

The Humanities

How many academics does it take to screw in a lightbulb? Two: one to apply for a grant and one to supervise the graduate student.

What Business are the Humanities In?

How many humanities professors could give a brief but accurate description of the purposes which the humanities were assumed to serve ever since, say, the days of ancient Greece? To what extent, in this world of science and business, can the humanities be said to be still the “course of instruction for the leaders of tomorrow”?

I once knew a humanities professor who apparently had never once asked herself, or was required to ask herself, during her undergraduate or graduate education, questions like, “What kinds of questions are we trying to answer in this subject?”, “What do we mean when we say ...?”, “What do we mean by *truth* in this subject?”. I have no reason to believe that she was different from the vast majority of humanities professors in this regard. But she often insisted how, as a student, she and her fellow students at a prestigious Eastern liberal arts school, had to “learn to *think*”. When I asked her what exactly that meant, she replied, “We had to write a paper every week!” I asked her to categorize the subjects she was asked to write on. She waved away such a silly question. I asked her what classes of problems her subject attempted to solve. All irrelevant. But her senior exam was graded by *Harvard professors*! Hence what better preparation than to write a paper a week?

“*Reason in school*. Schooling has no more important task than to teach rigorous thinking, careful judgement, logical conclusions; that is why it must refrain from every thing which is not suitable for these operations — religion, for example. It can count on the fact that later, human opacity, habit, and need will again slacken the bow of all-too-taut thinking. But as long as its influence lasts, schooling should force into being what is essential and distinguishing in man: ‘Reason and science, the *supreme* strength of man,’ in Goethe’s judgement, at least.” — Nietzsche, Friedrich, *Human, All Too Human*, section 265, University of Nebraska Press, Lincoln, Neb., 1984, p. 162.

I have never met a humanities professor I could call *smart*. I don’t mean smart in the high IQ sense of being able to solve mathematical or logical problems quickly. I mean in the sense that Nietzsche was smart, in other words, unusually *aware*, and that includes being aware of what business the humanities are in.

The vast majority of humanities professors (outside of a handful of genuine scholars) are little more than dopes with exquisite manners.

Suppose we decide that the humanities are really in the business of creating art — i.e., maintaining and cultivating and expressing certain types of feeling, the types of feeling that constitute the inner climate of certain kinds of bookish people. This does not mean the humanities therefore have no value! Of course the professors would be shocked to be accused of being in such a busi-

ness (and insofar as they are purely scholars, attempting to ascertain who said what when, they are not), but that is too bad.

The humanities can best be described as the disciplines that do not know their name.

Advice to Students

Year by year, as you go through college,
Beware all art that claims to be knowledge.

Here is an analogy of the level of naiveté of humanities professors: show them a superbly executed drawing or painting of, say, a unicorn, and they will proclaim that certainly unicorns exist, because nothing that can be represented that precisely, can possibly not exist! But this naiveté applies not only to the depiction of creatures known not to exist. Here is a “convincing” portrait of the “truth” underlying modern technological society. Surely anything this convincing — drawn or painted with such extensive detail — must represent what is! The lofty place that writing occupies in the humanities is due to the fact that writing is the means (the art form) by which the academic creates pictures that, solely because they are so well drawn, his naive audience believes must represent truths!

“Theory” in the Humanities

“Professor X, an outspoken theorist for the Language Poets...” Nowadays, every movement in the humanities must have its academic mouthpiece before it is considered worthy of public attention. Yet not one of these theorists could tell you what a theory is in the sciences, or why the idea is important there, i.e., why the sciences *get somewhere* with their theories, and why the humanities, year after year, century after century, get nowhere, apart from producing works of art.

“Whenever I hear the words, ‘theory of language’, I reach for my gun.” — S. f.

“Feminist theory”, a contradiction in terms if there ever was one, offers a prime example of how the humanities *keep not getting the point* as far as the nature of theory is concerned. To the academic ladies pursuing this discipline, calling something a theory makes it true, so that all that remains is then to bring the world around to recognizing the truth of the theory (a labor which may well take a lifetime, but that is one’s burden when one is bringing forth new truths). Calling something a theory thus serves the same purpose as writing in an objective style and having this writing printed in a journal which is respected by those one wants to impress: it confers truth on the ideas expressed.

I am amazed that feminists don’t realize that this need to call their views “theory” is conceding victory to the enemy before the battle begins. In effect, the ladies are saying, “In order to win we must sound like the men, in particular, those powerful, intimidating men in the universities

who are in charge of the truth.” But it is perfectly legitimate, *intellectually*, for a group to say to the world, “We don’t like the way things are! We are going to make some changes!”, and then to bring about these changes through demonstrations, boycotts, legislative action, legal action. But the ladies haven’t yet freed themselves from their bondage, and so, in addition, they want one additional thing, namely, they want the men — the important ones — to tell them that all this is *all right* (namely, *true*).

What Does It Mean to “Think” in the Humanities?

I have never met a humanities professor I could call a *thinker*. What he or she considered “thinking” was at best a kind of informal pattern matching strongly rooted in esthetic tastes — “this thing is like that thing which I value highly, therefore it too must be true (or worthwhile or likely to prove to be the best)” — and at worst nothing more than a kind of lawyer’s argument. Once, in a Berkeley coffee shop, I overheard a young woman professor talking to a woman graduate student. They were apparently discussing a paper (on women’s studies) which the latter had to write but was having trouble with. At one point, the importance, for a rising star in the field, of writing papers was brought up. The graduate student was clearly envious of the professor’s ability. The professor said, apparently without the slightest awareness of the implications of what she was saying, “Well, some people just have a knack of making a convincing argument out of almost nothing, whereas others have trouble even when there is abundant evidence in their favor. You just have to develop the knack.”

There is a type of intellectual in the humanities who believes that the really *exceptional* minds are those who can always find difficulties where others do not see difficulties. The exceptional mind can find a flaw in any argument; can torment itself to the brink of suicide with the difficulties it finds in even the simplest things. “How naive ordinary people are, not to see the overwhelming difficulties that lie everywhere! On the other hand, nothing can satisfy me. That’s how brilliant *I* am. I can find difficulties where no one else can.”

This type of intellectual, when she becomes a professor, feels she is doing a good job as a teacher only when most of her students are as tormented about the subject she is teaching them, as she is about his own work. “If it were easy, or clear, it would be worthless.”

Such an intellectual believes that greatness consists in finding so many difficulties that the burden almost crushes her. Wittgenstein was in this category, despite his logical and mathematical armor.

“A certain set of highly ingenious resources are, with the Prefect, a sort of Procrustean bed, to which he forcibly adapts his designs. But he perpetually errs by being too deep or too shallow for the matter at hand; and many a school-boy is a better reasoner than he.” — Poe, Edgar Allan, “The Purloined Letter”, in *The Complete Tales and Poems of Edgar Allan Poe*, introd. Hervey Allen, The Modern Library, N.Y., 1938, p. 215.

“Have you ever seen a child trying to divide a mass of quicksilver into a number of parts? The more he presses and squeezes it, and tries to bring it under control, the more he provokes the free-

will of this noble metal. It eludes his skill, and keeps breaking and diversifying itself indefinitely. So it is here: for by the subdivision of these subtleties, we teach men to increase their doubts. We are put into a way of elaborating and diversifying our difficulties, of prolonging and dispersing them. By scattering and chopping their small questions, they make the world teem and fructify with uncertainties and disputes, even as the soil becomes more fertile the more it is broken and the deeper it is dug. ‘Learning creates difficulties.’ [Quintillian, *x, iii*] We were puzzled by Ulpian, and we are still more puzzled by Bartolus and Baldus [commentators on Ulpian]. We ought to blot out all trace of this infinite diversity of opinions; not use them for display and stuff the heads of posterity with them.” — Montaigne, “On Experience”.

Though fully aware of the wrath I am calling down upon myself by making such an assertion, I nevertheless assert that a person who has been granted lifetime employment because of their rare mental gifts and knowledge, should know what a rational argument is, and, furthermore should be able to think rationally about ordinary problems in everyday life, e.g., determining what to do if a car or a TV set is not working properly. This in no way implies that, taking the latter case as an example, the person should know something about electronics! It implies asking questions like the following: When was the set last working properly? Has anyone possibly changed an adjustment since then? Is the manual available? If so, what exactly does the manual say about the correct procedure for making the TV work? If no manual is available, then let us try various sequences of adjustments and carefully record each sequence and the results. If we are still unable to make the set work, is there a friend or acquaintance we can call who might be able to help? If not, then we probably should call a professional repair service. What are some ways we can find out a reliable one? Etc.

Do not say that proceeding in this fashion is “obvious”, because I have seen more than one humanities professor not even get to the first question, and instead believe that, since the subject is something technical, their only choice is a kind of frenzied trial-and-error.

I believe that *any* professor, regardless of his or her specialty and brilliance in that specialty, should not believe, as so many apparently do, that metaphor elevated to the status of truth and approved by sufficiently important people, is as valid intellectually as what people in the sciences and mathematics do.

Knowing what a rational argument is means, at the least, knowing what a logical fallacy is, e.g., *post hoc ergo propter hoc*, and what the difference is between sufficient and necessary in a logical sense, and what the correspondence theory of truth is and the criteria it imposes for deciding if something is true or not, and what a valid argument based on statistics is, and what its value and its limitations are, and what constitutes valid vs. invalid evidence in support of an argument, and (roughly) what the difference is between form and substance, syntax and semantics, the How and the What.

Truth and the Humanities

In Union Square, San Francisco, in the early sixties there flourished briefly a period of public argument vaguely reminiscent of London’s Hyde Park. Some of these arguments took place among a group of old bums. The subject was usually politics, but it could change unpredictably,

for the following reason. One of these debaters had a habit, whenever he was losing an argument, of reaching into his jacket pocket and pulling out a small slip of paper on which was written one or more words. These, he once revealed, he copied from books and newspapers in the library (where he apparently spent much of his free time). He would look at the paper and then defiantly reply to those who had defeated him, “Oh yeah? Well I bet you don’t know what” (the word on the paper) “means! *Haha*” The others never did — for one thing, the word was invariably obscure and completely unrelated to the previous discussion — and as a result you could practically feel the consensus suddenly change: Well, he’s beaten us again!

I often thought of the old man’s trick as I became acquainted with academics in the humanities.

I once asked a professor of Asian studies at one of the nation’s most prestigious universities, why academics in her field, and indeed in all the humanities, felt it was so important to write in the formal objective style so common in academic journals. She replied, without a moment’s hesitation, “Because it’s not supposed to sound as though it’s just your opinion!” On the other hand, a scientist I once worked for used to reply to arguments that in scientific writing, only the passive voice should be used, in order to prevent the intrusion of the subjective opinions of the author: “Either the author’s a liar or he isn’t. Period. Everything else is secondary.”

A major amount of effort in the humanities goes into the officializing of opinions. Training in a humanities subject is largely training in the use of an esoteric language, i.e., it is training in a subtle, highly complicated form of good manners. Questions like “What do we mean by the typical statement x in our field?”, “What do we consider necessary grounds for accepting, at least provisionally, the truth of x ?”, “What type of argument do we consider as sufficient for refuting x ?” — such questions are not considered important because the main business is not the pursuit of truth, but rather the expression of opinions in the language of the discipline, and a convincing argument is a use of that language in such a skillful way that it is hard to doubt that what it expresses is “real”. But that is precisely an *artistic* activity.

Which may guide us toward an answer to the question, *What does it mean to be brilliant in the humanities?*

A remarkably effective way — perhaps the only way — of resolving certain types of interminable argument is to ask each participant what percentage of his next paycheck he would be willing to bet that he is right. Among other things, this tends to make clear what is often the main problem, namely, that there is, in fact, no way of deciding who is right.

For the female academic in the humanities, things are the same as they were in the affluent household in which she was raised: *how it appears is what it is*. (Prestige is analogous to wealth; academic language is analogous to good manners; publication is analogous to mention in the social pages.)

A Measure of the Failure of the Humanities

If you have any doubts about the utter failure of a liberal arts education to teach basic think-

ing, watch the programs that PBS TV stations typically broadcast during pledge drives. These programs are designed, above all, to attract the largest audiences. And so what do we see? Every self-help con artist in the business, all operating from the same premise: “If it makes you feel good, it must be true.” And the eager audiences in the studios, most of them with college degrees, no doubt, and most of those degrees, no doubt, in one or the other of the liberal arts, sit eagerly lapping up the good news. “You can be anything you want!”, “You can find happiness just by connecting yourself to the core of Being!” (represented by glowing ball on the stage).

The habit of skepticism in the face of such nonsense is precisely what any good college education should provide to students. Hands should go up *very soon* after these talks begin, and questions should be heard: “Excuse me, doctor, but on what basis do you make that statement? What data have you kept over the years? How many persons, of all those who have tried to do what you recommend, have stated unequivocally to you, that your method worked for them?”

Science vs. the Humanities

The first question to ask of any academic discipline is “How important is syntax?” The greater the importance of how things are said, the less scientific the discipline.

The technical world is fundamentally *geometric*. Fundamentally, every technical concept can be represented by a (labelled) *picture* or diagram, and this includes concepts in the more abstract mathematical subjects like group theory. In other words, despite the profusion of arcane symbols in every technical discipline, the concepts are not “word-based” as they are in the humanities. This is the real reason why the technical world and the literary world are so alien to one another.

Every academic discipline claiming to be scientific can be categorized according to its “concept-weight” — the depth and difficulty of its concepts — and its “data-weight” — the degree to which empirical data is important in the discipline. Physics, e.g., is “concept-heavy” and “data-heavy”; mathematics is “concept-very-heavy”, “data-very-light”; biology, until the discovery of the DNA structure, was “concept-light” and “data-heavy”, as is sociology now.

Darwin’s basic ideas must be the simplest great ideas in all of science. They can be summarized on a page that is understandable by any bright high school student, and they require no prior mathematical training, unlike Newton’s law of gravitation. The bare outlines of Einstein’s special theory of relativity — that the speed of light is a universal constant, that time slows down and lengths shrink and masses increase as an object approaches the speed of light — and of the general theory of relativity — that gravity curves space-time — are expressible without mathematics, but conceptually are much more difficult than Darwin’s ideas.

We wonder how it could possibly have taken until the 19th century for someone to come up with the ideas underlying the theory of evolution, but “Darwin was neither the first to recognise these simple ideas nor to put them together. Thinkers as far back as Empedocles, a Greek philosopher born in 490BC, are known to have suggested that natural selection might explain why animals were adapted to their surroundings. The idea of the struggle for existence has been traced as far back as al-Jahiz, a Muslim theologian and scholar born in Basra around 776. And the idea crops up again in the works of Thomas Hobbes, a 17th century philosopher, and Erasmus Darwin (Charles’s grandfather), who lived in the 18th.” — *The Economist*, Feb. 7 - 13, 2009, p. 72.

One major difference between Darwin and his predecessors was the amount of data he accumulated in support of his theory.

How to write sociology: (1) Make an assertion; (2) Take most of it back (“...which is not to say...”); (3) Give back most of what you took away (“...on the other hand...”); (4) Take back most of what you just gave back (“...which does not imply...”); etc.

(I can’t resist pointing out that the analogue of such a process in mathematics does not necessarily sum up to zero! — at least, not if one gives or takes back half of what one took or gave back the previous time. For example, the infinite series,

$$1 - 1/2 + 1/4 - 1/8 + \dots + (-1/2)^n + \dots = 2/3 \quad .)$$

Let us try to list some of the legitimate questions of sociology.

(1) Do the replies to this questionnaire represent what we think they do? (We can always legitimately report on the results of questionnaires, e.g., x percent of those questioned, who were in the category y , replied yes to the question z .) But as soon as we start affirming that the results reveal “...a profound malaise...” or other presumed social condition, we are writing literature.

(2) Can the results of study x be compared, in a way that interests us, with the results of study y ?

(3) Are our arguments statistically sound (in the eyes of any one of the world’s top statisticians)?

(4) What will we accept as evidence our theory is wrong? (There is no point in any sociologist even setting to work before he or she has answered this question.)

A sociological work that demands our respect (the first such work I have come across) is Rodney Stark’s *The Rise of Christianity* (Princeton University Press, Princeton, N.J., 1996). Here, at the very least, is a sociologist who recognizes the importance of Popper’s criterion of falsifiability in any theory, any assertion about the world.

The less scientific a subject, the more likely it is to contain the word “science” in its name. (An observation originally, I believe, by computer scientist Joseph Weizenbaum) Consider, e.g., Christian Science, Marxist science, Creation Science, theological science, human science, information science (i.e., librarianship), domestic science, political science, social science, decision science, cognitive science, military science.

One consequence of the scientific ignorance of the liberal arts community is the kind of stupidity you occasionally hear from those who are specializing in what amounts to pleading the case of this or that native people, this or that Third World people. Reasons for the popularity of this speciality are given in the chapter, “Politics and Economics”. For example, you will hear some of these naive souls say that the explanations of the nature and origin of the universe in native lore are “just as good” as those of modern physics. By which these innocents mean, they have an equal claim to be respected. And we may agree with this much. But on no account can an edu-

cated person be encouraged to believe that “there is no difference” between these primitive mythologies and the theories of modern physics, because, for one thing, the two are in entirely different lines of business: the mythologies are ultimately aimed at keeping a community, a tribe, together and providing explanations for the mysterious, often threatening, world in which the members of the tribe live — explanations that allow the tribe to continue to function, to perpetuate itself. The theories of modern physics are ultimately aimed at understanding the universe and, in particular, at making predictions that can stand up to rigorous criteria of success or failure.

The Shame of the B.A. Degree

It is an absolute scandal that year after year the universities — including the very best ones — give B.A. degrees to liberal arts students who haven’t the vaguest idea of how science works, what scientific thinking is, much less what the major discoveries of science and mathematics since, say, the year 1600 have been. True, in some schools, liberal arts students have to “fill a science requirement”, and here in California many students are allowed to do this with a course on earthquakes. But the professors assign problems that are only fit for math or engineering or physics majors, the professors apparently oblivious (or indifferent) to the kinds of struggles the students have to go through, the vast majority of whom haven’t had a math course since high school. Result: the students come away even more baffled by, and ignorant of, and angry about, science than before.

It is an absolute scandal that at this late date the liberal arts academic community has not seen fit to find the necessary funds to have a film or video made that presents, in as appealing a manner as possible, with few or no equations but definitely with abundant animated graphics, a description of the discoveries of Kepler, Galileo, Newton, Darwin, Maxwell, and Einstein. “Filling the science requirement” should consist of (1) watching the above video or film and then (2) learning how the scientific method works using the simplest tasks as examples: fixing a bicycle; answering simple questions like: when the ice cubes in a glass of water melt, does the level of water in the glass rise, stay the same, or fall (and why)?; if you kill sufficiently many ants that have invaded your kitchen (kill them without poisons that the ants carry back to their ant hill), will the ant hill eventually stop sending ants into your kitchen? what is the cause of a leak in an upstairs bathroom tub that results in water dripping through the ceiling below? (3) developing an idea of some of the basic concepts of science, e.g., what a light year is, how small an atom is, how old the universe is, how old the earth is, how far away the sun and the planets and the stars are, what *energy* means in science (to counter the nonsense New Age uses of the term), etc. An idea of distances can be gained by the use of scale models. For example, if the earth were the size of a pea, how far away would the moon be? the sun? the planets? the nearest star? If an atom were the size of a football field, how large would the electrons be? the nucleus?

The science requirement course should be designed *only* after extensive questioning of liberal arts students along the lines, “What do you dislike about science?” “How do you wish you had been taught science?” “What do you most wish you knew about science?” Etc.

Let me emphasize that I am not suggesting that liberal arts majors should be forced to take math or physics courses. But I *am* arguing that the B.A. degree should include at least one course that describes, with little or no math and lots of drawings:

Kepler’s three laws about planetary orbits;

Galileo’s discoveries regarding the pendulum, and his astronomical discoveries;

Newton's law of gravity;
Maxwell's equations;
Darwin's theory of evolution;
the nature of the atom and of molecules;
Einstein's special and general theories of relativity;
the solar system;
the Milky Way and other galaxies;
the Big Bang Theory and the evolution of the universe;
the integrated circuit chip and how binary arithmetic works;

The name and dates of each scientist whose law is presented must always be given, along with the date when the law was discovered. In addition, there should be a time line to show the sequence in which these laws were discovered, relative to universally-known dates, e.g., those of the American Revolution, the Civil War, World War I, etc..

The practical applications of each law must be shown, e.g., the use of Faraday's law to make hydroelectric power generators.

There is no doubt in my mind that these concepts can be communicated with little or no math and lots of drawings. I am confident I could do so myself. In fact, many of these concepts already have been so communicated, in a variety of books and afternoon PBS programs aimed at students. *The Cartoon Guide to Physics*¹ is a commendable example, but even with its minimum use of math, I am afraid it is still beyond the understanding of most liberal arts majors. The task is to gather together the best of the materials into one book, but that is not all.

It is absolutely essential that: (1) the writing of such a book begin with a clear, precise statement of goals; (2) the author make a list of the minimum vocabulary and abilities that will be assumed of all readers; (3) that the entire book stay strictly within those limits; and (4) that it be tested repeatedly during the writing and after on random samples of representative readers to see if the goals are being met.

I know of a well-intentioned physics professor who put a great deal of time and effort into such a book, using for his examples as many familiar items from the everyday lives of students as he could. However, he followed none of the above rules, and was known to become visibly angry whenever any reader (student or faculty member) made suggestions for improvement prior to the publication of the manuscript. As a result, his effort amounted to little more than an exercise in enhancing his own self-esteem.

The above describes the bare minimum knowledge of science that should be required for any B.A. degree. But the truth is that we should regard it as a disgrace that an acquaintance with some of the fundamental ideas of science and mathematics and modern logic is *optional* for students and professors-to-be in the humanities. Careers continue to be built on plausible arguments that are as naive as those used by the ancient Chinese philosophers², and on the ability to "write

1. Gonick, Larry, and Huffman, Art, *The Cartoon Guide to Physics*, Harper Perennial, N.Y., 1991.

2. "Europe has gone to the school of logical and critical thinking. Asia still does not know how to distinguish between truth and poetry, and does not perceive whether its convictions stem from its own observation and proper thinking, or from fantasies." — Nietzsche, Friedrich, *Human, All Too Human*, section 265, University of Nebraska Press, Lincoln, Neb., 1984, p. 162.

well”. Surely, every professor-to-be in these disciplines should be forced to demonstrate a basic understanding of modern logic. Surely a professor-to-be in these disciplines should be able to give the right answer as to the truth or falsity of statements that include the following:

The sum of an infinite number of numbers is always infinite. (False.)

A part of something can never have as many parts as, or be as large as, the whole. (False.)¹

If you break something down into smaller and smaller pieces, eventually you will wind up with a piece whose size is zero. (False)

It is impossible to break something down into smaller parts, then reassemble all of them in a way that yields something of the same shape as the original, but much smaller in size (volume). (False)

If something makes sense — is conceivable, is clearly visualizable and understandable— then it is true. (False)

The PhD Process in the Humanities

I once car-pooled with a young woman who was studying for a PhD in Education at Stanford. What struck me about the education she was receiving was how little it had to do with learning to think straight about the problems in her field, and how much it had to do with learning *to use words* —specifically, the words that were currently considered important in her field. When she was confused about a problem, or when I told her I had difficulty understanding something she had said, her solution was to use more words — to speak faster, pack more words into her sentences, invoke still more jargon. You sensed that she had no idea what it means to “quiet the mind” in an intellectual sense, meaning, to think with as *few* words as possible, to think conceptually, “geometrically”, to ask those all-important questions, “What do we really mean by this?”, “What am I really saying when I say this?”.

Her curriculum included a course in statistics, and several problems required that she do proofs. She hadn’t taken a course in mathematics since high school, nor had most of her fellow students, and her professors knew this. Nevertheless, they clearly felt it was far better that the profession be carried on by researchers and high-level government bureaucrats who could be counted on to be wide-eyed with wonder and respect for anything called a “proof” (“hard to understand, you never know if you’ve got it right, or what it really means, but *mathematical*, therefore terribly important!”). The course required using a statistics computer program — one which, as you might expect, was virtually impossible to use by anyone but a computer programmer. Yet the tyrant at the head of the classroom seems to have made a point of not telling his intimidated charges that not everything difficult is equally important — that a program that is difficult to use by members of its intended class of users, is an object of contempt; that real intelligence consists in part in knowing what not to waste your time on — in this case, knowing when to demand, or ask for, or hire, someone to translate the tasks you want to perform, into the arcane language required by a program. But for a person who has been trained to believe in language, in words, in particular in *prestigious* words like those associated with computer programs, such an

1. I once tried to explain, to a philosophy lecturer, Cantor’s argument that if a one-to-one relationship exists between the elements of two sets, then the sets contain the same number of elements. I used this argument to show that there are just as many multiples of 10 as there are positive integers, because we can match 1 with 10, 2 with 20, 3 with 30, 4 with 40, etc. She shook her head, laughed, and made it clear there was not a shadow of a doubt in her mind that such an argument was wrong, because obviously there are only 1/10 as many multiples of 10 as there are integers.

idea seems nothing but a sign of weakness.

“‘Oh, he has his dissertation to write,’ said Mr. Ramsay. She knew all about *that*, said Mrs. Ramsay. He talked of nothing else. It was about the influence of somebody upon something.” — Woolf, Virginia, *To the Lighthouse*, Harcourt Brace Jovanovich, N.Y., 1955, pp. 101-102.

And certainly many, perhaps most, PhD theses in the humanities are about the influence of somebody upon somebody or something. Years of labor and of exploitation by the tenured few go into the careful *getting the manners* right of an assertion that the influence of x on y was *greater* (greater, don't you see, not the same as, or less!) than has hitherto been thought. Well, *there's* a step forward in the march of human knowledge!

Our business is to ask if there might not be a simpler way to make the assertion. Suppose we define a finite set of categories in which influence can occur. In the case of prose literature, this set might *include*: writing style (with sub-categories, e.g., vocabulary, average length of sentences, sentence structure, textual organization, etc.), subject matter, attitude toward subject matter (satirical, sympathetic, etc.), characters (with sub-categories defining social class, gender, occupation, age, personality type, etc.). Then, with each category and sub-category we associate a weighting to represent the degree to which the work or works of y correspond, in this category, to those of x , with, of course, a reference being provided to the part of the thesis in which an argument for the validity of the association is made.

Here, at the very least, the PhD candidate is forced to confront what he or she means by “influence”. He or she is also forced to confront how influence will be measured, or, at the very least, what will be considered a valid argument for statements of the form, “the influence of x on y is greater than has previously been thought.” The candidate may (though the chances are slim) be forced to entertain the thought that an opinion — even a politically correct opinion — may not constitute a valid argument, not even if it is dressed in the most formal clothes.

If you want to understand why the humanities have such a low reputation compared to the sciences, ask any humanities PhD candidate what criteria would convince him or her that his thesis idea was wrong; or, on the other hand, what some of the characteristics of a truly outstanding thesis would be. In most cases, you will be greeted with a puzzled silence. Now there may be major arguments against applying the scientific idea of truth to the humanities, and Heidegger, for one, tried to set forth a few, but the fact that each year hundreds of new PhD recipients go forth to teach and to conduct “research” without having considered the above questions long enough even to have a good answer, is a disgrace.

It is instructive to ask of any professional, in particular, any academic, “What classes of problems does this person typically solve in his daily life?”, and then, “Which of these problems could I solve myself, solely with the aid of books and other media?” Academics spend much of their time solving, for students, such problems as, “What does x mean?”, “What is the history of y ?”, and in the hard sciences and engineering, “How do I do z ?” But most of these problems the student could solve for himself, especially if books were designed for that purpose (see section, “Textbooks”, in the chapter “Education and Learning”). The prestige of academics drops considerably once we begin asking, “How much of what he knows is something I could look up?”

Another good question to ask of any course of study is, “What does this enable you to do that you couldn’t do when you started?” I once worked for a woman technical publications manager who had a Master’s degree in feminist theory from the University of California at Berkeley — a prestigious school! What could she do now that she couldn’t do when she started? (Don’t reply, “Answer questions about feminism”, since she could do that before she started, simply by looking up the information in the right books.) I think all you can say is, “Speak and write well”. (She had the overarticulated manner of speech affected by many women managers.) It is true that she had a superficial knowledge of the software she used every day, but beyond that, she gave no sign of having the slightest knowledge of, or interest in, technical subjects. Yet even the most mediocre graduate of a mathematics or computer science or engineering curriculum can say, “When I started, I had no idea how to solve problems like ... and now I do.” *That is not something to be scoffed at*, dear friends, crusaders, liberal arts reformers of the world!

Earning a PhD in a humanities subject is largely a matter of learning a certain kind of good manners in writing and speaking, or, in other words, it is largely a matter of learning how to please certain figures of authority. The goal is prestige. (Left alone with a great library and all their time to themselves, these eager clerks would be utterly at a loss. “What shall we read? What shall we think about it? Whom shall we go to to see if we are right or not?”) It’s a good thing that I, and perhaps one or two others, don’t take advantage of what we know, namely, that with the right credentials (this above all), an objective sounding language that is difficult to understand, the appearance of dealing with currently prestigious concepts (or attitudes), the clear guarantee of job security to those who climb on the bandwagon (“more research is needed”) — you can lead these never-quite-getting-it souls down any garden path you want.

Given that an education in the humanities amounts to training in good manners, it shouldn’t surprise any reader when I say that I have never met a humanities professor who gave any evidence of being able to recognize a good idea if it happened to be wearing the wrong clothes. Humanities professors are good at recognizing an idea that is likely to have prestige in the current culture, but that’s about it.

If academics still communicated via handwritten manuscripts, then a major part of a humanities education would consist of training in penmanship, since, clearly, the researcher with the most beautiful handwriting is the one in possession of the truth.

The only test of an art historian’s knowledge — or I should say of his or her *ability*, since his or her knowledge otherwise is something that can be looked up in a book — is how well he or she can detect counterfeit works. On this score, the reader should see Orson Welles’s *F is for Fake*, which portrays the art forger Elmyr de Hory, who for amusement would dash off drawings and paintings that the academics would immediately claim to be genuine works of Modigliani and other great painters.

One of the most important tests of a historian's talent is his or her ability to recognize an important historical document when he or she comes across one. In this regard, consider the fundamental dullness if not outright stupidity of the numerous (male) historians who dismissed the diaries of Martha Ballard on the grounds that they were of no intrinsic interest because they merely recorded the everyday events of an ordinary woman's life(!) Now, thanks to the efforts of Pulitzer-Prize winning historian Laurel Thatcher Ulrich, these diaries have been brought to the attention of the public, and, as the PBS dramatization of portions of them made clear — "A Midwife's Tale", 10 p.m., KQED, San Francisco, 3/29/99 — the diaries are invaluable for gaining a detailed understanding of what life was like on a small farm in Maine during the early years of the American republic, namely, from 1785 through 1812. Such an understanding is *simply not possible* without such documents.

"The vast majority of academics in the humanities, for all their learning, are simply not very bright." — S. f.

"[Jared Diamond's *Guns, Germs, and Steel*] asked why the West is atop the food chain of nations. Its conclusion, that Western success was a coincidence driven by good luck, has proven extremely influential in academia, as the view is quintessentially postmodern. Now 'Collapse' ['How Societies Choose to Fall or Succeed'] posits that the Western way of life is flirting with the sudden ruin that caused past societies like the Anasazi and the Mayans to vanish. Because this view, too, is exactly what postmodernism longs to hear, 'Collapse' may prove influential as well." — Easterbrook, Gregg, "There Goes the Neighborhood", review of Diamond, Jared, *Collapse*, *The New York Times Book Review*, Jan. 30, 2005, p. 10.

What is disgraceful here, regardless of whether Diamond is correct or not, is the eagerness with which the know-nothing pussies in the humanities professoriate embrace ideas that denigrate the world-changing, world-shaking, accomplishments of the scientific West, and even predict the West's downfall. Anything that explains away, excuses, promises the end of, the humiliation of facing the fact, day-in, day-out, that in the modern world, these tenured losers are worthless, is embraced as the truth.

"It is actually this [anti-scientific] moralism [of the academic left], rather than any solid philosophical commonality, that unites the various critiques we have examined. Moralism has the bad intellectual habit of excusing itself, on its own grounds, for weak and shoddy arguments. Moralism of this kind is, for instance, untroubled by the fact that its denunciations of Western scientific epistemology are composed on word processors whose very existence derives from a subtle understanding of the universe encoded in quantum mechanics, perhaps by a writer whose indispensable spectacles depend on the light — via the science of optics — of Enlightenment. It lives very comfortably with all such contradictions." — Gross, Paul R., Levitt, Norman, *Higher Superstition*, The Johns Hopkins University Press, Baltimore, Md., 1998, p. 220.

“The scholars, to whom right of judgement over books belongs, recognize no other value but that of learning, and approve no other mental processes than those of erudition and philosophy. If you have mistaken one of the Scipios for the other, what can be the value of anything else you have to say?” — Montaigne, “On Presumption”.

“Though I have no great opinion of Machiavel’s Learning, yet I shall not presently say, that he was but a Novice in Roman History, because he was mistaken in placing Commodus after the Emperor Severus. Capital Truths are to be narrowly eyed, collateral Lapses and circumstantial deliveries not to be too strictly sifted. And if the substantial subject be well forged out, we need not examine the sparks which irregularly fly from it” — Browne, Sir Thomas, *Christian Morals*, Part 2, Section 3, in *Sir Thomas Browne: Selected Writings*, ed. Sir Geoffrey Keynes, The University of Chicago Press, Chicago, Ill., 1970, p. 214.

“And we shall so far encourage contradiction, as to promise no disturbance, or reoppose any Pen, that shall Fallaciously or captiously refute us; that shall only lay hold of our lapses, single out Digressions, Corollaries or Ornamental conceptions, to evidence his own in as indifferent truths. And shall only take notice of such, whose experimental and judicious knowledge shall solemnly look upon it; not only to destroy of ours, but to explain and dilucidate, to add and ampliate, according to the laudable custom of the Ancients in their sober promotions of Learning.” — Browne, Sir Thomas, “To the Reader”, in *Pseudodoxia Epidemica*, *ibid.*, p. 230.

Substance vs. Art in the Humanities

The problem is not that the humanities are not worthwhile. Anyone who seriously believes that the only worthwhile intellectual activities are the sciences and mathematics, deserves nothing but our pity. The problem is that the humanities do not know what business they are in. (And if you don’t know what business you are in, you have no business being in it.) One difference between an engineering education and one in English literature, is that a recent graduate (bachelor’s degree) in engineering can competently solve many problems and, in fact, construct, or assist in constructing, devices and structures which not too many years ago would have been impossible to construct by even the greatest geniuses of the time. On the other hand, the vast majority of recent graduates with a bachelor’s degree in English find it a daunting task to write a short story or poem, not to mention a full-length book. They are not much farther ahead in knowing how to perform these tasks (apart from the advantages provided by computer word-processors) than were similar graduates centuries ago.

I have never met a humanities professor who gave any sign of even knowing that there is a difference between substance and literature, between the What and the How, between what is expressed (usually boring and obvious) and the gracile manner in which it is said.

Is there a way of distilling the intellectual substance from a humanities book? Is there a way of “deleting” all the music and good manners — which is not to say that these are worthless! — and

leave behind just the “pure ideas”?

One approach to an answer is to imagine putting the book in a computer database in a way other than simply copying it in. Consider sociology. Is there a set of questions which, when answered by the author of a sociology book, would, in the minds of most sociologists, constitute a representation of the substance of the book? To sharpen the focus of this question, suppose a majority of sociologists were told that a space ship was about to be sent on a long voyage, but that the computer memories weren't large enough to contain entire sociology books. Only a limited amount of database storage was available, i.e., the substance of each book would have to be captured in a sociology book questionnaire. Would most sociologists believe such a questionnaire could be devised, and if so, what do they think it would look like, and if not, why not?

Another approach is the following:

(1) Prepare a set of multiple-choice questions covering the major ideas in the book, e.g., “The author believes that a relationship between a man and a woman is more likely to be long-lasting if (a) each person is interested in the personal growth of the other; (b) each person is not interested in the personal growth of the other; (c)... “;

(2) Select at random any member of the intended audience of the book who has not read it and have him answer the questions;

(3) The larger the percentage of questions he answers correctly, the lower the information content of the book.

A third approach — and one that is certain to bring out the fundamental ontological difference between the humanities and the logic-based disciplines, as will be evident from the howls of outrage from persons on the humanities side — is to attempt to convert the book or paper into objects, their properties, and operations on objects, where each property can be measured on a scale of 0 to 10. What are the properties of the Absolute in Hegel? of the in-itself and for-itself? What are the important objects in deconstructionism, what are their properties, and what are the operations on those objects? (One object is a text, and one operation is that of deconstructing it.)

We can reduce the exercises in good manners, in *tut-tut-tut* and *tah-tah-tah*, that constitute the vast majority of efforts in literary criticism and in political writing (among other liberal arts disciplines), to weightings in a set of scales. These scales, in the case of literary criticism include, the influence of x on y , the importance of x relative to y , z , etc., the degree to which x relies on technique y , the degree to which x 's work y is representative of similar works of his age, to what degree z is the reason that x wrote y when he/she did, etc. An extensive list of these scales, with weightings, would seem to provide a very quick and comprehensive summary of the author's views. What of importance can the author say that cannot be significantly approximated by these weighted scales? Furthermore, these scales allow different authors' views on the same subject to be rapidly compared.

The substance of any subject in the humanities is what can be put into a table. (Consider, e.g., history.)

Any *honest* discipline in the humanities — including philosophy — would take pains to attempt to fool the reviewers of its journal papers. That is, there would be an on-going production of papers that were hoaxes, the purpose being to see if the intellectual tools of the discipline were, in fact, capable of discriminating between what the discipline considered substance, and what it

did not. One such paper was, in fact, written several years ago, sent to a prestigious post-modernist journal, and, needless to say, accepted for publication. “The paper was full of self-contradictions and nonsense (such as might be found in disreputable publications on April the first) and written in suitably meaningless post-modernist jargon. The eminent professors on the editorial board accepted it with glee because it appeared to support their prejudices, only to find after its publications that they had been hoaxed and shamed.”¹ (See the story of Alan Sokal’s now-famous hoax in, e.g., Gross, Paul R., and Levitt, Norman, *Higher Supersitition*, The Johns Hopkins University Press, Baltimore, Md., 1998, pp x-xi. The paper was published in May, 1996 in the journal *Social Text* and was titled “Transgressing the Boundaries: The Transformative Hermeneutics of Quantum Gravity”.)

How Should a Book or Paper in the Humanities Be Judged?

What I said at the end of the chapter, “Philosophy”, regarding philosophers applies equally to the authors in the other humanities: there are two questions we can legitimately ask of such an author about his or her book or paper, namely:

- (1) What are your criteria for deciding if a person has understood you?, and
- (2) What, if any, criticisms of your book or paper do you consider valid?

In 2009, I asked the second question of a young woman who was in the last year of her work on a PhD in sociology. For a while she seemed perplexed. Then she said that a valid criticism in sociology is that the conclusion is not justified by the methodology.

I: “What are some examples of a methodology?”

For a while she didn’t answer, then she said, “It is not something you can get out of a book. It is something you pick up in years of classes.” (I thought: Holy Christ! Then I thought, That is exactly the reply that one would make if the question had been, How do you learn to write in the accepted style?)

I: “Would statistics be a methodology?”

She: “Yes.”

I: “And so a legitimate criticism would be that the statistics were faulty.”

She: “Yes: that the statistics didn’t prove what the author claimed.”

I then pointed out that most books and papers in the humanities are not based on statistics. I asked her what some of the other methodologies are. At which point she said she had an appointment and had to leave.

Additional Thoughts

The longer I try to improve my understanding of some of the basic concepts in mathematics and physics, and the longer I read literature (good novels, plays, poetry, essays)², and the longer I read competent works of history, the more my contempt increases for the humanities — for what is published in academic journals and books by professors in these subjects. It really *is* mostly

1. www.whitehat.com.au, 2/27/07

2. I have spent far more time in my life on literature, philosophy, and history than I have on technical subjects.

rubbish, always excepting the part of it that lies in the realm of basic scholarship (who said what when, and how can we make it accessible to a modern audience).

I'd rather be a failure in mathematics or physics or any other of the hard sciences, than a success in the humanities.

I cannot close this chapter without answering the question, "What would the humanities look like if humanities professors decided you were right in your criticisms?" My answer is that they would be much the same as they are today, except that editors of papers and books would know the difference between what could be designated as "true" or "probably true" (e.g., statistical data) and what lies outside the bounds of "true" and "false" — in other words, what I have throughout this book called "art", a prime example being the overwhelming majority of deconstructionist writing. No paper or book claiming to set forth a "theory" would be accepted unless the theory were legitimately scientific or mathematical. Social and cultural studies would need to have the character of works such as de Tocqueville's *Democracy in America*, Riesman's *The Lonely Crowd*, Hoffer's *The True Believer*, and many others. Authors of papers or books in which new terms were used without prior definitions would have to state, in writing, at the beginning of each work, their willingness to engage in person-to-person spoken dialogues with qualified people outside their specialty who would be allowed to ask for definitions and, if these were not given, to ask for reasons why they were not given.

(Readers who find themselves in agreement with at least some of the points in this chapter, might enjoy reading Gross, Paul R. and Levitt, Norman, *Higher Superstition: The Academic Left and Its Quarrels With Science*, The Johns Hopkins University Press, Baltimore, Md., 1998.)