



"What thou lovest well remains; the rest is dross."

Ezra Pound From Canto LXXXI



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THE TREE

A FABLE

Imagine that Chuang Tzu, the Chinese philosopher, is telling this story.

Long ago, in the days of the great Emperor Shen-Nung, at the beginning of history, there lived in the village of Sh'ai-yen a merchant, and he was very shrewd in business. While still young, he had made a fortune in the big city and now, in his middle years, he returned to his town and lived in a sumptuous house, and kept many servants. And he was powerful and much respected by men. But the itch for gain did not leave him, and he was forever setting up new ventures which would increase his wealth.

Now, outside the village of Sh'ai-yen there was a beautiful forest. The trees were tall and the forest floor was covered with leaves, and rare animals lived there without fear of disturbance. One day merchant Shang went for a walk in this forest, and he discovered that the trees were of a shiny hard wood, such that good furniture is made from. So he went out and hired a crew of men, who began cutting down the trees of the forest, and merchant Shang arranged with craftsmen in the big city to buy his timber at many times the price he paid to have it cut down.

And in the forest there arose a wailing and crying of all the animals and birds who were losing their homes, and the villagers were angry, but Shang was so powerful that they did not dare complain.

Now, in the forest near Sh'ai-yen there was one tree that was older than all the rest. Unlike the other trees it was not hard and shiny and beautiful, but was pitted all over, and so bent and gnarled that it could be of no use for making so much as a bowl or a tray. Nor was it soft, like cork, nor did it yield any useful sap. It merely sat and watched all the other trees being cut down. And since Shang could think of no use to which the tree could be put, he simply left it alone.

Now, all the trees save that one were cut down and made into beautiful tables and cabinets and desks, and bowls and plates and chopsticks, and some were inlaid with ivory and made into chairs for the Emperor's wife to sit in, and some were made into dolls for the Emperor's children to play with. So fine was the wood from this forest, that Shang's profits were beyond the dreams of avarice. He became one of the richest men in all of the province, perhaps in all of China. And so the merchant Shang rose even higher in esteem and began to think rather well of himself too.

But Shang was growing old, and his life of business dealings had tired him. While staying in his old house in the little village of Sh'ai-yen, he felt that death was near, but he rose from his bed and took a walk in the field which had once been the forest of Sh'ai-yen.

In the middle of the field Shang came upon the vast old tree which had no use, and he looked up at it in disgust.

"Of what good is such a thing to anyone," he said aloud. "Its fellows have become some of the finest objects in the land, and look at it! Old, ugly and twisted, it stands in this field by itself — useless! What a pity!"

And then the tree spoke, and it replied, "Of those trees which were my fellows, not one remains intact. Not one but which has given itself up to commerce. Their usefulness destroyed them. I am ugly and fat and twisted, and of no use to anyone. So here I stand, year after year, alive and healthy and perfectly at ease.

"You, old man, have busied yourself in vain gaining and spending. You have spent much time worrying about what is useful, what will draw profit, and your mind exalts usefulness. You too have been useful — you have provided many families with beautiful things. Your carved jars stand on their shelves. They write letters on your desks. But you, old man, are played out, and will soon render up your soul out of exhaustion. Because the value of you was marketable, like the value of those trees, you have been marketed. But my value none can measure, none can take apart. And that is why I have survived."

The old merchant Shang, who was so clever, returned home in much dejection, and died very soon after.

Moral: There is some use in being useless.

Sophie Balcoff



Wang Chi-Yuan Magnolia Tree Courtesy of RAA Gallery

WINTER SUMMONS

for Stevie Rose

as summer approaches
we speak of wanting but forgetfulness is
our greatest enemy; when nights are
cold again and people hide their
treasure we would be foolish if we did not
move away

the leaves are firm as grave-mounds the wind here scatters nothing dogs and men are scraps of rind scratching along the ground hard as granite; the speech of winter is bitter and rises from longing

in russia the cold has riddled old people our faces will suffer too and recognition kill so where will you who have seen nothing/go

- Victor Bockris

LETTER 10

At ebb-tide

fiddler crabs and shore birds scour the beaches for food.

Reef herons

come and go; a shuffling of wings above Sesimbra

times the tide.

The waves that mold the shore, like pain, seem my breaths re-breathed.

The painted

faces of harbors and plow-peeled hills fill me with

the weather

of returning, facing you. If your face would shiver and

bend apart,

its leaf-saying branches losing their syllables in

a slow wind,

I could know you, watch you come together quietly.

- W. B. Patrick

AFTER READING CHEKHOV

Such a pale shadow of old Russia, the hissing samovar, snow, boot-grease And people sitting together Involved in insipid conversations, remembering older days, when there were strong, coarse, murderous boyars — not delicate, gentle, musical, but real and red — That was when servants and serfs went under trees and archways to do one's bidding, The trees bloomed in summer, life was short, mud clogged the roads, and Paris was as far off as the sun.

"We are only living until we shall be destroyed," not without a secret gladness that the time on their hands will be lopped off by the next fierce generation.

- Sophie Balcoff

AN INTERVIEW WITH ANDREW WYLIE

INTRODUCTION

I met Andrew Wylie in The Grolier Bookshop in Cambridge last June and he shoved a book called Circe into my hands and then three or four other books saying "Read these." Later that afternoon we went to an art exhibit with his wife and Gordon Cairnie. After a few drinks I remember Andrew leaning down toward me reciting Ungaretti in Italian, teeth clenched and fingers tensed, demonical. And then I went away taking the books he'd given me. That first meeting was catalysis.

We've both been busy since and I came back to Cambridge to find him immersed in yet another giant project, translating Sartre's most recent book: The Critique of Dialectical Reason.

It's not really important who Andrew Wylie is, what he looks like, how many books he has, does he drive a car. The interview is not an excuse for excessive prying or carpet slipper gabbling. It is, like television, one of the most used and abused methods of communication. When a person is working hard he has much on his mind and little time to relay it. This conversation is for rejuvenation of anybody's thinking. Thanks to the editors of Era for replaying it.

- Victor Bockris

SECTION ONE

Andrew Wylie has just finished writing a book of poems tentatively called X-1. It is an unusual piece of writing and seems to me to be essentially political in intent. He hopes to publish it soon and seeks the widest distribution possible. We began by talking about his writing in relation to politics.

Bockris: I take it that you want X-1 to be politically effective; what is your view

of the relation between art and politics?

Wylie:

I think all writing makes a political statement. Just as all writing has political repercussions or political meaning, all politics has a relation to and an influence on art. It's customary in western capitalist society for artists, who are generally a fairly reactionary group, to point out that artistic freedom in the USSR is severly limited by political repression. In so far as in Russia politics influences art, so also politics influences art in the bourgeois West. I would say for instance that Pound's Cantos are most definitely, and to a large extent, the result of certain social factors. Pound creates the Cantos himself, perhaps with non-political content, at least in some early Cantos, and yet at the same time his creating of the Cantos is created by certain forces, so he is not entirely free.

You see, a poem like Valery's La Cimitiere Marain would seem to a lot of people a totally unpolitical poem, and yet it most definitely has political repercussions or political meaning if you look at it in that terminology. Certain Marxists would say that La Cimitiere Marain is a bourgeois work, but Sartre points out that if Valery is rejected as a

bourgeois, it means nothing, because, though he may well be a bourgeois, every bourgeois is not a Valefy.

Feeling that every artistic work does make a political statement of one sort or another, I am consciously creating a political statement of a different kind than that which is the political statement of most of our poetry and "creative" writing.

Bockris:

But who reads the Cantos? Or, more specifically, who's going to read your book? It's going to go to the colleges and that surely is not your aim.

Wylie:

There are various ways of reaching a wide audience. I've experimented with writing on walls and sidewalks; I've been doing this round Cambridge with a can of spray paint. I think there are various ways for a work to penetrate someone's consciousness. For instance, I imagine very few of the French proleteriat as of May '68 had read Das Kapital from beginning to end, but it would be wrong to say that the French proleteriat has not been influenced by Marx. I would hope that the influence, if X-1 had any, would be on a certain number of people who would read it, who would probably be academic, and by its influence on them it would channel down and come by a second route to the people I want to reach.

I asked Andrew why he was channeling so much of his energy into writing because he seemed to me a person who wanted, almost needed, to be politically active.

Wylie:

I'm putting a lot of energy into writing because I think now that I can accomplish more this way than I could in another way. I think I'd be very foolish if I were sitting up there and continuing to write if the time arrived when people were going into the streets with guns. But I think at the moment I can influence more people by writing this book than by going down into the streets. I also think that by translating The Critique of Dialactical Reason, although I'm not kidding myself about the masses of people reading The Critique, that I can eventually create a considerable influence on the country. And it will help to give a solid theoretical background to the Left in America. It will help to create one, it's an essential book. But just as I don't think that Sartre would sit writing a book on Flaubert, and in fact as he did not sit up in his apt. and continue writing, during the Spring of 68, I would not be so stupid as to think this more important than making a revolution.

It seemed to me that Andrew was writing for political reasons, that he was a "political writer." But if this was the case it was surely ironic that he was writing a poem and a poem that was not, I thought, easy to understand.

Bockris: Do you consider writing to be more of a political than an artistic act?

I don't see writing as more a political than an artistic act, but I do see it as having political content for political people, literary content for literary people. Each person creates what he or she reads. For instance, in showing it to someone like Tom Pickard you would have both political and literary content. In showing it to Eldridge Cleaver you would have political content, perhaps a little literary, in showing it to Basil Bunting you'd have almost entirely literary content, so they're both there and it depends entirely on the person who reads it. For instance, a literary person coming across the line

. . .together in nothing together will take break

might think, how much does that have to do with Joyce. A political person might look at it and notice especially the words 'together' and 'break' and think of that in terms of inert series becoming group in terms of The Critique. Tom Pickard, for example, is an example of someone who has made a successful political statement without having primarily political intentions. Tom's intentions are at least equally balanced if not more artistic than political.

Well, take a poem like "Nenthead" (from High on the Walls by Tom Pickard, Fulcrum Press, London). That poem made me feel angry about the treatment of miners in the north of England. What's that? Doesn't that come out of political intent on the part of the author?

I don't think it is political intent. I think what it is is that every individual whether he is writing a poem or shooting a policeman or no matter what he is doing, is the result of an incredible number of interrelations and I would say that an irrelevant poem, a poem that ends up boring someone probably bores because it lacks relevance in one sphere or another. Now I would say that W.H. Auden's poetry, for instance, does not represent reality to 80% of the people, whereas Tom Pickard's poetry does represent reality to 80% of the people, at least in the West. Now that is political, it's artistic, it has to do with brushing your teeth, I don't think Tom says, I'm setting about writing a political statement. The poetry is part of Tom's experience and Tom's experience is much more directly oppressed than mine, because I am the son of American ruling classes, whereas Tom is the son of the North of England laboring classes, so that his statement comes out of an experience that is for me political experience. It is something other than I would necessarily have had to experience, but it is not something other than what Tom would necessarily have had to

Wylie:

Wylie:

experience, so, for him, it's not necessarily political in intent. I had to seize revolution with my head; Tom had it forced int his hands.

I had read a lot of literature, which could be termed political in intent and was bothered by what seemed the naivete of many artists. They seemed to think that just saying, this is no good, was enough. I mentioned this, directing the question toward the meaning and significance of X-1.

Wylie:

What I am interested in and what I think other people should look for is not what it means, not what it says, not what it preaches, but what it does, the literal effect it has on you. For instance you read something like the poem NEWCASTLE

some
but all others
no one saw
whose unions move
over us
+ will end
then never lie down
in the street

It might mean very little immediately, it would have very little immediate didactic content and yet it would create a delayed didactic response which I could generally calculate. This is the reason I think it's not elitist, though a lot of people might think it is because it's perhaps difficult to understand. But I think it's as accessible to some-body who's just literate as it is to someone who has a PhD in English from Harvard. And it is designed in fact to be that because it is not designed to have immediate didactic content. It is designed to cause a certain movement, to do something, not to mean something, but to do something, to have a delayed didactic content, which would be such as to create the need, the necessity, in a person of breaking a window, in the most trite sense, or of becoming politically involved and seeing in fact that we need a change, we need a revolution in the United States.

SECTION TWO

Giuseppe Ungarettis is an Italian poet, who died June 1st 1970 at the age of 82. He is the greatest Italian poet of the century and was considered with Beckett and Borges for the Nobel Prize. He did win the First Books Abroad International Prize for Literature in 1970.

In 1968 Ungaretti spent a term at Harvard with Andrew Wylie and in fact Andrew is now Ungaretti's translator as far as Ungaretti was concerned, but some bloody publisher has the right to Ungaretti's work in translation and won't let him publish a book. However, Agenda (An English poetry magazine edited by William Cookson) did a special Ungaretti issue (guest editor Andrew Wylie, Agenda Vol. 8 No. 2) which has many of Andrew's translations (four of these were reprinted in Pennsylvania Review No. 1). And in the autumn of 1970 Books Abroad came out with an issue entitled "Homage to Ungaretti", which included twelve more of Andrew's translations plus his essay Ungaretti's Poetry and Experimental Time.

I had read the translations and been struck by their violence. This lead me to ask Andrew about his connections with Ungaretti and Ungaretti's connection with politics.

Wylie:

I chose to translate Ungaretti because when I first came across his work I could hardly read Italian at all and I saw a poem called "Cain," and it was very violent; all I understood about it was the violence. I literally didn't understand most of the words in it. This happened to me with Rimbaud too. I came across him when I was thirteen and I remember reading one of his poems and I memorized it and walked up to a friend and recited it and said, isn't that beautiful. And he said, but what does that word mean and what does that word mean, and I had no idea what they meant, but he was not willing to accept it as beautiful, or didn't see that it was beautiful without that. I ended up translating a whole slew of Rimbaud, largely to teach myself and to learn Rimbaud's work. I did Ungaretti for the same reason. I felt here was somebody, who was very close to what I felt and I got deeper and deeper into his work until I eventually got to what I think are sometimes very good translations, very close to the essential spirit that made the poem in Italian. It was largely a personal project.

Ungaretti was a fairly apolitical man, in fact you might say he was really apolitical. Like most poets, he obviously had political implications. The way he would have political implications, the way he would be true, is say in a poem that he writes in the trenches during World War I. He can write a poem like

"WATCH" Cima Quattro 23 December 1915

An entire night
thrown close
to a comrade
massacred
with his mouth
gnashed
turned to the full moon
with the congestion
of his hands
penetrated

in my silence I've written letters full of love I've never been

tied to life (translated by A. W.)

Now that is not, you might say, a political statement and yet it is obviously worth any political statement on the degradation of trench warfare and it has political implications.

The greatness of Ungaretti's work, the relevance of his work to me is its total fragmentation, this gasp and clench. It's necessary to understand the way he reads, with great tension. A French translator of Ungaretti's work said that Ungaretti chewed each word before he let it out. Besides that there is this total fragmentation I tried to explain in an article published in Books Abroad. The truth of that fragmentation is what we are living now: that it's very hard for people to get together, that it's very hard for people to cooperate, that there is tremendous violence. The violence that Ungaretti expresses by dragging a word that should be on the end of one line down to the beginning of the next line is his equivalent for the violence of someone being shot in a ghetto. That is his way of expressing our violence and he does it effectively.

He does it also in a way that is equivalent to Klee's and Webern's; he creates continually these very delicate small flowers. Stravinsky talks about perfect hard gems shining on a mountain in discussing Webern's music, which is not how I see Webern's music at all. I think Webern creates continually, desperately fragile flowers and then destroys them one after another. He creates a gem of a flower, but the point is, it is very soft; a very frail, very temporal object, and destroys it, destroys it, as though he had a child being born and killed within the first day of its life over and over again. And this is what Ungaretti does, this is what Klee does with his magical paintings. To the inexperienced eye the reaction would be, perhaps, "my kid can do that." Well, yes, fine, but the point is that Klee is presenting these childlike paintings and beneath the little flower is this immense destruction going down down down again. And many of Klee's paintings are to me more violent than Picasso's "Guernica." There's the same violence in Webern and Ungaretti and this is its relevance, the fact that it is the creation of something frail, which is relevant and similar to our existence now because under the bomb we are all nothing, we are just very small, we are very frail indeed in relation to the bomb. We all know it, we all sense it deep in us even if we haven't faced it and objectified it. We also are continually being destroyed and we are continually separated from each other. Ungaretti does the process of separating words from each other through the creation of a logical disjunction or what Stockhausen describes in Webern's music as being an element of continual surprise. I discussed this in relation to the first lines of "You Shattered" on that article I mentioned.

SECTION THREE

Wylie

I think it's always necessary to keep in mind, and it's a very disillusioning fact, but it's a fact, that people are not influenced by events until they are touched by them personally. You cannot persuade the working class in America that it is exploited, because it has been bought off on the installment plan, it has been given sufficient benefits so that it believes that it is not exploited. You cannot do it because a working class man or woman will not feel that exploitation until he or she does not have the car or television they have been lead to believe necessary for their comfortable existence. In the same way that you cannot make anybody worry about what happened in Pakistan with the "Natural Disaster" you can also not make anyone in the United States, practically speaking, worry about what's going on in Vietnam. The writing is on the wall; it is as obvious as Hitler's occupations pre World War II. The only way you could get the majority of Americans to protest against Vietnam is if the economic situation becomes so intolerable, and is linked up by big business with the Vietnam War, that people are made to believe they could lose their television sets if we didn't stop fighting in Vietnam. But we could slaughter every single person in Vietnam and no one, relatively speaking, in this country would raise a finger. And I'm afraid the same thing is true with Russia acting against Biafra, etc. So you cannot expect people to be concerned about the future. This is the job of revolutionaries - to be concerned with the future, to try to decide not only what other people are trying to direct the future towards, but to try to move that locus. I think entirely in terms of the future and the future looks bright. There's an article by Martin Nicolaus in a book edited by Carl Ogelsby and this article is essentially an explanation of how Marx, in the Grundrisse, saw that, with superfluous labor becoming increasingly a precondition for necessary labor, capitalism, developed still further than it has already been in America, can only eventually produce the material conditions for its own destruction. If Marx hadn't seen the contradictions in advanced capitalism he would indeed have had a very shallow world view. But in fact Nicolaus points out that he did foresee this, and American capitalism is creeping toward its own deathbed. So, economically, I have quite an optimistic view of what will happen in this country. I mean I see the time when there might be a radicalisation of the American "proleteriat" through a collapse of the economy and that might also bring race relations to a much better point.

Bockris: What about the backlash? Surely a fascist backlash has already begun and it can get much stronger than it is now.

Wylie: Sure it can and I wouldn't be at all surprised if it did, but it can't win. All you have to do is walk into a ghetto in the United States and look around you and you realize that white rascism and capitalism cannot defeat black America. The Nazis could not win. Just look at the eyes in Vietnam and you realize that American military fascism cannot win; the Vietnamese will not be defeated, it's not possible. It's the kind of thing that defies all rationality and it's the kind of thing that is happening in Vietnam and would happen in the States if the Pentagon fascists did what they wanted to do, which is to consolidate total military power and start rounding up every black person in this country and gassing them or machine gunning them.

Bockris: What about the possibility of a strong fascist government taking over, rounding up and eliminating a few thousand key people? The rest of us would just curl up. America, except perhaps for the black population, is far gone in decadence. College students, for example, would never rebel, because the majority of them are too soft.

Wylie: If there were the strategic rounding up of personnel on the left in America, black and white, yes, they might delay a revolution, but it would still be very difficult to avoid it. There's that phrase of Huey Newton's, 'the spirit of the people is greater than man's technology'. Obviously the people in America does not yet represent the mass, it represents the justifiable demands of a minority. So the rulers can round up leaders of the left, there will be more leaders; the second they started rounding up people like Hayden and company I would drop my pen and pick up my bomb and machine gun and be out there. And when they rounded me up they'd have to worry about Christina (his wife) and after that Nikolas (his six month old son) would grow up and they'd have to round him up, too.

SECTION FOUR

Wylie: I'm interested in getting into the philosophical implications of Marxism and it seems to me that the best way to gain an understanding of its

philosophical implications is by translating one of the texts that develops Marx's philosophical direction and I've chosen The Critique of Dialectical Reason by Sartre. I'm glad that it hasn't been translated because I need some sort of impetus to really get into the text, go underneath it, and yet in the social context it's terrible that it hasn't been translated, because it's a very useful book and I'm doing it to influence other people.

The Critique of Dialectical Reason was published ten years ago and is untranslated in English. The book is more complex than Being and Nothingness, which may be part of the reason it remains in French. Andrew explains here why he is translating it and talks about the book in relation to his own work.

Wylie:

Let's say my interest in Sartre and my interest specifically in the Critique stems from the fact that I think the Critique contains a study of the dealings of the individual in society. Sartre examines what makes a society and how a person functions in it. He criticises the normal method of investigation in dialectical materialism, saying that as an individual in society you must recognize that you are part of the structure you study. Through the popular theory of objectivity, people have come to see themselves as omniscient onlookers into society. What Sartre does then is to clarify the role of the individual, suggesting what that individual not only can, but must, do. Necessity plays a strong role throughout the Critique and throughout history. Both the necessity of violence, because there is scarcity, and the necessity of freedom as the necessity of living the exigence of praxis. The Critique deals with the individual and the problem of the individual within a Marxist framework. Whereas you have (in Das Kapital) a discussion of what happens to certain classes in capitalist society, in The Critique of Dialectical Reason you have a discussion of what happens within those classes. For instance, Marx say that the proletariat is suppressed by the ruling class. Sartre will say that within the oppressed proletariat you have individuals A.B.C. D.E: what is happening to them? How do they become a class? What is a class? What is a person? How does that person join with another person? He studies groups and describes the process of an individual becoming a member of a group. This is of immense importance, because it puts the individual into the structure of Marxism, whereas the individual has largely been left out of the structure of Marxism before. Marxism has been most often discussed in terms of great numbers.

The Critique has a relation to my work in that Sartre points out the necessity of comprehending someone else's comprehension. I've tried to

do that. I've attempted, for instance, to understand what a person would think, what would happen to a person if a certain series of words, a cluster, were thrown at that person. Take a cluster like

negative positive positive dimension + shape of each sign

I would not expect anybody to understand or get out of those lines what I got out of certain things in order to make up those lines, but I think I can generally understand what would be the majority of people's reaction to that group of words. I've continually tried to create definite responses in other people. I think that generally in poetry and writing people try to express themselves in the most personal way. For instance, let's take Briggflats (a long autobiographical poem by Basil Bunting, Fulcrum Press, London). Basil has expressed himself. He made a statement somewhere, that people have a very utilitarian view of poetry and they should realize that poets write just for the pleasure of it, as birds sing for the pleasure of it. Now, I don't know much about birds, but the point's there. And I think you get from that, that Basil is essentially attempting to accurately reproduce what he has experienced, without taking into consideration what his reaction would do to other people. I've attempted to express not so much what I felt, but to organize what other people will feel if they come in contact with something I write.

Bockris: How did it work in the readings?

Bockris:

Wylie:

Wylie: It worked when I read a poem on women's liberation. I got very heated responses from women who figured they were liberated and that I was telling women how to conduct their lives, which wasn't my business. That was good. I wanted heated response one way or the other.

But apart from that one poem, do you feel overall that what you're trying to do with the poems can ever reach a wide audience?

Probably less than I'd hope. But then the way to present poetry, and to make it popular, is not through readings or on the page, but on walls, say, where a person would be faced with one poem or a line from a poem that would then be taken out of its normal literary context into the daily experience of the person in the street. Poetry creates its audience, just as its audience creates poetry, and the influence of a poem can reach out further than the poem itself. Howl, for instance, has influenced to some extent the lives of quite a few people who have never read the poem. And Howl is influenced

(not strongly, obviously, but still influenced) by pre-decessors say Whitman, Apollinaire, Pound, Williams, etc. And maybe Howl influenced Abbie Hoffman and so you might even say, without stretching it too far, that the Yippies are a Poundian offshoot. Wouldn't Pound love that! But again obviously, as in the case of Valery as bourgeois, they are more than that, other than that. Poetry still has a larger influence than people generally believe. It's funny, because people seem to think that poetry has no influence very few people read it. But very few people have read Being and Nothingness and hardly anyone aware of the existence of that book would deny its wide influence on the least likely people, in the most unforeseen ways. Committed poetry, poetry that takes its object as well as its subject into consideration, should try to get out to its object, to people. Because it really has no more business left on the page in a book in the library of some oppressor than philosophy has left at a desk in the imagination of some philosophical idealist. Poetry should be everywhere, and, if it's good, it might eventually reach nearly everywhere, and so somehow influence a large number of people – the people. Rimbaud was written on the walls of Paris in '68, and I had an interesting experience with this myself, once. I was in a laundromat and there was this huge piece of paper on the bulletin board and I wrote up a poem on Vietnam and people came in and put their laundry in the machines and they wandered around and sat down and everyone of them eventually got up and walked over to the bulletin board to look at the notices. And they saw this poem and they looked at it, looked off and looked at other things, and then you could see they did a double take and went back to it. And they saw it was a poem first of all, surprising to see in a laundromat, and that it was hand-written (I'm trying to understand what must have gone through their heads). It was exceptional that it was a poem, and that it was hand-written; they probably wouldn't have looked at it if it had been printed because there would have been other copies, whereas this was obviously the only copy. And then they read it once, and then without exception they read it again. I saw four people reading it. The first person was average. He went up, read it, read it again, went back, sat down, fiddled with the laundry, then went back and read the poem a third time. Now that's really a good response. It's getting to the person more than it would get to a person in a book because that's three readings! How many poems are read three times!

BABYLONIAN MATHEMATICS

One of the important legacies of the Babylonians to modern man is their system of mathematics, which paved the way for the discoveries of the Greeks, but which can rightfully be discussed on its own merits. After looking at the possible origins and mechanics of Babylonian mathematics, this paper will analyse its contributions as revealed in the tablets surviving today and any discoveries in lieu of the Greeks or later mathematicians.

The origin of Babylonian math is far from being certain. Although it may be impossible to establish the precedents for table and problem texts, which form the bulk of our knowledge of Mesopotamian mathematics, it can easily be seen that the Sumerian notation foreshadowed that of the Babylonians. First was the custom of representing a higher power number in a given numerical system by a larger sign. Thus in early Sumerian numeration, which was decimally based (10, 100, 1000 are the main digits), 10 was represented by "o" while 100 by "0". (00=110)¹ By comparison, ¹ and 60 are represented by the same symbol P in the Babylonian system, which, in earlier times, by virtue of its size, would differentiate ¹ from 60.

The question of origin of notation has been related with that of the measure system. From Warka, we have evidence of a system of measures formed by 1, 10, 30, 100, 3000qu. Later this is replaced by the kings of Akkad by 1, 10, 60, 600, 6000, in which 60 is used instead of 30. Lewy gives the reasons for this as being practical: a shift in the diet of the ordinary worker from a small amount of coarse grain to a larger of the same, but refined foodstuff.² The shift to the standard table we know from Old Babylonia is simple. The number 3600 is introduced, being the square of 60, and we thus have: 1, 10, 60, 600, 3600.

Continuing along the origin, it is well to ask why the Babylonians developed such a highly sophisticated system of math. Some scholars have pointed to the irregular inundations of the Tigris and Euphrates Rivers or the need to keep tax and temple records.³ Other texts are concerned with finding interest on a given amount of money, indicating possible an economic need. By far the most

^{1.} H. Saggs, The Greatness that was Babylon, New York, 1962, pg. 422.

^{2.} H. Lewy, <u>Journal of the American Oriental Society</u>, Vol. 69: Origin and Development of The Sexagesimal System of Numeration, pg. 9.

^{3.} Saggs, The Greatness that was Babylon, pg. 420.

reasonable suggestion is given by O. Neugebauer, who postulates that Babylonian mathematics arose simply because of a flourishing of talent at the time of Hammurabi, with periods of stagnation both before and after. This theory is confirmed by examining the rise of mathematics in other civilizations such as Greece, for which no practical origin can be argued. Finally, the economic postulations fail, because they do not provide us with a reason for the sudden interest in pure mathematics, which this paper is concerned about.

Before proceeding to sample texts of the Babylonians, it is best to look at their numerical notation. 1 is simply represented by $\[\]$, made by an impression on the clay by the stylus. The symbol for 10 is $\[\]$. Most of the numbers are created by different combinations of $\[\]$ and $\[\]$.

1	P	10) (
	PP		L (P
	PPP		
: 8	EF.	58	B (44 FFF
	FF	5	9 (44 878

Through a remarkable insight, the next number, 60, was represented by the same figure as 1 (P), and differentiated only by virtue of its place. Somewhat akin is the difference we place between 10 and 1, with the exception that zero was not invented until the seleucid period in Babylonia. Certain complications arise, especially in determining how a number should be read. For instance, is " P PPP " equal to 63 or 3603? Most ambiguities dissolve when reading the numbers in context with the other material. This does not significantly detract from the achievement of conveying large numbers with a few digits. The Babylonians similarly devised a precise concept of small numbers and used this

^{4.} O. Neugebauer, The Exact Sciences in Antiguity, Providence, 1957, pg. 30.

knowledge to effect division without the use of fractions, a problem which held back Egyptian mathematics in its development. The use of place notation was simply extended in the other direction so that $\mathbf{P} = 2$ $(60)^{-1} + 2$ $(60)^{-2}$. By multiplying $\mathbf{P} = 60^{-1}$ by a higher order number, division was achieved within the context of multiplication. As will be seen later, this proved to be of crucial importance.

Since the Babylonian system was sexagesimally based, one would expect tables for numbers from 1 through 59, for in our system, we are familiar with the multiplication tables from 1 to 10. However, the tables primarily concern themselves with numbers from 1 to 20, 30, 40, and 50. This strongly supports the position that in an earlier, unrecorded period, the Babylonians used a smaller system of numeration as they did in the case of measures. Multiplying large numbers is reduced to simpler processes, then. Thus $59 \times 3 = 50 \times 3 + 9 \times 3$. This process is attested to by a text concerning multiplication of fractions. All of the complicated or very small fractions are referred to in terms of simpler ones (Thus 1/24 = 1/6 x 1/4).1 From examination, these Babylonian texts can be roughly divided into two groups: table and problem tablets.2 Although the problem texts present generally more interesting material, the tables give us an insight as to how the thinking of the Babylonians proceeded. In looking at the table texts, we can break them into two categories: exact texts (multiplication, reciprocal tables) and approximation texts (of irregular numbers, "irregular" to be explained later: the square root of 2, etc.). A large number of these "exact" documents are in the University Museum, and by observing the numbers involved, a relation with approximation and problem texts can be established.

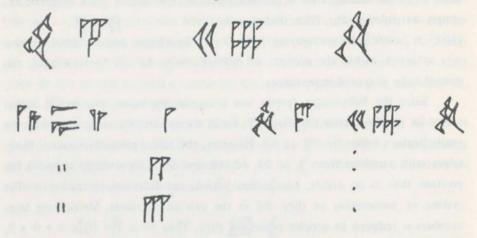
The standard formula for multiplication tables is well illustrated in CBS 29-15-477 (University Museum), which concerns the number 44, 26, 40, where the Beginning portion of the tablet is preserved. 44, 26, 40 is introduced at the

5/16 =] + (¼ X ¼) 5/12 = 1/3 + (¼ X 1/3) 25/24 = 1 + (1/6 X 1/4)

A. Sachs, <u>Journal of Near Eastern Studies</u>, Vol. 5, Notes on Fractional Expressions in Old Babylonian Mathematical Texts, pg. 204, also:

^{2.} Neugebauer, Exact Sciences, pg. 30.

top, and followed by "ara", which means "to multiply", in terms leading to a list of numbers from 1 to 20, including 30, 40, 50, and their respective answers:1



There are also tables for many other numbers such as 15, 16, 30, and (3,20) in the Museum.

But why was 44, 26, 40 used in a multiplication table? This brings us into the second major phase of tables: reciprocals, which made complicated division possible. If one wishes to divide by the number 40, its reciprocal 60/40 can be used in place to effect multiplication. The only thing needed would be a table of reciprocals for the most used and familiar numbers. More than one copy of such a standard table does exist, indicating a wide use in the Old Babylonian Period. The problem of 44, 26, 40 is solved, as it is the reciprocal of 1, 21 = 81. 81 was undoubtedly a number used often as it is equal to 92 = 34. However, it can be easily seen that there are a number of omissions in the table. For instance, between 1 and 20, 7, 11, 13, 14, 17, and 19 are missing. These are numbers containing factors other than those of 60, and give no simple answer when divided into 60.

 Sachs and Neugebauer, <u>Mathematical Cuneiform Texts</u>, New Haven, 1945, pg. 20. divide the multiplication tables into three distinct types, our example being Type A:

A			B		5	=
c ará	1	c	c ará	1 c	1	c
ará	2	20		20	2	20
:			:	and the part of		
ará	50	50c	50	50c	50	500

Thus 60/11 = 5.4545. . .and 60/7 = 8.57425742. . .Occasionly beside one of these "irregular" numbers is written an expression such as "7 does not divide." This is the major fault of the Babylonian system, for the process of infinite repetition or progression was not understood. In some cases, as with the number 7 (probably because it is one of the first ten digits), an attempt is made to approximate its reciprocal.

Of more interest, however, is the use of a procedure to find reciprocals of regular numbers not contained in the standard table, "regular" implying a number composed of the same prime factors as 60. (60 = 2X2X3X5). Let c be a number included in the standard table. c = a + b, where a has a reciprocal "a" listed in the standard table. a + b = a(1 + b/a), so the reciprocal c = a + b - a(1 + b/a) = a(1 + b/a). If (1 + b/a) is not included in the standard, then treat it as a new "c", and continue the process till an answer is reached. Thus the reciprocal $c_n = \overline{a} \, \overline{a}_1 \, \overline{a}_2 \dots \overline{a}_n \, (1 + \overline{a}_n \, b_n)$, where a through a_n and $(1 + \overline{a}_n b_n)$ have reciprocals found in the standard table.² A text confirming this procedure is in the University Museum, CBS 1215³. The tablet consists of numbers arranged in separate blocks, each block representing the process of finding a reciprocal for a given number.

Taking 2.5 = c, the other numbers fall into place, for

$$12 = 0.5 = \overline{a}$$

 $25 = (1 + \overline{a} b)$
 $2.24 = (1 + \overline{a} b)$
and $28.48 = c = a(1 + \overline{a} b)$

The rest of the numbers in the block are results of finding the reciprocal c of (28,48), which is naturally (2,5). The rest of the tablet consists of doubling

- 1. Neugebauer, Exact Sciences, pg. 33.
- 2. Sachs, Journal of Cuneiform Studies, Vol. 1, Babylonian Mathematical Texts 1, pg. 224.
- 3. Sachs, Journal of Cuneiform Studies, Vol. 1, pg. 230. The tablet was first published in Mathematical Cuneiform Texts with the commentary: "Numbers written in a disorderly manner within square fields are to be found on CBS 1215."

c = 2.5 and thus halving its reciprocal, (If c = 60, (2c) (c/2) = 60) but still along the same guidelines provided by the procedure.

The use of processes such as these points to a knowledge of algebra on a higher level than simple multiplication and division. This is confirmed in Tablet 322 of the Plimpton Collection of Columbia University, which contains a listing of numbers derived from the formula $a^2 + b^2 = c^2$, known to us thru geometry as the Pythagorean theorem. However, the numbers presented, a, c, and c^2/b^2 , are not taken from geometrical situations, but constructed algebraically from the standard table of reciprocals: $a = p^2 - q^2$, b = 2pq, and $c = p^2 + q^2$, where, p and q are from the standard table. Thus $a^2 + b^2 = (p^2 - q^2)^2 + (2pq)^2 = p^4 - 2p^2q^2 + q^4 + 4p^2q^2 = p^4 + 2p^2q^2 + q^4 = (p^2 + q^2)^2 = c^2$.

The use of approximations extended over a large area, but always had some algebraic principle behind it. Take the approximation of a square root, for instance. Let a_1 be the first approximation for a. Then $a/a_1 = b_1$ where b_1 will be another approximation. If a_1 is less than a, then b_1 is greater than a, and if a_1 is greater than a, a, a and if a_1 is greater than a, a, a and a and a and a and a betting $a_2 = \frac{1}{2}(a_1 + b_1)$ will bring a result closer to a, than both a_1 and a and a and a and a are considered as a and a and a are considered as a and a are considered as a and a are considered as a. Setting a and a are considered as a and a are considered as a and a are considered as a. Setting a and a are considered as a and a are considered as a and a are considered as a. Setting a and a are considered as a and

Another similar method involves finding $\sqrt{a^2 + b} = 1$. If our first approximation is a = 1, then $1^2/a = (a^2 + b)/a = b_1$. Then an answer will be found closer to I that a or b_1 , by letting $a_2 = (a_1 + b_1)/2 = a/2 + (a^2 + b)/2a = a + b/2a.^3$

The Babylonian concept of algebra is perhaps easiest seen in our first problem text containing a number of problems involving two unknowns, but ultimately all having the same answer. The first problem presents two simple equations xy = 10, 0 and (x + f(x,y)) = 35. xy = 10, 0 is kept fixed but by the end of the text the other equation has been expanded to this point:⁴

$$(3x + 2y)^2 + 2/13(4(x + y) - (1/2 + 1)(x + y)^2 + (x + y)^2) = 4,45,0$$

- 1. C. Boyer, A History of Mathematics, New York, 1968, pg. 39.
- 2. Boyer, A History of Mathematics, pg. 30.
- 3. ibid., pg. 31.
- 4. Sachs and Neugebauer, Mathematical Cuneiform Texts, pg. 116.

The answer is the same as that of the two simpler equations, x = 30 and y = 20. That the long complicated equation is reducible to a simple one is implied by the text.

It can be seen that most of the complex quadratic equations, which mark the highpoint of the Babylonian system, are easily reducible to or use simpler formulas, in their solutions. Boyer has stipulated that the quadratic problems can be reduced to three types for which there is a set method of solution:

- (1) $x^2 + px = q$
- (2) $x^2 = px + q$
- (3) $x^2 + q = px$

More complicated equations can be reduced to these formulas through substitution, multiplication, or additon and substraction. One problem asks for the solution of $11x^2 + 7x - 6 = 6$, 15. By multiplying through by 11, one obtains $(11x)^2 + 7(11x) = 1$, 8; 15, which is equivalent to (1). Boyer's third equation is related to that of Neugebauer's "normal form" which includes hundreds of problems essentially reducible to the pair: 1

$$x y = a$$
$$x + y = b$$

The solutions to this pair are the same as those of equation (3),

$$x^2 + a = bx$$

which gives x equivalent to two numbers, $b/2 + \sqrt{-(b/2)^2}$ a and $b/2 - \sqrt{(b/2)^2}$ a, because $(b/2)^2$ - a = (x + y)/2 and b/2 = (x + y)/2. Thus $x = (x + y)/2 + (x - y)/2 - b/2 + \sqrt{(b/2)^2}$ a and $y = (x + y)/2 - (x - y)/2 = b/2 - \sqrt{(b/2)^2}$ a. This is superb example of the method of addition and subtraction in simplifying the equation, a process used in the solution of geometrical texts as well.²

This brings us to the area of geometry and the problem texts which usually accompany the figures. However, it must be remembered that geometry for the Babylonians is highly dependent on algebra, and often serves only as a vehicle for illustrating some fact of algebra. It is not uncommon to see areas and lengths the answer to a question of earnings to be 2 + 3/4 men.

- 1. Neugebauer, Exact Sciences, pg. 41.
- 2. See Mathematical Cuneiform Texts, pg. 49.

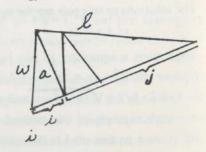
The first example consists of a tablet found at Tell Harmal. The first portion of the text proceeds as follows:

- (1) A triangle. 1, 0, is the length, 1, 0, 15 is the "long" length (the hypotenuse), 45 is the upper width.
- (2) 22, 0, 30 is the total area. Form 22, 0, 30 the total area 8, 0, 6 is the upper area (the area of the upper triangle).
- (3) 5, 0, 11; 2, 24 is the next (adjacent area. 3, 0, 19; 3, 56, 9, 36 is the third area.
- (4) (and) 5, 0, 53; 53, 39, 50, 24 is the lower area.
- (5) What is the upper length, the "segment" length, the lower length and the perpendicular?
- (6) When you perform the operation, take the reciprocal of 1, 0, the length, and multiply it by 45.
 - (7) -(8); 45 you see (get). Multiply; 45 by 2 and 1; 30 you get. Multiply 1; 30 by 8, 0, 6, the upper area and you get 12, 0, 9. What is the square root of 12, 0, 9? 27 is the square root.
 - (8) 27 is the width of the upper triangle.1

If we reduce the process to our algebraic terminology, we have:

$$1 = 1, 0 \quad w = 45 \quad i \& j = 1, 0, 15$$

 $(6) \rightarrow (7) \rightarrow (8) \rightarrow (9)$



The method used here implies knowledge of three principles; similar triangles, or

 T. Baqir, <u>Stimer</u> VI (1950), An Important Mathematical Problem Text from Tell Harmal, pg. 43. that w/l = i/a, since their proportions are equivalent, and knowledge of how to calculate the area of a right triangle, namely, area = 1/2 ab, where a is the altitude and b the width. There is also an awareness that a perpendicular dropped to the hypotenuse, forms two triangles both similar to the original, or that i/a = a/j = w/l.

Another text is reminiscent of high school geometry problems. It goes as follows:

- "A reed stands against a wall. If I go down
- 3 yards, (at top), the (lower) end slides away
- 9 yards. How long is the reed, how high the wall?"

Indeed, the problem even goes further to make use of the Pythagorean Theorem, calculating h as $\sqrt{d^2-b^2}$. It might also be noticed that answer is reached by addition and subtraction ((d + h) + (d - h)) a type we have seen earlier in solution of quadratic equations.

The contributions of Babylonian mathematics toward Greek thought thus include the theorems of Pythagoras, similar triangle, and the computations of areas for certain figures. Of more importance, however, were their algebraic concepts, highlighted by the quadratic equation, which, along with their notational system paved the way toward making mathematics a discourse in its own right, and aloof from the practical problems of day to day existence.

- Thomas Holtz

CRUDI CIELI

CHARACTERS

Ramon, an anchovy
Doris, a leaf of Romaine lettuce
Tweedledum and Tweedledee, two croutons
Albumia, a coddled egg
Grated Parmesan cheese, the chorus

Fork

Scene: In a wooden salad bowl which has been rubbed vigorously with a clove of garlic, Ramon lies langorously inside one of Doris' folds.

Tweedledum and Tweedledee stand off to the side. Albumia lies

unobtrusively near Doris' head. The chorus is everywhere.

Ramon: Was it good for you, darling?

Doris: Super. I always enjoy our evenings together.

Ramon: Why must you be so impersonal? You know I only live to flavor you with the violence of my aroma and the pungency of my taste.

Doris: Yeah, well, tonight I hardly even noticed that you were a fish.

Ramon: Well, I'm not a practicing fish.

Doris: Sorry, sweetheart, if your parents were both fish, you're a fish even if you don't like to admit it.

Ramon: But it's been years since I've been to school.

Albumia: (her speech is punctuated by gurgling noises) Ggggggg. You two make me sick. Why don't you just enjoy love without overanalyzing your emotions to death? Ggggggg.

Doris: Like you almost know. When was the last time you were on top of a piece of toast?

Tweedledum: Did you hear that?

Tweedledee: Oh, yes. La la! A piece of toast. How clever. As if the only place an egg like her belongs is on top of a piece of toast. Why, on an English muffin, she'd be fan-TAS-tic.

Albumia: Sweetheart, I've been on top of so many English muffins, it would make your head swim. Ggggggg.

Tweedledum: Do you believe in reincarnation, then?



Ramon: Wait, swim, swim. That reminds me of my pre-can days. You should

have seen me. How beautiful I was as I glid through the icy blue

water of the Agean Sea.

Doris: There is no such thing as beauty. The only things that even come close

to beauty are the inner thighs of newborn babies.

Albumia: How boring it is to always associate with the same people. How I

would love to find an obscure little cafe where I could sit and watch the world stroll by. . .toothless old men, saggy breasted old women,

all the members of the international jet set.

Doris: If you're leaving, I'll call you a spoon.

Ramon: Are you aware that when you make sarcastic remarks you lose your

feminine identity?

Tweedledum: So harsh!

Tweedledee: So cruel!

Tweedledum: How divine to have each other.

Tweedledee: It takes the pressure off.

Doris: (she stands up. Ramon slips to the floor, i.e. the bottom of the bowl,

where he wriggles over nearer to Albumia.) Ah, me. Would anyone

like to get up a game of bridge? (She does calisthenics.)

Ramon: You're mind is rotting away by degrees. The last New York Times

Crossword puzzle you started is sitting one-third finished in my night-

table drawer.

Albumia: Ggggggg. Get it out precious. I'm so good at those things. It gives one a

chance to show off one's breeding. (She puts on bifocals and produces

two sharpened pencils.) I asked you to fetch it for me, green queen of

pig people.

Doris: Don't order me around, gelatinous mass. You know a new Playtex

foundation garment might do wonders for you. You mus'be jelly

'cause jam don'shake like dat.

Albumia: Ggggggg. Bitch.

Tweedledum: So hostile.

Tweedledee: So profane.

Tweedledum: Mother would never have said anything like that.

Tweedledee: Well, mother didn't have a mouth, don't forget.

Tweedledum: Yes, all she had after that frightful accident was a Kyrie lesion.

Albumia: Ggggggg. Just direct me to the night-table. (She oozes off in search of

the puzzle.) Maybe I'll even find some prophylactis, though what good they would do an old buzzard like me, I'll never know. Youth, where

are thy juices?

Chorus: "Don Giovanni! Sei qui mostro! Fellon!

Nido d'inganni!"

Ramon: It seems to me that just after a man opens up his soul to a woman,

she sprints away in search of a less transparent lover. Women love to be hurt. Oh, Doris, chilled Aphrodite of this wooden world, rubbed with lemon juice until you snap and glisten, if only you would let yourself

love me.

Doris: (turning her head) Would you mind breathing in another direction.

Ramon: Your very tongue lacerates me to the point of festration.

Chorus: "Sentite. Lasciatemi parlar!

Manco male che lo conosce bene."

(Albumia appears with the Times' puzzle.)

Tweedledee: Oh, no, now she is about to shame us all.

Tweedledum: I'm never ashamed. I'm far too self-confident. Let everyone else be

ashamed of themselves. Why should I waste my mental effort? I don't

have too much left anyway. It all broke off in the frying pan.

Ramon: Ah, if only I had your sang froid.

Tweedledum: It would never fit you.

Albumia: Ggggggg. Six letter word meaning to brand, in Oslo.

Doris: (breathing heavily in the direction of the two croutons) You know, I

never realized how excruciatingly attractive you two are.

Tweedledum: Madame, are you addressing us?

Ramon: Wretch.

Albumia: Ggggggg. No, it can't be "wretch." It doesn't fit.

Ramon: Aaaaaaugh. A migraine is attacking.

Chorus: "Dei! Leporello!

Che inganno e questo!

Stupido resto! Che mai sara?" Ramon: I'm being ignored.

Doris: Only a bore would even utter such a phrase. You wear your insecurity

like an attack of hives. You don't find Leonard Bernstein complaining that I ignore him and I've not written to him since West Side Story.

Albumia: Ggggggg. An eight letter word beginning with R meaning an alligator

wrestler's malady.

Tweedledum: What about jaundice?

Albumia: Vile cur! Why would an alligator wrestler get jaundiced any more

frequently than the rest of us?

Doris: Haven't any of you mincemeats considered the fact that jaundice

begins with a J?

Ramon: Jaundice begins with a poor diet. Besides, I grow yellowed at the

agonizing thought of being unloved.

Albumia: It's a feeling we all have to get used to, Ducky, or none of us would be

able to exist in this mucky world. (She throws her magazine to the floor and sings, "People. . .people who need people etc." Ggggggg.

Tweedledee: Oh, cursed falsity.

Tweedledum: Piteous error.

Doris: You know, I was going to study today and now the whole morning is

wasted.

Albumia: Oh give up, aging horse chestnut. What good is a high school diploma

these days?

Doris: Lumpy faced frog-woman! I'm going for my M.B.A. in financial

consulting.

Ramon: I bulge with desire for my Wharton woman.

Doris: (She kicks Ramon. He skitters across the bowl and folds up against the

wall. He is limp and gasping for breath.) Now you no longer bulge with anything, hollow-chested hyena. I'll teach you to call me a wart woman. I don't have a wart on me that you didn't put there.

Tweedledum: Should we be listening?

Tweedledee: But can we tear ourselves away? (They hold hands and giggle.)

Chorus: "Amici miei, dopo eccessi si enorme,

Dubitar non possiam che Don Giovanni non sia L'empio uccisore del padre di Donn' Anna." Albumia: A three letter word for adze. A four letter word for scald. A French soubrette.

(A faint drum roll is heard in the distance. Gradual crescendo. A breeze starts blowing.)

Doris: (her face contorted with fear) Fear contorts my face as I behold a supernatural occurence. (The breeze has become a stiff gale. The drum is louder.)

(A huge fork is lowered from the ceiling and descends into the bowl. It spears Doris first as she is pulled slowly out of the bowl.)

Doris: My M.B.A! All is lost. To be eaten before I am ready to go - the ultimate horror.

Tweedledum and Tweedledee: (embracing and shuddering) Who next? Who next?

Doris: (her cries grow fainter as she ascends) Goodbye, dear friends. Forgive my harsh tongue, but heed all the important advice I've given out. Albumia, you pock-marked phlegm fatale, I've always been an admirer of your perverse courage. (She disappears.)

Ramon: (laughing scornfully) Funny, but I feel strangely unmoved.

Albumia: Ggggggg. You'll move soon, impotent refuse. You are about to go. (The fork spears Ramon.)

Ramon: Ooooh.

Chorus: "Ferma, perfido, ferma."

Ramon: (as he rises) Albumia, take good care of my soul records. And sell my BMW. (Sobbing, he disappears.)

Albumia: How fearful I am for my own life! Ggggggg. (She clutches her puzzle to her breast.) I never really thought it would come to this. Some by fire, some by water. Some by starvation, some by disease. But, eaten at a dinner party? (She laughs, then panics) I've no time. I must hide. If only I had my grandmother's sponge cake recipe. Oh, I'll just spread. That always works. (She sinks to the floor and assumes a flatter, more liquified appearance.) Ggggggg. I'm melting!

Tweedledum: Oh, jolly good. You tried to keep Dorothy and Toto from reaching Oz.

Tweedledee: Reactionary rumor-monger!

Tweedledum: Anarchist!

(The fork appears suddenly and spears Tweedledum.)

Tweedledum: My God! I'm not ready. Oh please God, spare my life! Why me!

Take someone else, God.

Tweedledee: I never know you to be religious.

Tweedledum: Only in moments of extreme fear.

(The fork hesitates in mid-air, then plunges downward for Tweedledee. Both are lifted abruptly.)

Together: Whee! So painless when together. (Both start crying) Albumia! Here we go! What will it be like? Will we have a new consciousness? Will we ever play handball again? (The disappear.)

Albumia: Ggggggg. I just may be saved. I'll just pretend I'm not the least upset. (She whistles, "Shine on Harvest Moon." She picks up her puzzle again.)

Osteopath's hobby.

(The fork comes flying into the bowl, and lands, lifelessly, on top of Albumia.)

Albumia: (Chocking) Gack, gack. Get off me. (There is of course no response.)
Oh, no response, eh? Gack! Gack! Am I to die this ignoble death, suffocated under a lifeless fork! Oh, such an untimely demise. I hope I get another chance some day. (She begins to laugh hysterically.) I'm going! I'm fading! Give my regards to Broadway! Ggggggg. A six letter word for futility. A seven letter word for death.

Chorus: Questo e il fin di chi fa mal, E de' perfidi la morte Alla vita e sempre ugual!"

(A strong wind blows into the bowl. The chorus scatters all over the visible universe.)

(Table cloth)

- Andria Thal

NEW SOCIAL RESPONSIBILITIES OF THE HUMANITIES

When we talk about the social responsibilities of the humanities, we are likely to mean one of two things. We may be thinking of the humanities as a discipline or group of disciplines, and have in mind the social role which these institutions engaged in humane scholarship - - university departments, scholarly organizations, collectives of students and scholars. It is this latter meaning that lies behind most of the recent discussions of the social responsibilities of the humanities, though frequently arguers for and against activism fail to recognize the distinction between the discipline itself and the institutions which represent it. Thus the need to maintain scholarly objectivity is erroneously used as an argument against any kind of social action at all or, conversely, we are told that scholarly objectivity gets in the way: that we must live like Milton or like Shakespeare, not merely study and seek to understand their writings. But the distinction between the pursuit of the discipline and the organization of scholars is extremely important and we must keep it always in mind. My title might seem to suggest an interest in the latter area - - the institutions. I might try to map out a program of social action, or the limits of social action, proper to those engaged in the study of the humanities. But a great deal has been said about this already, often by people better qualified than myself to say it. I prefer to concentrate on what is really a more fundamental question - - the inherent social role of the humanities, not the role of the institutions they have given rise to. I hope to explain to you how the humanities play a crucial role in our social consciousness, and why they will prove essential to our spiritual and moral well-being in the future.

I should like to begin with two stories whose relevance will become clear as my talk proceeds. The first concerns the country of Flatland, the invention of a nineteenth-century schoolmaster named Edwin A. Abbott, and the subject of a little book now fortunately becoming popular again. 1 Flatland is an imaginary country inhabited by two-dimensional beings, without height or depth, who consequently have the appearance of geometrical shapes. Its customs and institutions are described in Abbott's book by a member of its professional class, a square. This square, however, has fallen (if that is the right word) on difficult times, the consequence of a visit by a mysterious stranger of uncertain shape, who seems to have the ability to appear and disappear at will. This visitor in fact belongs to a totally different realm of existence. He is a sphere, and his home is Spaceland. He takes Square on a visit to his country, and Square finds this threedimensional world to be a place of great and incredible beauty. Overwhelmed by his experience, he returns to his own people to tell them of his amazing discovery. They, lacking even the ability to conceive of three dimensions, immediately imprison him as a liar and a mountebank.

My second story is drawn from Plato. In the Phaedrus Socrates recounts the

following myth:

At Naucratis, in Egypt, was one of the ancient gods of that country, the one whose sacred bird is called the ibis, and the name of the god himself was Theuth. He it was who invented numbers and arithmetic and geometry and astronomy, also draughts and dice, and, most important of all, letters. Now the king of all Egypt at that time was the god Thamus, who lived in a great city of the upper regions, which the Greeks call the Egyptian Thebes, and they called the god himself Ammon. To him came Theuth to show his inventions, saying that they ought to be imparted to the other Egyptians. But Thamus asked what use there was in each, and as Theuth enumerated their uses, expressed praise or blame of the various arts which it would take too long to repeat; but when they came to letters, "This invention, O king," said Theuth, "will make the Egyptians wiser and will improve their memories; for it is an elixir of memory and wisdom that I have discovered." But Thamus replied, "Most ingenious Theuth, one man has the ability to beget arts, but the ability to judge of their usefulness or harmfulness to their users belongs to another; and now you, who are the father of letters have been led by your affection to ascribe to them the power the opposite of that which they really possess. For this invention willl produce forgetfulness in the minds of those who learn to use it, because they will not practice their memory. Their trust in writing, produced by external characters which are not part of themselves will discourage the use of their own memory within them. You have invented an elixir not of memory but of reminding; and you offer your pupils the appearance of wisdom, not true wisdom, for they will read many things without instruction and will therefore seem to know many things, when they are for the most part ignorant and hard to get along with, since they are not wise, but only appear wise.2

Now clearly my first story, of Flatland, follows the general lineaments of Plato's famous simile of the Cave, in the Republic. The square, like the philosopher who has seen truth, suffers scorn and disbelief when he seeks to explain his vision to his fellows; and the Flatlanders seem totally, even obstinately, content with their impoverished life of two dimensions, entirely unable or unwilling to understand our world with its greater richness and variety. Less immediately apparent, perhaps, is the fact that the story is also concerned with time. The only way in which the square is able to understand the existence of the sphere at all is in terms of his appearances and disappearances, and his shifting size as he passes through the two-dimensional plane of Flatland. What appears (to the sphere's way of thinking) as space, appears to the square as time because he can only conceive of the sphere's third dimension as a sequence of observations about his appearance.

This interest in time, never made totally explicit in Abbott's little book, but evident nevertheless, was of course typical of the period in which the story was written. Time was particularly troublesome to the Victorians.³ In fact, it has been a subject of fascination and terror to mankind in every age, and he is con-

stantly looking for ways of talking about it, controlling it, and studying it. I will go so far as to suggest that it is one of the principal functions of the present-day humanities to bring us to terms with time, and to enrich our understanding of this hidden dimension of human nature. The humanities are the study of man's records, of man as a thinking and feeling animal, and their special province is chronology.⁴

One way in which we make sense of the endless and terrifying sequence of seconds and minutes and hours is in terms of generation. Nature constantly renews itself, constantly makes new beginnings to match its endings, its forward movement matched by cyclical returns. Another way in which we cope with time is by inventing fictional endings, by writing stories that have beginnings and ends and so contain and give shape to time,⁵ and which take on a form which, by containing time, seems to deny its power to destroy. Shakespeare's sonnets, characteristically, offer these two answers to time as alternatives:

Those hours that with gentle work did frame
The lovely gaze where every eye doth dwell
Will play the tyrants to the very same
And that unfair which fairly doth excel;
For never-resting time leads summer on
To hideous winter and confounds him there. (Sonnet 5)

The answer to such destruction is contained in the very terms that the speaker uses — the cycle of generation. The young man addressed in the poem must beget progeny and so defeat time. On other occasions in the Sonnets, it is art that provides a solution: the work of art, given form by the poet's inspiration, will outlive civilizations and individual lives:

Not marble nor the gilded monuments Of princes shall outlive this pow'rful rime, But you shall shine more bright in these contents Than unswept stone, besmeared with sluttish time. (55)

Literature, art, then formalizes time and controls it.

If literature provides answers, so, too, does religion. The Bible contains within its pages not merely the narrative of a single people or a single series of events, but time itself, from man's initial purity in the Garden of Eden to the apocalyptic Book of Revelation, when time itself ends in the Final Judgment and the conclusion of human history. The Garden of Eden is only one of the many myths of origin which peoples invent to account for their past. Related to it is, of course, the Greek myth of the ages of man, best known to us from passages in the Greek Hesiod and the Latin Ovid, in which man passes through a series of ages each slightly worse than the previous one, from gold, to silver, to bronze, to iron. The myth of the Golden Age has proved a constant source of inspiration to writers in the classical and western tradition. United with the Eden myth, and

with a veneration of shepherds and shepherd life, part of whose origin is to be found in the figure of Abel (Cain, you remember, tilled the soil — already a sign of a falling off in virture), it leads directly to visions of a pastoral arcadia. In such happy fictions shepherds pipe beneath cloudless skies, sing songs to shepherdesses, and live in constant rural contentment. It is the myth of nostalgia, if you like, and it is therefore hardly surprising that it is associated with childhood — for example in the poetry of Wordsworth and Dylan Thomas. One version of pastoral we constantly see around us in those expensive clothes imported from faraway and rural places, like Greece, or fashioned with consummate art by designers who wish to appear artless — clothes which take their inspiration from peasant garb but which go to cover the backs of patricians.⁷

At the other end of the Bible stands prophecy, the apocalyptic vision of the end of history. The Church Fathers, particularly Augustine, saw the vision of the City of God as the final culminating point of human existence, coming at the end of a series of six historical eras and ushering in the final stasis of the eternal sabbath which lies outside time itself. In fact the Holy City would not be a historical phenomenon exactly, but rather a gathering-in of history: its streets and squares would turn time into space, so that it became an emblem of history. Later writers elaborated upon Augustine's picture of man's future history, and Joachim of Fiore went so far as to define a Third Dispensation before the final end of history, thus opening the way to all kinds of chiliastic heresies, prophesies of a new Messiah who would usher in a new historical era.8

Apocalypse, of course, denies that history is a simple continuum, since it fixes its end, and all events can be interpreted in terms of that end, as indeed they were by Judeo-Christian writers. This gives special significance to time, and it moves history from the past to the future. Whereas pastoral denies the importance of history, apocalypse vests it with significance. The one is apt to lull us into a false security, the other is likely to lead to strange excesses, a kind of constant anticipation of the climax of all events. But both tendencies, both myths, are a part of our psychological make-up.

My second story concerned Memory. The Greeks had a legend that poetry was invented by Mnemosyne, the goddess of memory — a myth which serves to emphasize that literature (and art in general) is a repository of human experience, that it preserves the past in the present. Of course, the Greeks had in mind oral poetry, which was not recorded in documents external to the poet himself, but was stored in his mind, the common possession and product of his people. This sense of tradition is in its way still conserved today. Though we now have writing, and books, we are still very aware of literary and historical tradition. Sometimes it seems a legacy somehow suspect, a kind of Trojan Horse wheeled into the ordered city of the social planners. But we should distinguish, I think, between tradition, which is something living and changing, and authority, which often seeks to march under the banner of tradition but is in fact something without life,

unadaptable.9

Books, as the god Thamus pointed out, are not memory so much as memory systems, aids to our psychological processes but not in themselves part of our organic development. They are monuments, records of single points in time, yet divorced from time, and from ourselves. As long as poetry is an oral art, eternity through art and eternity through generation are the same thing; Shakespeare's sonnets signal a separation with the introduction of a further possibility, the written word. The poet's farewell to his newly written book, a commonplace of medieval and Renaissance poems and collections of poems, is an acknowledgment that books exist whether people do or not.

The Bible, too, is a kind of memory system, containing within its pages the whole of time. The magnificent philosophical systems of Aquinas or Descartes are also in their way attempts to order and categorize the whole of human experience into a vast and comprehensive system of which we can ask questions about everything and expect to receive answers. Aquinas's Summa Theologica belongs in the great medieval encyclopedic or hexaemeral tradition. If it took God six days to create the world, and if human history goes through six eras, it follows that the whole of earthly experience can be contained in a six-part system; this became the basic structure not only for medieval historians but also for philosophers and all learned men. 10

In fact the hexaemeral tradition lasted well into the Renaissance and even into the seventeenth century. In an era in which the huge allegories of Milton and Spenser sought to provide an explanation of man's origins and his final destiny, it is perhaps not surprising to find works like Tommaso Campanella's City of the Sun, which describes an imaginary city consisting of six circles of houses, on which are painted all the stones, all the minerals, all the animals, all the birds, all the geometrical shapes, all the natural phenomena known to man. The city, in fact, is a vast memory system. If a man knows the city perfectly, he knows all that there is to know. 11

This impulse to build perfect systems, which will include all knowledge or all experience, is fundamental to the utopian tradition. Just how one defines the word "utopia" will depend a great deal on personal preference and the exigencies of argument, but most works which announce themselves to be utopias deal with systems of social organization, the sort of thing with which much of Flatland, fanciful though it is, is taken up. Here we can make a useful distinction between pastoral (or the Golden Age) and utopia. Whereas pastoral involves rural contentment, without laws and restrictions and the need to do a day's work, utopia is generally urban-oriented. It tends to emphasize cities, equitable legal systems, and communal work (though of course work not in the least arduous). While pastorals, of course, set no store by history, utopias seem almost obsessed with historical explanation. More's Utopia (1516) tells us how its society came to be set up; Bacon's New Atlantis does the same; the strange countries which Gulliver

visits have histories which are described sometimes in detail; William Morris's News from Nowhere explains how the perfect society came to be established; so does Edward Bellamy's Looking Backward. In our own day, Skinner's Walden Two describes the history of the colony as well as its present, and the anti-utopian Nineteen Eighty-Four devotes a good deal of attention to history. If pastoral is the type of the Garden of Eden, utopia is the type of the City of God, the summation of human history. Pastoral is past-oriented, utopia is future-oriented. 12

Utopias also seem to be obsessed with language. More gives samples of the Utopians' poetry; Bacon mentions the Atlantans' language; Gulliver boasts constantly of his linguistic ability; Orwell's Newspeak is one of the most important and terrifying aspects of his novel. Of course, languages themselves are systems, not always perfect ones, perhaps because they are the repositories of the irregularities of history as well as the regularities of syntax. Given our human propensity for for the invention of systems, it would be surprising indeed if men had not invented artificial languages, and of course they have. More interesting for our purposes than the nineteenth-century inventions like Esperanto, still going strong today, are those of the seventeenth century, the so-called philosophical languages constructed by such men as John Wilkins, first secretary of the Royal Society, or Sir Thomas Urquhart, Scottish man of letters, and dabbled in by Descartes and Newton. These languages are based not on existing languages, but on a division of human experience into a fixed number of areas, and subdivisions and sub-subdivisions, each one designated by some sound or combination of sounds. They function, in fact rather like a linguistic Dewey Decimal System.13 I do not know whether anyone ever learned one of these languages, but I rather doubt it. Their strict logicality does not correspond at all to the irregular complexities of human thought. In fact, they were even sometimes regarded as providing the possibility of improving thought processes, and Leibnitz maintained that a man who could master a strictly logical language would automatically think logically - a kind of linguistic escape from the problem of Original Sin, and the other side of the coin from Newspeak.

But utopias and utopian schemes, apart from providing interesting variations of memory systems, also represent a major heresy against which we must constantly be on our guard, and which is directly bound up with our desire to define the social role of the humanities. In a sense, utopian schemes are like works of art; they have an aesthetic symmetry, a completeness; and they control time, just as a work of art controls time. But the power of the work of art lies, in a sense, in its very artificiality; it is a metaphor, a form, for experience. The same is true of the utopian system: it is a working model, a perfect pattern. If we try to turn the work of art into reality, we destroy the metaphor; if we try to make the utopia real, we must either modify and dilute it or sacrifice the freedom and individuality of those upon whom the utopia is imposed. Systems, in other works, are metaphors for life, not life itself. Books are metaphors, not life. We can draw strength from

them but we must never abandon our awareness of the flow of time over our lives, however unsettling and fearsome this process may sometimes seem to be.

The most disquieting feature of utopian schemes is that they are not manifestations of the ongoing processes of history but rather systems which arrest history in a kind of perfect present. What gives history significance in a utopian novel is the existence of the utopia itself, the culminating point of the history which is there described. If there is time at all in utopia, it is a new time: just as the coming of Christ began our own era at the year one, so various chiliastic sects have started history all over again by establishing a new calendar. The Swedenborgians come to mind in this connection. Their founder, Emanuel Swedenborg, declared that in 1757 the old Church was destroyed and a new era began. The indefatigable Goodwyn Barmby, one of the most interesting of nineteenth-century practical utopians, started a new era in 1841, with the founding of his Moreville Communitorium. The year was designated 1 N.D. Followers of Robert Owen, who established a colony at Tytherly, in Hampshire, beat him by two years: they began a new calendar on 1 October 1839, the date they took over their land.14

The colonists of Tytherly proudly inscribed the new date on the fine building which they erected on the site. It bore the letters C.M., "Commencement of the Millennium."

Hardly surprising, architecture is often an important means of expression for the utopian ideal. ¹⁵ It demonstrates the twin concerns of so many utopian thinkers — system and environment. Robert Owen, through the building of New Lanark, sought not only to raise the standard of living but also improve the moral welfare of his workers; Charles Fourier made architecture central to his schemes for socialistic "phalanxes"; and the various projects of Ruslin and his followers, and of Ebenezer Howard and his, were based on the proper harmony of architecture and design.

But clearly architecture may provide not only liberation (as in New Lanark, or Letchworth Garden City) but also restriction. The grand vistas of Renaissance city planning perhaps pleased the eye of the observer but they restricted his freedom of movement as haphazard medieval planning had never done. The gargantuan architectural schemes of Hitler's planner, Albert Speer, captured exactly the apocalyptic spirit of the Third Reich — not accidentally the third, either, since it represented to the German Fascists a New Dispensation, a new millennium—a twentieth-century reappearance of the prophesies of Joachim of Fiore. Reminiscent in style and perhaps in spirit is the Stalinist architecture which did reach construction, like Moscow's University (which I have not seen) and Warsaw's Peace Palace (which I have).

New architecture, new chronologies. . . Utopian thinking all too often aims at the erasure of the past or its assimilation into a perfect and unchanging present. In their zeal to make the system perfect, utopian planners often ignore the needs of

the individual or, as in Stalin's Russia, show his insignificance by offering him no place in their plans. Their systems are non-chronological, a kind of horizontal organization which takes no account of the past and which, by definition, has no need of the future because it has already arrived. They are authoritarian, repressive and, in their proclamation of new beginnings, insanely unresponsive to the gradual growth of the personality of the individual. This latent authoritarianism, as readers of Nordhoff or Noyes can testify, was frequently the downfall of the American utopian colonies; ¹⁷ and the lack of respect for individuals is perhaps one reason why good utopian novels are so rare. But while these American colonists had submitted willingly to the lopping off of their past lives, Hitler's subjects were not always so fortunate. German society as a whole revealed the symptoms of hysteria which we associate in the individual with radical dislocation of personality.

Utopian systems are based above all on the assumption that if all men are reasonable they will agree, since there is only one reason, only one logic. If this is so, then their passions too will be satisfied. This is the opposite of the pastoral pattern, though it ultimately comes to the same thing, since pastoral is based upon fulfillment of the passions, which then turn out to be in accord with reason. Both views, of course, are mere fictions, and we should remember that they are fictions. Men never will be reasonable, and only a contempt for process, for the constant shifting and kinesis of human society, for history itself, can lead men to seek to create such fictions in reality here on earth. True social responsibility involves a careful picking of one's way between escape to pastoral inactivity and zeal for authoritarian system. It is an infinitely difficult task, and of course we are all too often vicarious utopians ourselves. It is no accident, for example, that many students of English are happier with the broad streets and avenues of Northrop Frye's theory of literature than they are with the accumulated accidents and haphazard structures of literary history. But while we need models for time models of all kinds, including Frye's - we must not allow them to tyrannize over us.18

The story of Flatland, and the story of Theuth and Thamis, both teach us lessons about the nature of tyranny and the need to resist it. Flatland, in its lighthearted way, tells us that men believe only what they can see, that they suppress and destroy prophesy. In the simile of the cave, model for Abbott's book, Plato's mystic met similar incomprehension from his fellows. Arnold Toynbee has pointed out that the most difficult part of mysticism, and socially the most essential, is not the withdrawal into the vision but the return — the return to earth, with the vision of perfection in our hearts and minds, and its translation into action. ¹⁹ The tyranny which Thamis refers to is the tyranny of words. He points out to us that books and writing are systems, not men, and that humanity, above all the human capacity to remember, to express his past through his present, is far more important than the written word. At best, books and documents assist us in our efforts to understand: they must not become ends in them-

selves. When they do so, they become authorities, not resources, and they limit thought and action rather than expanding them.²⁰

It is clear, then, that the proper practise of study and the proper understanding of humane learning are very difficult and very important. Today we are faced with a reverence for system and a willingness to sacrifice the individual to the collective which must be understood in order to be resisted. I hesitate to call this a new threat: it has always been with us. One of its most eloquent denouncers was Bertrand Russell, who, some twenty years ago, declared:

People do not always remember that politics, economics, and social organization generally, belong in the realm of means, not ends. Our political and social thinking is prone to what may be called the "administrator's fallacy, "by which I mean the habit of looking upon a society as a systematic whole, of a sort that is thought good if it is pleasant to contemplate as a model of order, a planned organism with parts neatly dovetailed into each other. But a society does not, or at least should not, exist to satisfy an external survey, but to bring a good life to the individuals who compose it.21

Most of us, I think, will acknowledge the existence of the threat, and that fact is in itself encouraging. But it is more difficult to define it. Partly, it is the old confusion between art and life, and unawareness of the nature of metaphor. Partly it is a fear of time, which manifests itself as a contempt for the past and a disregard for the future, a kind of crazy delight in synchronicity.

In one of the most interesting of recent studies of utopianism Robert Boguslaw has shown us how the computer, man's newest memory system, is peculiarly adaptable to utopian dreams.²² It is more complex, or more responsive than books or libraries, but what Thamis said of writing applies with even greater force to the computer and all other kinds of mechanical memory. They are pieces of equipment, not substitutes for human memory. I am not suggesting that computers are evil, but I am suggesting that the evil of men who operate them may seem more seductive and more convincing when it is aided by the plausibility of objective machines and when it comes to us with the aesthetic beauty of symmetrical system. The computer is constantly likely to shift from the role of helpmeet to the role of dictator, and it makes plausible the myth of collective power which is the mark of all totalitarian societies and a constant threat to what is left of our freedom. Noam Chomsky has recently provided us with a disturbing picture of mechanized social science gone mad.²³ I find it especially disturbing that these pseudo-scientific confusions of ends and means emanate from, or are associated with, a pentagon, a self-contained architectural form which, like its inhabitants, owes no allegiance to anyone or anything.

If anything makes us human, it is surely our yesterdays and tomorrows, those elements of ourselves which, while part of our personality, are yet beyond the scope of systems men. At least they will stay beyond the scope of the

systems men as long as we keep memory and hope alive. This is why history today is so desperately important, and there are at least indications that many people feel it to be so, the most recent indication of such an interest being the movement towards black history. Staughton Lynd, in that interesting collection of essays by a number of semi-radical intellectuals, The Dissenting Academy, 24 defends the study of history because it provides models for the present. Of course, historians have long since abandoned any notion that the objective recording of the past is a realizable ideal, or even a useful goal, but if, writes Lynd, "history, like a mountain, can be viewed from many different standpoints all equally 'objective' perhaps it makes sense to approach it from the direction that has most personal meaning to the observer" (pp. 96-97). But with relativity firmly established as the only principle, or rather lack of principle, in the study of history, one requires a morethan-average confidence in oneself to continue its pursuit. "As one considerably alienated from America's present, I wanted to know if there were men in the American past in whom I could believe," Lynd remarks. (I have always been bothered by this term "alienation," since it is so often used to describe not a sense of hopelessness, but rather a feeling of community with all those other selfdeclared alienatees who today populate the American scene. It is surely the society that is alienated, not those who have the perception to see its hollowness.)

If Staughton Lynd is able to use history to define his alienation, for many others it seems a less wholesome discipline. Traditionally, it has been used not to upset, but to underpin, the status quo. Especially in this country, acutely aware of its newness even today, history and myth have been found or created to explain and justify the present. The early colonists called America a Garden of Eden, thereby creating a myth of origins and identifying the Serpent with the American Indian. Today, the myth of progress if being replaced among thinking Americans, and some unthinking ones, by the notion that the country is perpetually on the brink of apocalypse. If the apocalypse comes, it will be America's self-willed and posthumous declaration that though it did not begin history at least it can end it. I fear the American apocalypse, but I try hard not to believe in it.

The combined desire to create an American cultural tradition and to justify present failures in the light of past successes led America's leaders to provide their sons and daughters with a "liberal education," a pedagogical concept which this country has made peculiarly its own. I do not, as some people do, fear the content of a liberal education, as somehow needlessly traditionalist and rather authoritarian, but the term itself (a myth rooted in the minds of a few teachers, many parents, and not a few uneasy or protesting students) leads one into troublesome and unnecessary logical corners. Somehow a liberal education is considered "good for the country." In fact, as one reads Jencks and Riesman, it rises almost to the dimensions of a pastoral myth, to which the students of today are longing to return. American pastoral myth, to which the students of today are longing to return. American pastoral myth, to which the students of today are longing to return. American pastoral myth, to which the students of today are longing to return. American pastoral myth, to which the students of today are longing to return. American pastoral myth, to which the students of today are longing to return. American pastoral myth, to which seems to reflect an old-fashioned virtue perhaps as chimerical as arcadia.

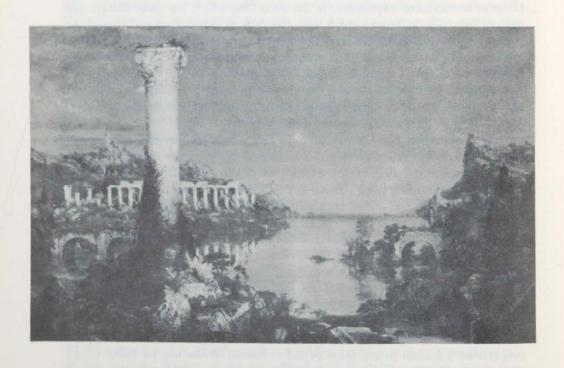
Though most defenses of liberal education insist that it is not practical, neither is it intended to be, they generally end by saying that it is somehow fundamental to American democracy. The mode of argument immediately raises questions about the purpose of such an education, since these are the terms which its defenders use. There are many, on both sides, who accept the truth of the assertion. It is precisely because of the state of American democracy that many students shun the liberalization of a liberal education. On the other hand, we find teachers of literature insisting that literature makes good men, and teachers of history declaring that the past gives us lessons for the present. But it is really the tyranny of terminology that has cast us all in our various roles. Liberal education is nothing more than a concept, and it may well be that it has always had more significance in the utterance than in the execution. To quote the god Thamis, "Your pupils will read many things without instruction and will therefore seem to know many things, when they are for the most part ignorant and hard to get along with, since they are not wise, but only appear wise." Liberal education, the Great Books of the Western World, is all too often a rather silly sham.

More important than the "uses of the past" 28 is the fact of its existence. History, accumulated experience, is the means by which we communicate and live our lives. The more we keep it alive, the more we understand and respect the present. I have little confidence in the assumption that the past can teach us to avoid mistakes in the present — an assumption which Staughton Lynd nevertheless seems to make; but I am quite certain that a short memory or no memory at all puts us at the mercy of those who would move us around, or shuffle us about, or line us up, or knock us down. Those who need proof of this should read I. F. Stone's Weekly, the only heaven-sent memory system I know.

It is important that we not ask that history teach us lessons, because our disillusionment will probably lead us to abandon not only the search for lessons but the pursuit of the study itself — a luxury we can ill afford. There is the constant danger that Staughton Lynd's mountain of history will transform itself into a mountain of mountain — that both ourselves and our past will seem not to have much significance.

In another age of self-doubt and uneasiness about the past, the American Romantic painter, Thomas Cole, painted a series of canvases, The Course of Empire, which showed just such a circumstance. The five paintings, which begin with the beginnings of civilization and end with its destruction, have only one pictorial element in common, a huge and craggy mountain, a lone rock perched on its summit, which appears as background for each of the five scenes.²⁹ History, in fact, sinks into oblivion. In our own age, when the study of the self has reached proportions unknown to any other period of human civilization, we either escape into the tiny detail and enormous design which is so remarkable a feature also of the Romantic sensibility, or we declare that we can only study history by making it, that history is merely a creative, and aesthetic act, and that is all.

This historical crisis has come upon us, as any of the dozens, probably hundreds, of books on the state of American academic life will tell one, because of authority. But behind this crisis there is actually a crisis of interpretation. The more we discover about the past, the less certain we are about its relevance to the present. Forced, nevertheless, by the American educational tradition, to show that it is relevant, we are reduced to inarticulateness. If all is relative, if our view of the past depends entirely on where we happen to station ourselves, why bother at all? In fact, the argument goes, interpretation may prove a dangerous thing. Writes Louis Kampf, with a kind of this-hurts-me-more-than-it-hurts-you sigh, "It may be necessary to illustrate that the quiet honesty of 'Tintern Abbey' hides a lie about the morality of nature; that our passive acceptance of the poem's seductive authority may keep us from seeing ourselves, the world and, indeed, 'Tintern Abbey' as they really are." 30



Thomas Cole: The Course of Empire - Desolation

The inability to make sense of the past, the feeling that it is somehow beside the point, the sense that history can teach us nothing, has driven many historians into defection and troubles scholars in other fields. Historians, driven by a desire to make their subject relevant, to adapt to changing circumstances without losing the old ideal, have turned history into a social science. Now, obliged to justify its new definition, they find they are unable to do so. Caught up in the urgency of events, they abandon the field altogether.³¹

In all this, history is the casualty. To ask that history teach us something, to ask that it be made relevant to the present moment in which we are living, is merely to feed our obsession with the present. It is a version of the synchronic fallacy which plays directly into the hands of those who could erase our individuality by flattening us into a system. We should remember that history is the accumulated monuments of past ages, it is a presence, not a teacher. It is a part of ourselves, and our consciousness. It is also, I might add, a part of our conscience.

Of course, history may offer us lessons, just as architecture, or artifacts, or literature, may provide some impulse for social action, or some awareness of our own situation. But we need only look around us to realize that Shakespeare, or Rembrandt, or Mozart don't make better men - except very occasionally. Equally frequently they breed a certain kind of intellectual and cultural arrogance, and sometimes they lead to the kind of glib and facile self-advertisement of which F. R. Leavis has proved so redoubtable an opponent.³² What is more, historical precedent may lead into the most bizarre and cruel circumstances. Just a day or two ago it was announced that American troops have for a while been fighting actions across the Cambodian border, and that such actions will be allowed to continue. But, the newspapers told us, this is nothing new: such operations have been going on for some while. This was supposed to reassure us. The fact that some illegal activity has been going on for years somehow invests it with respectability. The American people's respect for the status quo extends into the very details of their government's actions. Perhaps if people did not have such respect, the enormities would be avoided.

But no. While the past may be used to justify present failures, and present enormities, it is also our protection. It is surely no accident that the three great modern writers of anti-utopias (or dystopias, as they are called), Huxley, Zamiatin and Orwell, all stress the obliteration of the past as the essential element in totalitarianism.³³ Orwell's Winston Smith is employed as a rewriter of history, constantly changing the past to fit the present. If you do not believe in the efficacy of such a system, make not one trip to Eastern Europe but two. The self-same people whom I found identifying with the rebels of 1956 when I first visited Hungary in 1962 informed me when I went back in 1966 that in the tunnels beneath the streets of Budapest where the rebels had their headquarters, the Russian soldiers found swastikas daubed on the walls.

It is significant, too, that both Orwell and Zamiatin have their heroes keep diaries. Huxley's hero reads Shakespeare, forgotten, of course, by the rest of the world. The diaries are particularly effective devices, because they embody memory. Memory is, in its way, the quality that humanizes Winston Smith and Zamiatin's hero D-503. Winston of course, records in his diary memories of a past which is also our present — thereby redoubling the effectiveness of the device. Zamiatin's novel is a more stylized product than Orwell's and the future he writes of is more distant. Men and women live in glass cubicles, and their city is cut off from the vegetation of the natural world by a great glass wall. But the city also contains the Ancient House, a single survival of a way of life now past:

That strange, delicate, blind establishment is covered all around with a glass shell, otherwise it would undoubtedly have falled to pieces long ago. At the glass door we found an old woman all wrinkles, especially her mouth, which was all made up of folds and pleats. Her lips had disappeared, having folded inward; her mouth seemed grown together. It seemed incredible that she should be able to talk, and yet she did.³⁴

Huxley's <u>Brave New World</u>, of course, worships the great T, symbol of Our Ford. I suspect that he is not only a symbol of mindless mechanization but also a symbol of contempt for the past. Wasn't it he who declared history bunk, after all?

In Zamiatin's <u>We</u> there seems to be a rather direct connection between the suppression of history and the holding back of nature behind the green wall. This organic view of history – history as a growing plant, history as liberating – is something that reappears in Orwell. We might notice in passing that the drawing together of history and the cycle of generation, something we were made aware of at the beginning of our discussion, forms a rather artistic and literary motif. We find it in Spenser, for example; it is associated with Ovid and the idea of metamorphosis, which eternizes people as natural objects; and the swirling forms of art nouveau seem bent on reconciling classical line with organic growth.

There is, though, a seductive quality in art nouveau which asks us to neglect history altogether. Like the final painting in Cole's series, in which pillars are festooned with ivy, and the angular ruins are softened with vegetation, it promises an escape from the affairs and cares of men. Walter Ong has suggested that it is precisely when men are sure of history that they allow themselves the luxury of escape from it.³⁵ Such a notion does seem to hold true among those constant escapers the Elizabethans, and it may among the Romantics, but I suspect that we can hardly afford the luxury now. The present-day desire to escape is perhaps reflected in the popularity of a revived art nouveau (the Elizabethans had their art nouveau too: look at the detailed fancifulness of the miniatures of Nicholas Hilliard, for example), and it seems significant that the interest in allegory which distinguished both the Elizabethans and the Romantics³⁶ (though the latter called it something else) implies an interest in pure form which is today reflected in

the popularity of Tolkien and C. S. Lewis and Mervyn Peake. Of course all these writers recreate a vision of the past, but it is a false vision — as false as Gothic novels, and as false as the medieval fantasies of Elizabethan architecture.

My emphasis on the falsities of such works should not be construed as an argument against acquainting ourselves with them and enjoying them. But Louis Kampf's statement that we must avoid complacency when we read "Tintern Abbey," while it might sound vaguely revolutionary, is no different from the normal assumption which the intelligent student of the fine arts or of literature must always make. The study of the humanities, is always, and must always be, a moral act, however, unconventionally we may define that morality, and however it may lead us to redefine our priorities or realign ourselves. The humanities should teach us not complacency but restlessness — we should never confuse aesthetic judgments with moral judgments, to the neglect of the latter.

I suspect that the wise Thamus had some such idea in mind when he emphasized to Theuth the dangers of writing. Words on a page are fixed and immovable. Like the words in a seventeenth-century language project, they are ossified and cannot change. But words in a man's mouth are an expression of himself. We need to remember, as we teach or study the humanities, that memory is, above all, a living phenomenon, rooted in men, in their lives, in their beings. It is a changing thing and its organ is first speech, and only second the printed page. Dialogue, communication (if those much overworked terms mean anything still) form a fundamental part, the most important part, of study. John Dewey, in emphasizing the importance of dialogue, both as a means to learn and as a means to keep society alive, was surely right.

If education, and above all education in the humanities, is based on dialogue, then surely the humanities will frequently be in opposition to the status quo. It is at this point in my argument that the immediate problems of education come swarming in. Where is education going? Should teachers and institutions take stands? What is publishing for? What will the shape of education be in the future? As I wade through the books on the universities which lie scattered across my study floor, and as I stumble, mentally and physically, over the piles of books in that new genre, the prediction of the future (books like The World in 1984, Toward the Year 2018, Knowledge and the Future of Man)37, I cannot help feeling that a great deal of all this is meaningless intellectual self-indulgence. How often, when we plan universities, do we think of the future rather than the present: how often, when we plan the future, do we think of the past? We are irredeemably Platonists, plotting and planning and systematizing - and we are assisted by our own society, a society of giggles and chills, naked ladies and Time Magazine. When we are not inventing systems, we are plugged into them. Our television sets, for example, are not reality boxes but fiction boxes: they turn life into art. When we vote, we fight rather feebly against a vast and imprecise pre-programming.

Armageddon (the horrible truth, familiar to readers of literature, is that there is no Armageddon), but by providing its participants with the materials to make moral decisions, to act and live in the world. This is an unchanging social responsibility—something which has little to do with whether a man publishes, whether he uses class time for discussion, or group therapy, or lectures, whether the Modern Language Association condemns war.

I do think, though, that there is too much writing - too many books from teachers, too many papers from students. Ironically, it may be the economic state of the country that will reduce the flow. University presses have less money than they had. But if the flow is reduced, it should be reduced in order to improve its quality. As for teaching, we should spend more time talking and listening, not to improve teachers' level of performance, but to advance knowledge through dialogue and to sharpen our minds and our communication - and, one would hope, our moral sensibilities. All this while, we should remember that the humanities are, in terms of the economy, a luxury. Only because there are enough people with enough money, because the country doesn't demand the potential productivity which teachers and students represent, is the study of the humanities allowed to continue. This is a sobering thought and if we believe in what we are doing, it should give us pause. Said Thamis, "One man has the ability to beget arts, but the ability to judge of their usefulness or harmfulness to their users belongs to another." We must be constantly evaluating ourselves in terms of our disciplines, lest others judge for us and we are left without an answer.

If I have a prescription for the future at all, I think it is the avoidance of three dangers above all. First, there is always the risk that through the authority of the printed page, the weight of lifeless tradition, we will offer, in the words of Thamus, "the appearance of wisdom, not true wisdom." Second, there is the opposite peril, that we will turn the humanities into instruments of social action, not resources, justifying the study of history and the rest not through the existence of a biological urge to write literature and to inquire into our own humanity but through some sense of their immediate social application. Third, we may find ourselves asking that the humanities teach us in so many words social responsibility. But it is not the function of humane learning to tell us how to act: it is the function of humane learning to provide us with the resources through which to make our own decisions. It constitutes a body of knowledge, I should add, which should be made a part of ourselves, not a collection of books in a library: books, despite our mad dream on the subject, do not come alive in the library in the middle of the night and read one another. They only come alive in ourselves. And above all, the humanities live in our own histories: they are a consciousness of where we are in time, and they help map time for us. To cut ourselves off from our own past and our society's past is to reduce us all to the level of Flatlanders, who see height as time and, perforce, fail to see our time altogether. It puts us at the mercy of the systems men.

But I intend my prescription to be more than a series of don'ts. There is also something that we must do. The intellect, and art, too, is constantly creating models of order, which we apply and throw away when they are used, or store them in our memory or in writing. We must not give ourselves over to them, nor must we reject them out of hand. Between art-for-art's-sake, philosophyfor-philosophy's-sake, somewhere between these things and art-as-social-action, philosophy-as-life-style, stands art as a means for coping with ourselves and our surroundings, not to lull us into complacency, but to provide us with models for action. C. Day Lewis described such a process in his fine sonnet "The Image." He likens the poetic image, the metaphor, to the shield of Perseus. The Gorgon Medusa you remember, turned all to stone who looked on her. Perseus, by looking at her horrid visage not directly but in the reflection of his highly polished shield, was able to destroy her. The shield, the metaphor, makes action possible. The poem tells us how the forms which we create with our minds may be applied to the affairs of the world. It is my best justification for what I and others like me are trying to do.

From far, she seemed to lie like a stone on the sick horizon:
Too soon that face, intolerably near,
Writhed like a furious ant-hill. Whoever, they say, set eyes on
Her face became a monument to fear.
But Perseus, lifting his shield, beheld as in a view-finder
A miniature monster, darkly illustrious.
Absorbed, pitying perhaps, he struck. And the sky behind her
Woke with a healthier colour, purified thus.
Now, in a day of monsters, a desert of abject stone
Whose outward terrors paralyse the will,
Look to that gleaming circle until it has revealed you
The glare of death transmuted to your own
Measure, scaled-down to a possible figure the sum of ill.
Let the shield take that image, the image shield you.

Humphrey Tonkin

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- Jerome H. Buckley, <u>The Triumph of Time</u> (Cambridge, Mass., 1966); Hans Meyerhoff, <u>Time in Literature</u> (Berkeley and Los Angeles, 1968).
- The problem of defining the humanities is considered in "The Languages of Humanistic Studies," <u>Daedalus</u>, 98 (1969), 978-1028.
- 5. Frank Kermode, The Sense of an Ending (New York, 1967).
- 6. The classic statement is the opening of Ovid's Metamorphoses. Cf. W. K. C. Guthrie, In the Beginning (Ithaca, N. Y., 1957).
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- 14. W. H. G. Armytage, Heavens Below: Utopian Experiments in England (London, 1961).
- 15. Cf. Donald Drew Egbert, Socialism and American Art (Princeton, N. J., 1967).
- See Cohn, Millennium. On Albert Speer, see the recent article by James P. O'Donnell, "The Devil's Architect," New York Times Magazine, October 26, 1969.
- John Humphrey Noyes, <u>The History of American Socialisms</u> (1869; Dover ppb.);
 Charles Nordhoff, <u>The Communistic Societies of the United States</u> (1875; Dover ppb.).
 See also A. E. Bestor, <u>Backwoods Utopias</u> (Philadelphia, 1950).
- 18. Northrop Frye, Anatomy of Criticism (Princeton, 1957).
- 19. The Study of History (London, 1934), 3. 251-255.
- 20. This is not, of course, to imply that writing is other than essential to history itself. Our awareness of history is dependent upon the transmission of written records but this awareness is manifested through ourselves and our actions.

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- 24. Ed. Theodore Roszak (New York, 1968).
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- 26. The Academic Revolution (New York, 1967).
- 27. Boston, 1959.
- 28. See Herbert J. Mueller's book of that title (London, 1952).
- 29. Angus Fletcher, Allegory: The Theory of a Symbolic Mode (Ithaca, N. Y., 1964), plates 16-20. The paintings are the property of the New York Historical Society.
- 30. Dissenting Academy, pp. 58-59.
- Cf. Martin Duberman, <u>The Uncompleted Past</u> (New York, 1970). See also the "Daedalus Dialogue" "New Trends in History," Daedalus, 98 (1969), 889-976.
- 32. Most recently in Lectures in America (London, 1969).
- Aldous Huxley, <u>Brave New World</u> (1932); Evgeni Zamiatin, We (1924); George Orwell, <u>Nineteen Eighty-Four</u> (1949).
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- 35. "Crisis and Understanding in the Humanities," Daedalus, 98 (1969), 631.
- 36. See Michael Murrin, The Veil of Allegory (Chicago, 1969), pp. 199-212.
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ED. NOTE: Dr. Tonkin gave this paper as part of the Philomathean Society's "Prescriptions for the Future" series of faculty lectures last year.

INTRODUCTION

Palindromes read the same backward and forward, exhibiting bilateral, or mirror, symmetry. In language, palindromes include words and sentences whose letters run the same backward (examples being the deliberately palindromic "radar" and Leigh Mercer's "A man, a plan, a canal — Panama!") and sentences whose words run the same backward (J. A. Lindon's "You can cage a swallow, can't you, but you can't swallow a cage, can you?"). Palindromic poems using letters as the basic unit have been written, but they are generally unsatisfactory poetically. Other units can be used, however, and J. A. Lindon has invented the palindromic poem using the line as the basic unit. This was the inspiration for the structure of the following poem.

-Gordon Jenkins

POET'S REFLEXION (VI)

A Broadway pickup

— Face painted, leather-jacketed — —
Came to me. (I was
Writing poems then — — I said). My friends
Asked me what happened, how it was.

She Was young. Not yet bored, I Think, breasts yearning and soul crying Frightened as a sparrow with a broken wing but Searching for Someone. I was With her, for half a second, in my room; A naked poem lay across my bed, legs spread and . . . With her! for half a second in my room. I was Searching for someone . . . Frightened as a sparrow with a broken wing - - but Think! — breasts yearning and soul crying, Not yet bored, I Was young.

She
Asked me what happened, how it was
Writing poems then. I said, "My friends
Came to me: I was
Face-painted, leather-jacketed —
A Broadway pickup."

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