bears the hallmarks of geographical scholarship and judicious selection of illustration. After an introductory overview of the State's landscapes and "townscapes," each of seven chapters is devoted to a region drawn up by a balanced reference to physical, demographic and economic factors.

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"Hobart" and "Launceston and Northeast" are two of the regions, rarely seen as such in books that (generally, far less adequately) refer to Tasmania's areal patterns. The concluding chapter briefly relates the island to other areas, both near and far. In format and detail, **Tasmania** suggests that the authors together have an acute understanding of, and sensitivity toward, a wide variety of approaches to geographical study and teaching.

If it is a reviewer's purpose to point out faults, in the case of this book only petty matters can be noted. These include the absence of coloured photographs; the infrequent "telling" of the reader concepts or facts that may be discerned directly from the wealth of mapped and pictorial illustration presented; and the imprecise interchangeability of the terms "map" and "diagram" (cf. **Figs. 1/14** and **1/15**). Such comments as these should be discounted for **Tasmania** is that rare example of a school geography text which can have many useful applications.

The comprehensive methodological insight of **Tasmania** has value for any student or practising geography teacher wherever he be serving. The book's content is worthy of consideration in a course on the regional geography of Australia at any level of the education process. Hopefully, too, the use of **Tasmania** in Canada will not be confined to teachers' reference shelves. Class sets of the book should be available in any classroom where Australia is treated in the secondary school curriculum.

John H. Wise
Lakehead University

Carlton E. Beck, ed. PERSPECTIVES ON WORLD EDUCATION. n.p.: William C. Brown Publishers, 1970. 434 pp. $8.75.

This book contains fifty individually-authored essays on a variety of education systems (six on the major areas of the world and forty-four on separate countries). The regions included range from the expected (U.S.A., U.S.S.R.), to the unusual (New Guinea, Cuba, Upper Volta), to the exotic (Sheikdoms and Principalities of the Persian Gulf and Arabian Peninsular). The data presented are largely at the level of information, since the essays were written in response to the editor's question: "What would you say to an intelligent layman from another nation if he asked you to tell him about the main points in the history of education in your country, a description of education now, and what influences seem likely to shape it in the foreseeable future?"

Obviously, there are formidable technical problems in producing a book of this kind and the editor in his preface challenges the critic to call the quality of the essays "uneven." However, rather than attempt to deal with fifty papers in one brief review, it is preferable to focus on a

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few well-known countries. On this basis, the verdict has to be "dated." Though the book bears a 1970 imprint, the internal evidence suggests that the chapter on Canada was written around 1964. Anyone who thinks Canadian education is static would be amazed to find how many changes have been made in the last few years. Statements that have been true for centuries are no longer valid, e.g. "collèges classiques . . . still offer almost the sole academic entry to the French-speaking universities of Canada" (p. 285; see also pp. 293-4). No mention at all is made of Quebec's CEGEP's. Similarly, the chapter on USSR deals with the 1958 reform and the eleven-year school, but does not mention the 1964 reversion to the ten-year program. The editor's own chapter on the USA is also simplistic and stale.

One wonders whether the end product was worth the editorial effort and frustration.

Richard Armour. A DIABOLICAL DICTIONARY OF EDUCATION — An Absolutely Dispensable Guide Through the Muddle and Maze of the American School System. New York: World Publishing Company, 1969. 141 pp. Illustrated by Henry Syverson.

If you are looking for a Christmas gift for a pedagogue, here it is — a wry collection of insights deftly presented in the guise of definitions. Flip through this "dictionary," stop at any page and you will come to amusingly cynical comments on the educational scene. There are some good ones under "B" for example. Take "B" itself:

"To an optimist, a grade just below A; to a pessimist, a grade just above C. Considered by the registrar the equivalent of Good, though instructors who give nothing higher consider it Excellent and those who give nothing lower consider it a Bare Pass. Professors who give all B's are invulnerable. Unlike those who give all A's, they are not criticized for being too easy and letting down standards. Yet they never have to justify a C, D, or F to a complaining student or parent."

Across the page, you'll find a nice comment on scholarly phoniness under "Bibliography":

"A list of books placed at the end of a term paper to impress the teacher. Not included is the one book the student actually used, probably the **Encyclopaedia Britannica.**"

Richard Armour, who has an impeccable academic background, including a Harvard Ph.D., is to be thanked for his fortieth book. This is one of his most entertaining satires on teaching.

Margaret Gillett
McGill

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