

# Clarity of Thought and Higher Education

by JOHN H. KNOWLES, MD

**As education focuses more narrowly on specialized vocations,  
we face the hazard of producing a nation of idiot savants**

**T**HE MODERN Western scholar traces his intellectual roots to Plato's school in the Grove of Academus in 397 B.C. (That's an opening sentence that's almost guaranteed to make heads bob!) It was here that the first learned group of pupils met to study under the great philosopher. And, to this day, "academy" refers to a collection of scholars, or a learned society. The word academic means "scholarly," but in more recent times it has also come to mean "impractical," or "not leading to a decision."

Perhaps this change in meaning is in keeping with the somewhat anti-intellectual tenor of the times. It certainly implies disaffection and frustration stemming from what is perceived as a failure of the modern university to meet urgent social needs. It is also a reflection of the sharpening differences between yesterday's university ideal of Cardinal Newman and today's vocational, pragmatic ideal of Clark Kerr's "multiversity" — that great conglomerate service station with as many roles as the colors in a pied coat.

The vocational, pragmatic ideal seems to have gained the upper hand, as more and more American universities have neglected the substance and purpose of an undergraduate education and the swollen tail of the graduate school wags the university's body, i.e., the undergraduate faculty of arts and sciences. Simultaneously the graduate school "tail" is pulled and twisted by the federal Leviathan. Reading and verbal ability scores have been falling steadily in secondary schools since the mid-1960's, according to the Department of Health, Education and Welfare; colleges and universities have responded by doing away with English and other language requirements.

It is very interesting to me that in some universities in the United States today about 70 or 80 percent of the students who graduate, graduate *cum laude* or above, and yet an equal percentage are unable to write a decent letter. The University of California at Berkeley had to institute remedial reading for 45 percent of its entering class, while 50 percent of the pre-journalism students at the University of Wisconsin fail to meet the minimal standards for competence in writing. The Modern Language Association has recently established a Committee on Public Literacy.

Now what is this due to? Can it be the emergence of the nonliterate television culture, the new emphasis on social problems in a sensate culture, or what? George Orwell, of 1984 fame, in a classic essay entitled "Politics and the English Language," said, "The fight against bad English is not the exclusive concern of professional writers. The slovenliness of our language makes it easier for us to have foolish thoughts, and to think clearly is a necessary step toward political regeneration."

Remember when one of our elected leaders said, "Now I want to make one thing perfectly clear" — when it was clearly his intention not to do so? Vagueness of language bespeaks vagueness of thought. Vocabularies of today's students are limited, and the lack of ability to think and communicate requires the increasing use of "ya know" and "like I mean" and "like I mean, ya know" to camouflage the general befuddlement. Is it possible to have intellectual and moral clarity of thought in the presence of a distorted language — swollen as it is with euphemisms, taradiddles, tautologies, inverted and subverted

meanings stemming from Vietnam and Watergate, and perfectly horrendous grammatical bastardizations? Remember John Dean's memo about "maximizing the incumbency"?

Governmental bureaucrats, singsong politicians, and businessmen — as well as foundation presidents — have all contributed their share to the destylization and confusion. Mark Van Doren put it well when he wrote: "The liberal arts are an education in the human language, which should be as universal among men as the human form, and yet is not. Saint Augustine paid his education the compliment of saying that as a result of it he could read anything that was written, understand anything he heard said, and say anything he thought. This is perhaps as much praise as education could conceivably desire."

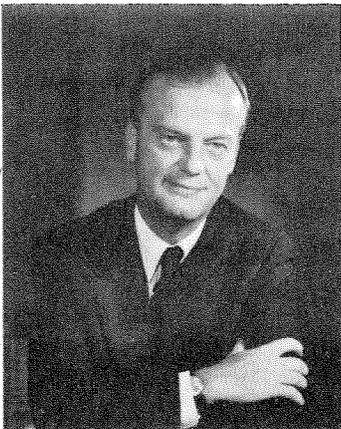
Corruption and debasement, obfuscation and illogic abound. In a review of the Morrisises' *Harper Dictionary of Contemporary Usage*, written, with the assistance of 130 distinguished consultants on usage, Joseph Epstein, an Englishman, writes in the *Times Literary Supplement*, "The battle for good usage is the best of all lost causes," and goes on to quote George Bernard Shaw, who described England and the United States as "one people divided by a common language." The attack is relentless, as he states, "American usage features the pompous at the service of the inane, the cumbersome in the cause of the confused." Many of us have suffered and winced when confronted with such phrases as *ongoing*, *felt needs*, *support structures*, *noise abatement*, *lifestyle*, *chairperson*, *Ms.*, and in the rush to rid ourselves of sexism in American life we have exchanged *charwoman* for *building interior cleaner*, *fishermen* for *fishers*, *busboys* for *waiters' assistants*.

If we don't deplore these euphemistic clouds of foolishness, we should at least be able to laugh at them. As Epstein says, "One must step very gingerly to avoid the droppings left by advertising agencies, the media, and the social sciences."

The ultimate, of course, arrives in the form of the term *solid waste ecologist* for *garbageman*. The Morrisises tell us that *concretize*, one of the most strident, harsh tones I think I have ever heard, is a favorite of businessmen, administrators, bureaucrats, and other semiliterates. The country would, in fact, appear to me to stand in need of a verbal waste ecologist.

As grammar deteriorates, the critical ability to see through others' and one's own deceptions atrophies. Just what in heaven's name does *consciousness raising* mean? Or *creative associations with our environment*? Or *selfhood*? When Professor Reuben Hill, an expert on the American family, on the faculty of the University of Wisconsin, is quoted in the *New York Times* under the headline "New Lifestyle Said to Bolster Family," see if you can tell me what he means: "The dual pattern fits nicely our ideology of equality of opportunity, full utilization of education, equalitarian ethos, and the push toward symmetry of the genders." I, for one, do not want symmetry of the genders. I rather enjoy the symmetrical differences between men and women.

A rash of *with-it* expressions (so-called *with-ity*) despoils the verbal landscape. *Low profile*, *bottom line*, being *into* something, and *meaningful* are barbarisms that refuse to leave and more often than not are short-hand deceptions. A leader of American medicine speaks of the *one-on-one physician-patient interaction* when referring to the relationship between physician



**A** COMMENCEMENT SPEAKER is supposed, somehow, to inspire and inform a very mixed audience — one that is likely to be at least restless and at worst blasé. So it was Caltech's good fortune at its 82nd commencement on June 11 to have a speaker who brought both wit and wisdom to the occasion. He was John H. Knowles, MD, president of the Rockefeller Foundation, and, said Stanton Avery, chairman of the Institute's board of trustees, in introducing him, "We can be sure that whatever Dr. Knowles has to tell us this morning will be expressed in his own words, because he has said that he would no more ask somebody else to write his material than Maria Callas would let someone else sing for her."

Dr. Knowles earned his AB degree at Harvard in 1947. He says he spent all his time there playing baseball, hockey, or squash, and writing music for the Hasty Pudding show with Jack Lemmon. Nevertheless, he was accepted by the Washington University School of Medicine and graduated first in his class. Eleven years later he was named, at 35, the youngest director in the 150 years of Massachusetts General Hospital. In 1972, he became the Rockefeller Foundation's eighth president.

Herewith, his Caltech commencement address.

and patient. (We can only hope that they are, in fact, not on each other.) *Subclinical* is another favorite. *Clinical* comes from the word that means *bed*; therefore a subclinical disease, or a patient with a subclinical disease, means that the patient and the condition are under the bed.

Lionel Trilling said, "A specter haunts our culture; it is that people eventually will be unable to say, 'They fell in love and married' — let alone understand the language of *Romeo and Juliet*. But they will as a matter of course say, 'Their libidinal impulses being reciprocal, they activated their individual erotic drives and integrated them within the same frame of reference.'"

There is humor on one side of this, and coming to southern California, I can't resist the recitation of a few Sam Goldwynisms. He is, of course, the man who said, "I don't think anybody should write his autobiography until after he's dead." And, "Keep a stiff upper chin." Or, his most famous one, which is in Bartlett's *Familiar Quotations*: "Include me out." Another is, "I can tell you in two words, 'Im Possible.'" When asked whether some of the papers in his bulging files could be destroyed, he answered, "Sure. But just be sure to keep a copy of everything."

A complete list of Goldwynisms would have to include, "I read part of it all the way through." And also, "The trouble with this movie business is the dearth of bad pictures." When told an employee had named his new baby "Sam," he said, "Why do you want to do that? Every Tom, Dick, and Harry is named Sam."

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Finally, when telling a friend about his new knowledge of the atomic bomb, he said, "It's dynamite!"

Now, in addition to the misuse, abuse, and nonuse of the language, the College Entrance Examination Board reports that SAT test scores on developed reasoning ability have fallen almost 10 percent over the past 10 years. As a result of testing nearly 100,000 elementary and high school students, the National Assessment of Educational Progress reports that students know significantly less science today than they did just three years ago. Ignorance of history also abounds. We seem to

have forgotten the admonitions of Louis Brandeis who said, "One page of history is worth a volume of logic." And of Santayana who said, "He who knows no history is doomed to relive it." New on the scene in our country is a dispiriting, self-flagellating churlishness that prevents us from confronting without embarrassment the values that make for greatness in a people and a nation — specifically, our own.

Cardinal Newman's university was a collection of scholars who believed that "knowledge is capable of being its own end," and "knowledge is its own reward." But the Oxfords and Dublins of Newman's age were to be overcome by the development of science and research, which were to be firmly established in the German universities in the latter half of the 19th century. The gentleman scholar, the wealthy Renaissance man, at home in and in control of his own world, and indulging in so-called purely academic discussions, was soon to become specialized and vocationalized. The dilettante was one interested in art

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and science as a pastime, but the word was finally to be used in a derogatory manner indicative of a lazy amateur. This is a pity, for as Pascal said, "It is far better to know something about everything than to know all about one thing."

The natural scientist and the research ideal contributed enormously to the advance of knowledge and, with it, the advance of civilization and improvement in the quality of life. But something was lost in the process. As knowledge expanded, superspecialization took hold, and the modern university was forced to rigidly compartmentalize its disciplines. At the present time, in many universities in our country, the undergraduate years have become a necessary bottleneck, or a way station, en route to the specialized vocations of the graduate schools. As the focus becomes progressively narrow, we face the real hazard of producing a nation of idiot savants, highly knowledgeable in depth and technically proficient but abysmally deficient in breadth and the ability to synthesize knowledge and integrate its disparate, atomized parts — so that the true purpose of all study, i.e., to be at home in and in control of the modern world, can be realized.

(Parenthetically, let me say that the critical mass of

the California Institute of Technology, the capacity for its wide variety of disciplines, and the excellence of its faculty allow the interdigitation of many different disciplines bearing on the complex problems of today. They cannot be solved in isolation by one set of experts alone.)

But why should the phrase "purely academic" now carry with it the connotations of irrelevancy, impracticality, and inaction? Perhaps it is because the intellectual isolation of specialism may in fact be an attempt on the part of the academy and its scholars to escape responsibility. (Here again, the California Institute is heavily involved in local, regional, and national issues.) The wish to acquire special knowledge and salable skills may have diverted us from our civic responsibilities and the necessary moral commitment to the whole — whether in terms of knowledge or with reference to our country, its culture, and its form of government. Every interest seems to be vested, and none encompasses the interdependent whole. Granted that the pull and tug of special interests define the democratic process, to whom will fall the special responsibilities of leadership? We hope the question will be answered in November. To whom do we look for those qualities of the true intellectual who integrates and synthesizes disparate knowledge into a coherent whole and then can transmit it to the nonexpert but educated listener? And who will tell us what *should* be done humanistically, as well as what *can* be done scientifically and technically? And who will follow the leader if either he or they are incapable of understanding the language?

One of the great discontinuities in contemporary intellectual life is the now fully institutionalized belief that knowledge and the students thereof are neatly

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divisible into two bodies — the one scientific, the other humanistic. C. P. Snow, as you know, popularized the cleavage between the "two cultures," noting its dismal results, and rejuvenated the search for continuity. Science systematizes knowledge logically, seeks analytic generality, abstracts what is quantifiable, and forms general laws which can be verified and then amended by the accretion of further knowledge. The humanities have no single methodological strategy and

rely on speculative thought and normative judgment. John Higham has said that "humanistic approaches predominate in all efforts to preserve the complexity of experience instead of abstracting verifiable regularities from it. These efforts include the use of expressive rather than technically precise language, a greater interest in individual events than in general laws, a reliance on qualitative rather than quantitative judgment, and a subjective grasp of a totality in

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preference to a dissection of its parts."

In the rush to be scientific, we have denigrated the literary, the romantic, the subjective, the impressionistic, the anecdotal. If not armed with questionnaires, tape recorders, computers, and the language of the social sciences, the results are clearly invalid. In between humanist and scientist sits the social scientist, a relatively recent arrival on the university scene. John Dewey saw the domain of the social sciences — history, sociology, political science, and economics — as bridging the gap between past and present, culture and science. Since the turn of this century, most universities have subdivided themselves into the natural sciences, the social sciences, and the humanities. The social scientists wanted to become pure scientists and in the process demanded complete separation from the value-laden speculations of the humanists, preoccupied with the past. Scientism and antihistoricism were natural bedfellows. The humanists rose up and established their defense. Their common concern was with values. The humanities would offer a liberating knowledge of choice, preference, and taste. But their claims paled when viewed in the light of the Second World War, Vietnam, and then Watergate.

The separation of these three divisions of scholars, while rational, is also artificial. To say that the social sciences are not value-laden, and — particularly in recent times — not using increasingly a historic dimension, is to say that you are not familiar with the works of Kenneth Boulding, David Riesman, Seymour Lipset, and Erik Erikson. To say that the humanities have not become more hospitable to methodological diversity is to ignore the recent developments in linguistics and in analytic philosophy and the work of

Chomsky and Quine, for example. However, one can only agree with John Higham when he says, “. . . we still assign much too low a priority to evaluative finesse in the social sciences and to criteria for measurement in the humanities. Consequently, we have too little ‘art’ in one camp, too little ‘science’ in the other, and not enough breadth of mind in either.”

To say that the natural sciences can exist and reach full flower in the service of human needs, without the historic perspective of the human condition offered by the humanities or the quantitative knowledge offered by the social sciences, is to belie the meaning of the word “university” and to cast the ultimate irony at its door. Alas, the Carnegie Commission on Higher Education, begun in 1967, headed by Clark Kerr, financed by over \$6 million from the Carnegie Foundation, and productive of 20 volumes of its own reports and additional scores of essays and research reports, does not answer or resolve the controversy surrounding education; namely — as defined by Robert Hutchins — “. . . how

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to maintain its critical function, how to regain community (or cohesion), how to repair the ravages of specialization, how to have a university rather than a series of unrelated autonomous technical schools called departments, how to force the confrontation of the disciplines, and how to tame the pretensions of the experts.”

If ever-increasing public support for higher education is to be obtained — and by public support I mean both voluntary for the private universities, and by taxation for the public institutions — then answers to society’s questions must be provided. In 1900 only 4 percent of the college-eligible age group went to college; in 1970 over 40 percent attended — the highest percentage in any country in the world. At the same time, one must ask: How can the nation support an enrollment of over 9 million students in higher education when there is no consensus about what ought to be taught, and why, to candidates for bachelor’s degrees?

The three major purposes of education — to develop the intellect, to transmit the culture, and to acquire marketable skills — have been so heavily weighted

toward the pragmatic ideal of “making a good living” that the undergraduate curriculum today is a mishmash of electives and pre-graduate school requirements. The idea of knowing a little about everything; integrating and synthesizing knowledge in the attempt to gain understanding of both self and life’s problems; strengthening the culture and its values; acquiring aesthetic and ethical sense in choice, preference, value, and style; and being able to read anything written, understand anything said, and say anything thought has been lost to the pomposity of idiot savant professionals, technicians, governmental bureaucrats, and to a rigidly compartmentalized faculty which has lost its sense of community and deals with everything but its universal purpose.

If the bugle sounds an uncertain note, who will do battle? Where and who are our leaders? Do we understand them and will they understand us? To quote Mark Van Doren, “The human language, once it is admitted to be complex, reveals itself as cogent. But bad education does not assist the revelations; it leaves us, on the contrary, chronically misunderstanding our enemies and our friends.”

The university’s role is to be a university. The complex problems of this rapidly shrinking, interdependent world require clarity of intellectual and moral thought for their solution. Such clarity can be achieved through the integration and synthesis of humanistic and scientific knowledge and the methodological disciplines of both. In the act of discovery, the student will be freed to pursue the lifelong joys of learning and understanding, for “the art of being taught is the art of discovery, as the art of teaching is the art of assisting discovery to take place” (Van Doren). In the process, the individual acquires hope, will, skill, purpose, fidelity, love, caring — and in the end, authenticity, and integrity — the highest virtue of them all.

Paul Tillich said we shouldn’t lose our sense of humor. We’re now in the midst of our bicentennial, and you are the favored, special class on our 200th anniversary, and I think the country is beginning to regain its sense of humor. And that makes me happy because of Tillich’s statement that “humor is a prelude to faith, and laughter is the beginning of prayer.” All you good folks about to graduate, may your reach always exceed your grasp, and remember that the journey is the thing — not the arrival. And always remember that statement on the great seal of the California Institute of Technology, “The truth shall make you free.”

Thank you, and good luck. □