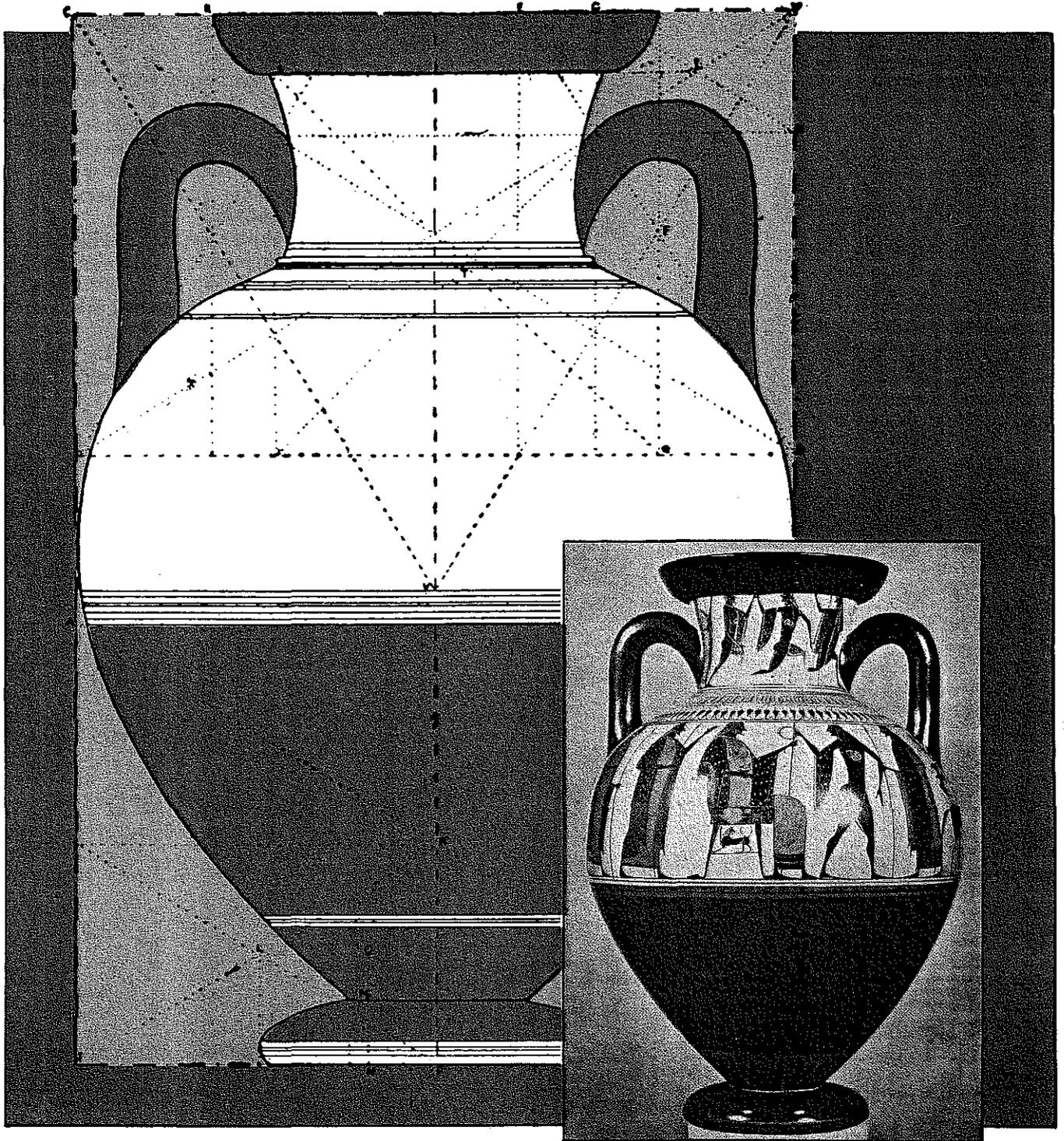


THE St. John's Review



Winter, 1985

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To the editor:

At the urging of alumni and colleagues, and with the co-operation of Mrs. Klein, I am undertaking to gather material for a brief life of Jacob Klein. I shall be pleased to have documents, reminiscences, or other memorabilia.

I would be particularly pleased to hear from alumni who were members of his classes in his first years of teaching, especially his first seminar.

Wye J. Allanbrook
St. John's College

Cover: A Black-Figured Amphora from the Boston Museum (Drawn, measured and analyzed by L.D. Caskey).

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The Parable of Don Quixote

Joe Sachs

In the twenty-fifth chapter of the first part of *Don Quixote*, the fortunes and spirits of the book's hero are at their lowest. He has been bruised and laughed at, and has lost part of an ear and most of his teeth. He has mistaken an inn for a castle, whores for maidens, and windmills and sheep for enemies. His intervention in the affairs of others has led a servant boy to be beaten worse than before, and has set loose on Spain an entire column of convicts who have made him and Sancho the first of their new victims. Even the simple-hearted Sancho has lost his trust in his master. " 'God alive, Sir Knight of the Mournful Countenance,' said Sancho, 'I cannot bear in patience some of the things that your Grace says! Listening to you, I come to think that all you have told me about deeds of chivalry . . . is but wind and lies, all buggery or humbuggery, or whatever you choose to call it. When anyone hears your Grace . . ., what is he to think except that such a one is out of his mind?' " Shortly Don Quixote will be left alone, sunk in gloom, in the Sierra Moreno, the Dark Mountains. He had entered that lonely place partly out of fear of the police, a fear which could influence him because of his disappointment over the behavior of those he thought he was helping. But even at such a time, Don Quixote has an answer for his squire.

" 'Look, Sancho,' said Don Quixote, 'by that same God I swear that you have less sense than any squire in the world ever had. How is it possible for you to have accompanied me all this time without coming to perceive

that all the things that have to do with knights-errant appear to be mad, foolish, and chimerical, and everything happens backwards?' " It is Don Quixote's standard evasion when things go wrong or he is proved wrong: we are enchanted. Our senses are not to be trusted, and things are not as they seem. In this case he is driven to claim that everything is exactly the opposite of the way it seems, and he is right.

The remainder of Part one, after Don Quixote enters the Sierra Moreno, is the long unfolding of a series of happy endings of stories yet to be made known to us, and which come to pass without any effort on Don Quixote's part. His last action in Part one is the freeing of the convicts in Chapter twenty-two, with thirty chapters remaining. Yet none of the good that is done in those thirty chapters could have happened were it not for the earlier deeds of Don Quixote. And the happy endings do not come about by some comic reversal of Don Quixote's intentions. They grow out of his deeds directly in the spirit of those deeds, by a Quixotic contagion. Finally, it is not the case that Don Quixote's actions are justified only by unforeseen consequences, but each of his acts is, for those who have eyes to see it, good in itself, and exactly the opposite of the way it seems.

Pairs of contrasting opposites in *Don Quixote* are often remarked. The book combines the conventions of romantic fiction with all the ugly, smelly facts of real life. Of the two main characters, one is tall, thin, energetic, and spiritual, the other short, fat, lazy, and corporeal. The main character acts like a lunatic but speaks like the wisest of men. But the most important contrast in the book is less often noticed. It is that between the story the narrator understands himself to be telling and the one he tells, and it points the way to the underlying distinction on which the book is built: the distinction between fact and truth.

Joe Sachs is a tutor at St. John's College, Annapolis. His lecture *The Fury of Aeneas* appeared in the Winter '82 issue of the *Review*. *The Parable of Don Quixote* was originally delivered as a formal lecture at St. John's College, Annapolis in September, 1982.

Cervantes puts between himself and his story a historian who comes from a nation known for lying (I.9,II.3), a translator, and perhaps one or more other people; it is the sort of matter about which Cervantes is not a very careful bookkeeper. But there is one consistent voice which presents to us all the episodes in the book, including those which precede the beginning of Cid Hamete Benengeli's manuscript and those for which, as Sancho notes with awe, there was no human witness. The narrator through whom we know all that we know of Don Quixote tells us that when his character decided to become a knight he looked around for a make-believe beloved just as he looked for a sword and helmet; but the same narrator gives a careful reader all the information he needs to see that Alonso Quixano has been secretly and hopelessly in love with Aldonza Lorenzo for twelve years (I.1,I.25). The narrator mocks Don Quixote's speech about the Golden Age as nonsense which only occurs to him by an association with acorns (I.11), but the goatherds to whom it is addressed are moved by Don Quixote's eloquent respect for their way of life, and repay him with all the gifts in their power. When Don Quixote defends Marcela (I.14), the beautiful girl who chooses not to marry anyone, the narrator tells us that he is playing at defending a damsel in distress, but anyone who listens to what he says will hear him give the reason for which he became Don Quixote: that beauty demands a response from us, an effort not to possess it but to be worthy of it.

Cervantes writes in the guise of someone who never sees the things that matter amid events he describes in meticulous detail. In belittling his hero, Cervantes belittles himself, and it is left to us to discover whether we are cut to the measure of that same littleness. It is a simple rhetorical trick that Cervantes plays, gently manipulating his readers by appealing to our vanity, our pleasure in feeling superior to the stupid narrator by seeing things to which his coarse sight does not penetrate. A most generous author, we are dealing with, who allows us for the most part to indulge in superior laughter at the crazy knight and the gullible squire, and still to have someone to look down on when we see those characters more deeply and truly.

The narrator's misunderstandings begin practically on the first page of this book, when he tells us that the gentleman about whom he is writing has gone crazy. It is certainly the most widely held opinion among those who meet Don Quixote, but there are three exceptions. In Part two, three sensible people come to know him and come to other conclusions about his sanity. Don Diego de Miranda, the gentleman in the green greatcoat, decides that Don Quixote is "a crazy sane man and an insane one on the verge of sanity" (II.17). And later, at an inn, which he takes for an inn, when he is on his way to Saragossa, Don Quixote meets Don Juan and Don Jeronimo, who are finally unable "to make up their minds as to just where they were to place him in the vague realm between sound sense and madness" (II.59). It is no ac-

cident that this pair of judgments is made available to us, for together they mean that the categories mad and sane break down when applied to Don Quixote. He must be said to belong to both, or to neither. He is unlike other men, but the distinction between the mad and the sane does not illuminate that difference.

The truly illuminating distinction is given to us by Don Quixote himself, whose judgment is always the most trustworthy in the book. When the gentleman in green is worrying about what to make of his companion, Don Quixote guesses his thoughts, and breaks in on them in a kindly way. He forgives his friend for thinking him foolish and mad, and does his best to explain why he does what he does. "Even as it is easier for the prodigal to become a generous man than it is for the miser, so it is easier for the foolhardy to become truly brave than it is for the coward to attain valor. And in this matter of adventures, you may believe me, Señor Don Diego, it is better to lose by a card too many than a card too few."

Prodigality, we shall see as we go on, is one of the most important words in the book. When Don Quixote appears ridiculous, which is most of the time, it is not for lack of wits but for his deliberate choice to be prodigal. With what is he prodigal? With money, of course, but with all the things that constitute himself. When, in his fiftieth year, Alonso Quixano became Don Quixote, it was not because his brain dried up but because he judged his safe and settled life to be a miserly one, a dried-up life. From that time on he ceased to hoard his capacities to act, to befriend, and to benefit. He gives his reason for doing so again and again in a single word, the most important word in the book: gratitude. As he says to one of the shepherdesses in Part two, "My profession is nothing other than showing gratitude" (II.58). Gratitude is the reciprocal response to grace. In his discourse on arms and letters (I.37), Don Quixote explains that the highest achievement of human letters and learning is distributive justice. He has chosen instead the higher calling of the soldier, which aims at bestowing the grace of peace. The middle-aged Alonso Quixano decided to stop living a life which received grace but returned none.

In Part two, Don Quixote asserts that the greatest sin is not pride but ingratitude. This has already been shown in Part one. The whole of *Don Quixote* is a parable, and its first part contains two parables-within-a-parable. The captive's story is constructed as the parable of the prodigal father; ingratitude is revealed in the parable of the curious impertinent. While Don Quixote sleeps in the inn to which he is taken from the Sierra Moreno, his companions read aloud a story about a man who is curious about the wrong things. His name is Anselmo. Let us listen to him describe his complaint to his friend Lotario (I.33).

"You may think, my friend, that in return for the favors God has shown me by giving me such parents as mine and bestowing upon me with no stinting hand what are commonly known as the gifts of nature as well as

those of fortune, I should never be able to thank Him enough, not to speak of what He has done for me by giving me you as a friend and Camila for my wife. . . . Yet with all these advantages . . . I lead the most empty and fretful existence of any man in this universe. . . . The thing that so tortures me is the desire to know whether or not my wife Camila is as good and perfect as I think she is, for this is a truth that I cannot accept until the quality of her virtue is proved to me in the same manner that fire brings out the purity of gold. For it is my opinion, my friend, that a woman is virtuous only in the degree to which she is tempted and resists temptation."

Can you hear why he is called Anselmo? I will remind you of the words of Saint Anselm in the first chapter of the *Proslogium*.

"Lord, thou art my God, and thou art my Lord, and never have I seen thee. It is thou that hast made me, and hast made me anew, and hast bestowed upon me all the blessings I enjoy; and yet I do not know thee. Finally, I was created to see thee, and not yet have I done that for which I was made."

"O wretched lot of man, when he hath lost that for which he was made! . . . We suffer want in unhappiness, and feel a miserable longing, and alas! We remain empty . . . I wished to smile in the joy of my mind, and I am compelled to frown by the sorrow of my heart. Gladness was hoped for, and lo! a source of frequent sighs!"

Anselm puts an end to the torment in his soul by finding a proof of the existence of God, but Anselmo, who also cannot enjoy blessings which rest only on faith, when he seeks proof of Camila's love, destroys his own life and those of everyone around him.

Anselmo insists that Lotario try to seduce Camila, and try again and again while Anselmo keeps himself absent from her. Since no human quality is infinite, and since every time Camila resists temptation Anselmo causes it to be increased, and since he himself is never present to his wife to help her be his wife, Anselmo finally achieves the only result that can come from his actions. He makes Camila unfaithful. He does not prove her unfaithful, because she was not so until he made her so. A wife's love is not a neutral fact to be ascertained by experiment, but a living thing sustained in part by her husband's faith in it. When Anselmo decides that his faith is an insufficient foundation for his marriage, he loses it, because there is no foundation other than faith for a marriage to rest on. And it is important (Cervantes underlines the importance by breaking the story off) that the marriage continues for a while on a foundation of deceit. The deception does not last because Camila's maid joins in it, and the chain of corruption inevitably lengthens until it pulls all of them down.

Anselmo's curiosity is impertinent or misplaced because a wife's love calls not for curiosity but for gratitude. In his inability to appreciate the wife he has, Anselmo removes himself from her, so that she has no

husband and he has no wife. The subsequent infidelity and deaths only turn into fact the truth that was already present in Anselmo's lack of faith. Don Quixote's village priest pronounces the story implausible (I.35), proving, for one of the innumerable times in the book, that he does not know how to read a story. Every marriage is founded on faith alone, but it is the unlikely and imaginary story of Anselmo that reveals that truth. And once one has gotten hold of the truth behind the implausible facts, one sees that it is a truth about more than just marriages. At that point Cervantes' story comes into its own as a parable.

The story of the curious impertinent illuminates the larger story of Don Quixote, but the characters in the one do not stand for characters in the other. That is not the nature of a parable. The myths Socrates tells in Plato's dialogues are intended to be interpreted, to be destroyed as stories and transformed into their philosophical content. They have no use but to invite interpretation. The allegory Dante tells in the *Divine Comedy* is always speaking of two or more things at once. The principal story holds together as itself, but its principal meaning depends upon the recognition of allegorical counterparts. A parable differs from both. Its content is not intended to refer to anything but itself. It is told because someone who understands it will be in a position to think about some other subject which is the teller's chief concern, and because anyone who cannot understand it would not be able to get anything out of any direct talk about that matter of chief concern. The parable draws on things close to one's experience, to prepare the imagination to deal with things less familiar.

The parable of the curious impertinent reveals that there are things in the world which are invisible except to the eyes of faith, things which genuinely exist but can be destroyed if they are not believed in. In an important exchange immediately preceding the reading of the story of the curious impertinent, the priest declares that there never were knights errant in the world. The innkeeper replies that he knows there are none now, but that they surely lived in those days. Sancho worries that one of them might be right, but makes up his mind to wait and see. If there is a knight errant in the world, only Sancho will have his eyes open to see him.

Don Quixote's first encounter, the first time he leaves home, is with two whores at an inn (I.2). He sees gracious ladies, and addresses them with courtesy. Their first response is coarse and cruel laughter. If the scene ended like that, we would have to agree with the narrator that Don Quixote suffers from delusions and sees not what is in front of him but what he wants to see. But something happens while no one is looking, and when we return from the stables with the innkeeper, we find the young women treating Don Quixote with kindness and bearing themselves with modesty. They have become the gracious ladies that no one, including themselves, except Don Quixote, saw them as. It is a very small and very important event, even if it has no lasting effect on the

women's lives. For a short time at least, they were not the sluts they had thought themselves to be, but free beings, capable of accepting and returning courtesy. Their graciousness was nowhere to be seen until Don Quixote's faith and their works brought it into being, but he saw it while it was still nothing but possibility.

Do you see the connection with Anselmo? He doubted the virtue his wife had, and thereby destroyed it. Don Quixote believes in the virtues the two women do not have, and thereby brings them into being. Anselmo withdraws himself from his wife. Don Quixote involves himself with total strangers. Anselmo does not know how to love the woman he is in love with. Don Quixote may have the secret of loving everyone in the world.

But Don Quixote's subsequent acts of charity, with the boy Andres and with the convicts, seem to be not mad but naive, a mockery of the very notion of doing good. When he prevents Andres from being beaten, and leaves his master on his honor to pay the boy his just wages, the result is the worst beating Andres has had in his life, and the loss of his job. When Andres tells him what has happened, and curses him for it, Don Quixote is deeply troubled. When he frees the convicts, it is Don Quixote who is beaten, by the very men he tried to help, and robbed of everything he carries and wears. It is that episode which sends him into the mountains, where, for a time, he is not himself. For the narrator, there is nothing troubling about these results. They merely confirm what every grown-up in the world except Don Quixote already knows. For Don Quixote they are severe tests of his faith in people, but tests which he survives, and rightly.

Don Quixote has benefitted Andres by forcing an end to a situation in which the boy regarded himself as someone who could be beaten at the whim of another, so long as the beating was not too bad. Like the two whores, Andres had taken himself at the valuation of others. They are startled to be taken for ladies. Andres is angry at being forced to be a man. We see him last on the road to Seville. We do not know what will become of him there, but we know that it will be what he makes of himself. Andres had accepted and made the best of a slavish role into which he was born and in which he was remaining by inertia. From Don Quixote he suffered the painful gift of his freedom.

With the convicts, Don Quixote worries that some might be innocent, convicted only because they were poor and without friends. Others he sees to be guilty, but of no very serious crimes. But his motive for freeing them does not depend on the facts about them. Don Quixote is outraged that, whatever they have done, the king should make slaves of them. Don Quixote believes in punishment; he spends much of the book dealing it out. But he does not believe in punishment that precludes forgiveness. The king's justice rests on the ultimate in impertinent curiosity: on the question whether a man shall be allowed to continue to be a man or shall be created a slave. The convicts had not used their freedom

well, but they had it not on human sufferance but by God's grace. Don Quixote does not find a solution to the problem of human ingratitude, but he does prevent its multiplication, and hence rights a wrong.

The two craziest of Don Quixote's deeds in Part one seem not explicable as acts of faith or charity, because they do not involve other people. They are his attacks on the windmills and the sheep. There is a clue to the meaning of these episodes in Part two, when Don Quixote tells Sancho, "In confronting giants, it is the sin of pride that we slay" (II.8). I suspect that, in attacking both the windmills and the sheep, Don Quixote was ineffectually, but literally, confronting giants—private companies of great wealth which, under royal patent, were exploiting the land of Spain on a gigantic and unheard-of scale. One windmill is sufficient to knock Don Quixote off his horse, but it is a clump of thirty or forty of them at which he charges in anger. And it is not a flock or herd of sheep at which he charges, but a vast assemblage of them to which his word army is appropriate. There must be wrong with the unbounded commercial development that is beginning to change the face of Spain, because it is founded on pride. On the other hand, every deed of Don Quixote rests on faith in the Gospels. It should be becoming clear in what way the story of Don Quixote is itself a parable.

At this point I have just about made good my claim that Don Quixote's actions in Part one are all understandable and good. I have not mentioned several encounters in which he gives and receives lumps and bruises. The most serious injury he causes is a broken leg, to an arrogant young priest who speaks rudely and treats him as though he were nothing. (I.19) Until he is in pain and unable to move, Alonso Lopez is too wrapped up in himself to recognize Don Quixote as another like himself to whom elementary courtesy is due. And as soon as Don Quixote sees that the man needs help, he is quick to give it. Alonso Lopez has learned his own importance from his theological education, but he has not learned who his neighbor is. If he is capable of learning such a lesson at all, both the anger and the kindness of the crazy knight could teach it to him.

Don Quixote is meddling, but his meddling always takes the form of *pertinent* curiosity. Though he talks often of the privileges of rank, he acts always as though every human being deserves honor. He is entitled to teach manners to a priest, to insist that the king accord even a criminal minimal recognition as a member of his own species, to require a master to treat his servant with respect, to make that servant and prostitutes aware of their own dignity, and even to strike a few blows at gigantic faceless companies which do their business in indifference to what they do to the world they share with ordinary people. Don Quixote earns the right to interfere with everyone by recognizing every human life as a claim upon himself. His curiosity is pertinent because when the test comes he always acts as though the good of another pertains to him. And we are entitled to wonder

if, in Don Quixote, we are witnessing a man who loves his neighbor as himself.

When Don Quixote enters the Sierra Moreno he is far from believing that he has done anything worthwhile, but his influence is already present in the world and working its own effects. He himself is miserable and alone. He spends his time imitating the penance of Amadis of Gaul, an episode noteworthy because it makes one realize that nowhere else in the book does he imitate anyone. Only in this brief, dark retirement from the world does Don Quixote ever try to remember something a knight in a book did in order to mimic it. Ordinarily he is the opposite of an imitator, the most original of men, in the sense that his deeds originate in himself out of the true array of possibilities before him. It is the rest of us, who judge and act out of habit, custom, and inertia, who are the imitators. The enchantment of which Don Quixote speaks is primarily the siren song of habit which prevents us from truly encountering the things and people before us. We take them for what everyone else always takes them for. In a chapter which Cervantes calls "one of the most important in the entire history" (II.6), Don Quixote's niece tells him to act like what he is, a man who is old, sick, and poor. In the Sierra Moreno, that is just how he acts.

When Sancho returns to him in the mountains, he finds his master thinner than ever, jaundiced, fainting from hunger, and sighing for Dulcinea. But when he tries to speak to him of his beloved, Don Quixote will only say that he is not worthy of her grace (I.29). When his priest, for a joke, says he has heard of a mad sinner who will undoubtedly be damned for setting free some galley slaves, Don Quixote hangs his head in silent humiliation. It is his wonderful friendship with Sancho that brings him back to himself. Here is the colloquy which brings him out of his melancholy and restores his sanity. (I.30)

"Faith, Señor Licentiate," (said Sancho,) "the one who performed that deed was my master. Not that I didn't warn him beforehand and advise him to look what he was doing, it being a sin to free them, for they were all of them the greatest rogues that ever were."

"Blockhead!" cried Don Quixote upon hearing this. "It is not the business of knights-errant to stop and ascertain as to whether the afflicted and oppressed whom they encounter going along the road in chains like that are in such straits by reason of their own crimes or as a result of misfortunes that they have suffered. The only thing that does concern them is to aid those individuals as persons in distress, with an eye to their sufferings and not to their villainies. I chanced to meet with a rosary, or string, of poor wretches and merely did for them what my religion demands of me. As for the rest, that is no affair of mine. And whoever thinks ill of it—saving the dignity of your holy office and your respected person, Señor Licentiate—I will simply say that he knows little of the laws of chivalry and lies like an ill-begotten son

of a whore. All of which I will make plain to him, to the fullest extent, with my sword."

Soon Don Quixote is drawing Sancho ahead of the others they are travelling with, to question him in insatiable detail about Dulcinea. As always, Sancho's disloyalty has strengthened Don Quixote's faith, and Don Quixote's healing anger at his squire has strengthened Sancho's devotion to his master. Those two are then wholly themselves, while those riding along behind them have, without knowing it, become new beings in Don Quixote's image.

Dorotea, who has been seduced and deserted by the nobleman Don Fernando, who has run away from home and twice trusted men who then tried to rape her, who has ended up in the Sierra Moreno in despair, is now in the company of three new knights-errant. Don Quixote's curate and barber, who, contemptuous of his behavior but concerned for his welfare, have come hunting for their friend to bring him home, have found themselves distracted by Dorotea's distress, and each has sworn himself to her service (I.28,29). Cardenio, who has also been misused by Don Fernando, and had run away to the Sierra Moreno to escape his troubles and all human society, has regained his sanity and hopes, and sworn that Don Fernando will either marry Dorotea or fight him. Two men for whom the idea of chivalry is matter only for mockery, but who are in the Sierra Moreno on account of Don Quixote, and two despairing victims, who are brought out of their solitude by Don Quixote's friends, are now a band united by mutual faith, by the giving and receiving of charity, and by the hope that life may still hold some unlooked-for good for a young woman in distress. The four of them connive at an elaborate pretense of knight-errantry to patronize Don Quixote, while none of them notices that they are living the actuality of it.

For the remainder of Part one, Don Quixote sleeps, listens, holds back from disputes to be a peacemaker, allows himself to be carried homeward in a cage, and, after one abortive attempt in the last chapter to return to knight-errantry, chooses the prudent course of returning home to await more propitious times. He, the most active of men, is for the most part content with his return to passivity. We are never told why directly, but Cervantes shows us why through the Captive's story, which is Cervantes' parable of the prodigal father.

Luke's story of the prodigal son begins with a young man's heedlessness of others, the Captive's story with his father's heedlessness of self. Each leads to the premature distribution of an estate. The prodigal father, worried that he will waste what he has, sells his lands, divides the proceeds among his sons, and sends them out into the world. One pursues trade, and becomes wealthy; a second pursues letters, and eventually becomes a judge. The Captive, in the image of his father, becomes a knight. After twenty-two years the family is reunited, the father's faith justified, the wealth he denied himself multiplied,

the sons whose presence he sacrificed returned to him freely out of love. But this summary of the story leaves out the most important character in it, the Moorish maiden Zoraida. When the prodigal father lets go of his property and his sons, he cannot know that a stranger is waiting in the world whom only his deed will save.

Of the many quixotic characters in *Don Quixote*, the most quixotic of them all is the Moorish princess Zoraida, who cannot take any pleasure from wealth, a loving father, or the society of her own people, because in her childhood she heard stories of the Virgin Mary from a Christian slave. She gives up everything to go with the Christian knight to a country where the Virgin Mary is worshipped. Upbringing, language, heritage, custom, and ritual do not produce faith in Zoraida; the inspiration of the imagination by stories does. The prodigality of the Captive's father, and of the Captive himself, who returns most of his inheritance and embarks on a soldier's life, make possible her rescue from a country not hospitable to her spirit. The band of knights-errant descended from Don Quixote, and already enlarged, gives her that reception to a Christian country of which she has dreamed.

Between Don Quixote's return to the inn and the Captive's arrival there, four more lives have been saved from unhappiness. Don Fernando, who arrived breathing threats and murder at Luscinda, who betrayed him after he had betrayed Cardenio and Dorotea for her sake, has relented and amended his life, making it possible for Cardenio and Luscinda to marry, and returning himself to Dorotea. Don Fernando's conversion is brought about by the unanimous and whole-hearted urging of the group in the inn, which includes the curate and barber, now involved in the lives of others by the same pertinent curiosity that took Don Quixote away from his home. As Zoraida was waiting in the world for the liberating act of the prodigal father, so, it turns out, was Dorotea, lost, alone, and in danger in the Sierra Moreno, waiting for the liberating, infectious generosity of Don Quixote. She acknowledges as much, when, finally abandoning all pretense with Don Quixote, she says to him, "I am convinced that had it not been for you, sir, I should never have had the good fortune that is now mine, and in this I speak the veriest truth, as most of these worthy folk who are present can testify." (I.37) The long chain of entangled lives which extends to the Captive's brother's teenaged daughter and her boyfriend, which is linked in mutual generosity to realize the highest possibilities of each, which is the exact inverse of the chain of corruption extending from Anselmo, owes its existence to Don Quixote. In the parable surrounding the parable, he is the prodigal father.

Don Quixote, having chosen not to hoard the grace his own life contained, made it available in unpredictable ways to people unknown to him. Contributing also to that transmission is, of course, an immense element of coincidence, as, one after another, nine people who are

in various ways making one another unhappy arrive at the same place. But perhaps coincidence is one of those categories under which things appear to our enchanted sight as other than they are. Cardenio and Dorotea are both in the Sierra Moreno because it is the place of despair, but they are not there together until Don Quixote's friends bring them together. Until that time, the latent truth that their interests coincide cannot become a fact, and that is why they are in despair. The coincidence of their connection with each other only has consequences in the world when the utterly disinterested curate and barber choose to make their cares coincide with those of two strangers. Similarly, the Captive and his brother might have spent the night at the same inn without knowing it, had Don Quixote's friends not been there to ask each for his story, and to involve themselves in those stories. If the truth of coincidence is that all lives coincide, then the fact of coincidence ceases to be surprising. Arrival at the inn where the steadily multiplying good will begotten by Don Quixote works its effects is for Don Fernando "like attaining Heaven itself, where all the misadventures of earth are at an end" (I.36). In contrast to Don Fernando's way of recognizing the truth behind the facts, Don Quixote's taking the same inn for a castle is modest understatement.

I have said that Don Quixote does not do anything in Part one after he frees the convicts. He is present in the subsequent deeds as the Captive's father is present in the lives of his sons, in just the measure that they are independent of him. But it is now necessary for me to qualify what I've said, because Don Quixote, for a brief moment in Chapter forty-five, does something important. He leads an army. He leads it in a conflict in which no one is hurt because he quickly puts a stop to the fighting. But it is an episode in which, while nothing happens, the participants reveal themselves for what they are. It is thus like those Platonic dialogues which Mr. Klein has called ethological mimes. Before describing the episode I will mention two others of the same kind from earlier in this book.

In Chapter four, during that first brief sally in which the whole truth of Don Quixote can be read, he encounters some Toledo merchants on their way to buy silk. For a moment they stand opposed, Don Quixote commanding them to swear that Dulcinea is the most beautiful woman in the world, one of the merchants insisting that they be shown her, or at least her portrait, before being required to commit themselves. In anger, thoroughly provoked by the rude jokes of one of the merchants, Don Quixote lowers his lance and charges. As happens as often as not with Rocinante, his horse stumbles, and he is a loser without combat. But Don Quixote on the ground, beaten by servants, with the merchants on their horses, laughing in a slightly embarrassed way, is just the enchanted appearance, the merely factual outcome of the episode. The truth of it is one man understanding that the beauty that is worth declaring

and defending is the beauty that is invisible, while a group of others think of the beauty of a beloved woman as they do of the quality of a sample of silk. It is the soul of a knight and the soul of a merchant that are set before us.

In Chapter twenty, Don Quixote and Sancho run afoul of another phase of the textile industry, the sounds of the hammers of a fulling mill. I am disregarding Don Quixote's advice in speaking of it. "I do not deny," he says, "that what happened to us has its comical aspects; but it is best not to tell the story, for not everyone is wise enough to see the point of the thing." The point of the thing is that Don Quixote is truly brave, because he is brave in the dark. The fact of the matter is that he, like Sancho, spent a night in terror of something that could not harm them, and had to endure Sancho's laughter in the morning. But does one who fears in the night have the right to mock in the daylight? Night will always come again, and will hold terrors, and Don Quixote has proved that he can face them with courage. The revelation of courage does not require a solemn occasion; for those with eyes to see, it is compatible with events that are ridiculous.

In Chapter forty-five, as in the flaring of a match or a lightning-bolt, there is the briefest of military engagements: the battle over Mambrino's helmet. The battle has no outcome because Don Quixote does not allow it to. The point of the thing is the drawing of a line between the two sides, and the revealing of the genuine willingness of each to fight. There is no issue present worth fighting over, as Don Quixote says. But there is the utmost importance in discovering for what one is willing to fight. On one side is an army of police, peasants, and servants, fighting in defense of the proposition that a barber's basin is a barber's basin and belongs by right to the barber. On the other side is an army of caballeros, Don Luis, Don Fernando, the Judge, and their natural and rightful leader, Don Quixote. One combatant seems to be on the wrong side, for Sancho Panza fights with the knights. But Sancho is no longer the cowardly peasant of twenty-five chapters earlier. Just five pages before the battle begins, Don Quixote has noted that Sancho has become a true man, and deserves to be dubbed a knight. (I.44) The knights fight to defend the proposition that honor exists wherever one stakes one's honor, even in the homeliest of objects. Don Quixote's dignity elevates the barber's basin, just as his love elevates Dulcinea above the sight of merchants and his courage elevates a fuller's mill beyond the comprehension of a coward. For the only time in the book, Don Quixote has an army to lead, and the one thing he does with it, the instant it comes into being, is disband it. The battle he fights is against the automatic taking of the things in the world at their lowest valuation, and it is both won and lost as soon as the sides are drawn.

Don Quixote has learned to see the possibilities which do not appear and the truths which facts never disclose by reading books of knight-errantry. Cervantes, of course, claims that he wrote *Don Quixote* to combat the harmful

effects of such books. But what, exactly, are those harmful effects? Four chapters of the text are devoted to a mammoth debate on the subject (I.47-50). The curate, of course, contributes his characteristic argument that such books foster mistaken notions among the uneducated about the facts of the past. People might even be moved by accounts of miracles which never happened. But a new character, more elevated in the hierarchy of the Church, a canon of Toledo, is introduced to carry the principal responsibility for exposing the evils of the books which have corrupted Don Quixote.

It is not right, the canon argues, that amusement ever be entirely separated from instruction, and not possible that pleasure could come from books that depict unlikely events in an episodic presentation and a crude style. The canon knows that the books of knight-errantry violate all these rules of good writing, because he has begun reading practically all of them that have ever been printed. In fact, he has enjoyed reading every one of them, but has always caught himself in time to remind himself that they are worthless, and incapable of affording true pleasure. He has never allowed himself to finish reading one. He once tried writing one himself, which observed all the rules of good writing, but he left it unfinished when he realized that most people wouldn't like it. Now the canon is an honest man, and if he were to hear his opinions presented as briefly as this and all in one place, he would find himself as peculiar as he finds Don Quixote. Spread over twenty pages, and supported with abundant examples, his discourse is in fact very impressive.

Don Quixote, of course, mops the floor with him, but listen to the surprising way he does it. "Do you mean to tell me that those books that . . . are read with general enjoyment and praised by young and old alike, by rich and poor, the learned and the ignorant, the gentry and the plain people—in brief, by all sorts of persons of every condition and walk in life—do you mean to tell me that they are but lies? Do they not have every appearance of being true?" Don Quixote does not say that the books are good, but that they are true. What is true about them? They are in touch with the deepest springs of our common humanity. There are incessant references in the book to the truthfulness of histories, by which everyone else means some sort of authoritative assurance of a matching-up with a dead and inaccessible past. Only Don Quixote sees that a more important truth lies in what matches up with the buried longings and unrealized possibilities in all of us.

Cervantes' discourse remains parabolic, but it is time for our own to become direct. The effect, harmful or otherwise, of books of knight-errantry, is not the subject of chief concern. The canon, showing the monstrous improbabilities the romances ask us to swallow, mentions a seventeen-year-old boy killing a giant, an army of a million men defeated because the book's hero is on the other side, and a tower full of knights miraculously scattered all over the earth, and concludes that books full of such things have no place in a Christian state. Is it

not clear that the canon is talking of one thing while Cervantes is thinking of another, and that the name of that other is the Bible? The canon tells Don Quixote to turn to the Book of Judges if he wants to read about knightly exploits, attributing its superiority to its accuracy. But even if the story of Samson and Delilah is more factual than that of Amadis of Gaul, does the worth of the Bible depend on its quota of facts?

In the first chapter of Part two, Don Quixote gives a lesson in how to read, which is wasted on his audience of the curate and the barber. He says, "the truth is so clear that I can almost assure you that I saw with my own eyes Amadis of Gaul." Is Don Quixote talking about amusement? About instruction? Those two categories do not exhaust the purposes of writing, and it is only because the canon thinks they do that he is so confused about his own experiences with books. Stories that affect us set our imaginations to work. That activity can disclose ourselves to us: what we care about, what we fear, what we long for. The combination of disclosure and stimulation may, as it does with Don Quixote, inspire action. Even when it doesn't, it may enrich the interior realm from which thought and action can be nourished. It is not possible for a work of fiction to relieve boredom for a time, and then vanish as though it had not been. Because the work of our imaginations is an indispensable partner in the presentation to us of a work of fiction, reading or listening to one is always an experience which must leave some mark. Under the word fiction I include history, if it is formed into stories.

It follows, then, that stories cannot be received by us passively or identically. And finally, it follows that the Bible cannot be what it is, mostly stories, and be understood for the many by a learned few who would control the rightness of beliefs. In our vulnerability to stories, we are all alike, and the canon cannot rise above his own humanity. In our response to stories, where the possibility of faith lies, we are independent and free, and the canon cannot rise above us. Cervantes' book is a parable of faith, written at the time of an Inquisition.

You may have noticed that I have not had much to say about Part two, and you must realize by now that I am not going to. In fact, I have used Part two as though it were Cervantes' commentary on Part one. It is more than that. In it, Cervantes magnifies Don Quixote's mistakes, failures, doubts, and miseries, so that we will

be willing to let him die. We are left alone at the end of Part two, in a way that we are not at the end of Part one. We have only ourselves to rely on, and no longer Don Quixote, to assimilate and come to terms with our encounter with him. If we are to carry away anything of importance from that encounter, it must survive a passage through his inexplicable abandonment of everything he believed. But Cervantes is too good a storyteller to make even half a book entirely painful to his best and most trusting readers. He gives as compensation for our ordeal Sancho Panza, for Part two is Sancho's book.

With the many ways in which Don Quixote and Sancho are obvious opposites, one is apt not to notice how much they are alike. Each has left home and submitted himself to adventure and the workings of providence, Don Quixote because he longs to be acknowledged and accepted by Dulcinea, Sancho because he longs for an island, where he would be an important man, see his children honored, and not have to do any work. Within their enormous sameness, their differences make their friendship the most stable of self-maintaining communities. When they pull against each other it is always for the sake of the same goal, that grace without which a life, whether devoted to honor or to pleasure, is incomplete. In the course of his companionship, his fights, and his reconciliations with Don Quixote, Sancho acquires habits which will sustain his quixotic longings after he has lost his friend.

He has progressively become brave enough to fight in defense of his master (I.24), alongside his master (I.45), and finally in rebellion from his master (II.60). He has likewise absorbed enough of his master's wisdom that he is able, on his own in charge of his inland island, to resolve a paradox that would defeat Bertrand Russel (II.51). But most important of all, association with Don Quixote has liberated Sancho's imagination. What Sancho sees from the flying horse Clavileno has nothing to do with knight-errantry, since his imagination has been differently nourished than has Don Quixote's. A mustard seed from the Gospels, some garbled astronomy, and memories of his boyhood as a goatherd combine in Sancho's visions (II.41). With the eyes of an imagination thoroughly his own, set free in him by Don Quixote, Sancho sees that his longing is for no earthly island (II.42).

As Don Quixote is a lover of honor, so is Sancho a lover of pleasure, with sufficient imagination always to be grateful and never to be satisfied.

Politics and the Imagination

Eva Brann

The topic "Politics and the Imagination" is at once larger and more restricted than "Politics and the Arts," the theme of this Tocqueville Forum.* It is more restricted because I mean to exclude the practical problem of the relation between the arts and public life. Indeed, by *politics* I mean here not the working processes by which public affairs are carried on, but a fundamental sphere of human interest, namely that which is concerned with the well-being of a whole civic community as a whole. I think that in this country even politicians in the narrow sense, who are absorbed in the machinations of power, have some inkling of this meaning of politics, while it plays a large role in the thinking of all people who regard themselves as citizens.

On the other hand, the topic "Politics and the Imagination" is larger than "Politics and the Arts" because, although almost all works of art are works of the imagination, not all imagining actually results in works of art; for example, dreams and daydreams have no actual product.

I should also say what I mean by the *imagination*. I take the term for present purposes in the most basic of its usual senses, namely, as our ability for forming *interior images*, for envisioning eventful scenes and peopled places. Such interior sights must certainly be derived from exterior perceptions, but our imagination reshapes them and infuses them with feeling. This is not the place to

pursue the fascinating philosophical analysis of our strange ability for forming an interior world, except to mention one of its important characteristics: the imagination is often thought of as a mediating faculty between our blind desires and our directed activity, a testing ground in which we shape our wishes into images and prepare them for execution as works in the material world.

This imaginative faculty seems to me to have a definite, although limited, relation to politics. Most political reflection is concerned with the relation between human passion and human reasoning, with what we want and how we contrive to get it. Of course, these activities often bring the imagination into play, but they are not specifically imaginative; they do not have their origin in the imagination.

It seems to me, however, that there are two definite ways in which the imagination as such has to do with politics, corresponding to the two aspects of the imagination as a place for shaping wishes and as a ground for planning works. In the first case the image remains an unrealized dream, essentially interior; in the second case it is externalized and becomes a work of art.

The first case is exemplified by that peculiarly political product of the wishful imagination, the *utopia*. A utopia is an imagined political community, where the emphasis is on the fact that it is *imagined*; it may be presented in words, but in words which depict, which are images. That is to say, a utopia is not a mere conception of reason (though its life may be presented as eminently reasonable), but the depiction of a wished-for community, communicated with as much vivid detail as the author can make plausible. It is a city painted in words.

A utopia will, of course, present itself as the imagined incarnation of the author's ideas, but that is part of an illusionistic technique used by utopian authors: at

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bottom it is not the image which follows the idea, but the idea which was distilled from a vivid dream.

Now insofar as the utopian image is written down in a book, the dream is, to be sure, externalized and worked up. Nonetheless, *utopias are in their very nature not works of art*, or at least they are not primarily such, for what is crucial about art works is that they are meant to be the final realization of the maker's internal image, and fulfillments or ends in themselves. Most utopias, on the other hand, pretend to be nothing but beginnings, mere sketches or blueprints for communities to be wished for in the world. Although it is no proof, it is at least an indication of this fact that among the score or so of the best known utopias only one is generally acknowledged to be a work of great literary distinction, namely, the book that gave its name to the genre, Sir Thomas More's *Utopia*. By and large utopias give no more esthetic satisfaction than does an account of a daydream: the energy is in the wish, not in the work.

The first part of my talk will therefore be about that application of the imagination to politics which produces an imaginary community, a *political wish-fulfillment*.

However, while the utopian imagination shapes and encompasses imaginary communities, the art-producing imagination may inform real communities from within.

Thus, the second way the imagination and politics intersect is precisely insofar as the realized works of the imagination, that is to say, *works of art*, become of concern to a political community.

Yet the relation of art to politics seems to me to be of necessity *primarily negative*. Just as a gardener can only select the seeds and choose the site, and thereafter can only water and wait and weed out unwanted growth, so a community can wishfully choose and encourage certain kinds of art, but it can *effectively only exclude* and censor what it opposes. Again, a sign of this fact is the exceedingly modest role accorded to works of art in most utopias: just as they are not generally themselves real works of art, so they admit such activity only in a very subdued fashion, for example, in encouraging styles in the crafts which are in harmony with the communal image. The grander arts, which depend more on individual gifts, are evidently considered to have too intractable a relation to the civic community.

The point I am making, that the arts are related to politics most determinately through censorship, is not quite the same as a familiar argument made by David Hume when he lays it down as a principle that it is impossible for the arts and sciences to arise among a people that is not blessed with free government, claiming that monarchy is positively injurious to the arts. He himself says that this theory cannot account for a Homer, and no more can it account for Shakespeare or any great poet who takes for his subject the incomparably great. So I am not arguing that political freedom is necessary to art—a manifest falsehood—but, on a different level, that a political community can never *produce* art: it can only *prevent* it from coming on the public scene. If politics

interests itself in art positively, it must perforce be by way of censorship.

Accordingly the second part will be concerned with censorship of the arts in various political settings.

I. Utopia

A utopia is, as I have defined it, an imagined and imaginary political community, envisioned rather than conceived, a desire-filled depiction of a well-shaped communal life.

The name "Utopia" was invented by Thomas More and is the title of his little book, written in the beginning of the sixteenth century, the first full-blown utopia. It is a Greek formation and means "No-place." Utopias are no place in two senses: First, they are inaccessible. More's Utopia is an island in the New World, but the playful claim is that its coordinates have been lost; it is, of course, a fantasy island. Second, it is no place because it is a community which never could and, as surely, *never should* be realized. The author comments at the end of his fictional narrator's report that, while some Utopian features are rather to be wished for than expected in England, yet others are absurd and in themselves unacceptable. It is not hard to discover what features More built into his fantasy city which are either unrealizable or undesirable or both. For example, the Utopians live in handsome houses which are reallocated every decade, since there is no private property on the island. Now there are passages in the *Utopia* itself and in More's other works which make it clear that he regarded communism as unsanctioned by religion and impractical in this world. But More's most serious reservations concern not what the Utopians *do* but what they *are*; namely, cheerful pagans, unwitting Epicureans, unphilosophical followers of all natural, reasonable pleasures. They worship Mithras, an ancient Persian sun god, while practicing religious toleration to the point of indifference. Now More was a devout Christian and a devoted reader of philosophy who could not and did not approve of these easy opinions and loose practices for a living polity.

When then did he invent the fantasy? The answer is that his Utopia is a subtle and revealing exercise in delineating delightfully a community which might be good if human beings were *natural* rather than *spiritual* beings, if they had only enemies worse than themselves, if they had no pride and knew nothing of original sin. It is instructive to imagine the kind of community such people might have, and part of the instruction is the faint repulsion we are expected to feel at the lives of weightless beings who do not share the fallen condition of real human creatures. More gives the narrator and discoverer of the island a Greek name meaning the "Babbler," Hythloday, but behind his babble stands the discerning imagination of the author.

The word "utopia" is, as a prefatory letter to *Utopia* explains, to be heard also in a second way. Utopia means

not only "no-place," but also the "good place," *eu-topia* (as in "eulogy"). For, on the surface, life on the island, with its fifty square-walled hillside cities in which each house has a garden, cities watered by pure fresh rivers fronted by solid piers and spanned by splendid bridges, is secure, pleasant, and good.

This second aspect of utopia comes to be preponderant in later utopias which are no longer half-ironic images, but real wish-projections, indulgences of the author's fancy; these are, for all their intended charm, slightly repellent, as imaginary spaces dominated by someone else's dreams of perfection always will be.

A fine example of such latter-day utopias is William Morris's *News from Nowhere*, written at the end of the last century. This Victorian *Nowhere* takes place right in England, and instead of being unreachable in place it is inaccessible in time; it is set in the future, but a future shaped by Morris's nostalgia for a medieval past. It is in fact a pre-Raphaelite dream, a future to return to. (I might observe here that writers of utopias naturally always play with the two necessary coordinates of reality, space and time, and, having more or less run out of uncharted lands on earth, they go to future times, and latterly to outer space; the first futuristic utopia is Mercier's *Memoirs de l'An 2440* of 1770.)

The chief feature of this future-past is the achievement of a perfect integration of human beings and nature, a machineless but productive pastoral, in which work is pleasure. In fact one of the mild worries of the Nowhereans is that they may use up their share of work too quickly. Work is either of the type called "easy-hard," namely, healthy outdoor labor, or it is craftsmanship. The country is gently and tolerantly anti-intellectual. Children may read books avidly if they must, but this bookwormish affliction is expected to disappear in maturity. Books were for a time when intelligent people could take no pleasure in life but had to rely on the imagination of others. The genuinely amusing work is housebuilding, gardening and producing craftsmanlike objects. The Nowhereans are uncompromisingly egalitarian and look back with a shudder at the old ways when machines were used for ordinary work while the intelligent elite followed the higher forms of art.

Morris's *Nowhere* has in common with More's *Utopia* those features which seem to belong to the very nature of an imaginative polity: its life is somewhat subdued, pastel-colored, so to speak. Morris acknowledges that passionate extremities may suddenly intrude into the peaceful pastoral, but these are incidents to be quickly resolved. Evidently, when the imagination applies itself to shaping a perfected political community, it naturally excludes just those eruptions of human extraordinariness which are the chief occasions for grand art. And, of course, that makes good sense, since the utopian imagination means to impose a certain coherence of atmosphere, a pervasive communal tranquility which naturally excludes private outbursts. The political imagination can-

not help but bleach out the passions and contract the private sphere.

Accordingly most utopias are communitarian: More's *Utopia* is a tightly organized, rather herdlike, communist republic. (At least one of its magistracies is an assimilation of an English office to Plato's pig city: the lowest title is that of "sty-ward," that is, steward.) Morris's *Nowhere* is an idyllic socialist anarchy, which is to say that there is really no political structure to speak of: all problems are regarded and solved as social problems.

Again, the ways of utopia are apparently inevitably anti-philosophical, and this feature, too, lies in the nature of the genre, first, because the imagined city is often dreamed precisely in opposition to the harsh and difficult reasonings of the philosophers, and, second, because its idyllic internal life alleviates those human predicaments which give rise to troubled quests. Of course, something similar holds for religion: utopian religions are by and large exceedingly tranquil since the suffering which intensifies religious feeling has been eliminated. The inventor has, so to speak, pre-empted all the passion and has led his creatures into the promised land.

Where the two utopias differ most fundamentally is in the attitude of their authors towards them. More himself appears in his book as the somewhat sceptical listener, and as author his stance is one of ironic delight. Morris, on the other hand, depicts himself as literally dreaming the dream in which he enters *Nowhere*, and, when he awakes from it, his heart is heavy with nostalgia for a time that never was. Most post-Morean utopias are, then, unironic political dreams, and the dream politics may consist precisely in dreaming of a community beyond politics.

As political dreams, utopias are naturally shaped about the intimate preoccupations of their authors, and one among these is almost intrinsic to utopian imagining. Since utopian writers are themselves inventors and contrivers of human nature and human environments, their imaginations are particularly drawn to inventions and contrivances, in short to technology, which they see sometimes as a sinister spoiler and sometimes as the bright savior of political communities.

There are then, first, the wholeheartedly optimistic utopias of technological process, whose optimism can be either complexly serious or simple-mindedly shallow. Early in the seventeenth century Bacon wrote the first of the positive technological utopias, the *New Atlantis*. It is the prototype of a research polity. Its management is surrounded with slightly sinister mystifications, but Bacon's insider's awe before the human mastery of nature which is in the offing is palpable. In the early twentieth century, on the other hand, H. G. Wells wrote *A Modern Utopia* which lightheadedly celebrates an international technocracy, endlessly on the move but strictly controlled by an ascetic elite called, infelicitously, the "Samurai."

Morris's *News from Nowhere* was in fact one sort of reaction to utopian celebrations of technology, namely the

pastoral. But there is also a very different kind of anti-technological utopia, an imaginary community which is not a dream but a nightmare. This kind of anti-utopia is not an invention of modern times. Plato depicts such a place, the mythical island of Atlantis, whose image Bacon meant to correct in his *New Atlantis*. The old Atlantans are the ancient enemies of Athens, corrupt half-descendants of Poseidon, the god of oceans and earthquakes and city walls. They inhabit a geometrically circular island surrounded by concentric ditches and built over with square castles with fantastically devised walls. These earthmovers keep elephants for bulldozers. Their island is amazing and awful.

In this century the fear of a now successful technology, combined with the horror of totalitarian politics, gives rise to a new political image, an image of the perversion of the *polis*, namely a collective of isolated, terrorized, technologically manipulated, lost souls. By the middle of our century the number of published utopias stood at about two hundred and fifty, and the most serious of these belonged to the new type, which was labelled "dystopia" or "bad-place." The most famous of these are Aldous Huxley's *Brave New World*, which imagines an England genetically manipulated and controlled by an orgiastic drug, and George Orwell's *1984*, published in 1949, which imagines a thoroughgoing totalitarianism in which privacy has become a persecuted political sin: there is no sanctuary from Big Brother's spying eye.

1984 has come and gone. Decades have passed since the publication of *1984* and "dystopia" has not been realized, at least not in the West. It seems to me that the dystopias themselves have had a small but effective part in this blessed fact, perhaps primarily by causing intellectuals, whose political imaginations are notoriously weak, to imagine terror and to learn to cherish what political blessings they have. Indeed the type of dystopia cannot help but be in general more effective than eutopia, because while eutopias are intimate hopes to which an author tries to win converts, dystopias are projections of real, fearful possibilities to which the author tries to open the world's eyes.

But while it is in general the case that utopias have had minimal political effect, there is a small scale exception to this observation. In the nineteenth century there flourished in this country, in the New World where Thomas More and Francis Bacon had once located their utopias, scores of utopian communities. There were not, of course, utopias exactly in my sense, both because they were not, strictly speaking, independent political communities—they had the American Republic as their political ground—and because they were not imaginary but very much flesh and blood. Yet they were usually based on utopian blueprints, such as those devised by Owen, Fourier, Cabet. Most of these realized dreams were brief; many ended in disaster. In fact, the more successful and long-lived settlements were usually religious foundations and not primarily social or political utopias;

as I mentioned, the latter were usually rather insipidly religious.

Before concluding the section about utopias, I should say that, once the utopian genre had become established, it was used to clothe with imagined shapes all sorts of notions and speculations. There are, for instance, cosmological utopias in which the community mirrors a hypothesis of the heavens, psychological utopias which embody a theory of human control, and ideological utopias based on issues such as feminism or ecology. The genre is irrepressible.

Yet, a short generation ago, utopia was declared dead. It had been discredited too long and in too many ways: in the nineteenth century by the failures of its many attempted realizations, and, more severely, by the Marxist attack mounted against "utopian" socialism in behalf of "scientific" historic principles of revolutionary development. Utopias are but small-scale editions of the New Jerusalem, the *Communist Manifesto* says sarcastically. Thus in our century its decline has been mourned; bloodied by the Marxist critique, it was said to have been killed off by that political pessimism which caused utopia to be displaced by dystopia. But these reports of utopia's demise are premature. The genre is, as I said, irrepressible. Although the best known recent utopias are rational constructs, (for example Nozick's libertarian utopia), romantic, imaginative utopias continue to be written, and even the founding of utopian communities still goes on.

Prolific as the utopian genre is and, no doubt, will continue to be, it has not, I have argued, and it cannot have, much political potency. The reason is inherent in its origin in the wishful imagination. That makes utopias finally rather private, even idiosyncratic, and certainly ungeneralizable constructions. The products of the imagination stand each alone; it is only the intellect which can discover universals. And therefore, even when there is wide-spread utopian activity, it cannot have the unity or coherence of an intellectual movement. *Utopian visions do not reinforce one another*, nor can one imagine utopian politics arising except under the aegis of a political framework based on more universal principles, as was the case for the utopian communities in the United States. That is not to say that utopian activity is not, just in itself, therapeutic and vivifying. However, an activity which matters as an activity, rather than because of its content, is precisely what we call play, and, in the last analysis, that is what utopianism is: the imagination at play, as irrepressible and as salutary as play is a political recreation.

I want to conclude by mentioning a role the imagination plays in politics in which it is not so spontaneously inventive as in the construction of imaginary communities, but perhaps correspondingly more powerful. I mean its role as imaginative memory, which contains our common past and our common beliefs. Most people, citizens and politicians, who love their country have a vision compounded of its founding myths, its pristine

principles and its historical high-points, which at crucial moments informs their political action. This vision is precisely *not* utopian because it is not inherently nowhere; on the contrary it is the ideal behind the here and now, the potent, practical image of a living political community.

II. Censorship

When a strong imagination becomes productive and by means of an adequate technique realizes it works for their own sake, its products are works of art. Such works in turn affect and shape the imagination of others. Thus art, intentionally or unintentionally, enters politics insofar as politics is the sphere of concern with the community as a whole.

Now I have argued that communities are powerless to elicit the art which seems to them to preserve and strengthen them, for the productive imagination is simply not at their disposal. *Communities can do but one thing directly and effectively: they can proscribe aberrant artists and their art.*

The classical justification for the control of works of the imagination is to be found in Plato's dialogue *The Republic*, written in the earlier fourth century B.C. It is a twelve-hour-long conversation mainly between Socrates and Plato's two brothers. In the course of it, they find occasion for devising a small political community such as the Greeks called a *polis*, a city. (In Greek the dialogue is actually called *Politeia*, meaning "political framework," or "city-constitution.")

I should point out here that the city of Plato's *Republic* is not strictly a utopia. To be sure, it too is "nowhere" on earth; Socrates refers to it as a "pattern laid up in heaven." (In fact, Plato wrote another work containing a "second-string" constitution meant more for practical application.) But the city of the *Republic* differs from a utopia in not being an *imagined* place; indeed, it is severely lacking in imagined detail. It is rather, as Socrates says, a city "in reason," an intellectual construct. One of Thomas More's friends, who recognized *Utopia* as being in a kind of respectful competition with the *Republic*, made just this point in his prefatory poems: Plato's city, he says, is a philosophical invention and full of philosophy while No-place, its successful rival, embodies its philosophy in an unphilosophical way (namely, as a flesh-and-blood fiction).

The case must be put more strongly. Not only is the city of *Republic* not a city of the imagination, but its very building is framed by two massive and deep attacks on all works of the imagination and on the imagination itself.

In Platonic dialogues *where* a point is made often determines its interpretation, so let me give a rapid sketch of the structure of the work, which is, in fact, rather strictly symmetrical. There are ten books. In the first of these are brought out the depths and the difficulties of the controlling question: "What is justice and what

is its worth in itself, apart from rewards?" Next it is decided that justice is better investigated "writ large." That is to say, instead of searching for justice in its original seat, the human being, the interlocutors will construct a perfectly just political community and then articulate the meaning of justice. Several books are devoted to the developmental stages of this city which correspond to the progressively higher parts of the soul as Socrates discerns them. The high point of the construction occurs right in the middle books, the fifth and sixth. It consists first in the scandalous notion that the governors of the city, corresponding as they do to the rational part of the soul, should be philosophers, and then in the detailed description of the philosophical education of these philosopher kings. There follows an account of the stages of decline and fall such a city is subject to and their causes in the souls of the citizens. The *Republic* ends with a cosmic myth displaying an answer to the question whether justice is a worth in itself.

The imagination and its works are discussed twice: on the way to the perfect city (Books II-III) and again, symmetrically, after its fall (Book X). This last treatment is the most radical and most fundamental attack on imagining and on art that I know of. It could only make sense where it occurs, namely, after the philosophical education of the governors has been set out, for this education is explicitly founded on a view of our world as being but an image of true being; indeed the whole realm of things present to us is a hierarchy of images from shadows and mirror images through the natural objects which they copy and which are in turn only images of their ideal originals. Accordingly, the education of the guardians of the city begins by turning the "bringing-up" of the young into a "bringing-around" (the Greek words are *agoge* and *peri-agoge*), by wrenching them away from absorption in the multitude of seemingly vivid images to those unique, substantial thought-originals which will teach them to keep the city harmonious and unified. In the light of this philosophical understanding of the world, image-making in general is a distracting and falsifying activity. Since visual images are the exemplary images, Socrates attacks particularly painters and, by implication, sculptors. One may well ask what possible political harm could be done, for instance, by the Parthenon frieze, a severely choreographed depiction of the sacred procession celebrating the goddess of the city of Athens, in which human beings are shown in decorous beauty and the gods, reverently depicted a little larger than men, watch graciously from Olympus. The answer is that Socrates is here attacking not the subject or style of any art, but *art itself* as diverting the attention by a procession of images from those self-same unities of thought whose contemplation keeps a community whole.

It is necessary to say that this radical proscription of the imagination is to be taken in its context. Socrates himself is, as I have mentioned, about to launch into the telling of a magnificent myth, a huge and brilliant cosmic image. The attack on the imagination is intended seri-

ously enough within the intellectual exercise he and Plato's brothers are engaged in: the thinking out of a city which would realize a philosopher's understanding of the human soul and which would therefore be safe for philosophy. But it is not, I think, meant for practical political implementation.

The censorship which is closer to possible political practice is the one discussed earlier in the dialogue, at the beginning of the building of the city, in connection with the upbringing of the children. Socrates, first and last, aims at the epic poetry of Homer—a bold and scandalous attempt, since the Homeric poems were the great primers of Greek education. What Socrates blames Homer for is primarily the portrait of the gods to which he has accustomed the Greeks: they are lustful, quarrelsome, unstable, mendacious, and unjust—a fact, incidentally, to delight and puzzle a post-Christian reader. Furthermore, the Homeric heroes are indecently woebegone and fearful of death; both gods and men are intemperate in laughing and weeping. The tragedians are attacked in addition for the very form of their poetry: its dramatic format requires the actors to do all but turn themselves into the person of the drama and so to lose their dignity and selfhood in histrionics. All these productions are to be banished from the city. Music too is to be purged of all those modes which are not tonic but relax and slacken the soul. What is left are tales of human excellence and reverent hymns.

This precisely delineated call for a civic censorship of the form and content of the arts may not seem to be so radical as that subsequent attack on the imagination itself which I have just summarized. Yet that is not really the case, for what Socrates here criticizes about the arts is what it is in their very nature to be and to do: they absorb and inform the participant; they are concerned with what is human-all-too-human even when imaging the divinities; and above all, they burst the bounds of tranquil dailiness in depicting what is extreme, excruciating, and passionate. The subdued decorum that dominates utopias and that Socrates too recognizes as a condition of civic tranquility is rarely a cause of a theme or a characteristic of art.

These arguments for political control of the arts are above all remarkable in that they constitute a testimonial to the knowledgeable seriousness with which Plato and his Socrates take the arts (although they make little of the artist himself). They share this attitude with their fellow Greeks. For example, the public importance of music, the power of its various modes to dispose the soul and shape the schemata of the body, was recognized throughout the Greek cities, where music and dance were part of the city's life. Thus Aristotle ends his great book on politics with a disquisition about the function of the musical modes in citizen training. What is peculiar to Plato, and where he differs from Aristotle, is his view of the effect of very intense experiences on the soul. While Aristotle supposes that attendance at a tragic performance will work a purgation and transformation of the passions,

Plato thinks that it will stimulate and excite them and lead to boisterousness followed by lassitude in the citizens. Plato's Socrates deems the arts politically indigestible.

The second remarkable fact is that the problems Socrates raises are very much our own. It is, for example, a much debated problem of our time whether the images children see affect their behavior and whether the shows they watch work their feelings off or work them up. Similarly some of us wonder what the social effects of our popular modes of music and dancing really are: How, to try a comical experiment of the imagination, would our public life change if we made every seven-year-old learn to dance the minuet? So the Socratic problems are much alive even if his solutions are out of tune with our society.

Plato's *Republic* has been seen as a prototype of totalitarianism, for several reasons; because Socrates' intellectual exercise has been mistaken for a practical proposal, because Socrates' city is not a democracy (as if no decent third possibility between totalitarianism and democracy was thinkable), but—most weightily—just because of those censorship provisions we are discussing.

Totalitarian states do, of course, have censorship of the arts—and all sorts of other censorship Socrates never proposes. I shall very briefly sketch the nature of the censorship practiced in the two chief totalitarian states of our century to show how utterly different it is from the classical case.

I mean, of course, Nazi Germany and the Soviet Union. The two cases differ in one important way: Nazi censorship appears to have been devoid of articulable rational foundations, and appealed instead to misty but emotion-loaded semi-ideas and watchwords, while Soviet censorship is rigidly based on an ideological frame, shifting only as the Central Committee of the Communist Party declares changes in interpretation. The documents of both are scoldingly rancorous and brutally threatening toward offending artists, although the Nazi literature on censorship exceeds the Soviet documents in a vulgarity that is scarcely communicable in English. The human plane of either is simply incommensurable with Socrates' gently ironic proposal to anoint and crown the poets and politely speed them on their way to another city.

I should mention that the previous observation concerning the inability of states to engender art is borne out by the censorship literature itself: there are continuous small-voiced complaints that politically pure art of real stature which is to replace the censored art has failed to appear.

The explicit object of Nazi censorship was to purge the arts of all elements not conducive to readiness for sacrifice, obedience to Adolf Hitler, and the submersion of the self in the totality, the State, the Race. For this last purpose a new subject, called "race-style-science" (*Rassenstilkunde*) was invented, and Nazi estheticians debated whether the tango or the minor mode or chamber music might be admitted as Germanic while proscribing atonal music for its rootless intellectualism and in-

ternationally popular hits for their supra-national cosmopolitanism. Effeminacy, decadence and the Jewish spirit were to be rooted out in all the arts. Bookstores were required to remove proscribed books on pain of being blacklisted. Of course the most notorious early act of censorship was the government-supported book burning of 1933. As the books were consigned to the flames a speaking chorus of brownshirted students would call such lines as "For discipline and morality in Family and State I give to the flame the writings of . . ." and supply the name of the blacklisted authors, mostly novelists.

As for Soviet censorship, Lenin set the tone long before the revolution by proclaiming that all literature is party-literature, and that literature is not an individual concern but belongs to the proletariat: "Down with non-partisan literature, down with literary supermen." The creation of art was to be organized, for art is, above all, the organization of the emotions of persons, groups, classes, nations. Stalin later summarized this view in a much quoted phrase to the effect that writers are the engineers of the human soul. In 1920 Lenin sketched out resolutions for *Proletkult*, the bureaucracy in charge of the new proletarian culture: there are, he said, to be no new and special ideas but the traditional culture is rather to be appropriated by Marxist ideology. There are manifestos stating that the working class has the leadership in literature; fellow travellers may be tolerated for their expertise in technique, but all appearances of counter-revolutionary ideas are to be ruthlessly eradicated. Under Stalin followed attacks (which have, incidentally, been lately revived) against formalism or so-called abstract art, for example, in behalf of socialist realism. Socialist realism demands that art always display a proud and life-affirming optimism, while works with no edifying content, which divorce art from socialist truth, are declared undesirable.

Now let me point out the elements in which Socratic censorship differs from totalitarian censorship.

First, whereas the totalitarian censorship enforces on living people a dogmatic pseudo-myth of race or an ideology of class, Socrates proposes his constraints on the poets as a philosophical exercise, a possibility to be considered on the basis of an ever-renewable inquiry into the conditions of a political community; the issue is, therefore, not this or that work or style, but the very nature of art and its relation to communal life. The Socratic attack on poetry is far more radical in thought and far less disruptive in deed than totalitarian censorship.

Second, there is a deep difference between a totalitarian state and a political community in Socrates' sense. In the former the dubious bond of race or class if considered to underlie, precede and supercede the relations of individuals, while the very device on which Socrates builds his city, namely that of a soul writ large, displays his assumption that a city is ultimately shaped and determined by the souls within it, and that the political bond is one of individuals: "psychology" precedes

politics. A totalitarian state is, or means to be, a different whole than is a Greek city, whether it philosophical or actual. The former is, so to speak, an embodied abstraction which attempts to pervade life totally from the top down and absorbs rather than bonds its individual elements; strictly speaking, its relations are not political at all because they are that of an amalgam or a collective and not of persons. Its censorship tries to reinforce this condition: the aim is not, as in the Socratic city, to shape self-possessed citizens, but to meld a people into a fervent mass.

The third point of difference lies in the contrasting conceptions of the virtues that the arts are to be made to instill. To cite just the Nazi list of affirmations as revealed in the watchwords recurring incessantly in the marching songs which were the most voluminous product of the revised arts: loyalty, obedience, flag, flame, race, blood, bullet, drum, submission and the love of death. Compare to these the virtues of Socrates' citizens: courage stemming from a knowledge of what is truly to be feared, temperance understood as a proper self-adjustment of the soul, justice interpreted as a knowledge of one's proper part in the community, and wisdom to be attained in the course of a long effort of learning.

The object of this comparison of obnoxious totalitarian and benign Socratic censorship is to point out what it seems to me we sometimes forget: that a certain kind of political community may have a defensible concern with controlling and even excluding some arts for the sake of its own integrity. For these cities a decent censorship is conceivable, and Socrates initiates the discussion of its rationale. A prime example of such a debate in more modern times is the open letter, published in 1758, which Jean Jacques Rousseau sent to d'Alembert in response to his article in the *Encyclopédie* advising the Republic of Geneva to establish a theatre. Rousseau wrote as a citizen of this small republic, and his chief argument, which was directly influenced by Plato's *Republic*, is that such an alien and sophisticated amusement will undermine the simple and close communal life of the Genevans. Rousseau, like Socrates, recognized an irreconcilable conflict between the arts and the political community, a conflict perhaps less deep but correspondingly more extensive in modern times when the drama is no longer a great sacred public occasion but a mere amusement. For it is just such a diversion which by its agile worldliness, its artful excitations and its isolating spectatorship may loosen the bonds of a small community.

What then about censorship of the arts in our own political community, in a national representative democracy? It seems to me that it has *no* place whatsoever with us. Indeed it is a dead, or at least a dormant, issue (except with respect to pornography; and acknowledged pornography, which is for the sake of sexual arousal, does not come under my definition of art as a product of the imagination which is not primarily an instrument of anything). As its censoring role in the arts ought to be nil, so the government's positive function can be only

minimal. It can and should encourage the arts in general, for example, by modest funding, but it can never rightly make itself responsible for furthering a specifically communal, a truly political, art. In short, the proper attitude of democratic governments to art seems to be friendly tolerance or supportive indifference.

How can it be that an intense and critical relation between politics and the arts is justifiable in classical communities while in our democracy a loose and tolerant relation is required? The answer seems to me to lie in the change of meaning both terms, politics and art, underwent in the century just before the founding of the American Republic. Let me briefly outline the related changes without attempting to articulate their deep common root.

First, the notion of *Art*. I have been using the word as if its connotations for us were the same as in the classical context — misleadingly, for just about the time this country was founded there came to a climax a development which transformed the meaning of the term. Its original unpretentious sense was that of craft, of know-how, of the ability to manage and produce objects of all sorts. In the later eighteenth century the notion of a “pure art work” came to the fore. Such a work of art was thought to originate in the independent esthetic realm of the radically free imagination, a world not bound to ordinary given reality, a world of free play and autonomous illusion. Correlatively the craftsman was elevated into the “Artist,” the godlike creator of this world, a genius, an extraordinary being. And instead of the work of art as a skillfully made object there arose “Art” simply, namely, that specially precious class of objects which is the product of the artist’s absolutely self-determined imagination. Naturally this new artist claimed great authority for himself and his imaginative realm. The German poet Schiller, for instance, proposed that the problems of politics could be solved if mankind were given an “esthetic education,” so that human beings might live in the mode of an artist, by the free play of the imagination (though without themselves producing art). But although the artist’s claim becomes one of universal human authority, it is not hard to see that this new understanding makes art essentially private. The final source and the final arbiter not only for the form, but, above all, for the matter of his products is the artist’s own solitary imagination; such works of private creation are not made to be put in the service of the community and its divinities — the artist would consider anathema any attempt at control (as, for example, the ordinance of the Second Council of Nicea proclaiming that the substance of religious scenes is not left to the initiative of the craftsman but that the craft alone belongs to the painter). So just as the American republic was born, art became an essentially personal enterprise, and the artistic mode came to be privately over-valued and, with good cause, publicly ignored.

In a parallel development that conception of a political community which was to underlie the formation of the

American republic had been formed, and formed in conscious contrast to the classical model. In an ancient city the primary bond is the *political* bond, and public life is not only a means to human fulfillment but its very end. The modern model, however, interposes between private and political life a *social* realm, “society,” a word of far more weight with us than politics. Political bonds are between the individual and a determinate ideal whole, namely the laws, traditions and public spaces of the community. Social relations, on the other hand, are between individual and individual; society as a whole is an indeterminate abstraction. It is in terms of social relations that the bulk of our life, and especially our religious life, takes place. Accordingly, the political sphere is not, for most of us, the place of our fulfillment. It is rather reduced to administration, that is to say, to essentially negative governmental functions which are meant precisely to protect the private and social realms from disturbance and intrusion. A political sphere which is so restricted and which is, by a special provision of the constitution, devoid of any legitimate religious dimension, is not naturally going to give rise to a very extensive or elevating art — though such a thing is not impossible: the major speeches of Abraham Lincoln constitute a political art of real grandeur. But while we may always hope for more such works, especially for a renewal of great political rhetoric, we scarcely expect it. John Dewey, for example, who is, after all, the proponent par excellence of a democratic fulfillment of life, wrote a book called *Art as Experience*, devoted to bringing art back from the estheticism I described before into ordinary life. But he never remotely considers the possibility of a public art celebrating our free political institutions. For him, art belongs altogether to the social realm.

Of course, the fact that our art is rarely political does not mean that it cannot be thoroughly and characteristically democratic and American. Tocqueville, after whom this forum is named, foresaw in 1835, with marvelous acuity, what the sources of poetry in a democratic land might be: how when faith in positive religion is shaken the idea of providence and historical destiny assumes a more imposing appearance; how when life is crowded with petty business the march of the American people across the continent subduing nature on the way is invested with special romance; how the democratic poet concentrates more on passions and ideas than on concrete individual men, always looking to the inner soul — in short how American poetry is suspended between grand massive movements and the most private passions of men. Is this not a near-perfect anticipation of Walt Whitman? Yet one would not claim that Whitman played the role in America that the tragedians, say, played in Athens. He is the poet of America as a democracy rather than as a republic; he celebrates a social rather than a political fellowship.

To conclude. If the privatization of art and the socialization of politics cut the ground from under a com-

munal art, is there then no public place left for the arts? Not so.

I have been speaking of politics in the largest sense, meaning the national political community. But in this country the actual business of life is largely carried on in the cities, and it is in the cities that a civic life in the fulfilling, antique, sense is to be found. The cities too are the natural seats of the arts, because they are the communities in which the arts are cherished and in which the artists flourish, and so it is the cities which have the symphony halls, the art centers and the theatres. Therefore, it is in the cities that the arts and civic life still intersect, and here too those classical dilemmas concerning the divergences of the judgment of the citizen and the imagination of the artist may on occasion come to life.

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Five From *The Old Testament*

This sequence is from a forthcoming book of poems based on Old Testament figures. 'Gideon' has previously appeared in *Shirim*, 'Aaron' in *Kansas Quarterly*.

J. Kates, widely published as a poet, is currently writing a novel about the civil rights movement. Kates lives in Jaffrey, New Hampshire.

Jacob

I crossed the river feeling for sink—holes
with a crooked staff and a blind man crying
"Thief! Thief!" while my brother wept,
the beggar, hungry as a hunter.

He is coming to meet me.
The desert trembles, he is still too far away
for me to see his hands.

Angels camp at the Jabbok ford.
I have offered him everything I own—
nothing I claim is mine by right,
All I keep is the blessing I stole.

Who are you, dressed like my brother Esau,
straining in my smooth arms,
begging me to let you go?

for Peter

J. Kates

Aaron

He has stones between his teeth.
Lisping, spluttering, stuttering,
the words of freedom fall out of his mouth
like broken nutshells, admonitions
and commandments like the cracked pits
of luscious fruit.

He can do anything with his arms,
he has only to lift them—
but his fingers are too subtle,
rebellious, fluttering like his tongue,
afraid to touch what moves suddenly.

He has held his staff over his head
conducting God's glory, opening
passage through the water, wells
in the desert; I have bent down
to pluck it writhing out of the dust.

From private gold I fashion public images,
talking all the time.
I do tricks to distract the multitudes
while he stumbles up the mountainside alone
and returns shimmering,
speechless.

J. Kates

Samson

I dropped like an empty bucket
into her bed. Three times I tried,
three times failed the test;
I had not guessed my own riddle.

A man who has never known sweetness
in his belly grows sick of strength,
of swinging a dry bone.

Who you are and why you come
to lead me in my traces like a mill—ox
mashing the dull chaff under my bare feet
I know, my boy,

I am not so stupid as you think.

Your hair will grow, your beard thicken
and you will find some comfort
in the arms of women.

J. Kates

Saul

Once I towered over the best of my tribe.
When I walked out, even on trivial errands,
men who were thinking of kings
whispered my name.

The force of my arm drove all enemies down.
Now I lift my left hand only with trouble,
the right drums like five fools on the table.
My sons are treacherous archers
who shoot deliberately to miss the target.

There is an empty seat, a gap in the company,
a missing tooth throbbing in my jaw.
Where is the young hero who should be here,
the lad who would swagger out against giants?
Have I withered to a mote in his eye
now that the oil is dried?

An old man can shit, can sleep, be pitied
because he is harmless, a king of wandering asses.
An old man can fling a spear at a hole
and watch it quiver in the mud wall

but miss the music he needs
to lull him into the morning.

*And also the song King David sang shivering in the
arms of Abishag.*

J. Kates

Gideon

While I was threshing wheat behind the winepress
and keeping secret, he said to me,
If I can strike fire from the rock
I will make a man of valor out of you.

All this was done with words
like a stick against the flesh,
nothing but noises clashed against each other
to let the light shine through.

So I went against the dumb thing of Midian
with ten men only like a small stand
of flaming trees, and we cast it down
into its silence.

We are a division of the god of number.
As the man is, so is strength
multiplied by the trumpet of his speech
and the silence of the fearful.

J. Kates

James Joyce's Soul

Joseph Engelberg

A piece of writing becomes a work of art when it is rich in meaning, when it embodies level upon level of understanding. As in an archaeological investigation a hierarchy of artifacts waits to be uncovered: the equivalent of bits of cloth and shards of pottery; jewelry and pots; murals and statues; rooms and houses; streets and cities; etc. Nabokov¹ enjoins us not to overlook in the archaeology of any literary masterpiece the beauty and greatness which can reside at the lowest level: in the details, the literary shards and bits. This is a wise admonition, but an unnecessary one for scholars of James Joyce. Much of their scholarship justly celebrates Joyce's magnificent and suggestive detail. There are, however, also in his works higher levels which await contemplation. Indeed, at the level of Joyce's entire opus there lies a theme which overarches all his works. It is the subject of this essay.

The story of any human life is the story of an awakening and of a falling asleep: an emergence out of unconsciousness into consciousness (paralleling the rise of consciousness in biological evolution), followed by a descent into unconsciousness and extinction. The works of James Joyce, followed chronologically, retrace this cosmic scheme.² Against the panorama of a civilization Joyce depicts the birth, travail, and decline of a soul. It is the story of Stephen Dedalus' soul, but it may as well be the story of Joyce's soul, or of the soul of our time.

The Soul

For millenia the word "soul," a word rich in connotation, was common in our civilization. It was in use as much in common life as in the most refined works of literature and religion. Then recently—suddenly—it disappeared from our midst. Why did it leave? Had we become so old and wise as to no longer need words from our spiritual childhood? Had the word "soul" become meaningless and superfluous like the word "protoplasm" in biology, "phlogiston" in chemistry, and "humor" in medicine? Had mankind begun to conceive of the human being as a machine, lacking any meaning beyond that of a bag of parts— hearts, kidneys, livers, lungs: its destiny to rust out and end on a scrap heap?

What might be meant by the word "soul"? When we remember someone we may recollect some characteristic part of the body, perhaps the hands or face; some disposition of the body, such as the gait, gesture, or posture; some aspect of the inner self, such as mind, intelligence, emotion, superego, unconscious, character. But each of these is but a fragment of one's being, and "soul" does not refer to any one of them. "Soul" may be said to stand for the undivided, unitary, integrative essence of a person. That is why we cannot specify where in the body the soul resides, or what its mass and chemical composition are. Like any attribute of an entire system— population size, gross national product, entropy, volume,— it cannot be localized within the system.

The "soul" represents a unity. Yet it is not self-contained. It is embedded in, and draws its life from family, friends, and society; from those that have lived, live now, and are yet to live; from history, tradition, and cosmos. To these the soul is connected by a myriad of bonds—the greater their number and variety, the greater its vitality, vibrancy, solidity and extension.

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Should some of the bonds be cut the soul loses size and strength, and when many bonds are severed, it shrinks, becomes vestigial; the body remains, but consciousness recedes. The organism withdraws from existence and gravitates towards automatism, somnolence, sleep, unconsciousness, extinction. The body may be the first to fail, and, failing, carry the soul to its destruction. But the destruction of the soul can precede that of the body. When isolated from the influences which nurture it and give it life, the soul atrophies, leaving behind an abandoned body adrift towards a physical doom.

Stephen Dedalus' Soul

What the scientific instrument is to the student of nature, the work of art is to the student of human existence. It makes visible what is invisible to the naked eye. James Joyce's trilogy, *A Portrait of the Artist as a Young Man*, *Ulysses*, and *Finnegans Wake*, is such an instrument, such a work of art. It can be likened to the vast mirror in a telescope, which collects and focuses a myriad of subliminal light impulses, enabling the eye to penetrate the reaches of the macrocosm. Joyce's trilogy brings together the subliminal impulses of a civilization. It is an instrument with which one can probe the microcosm: the soul of modern (post-enlightenment) man.

The *Portrait* opens with the first stirrings of consciousness, the awakening of a soul from a deep, cosmological sleep. This consciousness unfolds; it culminates in the person of Stephen Dedalus. In scenes of Stephen's childhood in the *Portrait*, the word "soul" can scarcely be found. It is in descriptions of his adolescent years that it makes a frequent appearance.³ Whenever the adolescent Stephen falls into an introspective mood, the word "soul" is likely to appear in his musings.

Where was his boyhood now? Where was the soul that had hung back from her destiny, to brood alone upon the shame of her wounds and in her house of squalor and subterfuge to queen it in faded cerements and in wreaths that withered at the touch?⁴

"Soul" appears some 170 times in the *Portrait*. Where it appears it represents some emotion-laden, deep, inward experience.

Her image had passed into his soul forever and no word had broken the holy silence of his ecstasy. Her eyes had called him, and his soul had leaped at the call.⁵

The use of the word reaches a crescendo in the descriptions of a series of sermons on salvation, sin, and hellfire preached by a priest in school at Eastertime. The sermons, and the ambience of the season, serve to raise Stephen to the level of religious exaltation. He enters upon a period of piety, but finds, as did Saul of Tarsus

before him, that the more scrupulously he tries to satisfy the demands of his faith, the more he sins. He is disillusioned; he falls; he breaks with his religion. It is the first of a series of Sunderings from the formative influences of his life. Thereafter the word "soul" appears less and less frequently in the text.

The story of the unfolding of Stephen's consciousness is one of anguish and bitterness. It portrays his relentless struggle against the mass of social, moral, and intellectual traditions which limit his existence. He feels trapped in a tangle of family and friends, the Dublin social order, Jesuit education, the Roman Church, Irish history and nationalism, bourgeois values, heroic ideals, British political and cultural ascendancy.

From early childhood on Stephen finds himself entangled in this thicket of disparate and conflicting influences thrust upon him by society. He strives with the ardor of genius, and in the light of a gifted imagination, to reconcile them. He fails. Later, at the height of perplexity and despair, he is graced at the seashore by a revelation which begins to lead him out of the mist of questions, conflicts, and introspective confusion in which he had been enveloped since childhood.⁴ It is a liberating vision yielding him the understanding that reconciliation is impossible, that incommensurables cannot be reconciled, that there is a higher sphere to which he must rise. What he cannot reconcile he will abandon. One by one he cuts the bonds which tie him to society, country, religion, tradition, friends, family. In a release of emotions long dammed he feels his being affirmed; in the agitation of a newly-found freedom he sets out to recreate the world. The *Portrait* ends on a heroic note.

"He would create proudly out of the freedom and power of his soul . . . a living thing, new soaring and beautiful, impalpable, imperishable . . . To live, to err, to fall, to triumph, to recreate life out of life! . . . Welcome, O life! I go to encounter for the millionth time the reality of experience and to forge in the smithy of my soul the uncreated conscience of my race."⁶

Somnolence

At the conclusion of the *Portrait*, as we have seen, Stephen is about to go forth to triumphantly forge the conscience of his race. Joyce's next work, *Ulysses*, takes up the story two years hence. It centers on a trinity of persons: Stephen Dedalus, Leopold Bloom, and Molly Bloom. The *Portrait* had led us to expect to find the hammerblows of heroic creation. This expectation is unfulfilled. *Ulysses* opens on an early morning with a feeble, drowsy Stephen in his temporary domicile, the Martello tower at Dalkey near Dublin.⁷

Stephen Dedalus, displeased and sleepy, leaned his arms on the top of the staircase . . .⁸

Later that morning he is at Mr. Deasy's school, where he languidly and dreamily performs the functions of an assistant teacher, a job which he is about to abandon. In the afternoon he defends an abstruse doctrine in the National Library, and in the evening he carouses with medical students in a hospital. Midnight finds him in a brothel, drunk and hallucinating. Later, as the night draws to a close, bucked up by a cup of coffee and a stale roll, tired but sober after a long walk through the deserted Dublin streets and a visit to an acquaintance's house, he seeks a place to sleep.

Ulysses appears to gravitate towards sleep. As it draws to a close, it is not Stephen alone who seeks rest: all the major characters are preparing their entrance into the world of dreams. The last chapters portray Stephen's journey towards sleep, the ruminations of Leopold Bloom as he prepares for bed, and the stream-of-consciousness of Bloom's wife Molly, who, in bed, in a state suspended between wakefulness and sleep, reminisces upon the events of her life and the day just past. It is the end of a long, wearying day, and one would not attach great significance to all this turning to sleep were it not for the fact that Joyce's next work, *Finnegans Wake*, to which he devoted eighteen of the last twenty years of his life, is set entirely in the world of sleep, dreams, and phantasmagoric language.

In all this, far from the smithy in which an uncreated conscience is to be forged, it is a drowsy, listless, passive, vulnerable, defenseless, diffident, defeated Stephen we find—a Stephen unequal to the onslaught of life; a Stephen in retreat, sunk into himself, detached from those he encounters, acted upon by circumstances but incapable of acting.

The Fading of Consciousness

Joyce died January 13, 1941, some 24 months after the publication of *Finnegans Wake*. In his works he systematically traced the rise of a human soul to the very heights of consciousness, and then its subsequent descent into torpor and sleep. Had Joyce lived to write another work, what might have been the next step in this soul's journey? Might the oblivion of sleep be succeeded by the oblivion of death, leaving behind a universe devoid of consciousness—as it existed before humankind made its appearance on earth? It is said that Joyce was planning another work which was to have as its setting the Sea.⁹ Had this work been completed, Joyce's opus would have retraced on the scale of a humble city, Dublin, the cosmic drama of the birth and rise of consciousness, and its decline into unconsciousness—the *Portrait* being the story of the coming to life of a human soul; *Ulysses*, a journey towards sleep; *Finnegans Wake*, the world of sleep; Joyce's projected last work, unconscious nature. The goal of life, according to Freud, is death (cf. *Beyond the Pleasure*

Principle). Joyce's imagination appears to have gravitated towards unconsciousness, human extinction.

Stephen Dedalus could not reconcile with the realities of his time and place, his idealized visions of religion, love, family, and society. Failing in this reconciliation he chose to break his connections with them. For them he would substitute the integrity of his self and soul, and build upon this foundation. Liberated from the smothering influences of his paralyzed homeland and people, and energized by an abundant spirit, he would build a new reality.

Ironically, as long as he had been a part of this land and its people, his soul had burned with an ardent flame. After he cut himself loose, paralysis and torpor descended upon his consciousness. This is anticipated in the *Portrait* in words of a prophetic nature:

The snares of the world were its ways of sin. He would fall. He had not yet fallen but he would fall silently, in an instant. Not to fall was too hard, too hard: and he felt the silent lapse of his soul, as it would be at some instant to come, falling, falling but not yet fallen, still unfallen but about to fall.¹⁰

To sin is to break up that which needs be whole.

The passage brings to mind the powerful ending of "The Dead," a story in *Dubliners*, of the collapse of a soul under the illusions of a lifetime and the events of an evening:

His soul had approached that region where dwell the vast hosts of the sea. . . . His soul swooned slowly as he heard the snow falling faintly through the universe and faintly falling, like the descent of their last end, upon all the living and all the dead.¹¹

The protagonist of this story is said to be at least in part the young Joyce's conception of what he might have become in middle age had he remained in Dublin and become a conventional success there.¹² The story begins with an energetic, confident Gabriel Conroy as he embarks, with pleasurable anticipation upon an evening of festivity, self-exaltation, and amorous adventure. He is a teacher at an Irish college (i.e., high school), financially secure, socially established; a reviewer of books for a prominent newspaper; a possessor of a fine wife, home, and children; a man of authority and social standing. But scarcely has he arrived at the house of his aunts for their traditional Christmas party than he suffers a series of psychic blows. These blows undermine his sense of existence, of his understanding of who he is, of who his wife is, and of what life expects of him. As the evening comes to a close, sitting at the window of an unlit hotel room, his wife fitfully asleep beside him, he feels his identity fading: he swoons as his soul tumbles towards the cold, snow-covered, eternal land of the dead. It is another depiction of the extinguishing, through isolation, of consciousness.

Still another example is found in "A Painful Case,"

a story in *Dubliners*, written by Joyce in his early twenties, where he speculates as to what might become of him by middle age were he to continue to live in a society which he despises while systematically and scrupulously isolating himself from its influences.¹³ The story relates the progressive involvement of a Mr. Duffy with a married woman, and his final scornful rejection of her passion. Over a lonely dinner, one evening, he learns that she has died. The news comes to him in an article describing the inquest into her death. He leaves his dinner half eaten. As he walks out into the cheerless cold of a gloomy evening, he meditates upon his own nature:

His life would be lonely too until he, too, died, ceased to exist, became a memory—if anyone remembered him. . . . He felt his moral nature falling to pieces. . . . No one wanted him; he was outcast from life's feast. He turned his eyes to the grey gleaming river winding along towards Dublin. . . . He could hear nothing: the night was perfectly silent. He listened again: perfectly silent. He felt he was alone.¹⁴

Mr. Duffy had labored to be free. Fate had granted his wish. He was alone.

Whose soul is departing?

Have we been speaking of James Joyce, or only of Stephen Dedalus, an object of his creation? Some consider Stephen to be Joyce:

We ought to know a lot about Joyce, seeing that he was at great pains to tell us all he could. He put himself into all his books. He is the unnamed boy in *Dubliners*, Stephen Dedalus in *A Portrait of the Artist as a Young Man* and *Ulysses*, Richard in *Exiles*, and Shem the Penman in *Finnegans Wake*, and, if Joyce painted them himself, who shall say that any of them is a bad likeness?

(Frank Budgen)¹⁵

Others consider Stephen to be Joyce's creation:

. . . my brother was not the weak, shrinking, infant who figures in *A Portrait of the Artist*. He was drawn, it is true, very largely upon his own life and his own experience, . . . But *A Portrait of the Artist* is not an autobiography; it is an artistic creation.

(Stanislaus Joyce)¹⁶

No matter: the works of a literary artist inevitably reveal to us something about himself and about the times in which he lives. Joyce bridges the end of the previous century, and the beginning of the present one. It was a moment when, everywhere, young, sensitive, gifted intellectuals awakened to find, on the one hand, stagnant social realities, nightmarish histories, and ancient, hypocritical religions; and, on the other, the promise of a liberated, secure, enlightened future based upon imagination, science, and reason. They thirsted for release,

for a fresh start, for escape from the smothering ambience of tawdry traditions. They felt themselves to be living at the very interface of a nightmarish past, and an iridescent future. They vowed to forget the past, to create a new future, a future based upon freedom, honesty, beauty, spirit, and justice. Like Stephen, they dreamed of severing their bonds to existing history, tradition, religion, culture, and society. In the end they found, as he did, in place of liberation, in place of a new, pure, and exalted life, that an unkind fate had granted them—sleep, that is to say, a lower form of consciousness.¹⁷

Ours is an age of sleep. The seemingly feverish activity around us is that of a troubled dream. There is a great striving for sleep on earth and an eternal rest in the world to come. There is a yearning for diversion, anesthesia, alcohol, narcotics, sleeping pills, and tranquilizers; for mental disciplines which would take us out of this world and never bring us back; for sharing the rest of the dead while yet alive. Genius appears to be falling asleep, consciousness to be departing. Its departure is reminiscent of the mystical doctrine concerning the *Shechinah*, the divine presence of God on earth.¹⁸ When humankind feels that everything can be under its complete control, when it relies only upon itself and thinks that it does not need anything higher, the *Shechinah* turns away, and departs, as if to say "You do not need me now. I will go away and come back some other time."

The Knight of Faith

Joyce reveals to us in his works the travails of Stephen's soul, of his own soul, of his age's soul. To these revelations, he joins in *Ulysses* the legend of Leopold Bloom, the narrative center around which other characters trace their orbits. Bloom is seemingly a scandal and a stumbling block: a mediocre, vulgar, uncultured, unassuming, undistinguished, canvasser of advertisements—hardly the counterpart of the Ulysses of Homer's *Odyssey*. Yet Joyce saw Bloom as an embodiment of an ideal type: the good man, the complete man.¹⁹ In what sense can Bloom be taken to be a good man, a complete man?

We have spoken of the "soul" as a core of personal being measured by its capacity to integrate the "I" with the "other." Bloom, indeed, has a rich soul. He is luxuriously connected to the world around him, the world and cosmos of Dublin and its people. In this he contrasts with other characters in *Ulysses*. These, leading pinched lives, are locked within themselves amidst clouds of personal obsession. They perceive the world which lies outside themselves to be contorted and an intrusion upon their inner being. Not so Bloom whose mind and vision are clear, whose heart is responsive to those around him, who exults in the world. As we follow him on his peregrinations, we become aware of the myriad connections which bind him with an inexhaustible sympathy to the city and its inhabitants.²⁰ Food being a prerequisite

for existence, he feeds the hungry: in the morning his cat and wife; later the seagulls over the Liffey, the dogs in Nighttown; and, in the early hours of the next morning, a debilitated Stephen. He consoles the orphans and the widows: at Glasnevin Cemetery he leaves for the family of a deceased acquaintance an offering considered generous for a man of his means, and shows concern for their receiving the life insurance. It is not the body alone, however, which must be fed, but also the soul. Wherever he goes he enters with sympathy into the lives of those he meets: Stephen's sister, underfed and in a tattered dress; Stephen wandering about the vast reaches of his own intellect; Mrs. Breen shepherding a deranged husband; the elderly, deaf waiter at the Ormond Cafe; romantic, lame, Gerty MacDowell at Sandymount shore; Mrs. Purefoy in prolonged labor at the Lying-in Hospital on Holles Street.

If Bloom is prodigal in entering such relationships it is not because he is spared afflictions of his own: there is his father's suicide, and the death of his only son; the separation from his remaining child, a daughter, who lives in a distant city; his being an outsider in the Dublin scene; his lack of commercial success and social status.

Yet, in spite of such adversities and losses, there is no hint, as he touches upon the experiences offered him by this Dublin day, that he longs for a release from life, that he wishes to escape its exigencies through sleep or death.

In this Bloom recalls to us the "Knight of Faith," the Abraham-like figure in Kierkegaard's *Fear and Trembling* who lives for the infinite yet is firmly rooted in the daily round of a finite world.²¹ What is remarkable about this "knight" is the extraordinary presence he brings to bear upon the everyday events and encounters of his life. Yet he seems commonplace to others, his special nature being unperceived by those around him. Bloom is such a knight. He is a life-force which vivifies the narrative of *Ulysses* and invests its earthbound finiteness with infinite longings.

Life, Joyce seems to tell us, lies with the "Knight of Faith" solidly rooted in existence; somnolence, sleep and death follow the cutting loose of the soul from its moorings.

NOTES

1. V. Nabokov, *Lectures on Literature*, Ed. John Updike, New York: Harcourt Brace Jovanovich, 1980, p. 373.
2. Cf. Julian Huxley in Teilhard de Chardin, *Hymn to the Universe*. Teilhard views each coming to life of a human being as a cosmic event: with the arrival of humankind the universe became conscious of itself.
3. The implicit suggestion that the "soul" is something acquired during adolescence is reminiscent of the Talmudic dictum that the child is born with an "evil inclination," and that the "good inclination" begins to develop only at puberty (cf. (18), p. 89).
4. J. Joyce, *A Portrait of the Artist as a Young Man*, New York: Viking Press, 1964, p. 171.
5. *Portrait*, p. 172.
6. *Portrait*, p. 170, 172, 252.
7. Cf. Wyndham Lewis, *Time and Western Man*, New York: Harcourt Brace and Co., 1928.
8. J. Joyce, *Ulysses*, New York: Modern Library, 1961, p.3
9. L. Gillet, *Claybook for James Joyce*, trans. G. Markow-Totevy, London and New York, 1958, p. 119. Cited by S. L. Goldberg, *Joyce*, Abeland-Schumann: New York, 1972, p. 114.
10. *Portrait*, p. 162.
11. J. Joyce, *Dubliners*, New York: Modern Library, 1954, p. 288.
12. C. H. Peake, *James Joyce: The Citizen and the Artist*, Stanford, Calif: Stanford University Press, 1977, p. 343.
13. Cf. S. L. Goldberg, *Joyce*, New York: Capricorn, 1972, p. 40.
14. *Dubliners*, p. 145-147.
15. F. Budgen, *James Joyce and the Making of Ulysses*, Oxford: Oxford University Press, 1972, p. 18, 118.
16. S. Joyce, *My Brother's Keeper*, New York: Viking Press, 1969, p. 17.
17. Cf. S. Zweig, *Die Welt von Gestern*, Stockholm: Bermann-Fischer Verlag AB, 1944.
18. A Cohen, *Everyman's Talmud*, New York: E. P. Dutton & Co., 1979, p. 42.
19. Budgen, p. 343 loc. cit.
20. Peake, p. 324-329 loc. cit.
21. A. Goldman, *The Joyce Paradox*, Evanston, Ill.: Northwestern University Press, 1966, p. 76.

Watching *Plains Daybreak*

for Erick Hawkins

*Antelope, buffalo, hawk.
Avatars of Eden,
these gentle, millennial beasts
dance on dawn-bleached grass
ceremony and enigma.*

Their masks do not simply create an aesthetic distance,
inviting us to rest in contemplation; they are spurs
to a certain psychic motion.

Habit blinds us. These masks and stylized movements,
erasing the veil of familiarity in a revelation
of essence, restore to us the instrument of wonder,
the dishabituated eye.

Love moves between the two poles of unity and separation;
this distance is the place of wonder.

This dance thus works its conversion; quietly coerced to wonder,
we are awakened, one and new,
into the revealed Peaceable Kingdom, and drawn awake
to the things of this world in love.

*Open your eyes!
Nothing has happened before!
This is the first daybreak ever.*

Richard Freis

Richard Freis, an alumnus of St. John's, Annapolis, has published poems in *Poetry*, *The Southern Review* and other magazines. President of the First and Vice-president of the Second USA International Ballet Competitions, he is a longstanding admirer of choreographer Erick Hawkins.

Self-Portraits

Elliott Zuckerman

EDITOR'S NOTE:

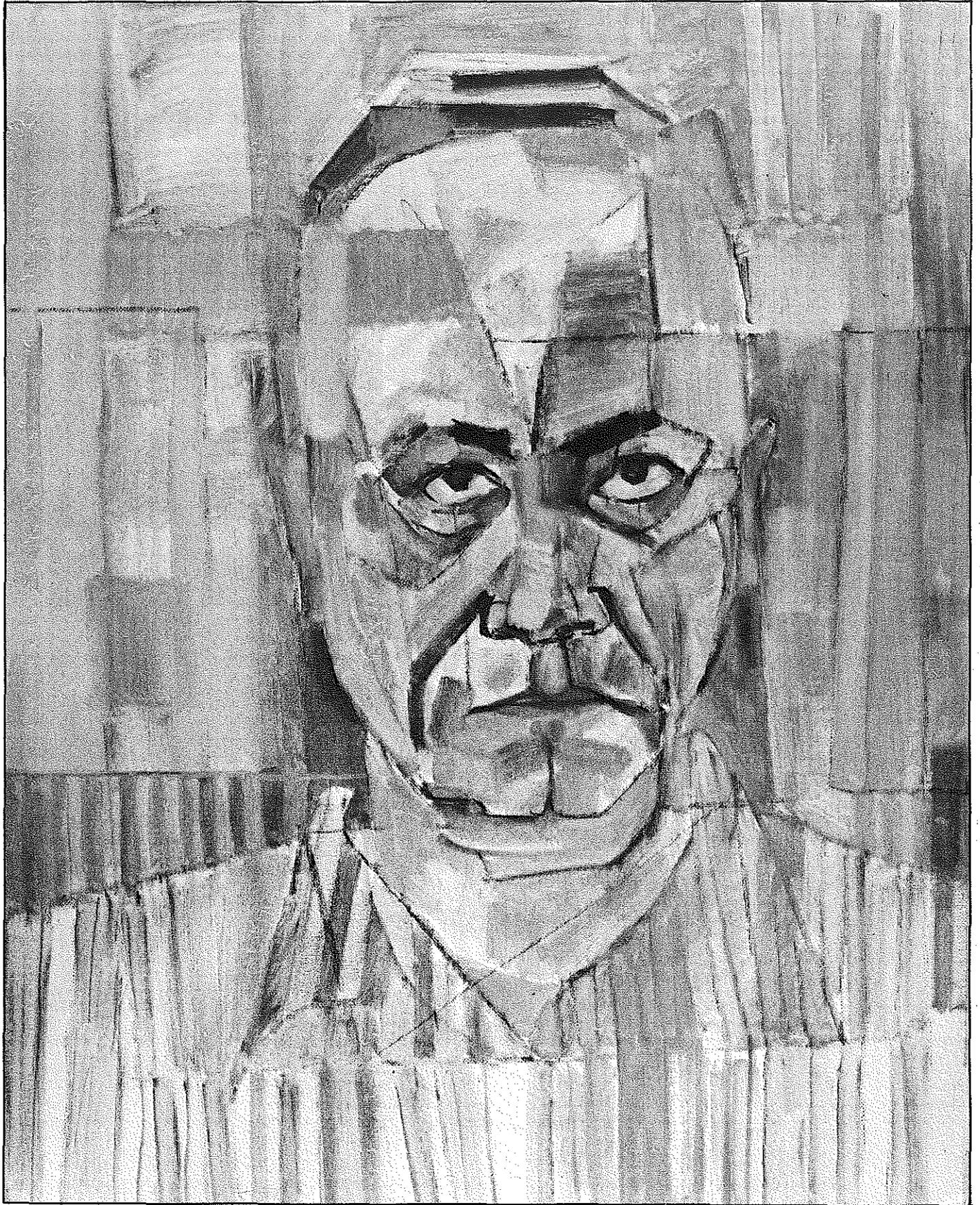
It is at my urging that Mr. Zuckerman has permitted these self-portraits to be reproduced here, even though we could not afford to present them in color. I have asked him to write a brief preface.

I started painting again in the fall of 1977, after not having done more than an occasional picture in twenty years. As a young man I had never painted portraits or self-portraits, but since I started again faces have been the only subjects that interest me. When painting other people I enjoy the effort to get a resemblance; but when I succeed, the delight in the captured look seems to end my interest in finishing the picture.

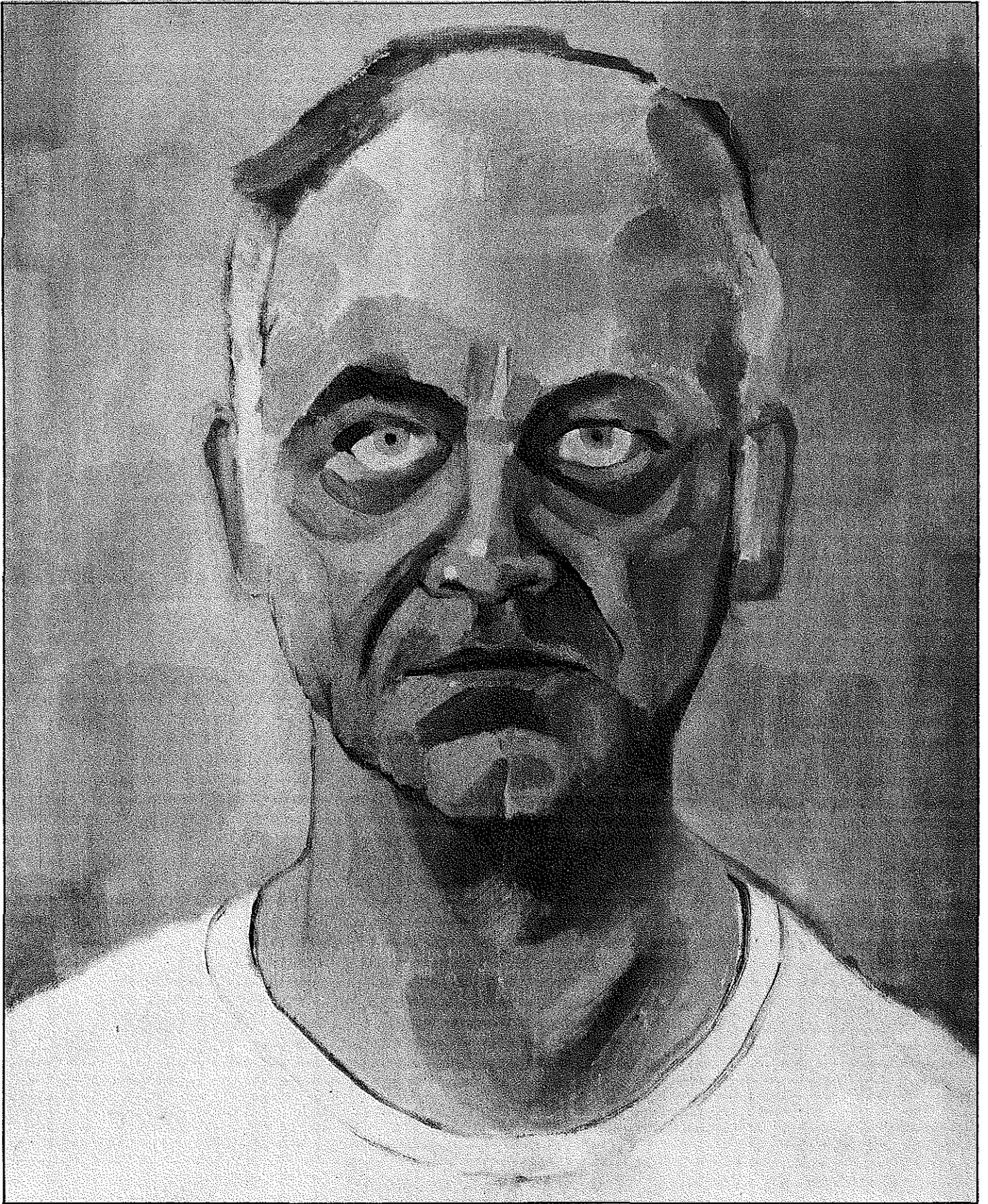
Only in a few of the earlier self-portraits have I been primarily interested in resemblance. Once a new picture is begun, the person on the canvas seems to me to be someone else, someone not-quite-me, usually looking at me, who may or may not reflect an aspect of my feelings, permanent or transient, about myself. I do not reproach myself with excessive self-infatuation, because it is not I who matters but the fellow in the picture.

There are now more than seventy self-portraits. Those reproduced here were painted in oils and are all of the same dimensions: 20 × 24 inches.

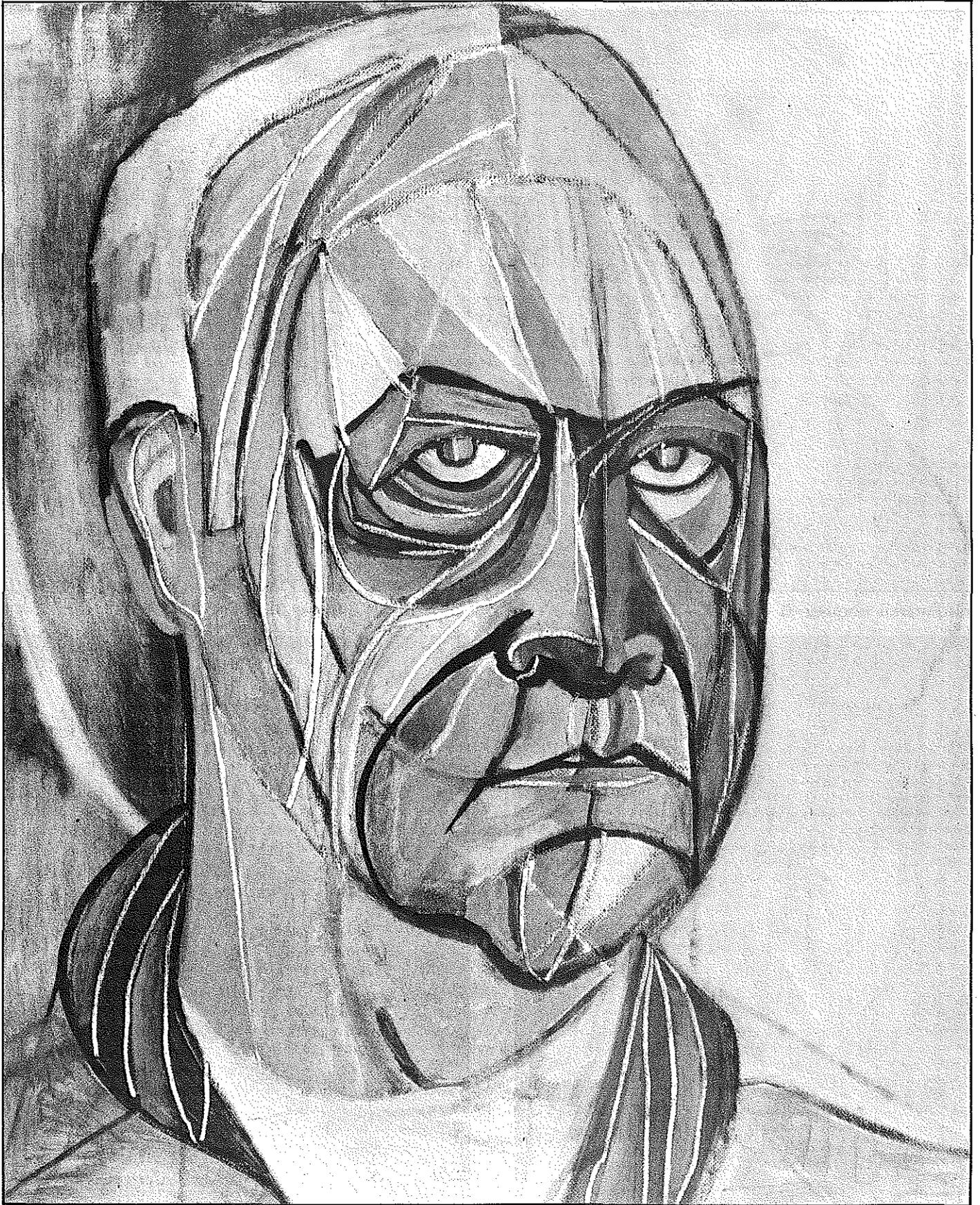
Elliott Zuckerman is a tutor at St. John's College, Annapolis. His lecture, *Beyond the First Hundred Years: Some Remarks on the Significance of Tristan*, appeared in the Winter '84 issue of the *Review*.



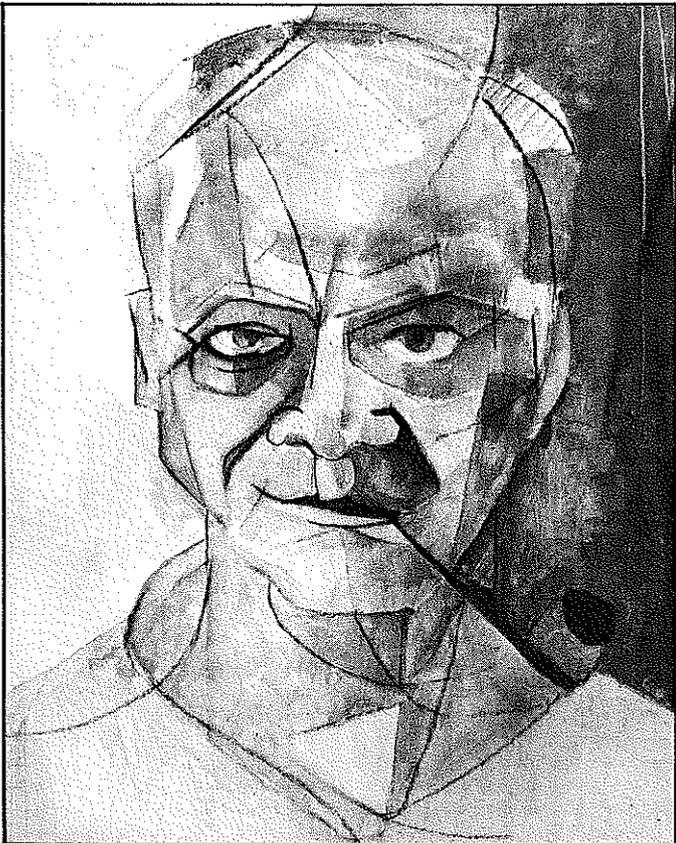
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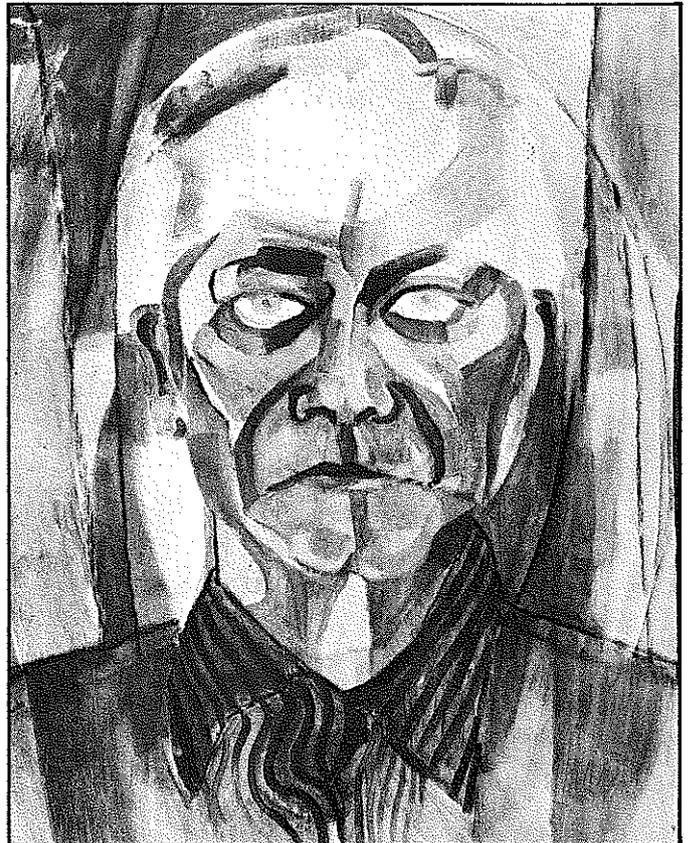
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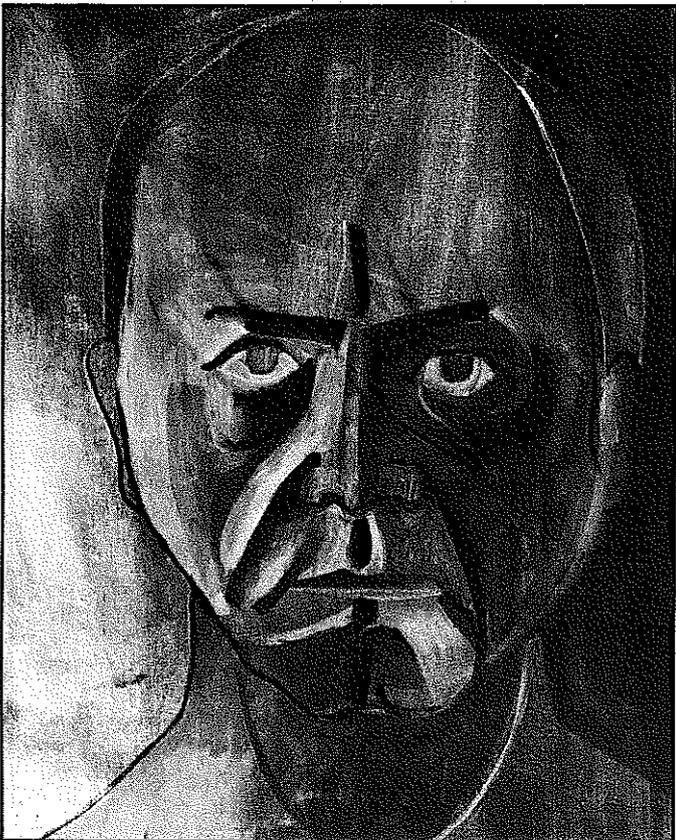
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Self-Portrait number 31



Self-Portrait number 33



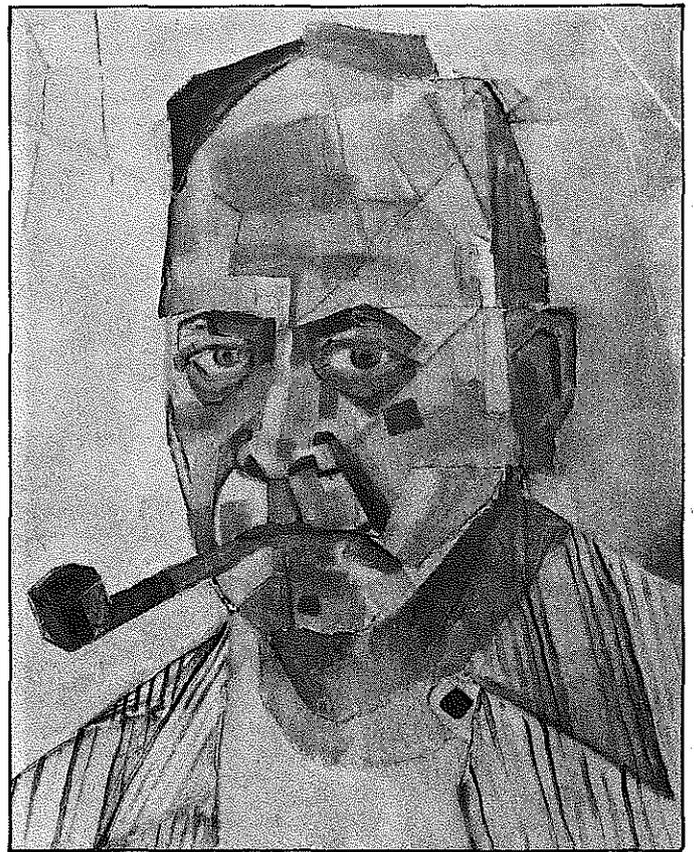
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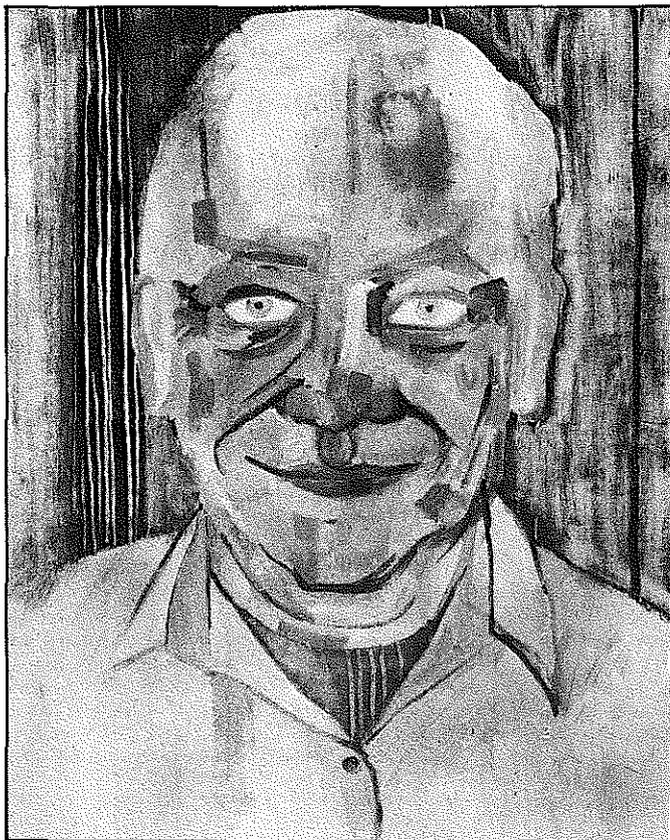
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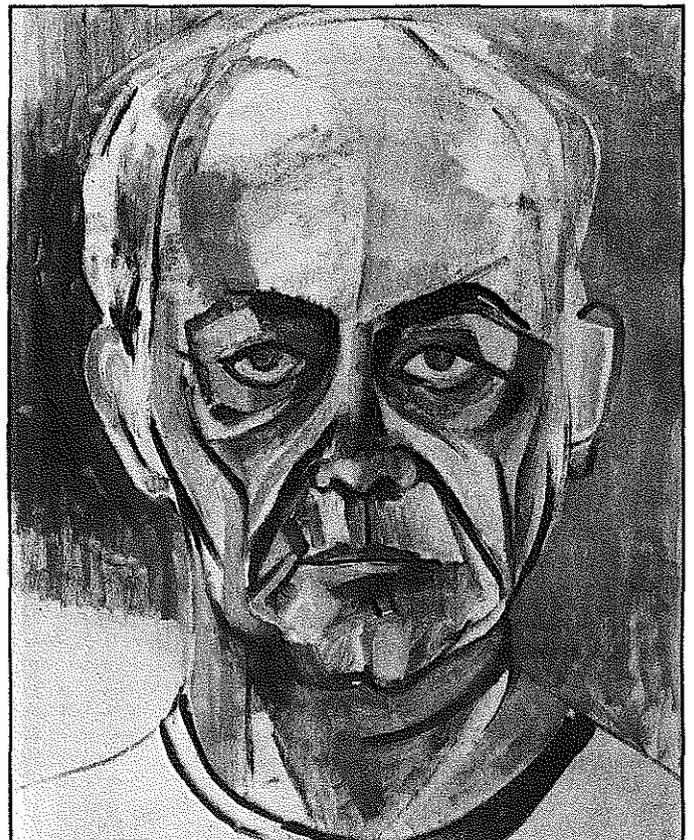
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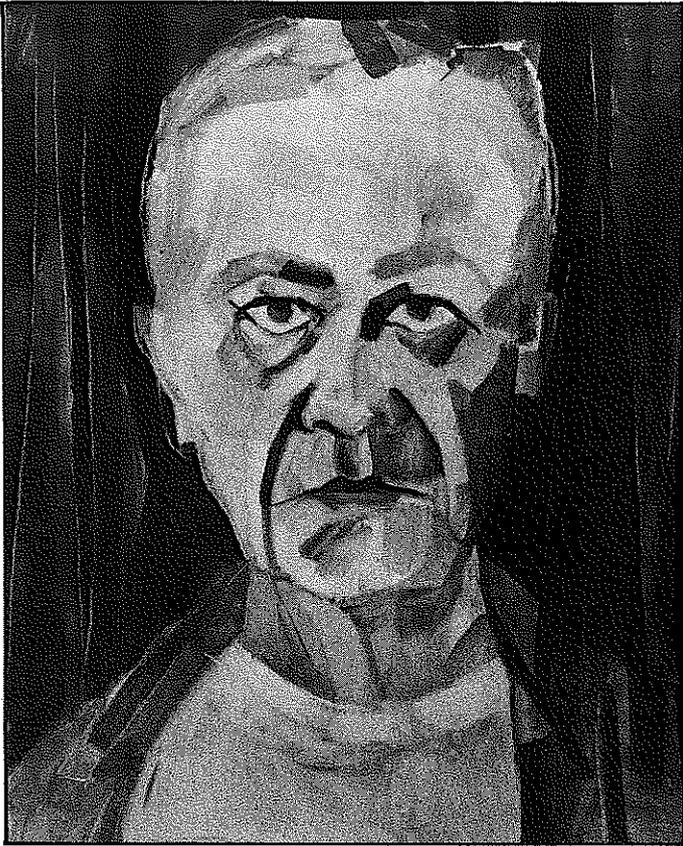
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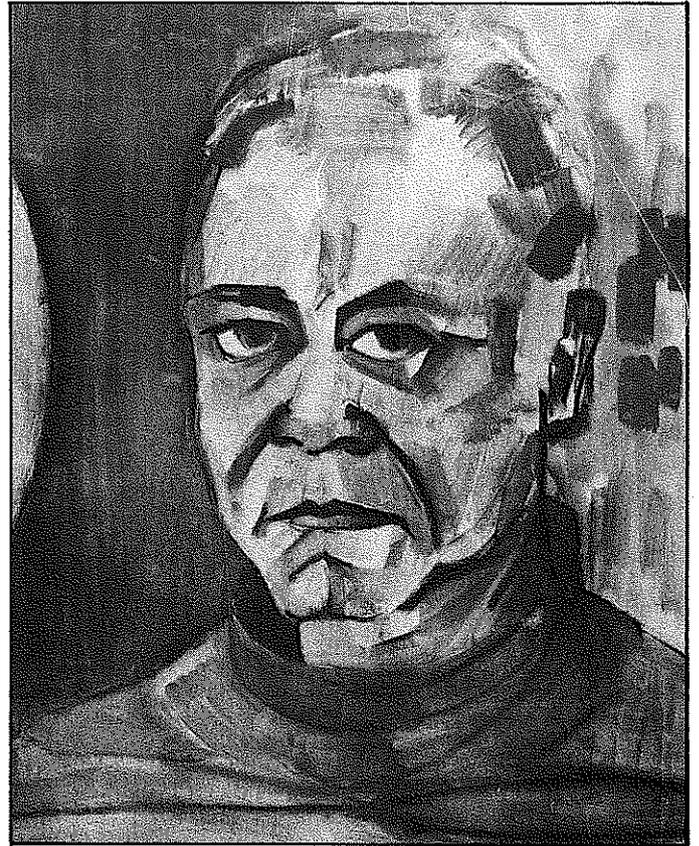
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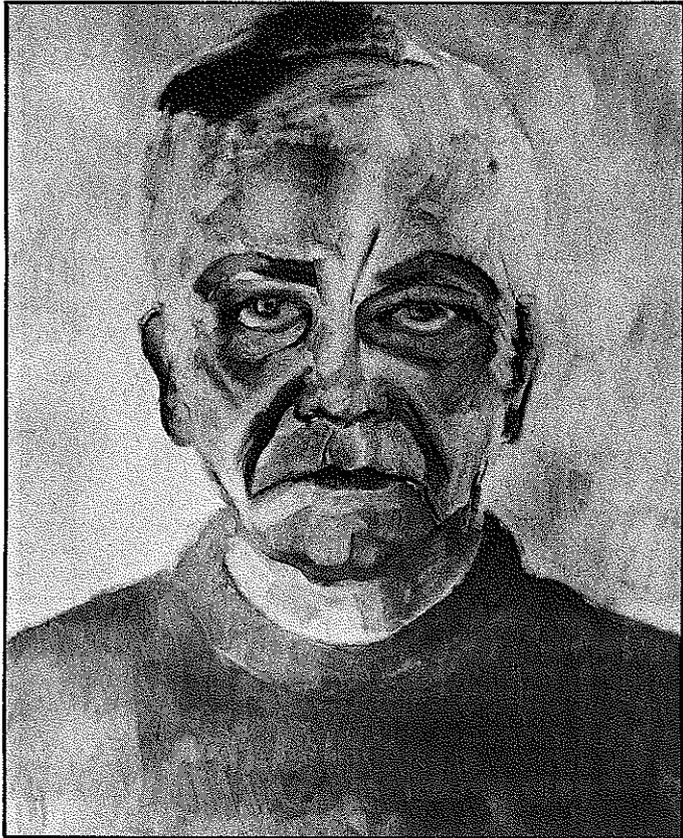
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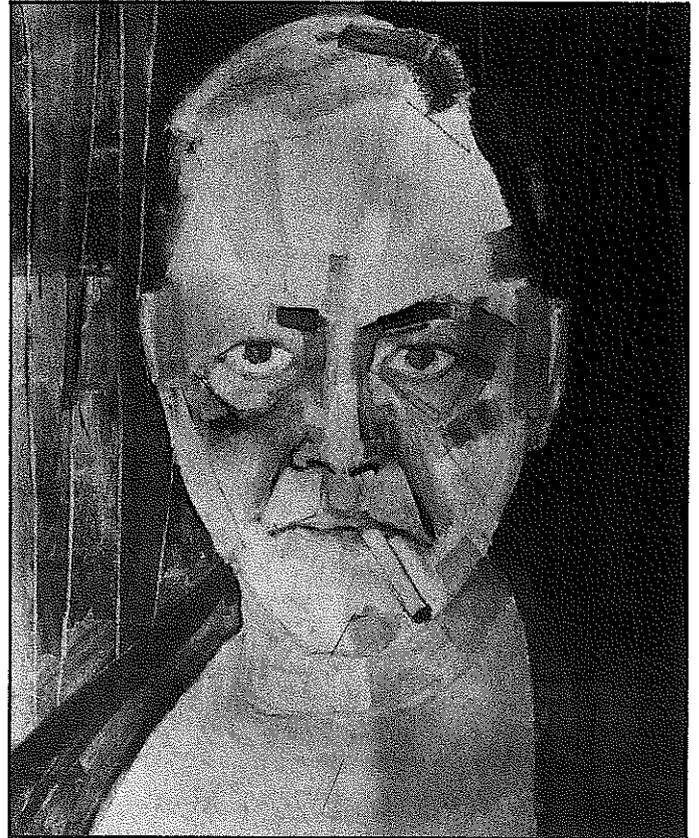
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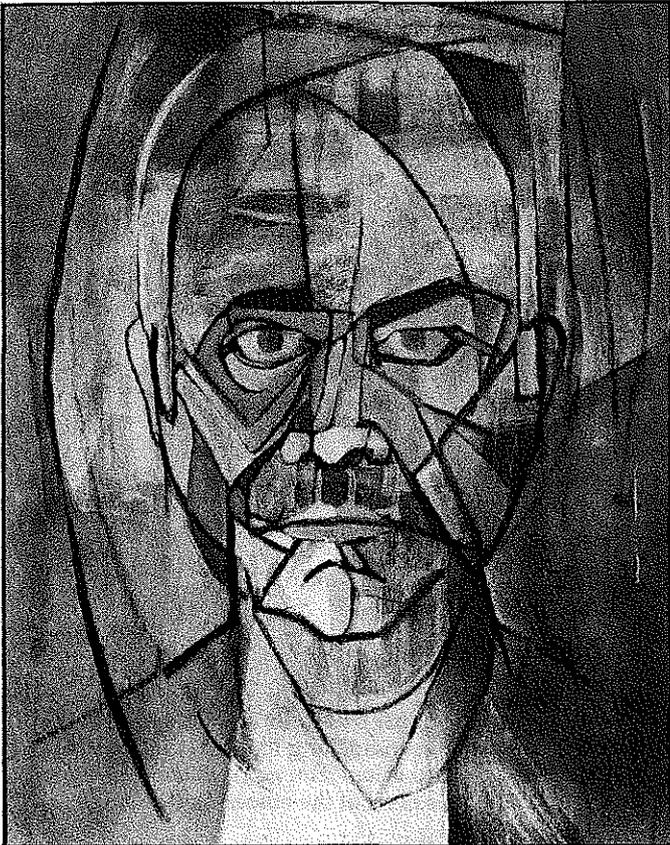
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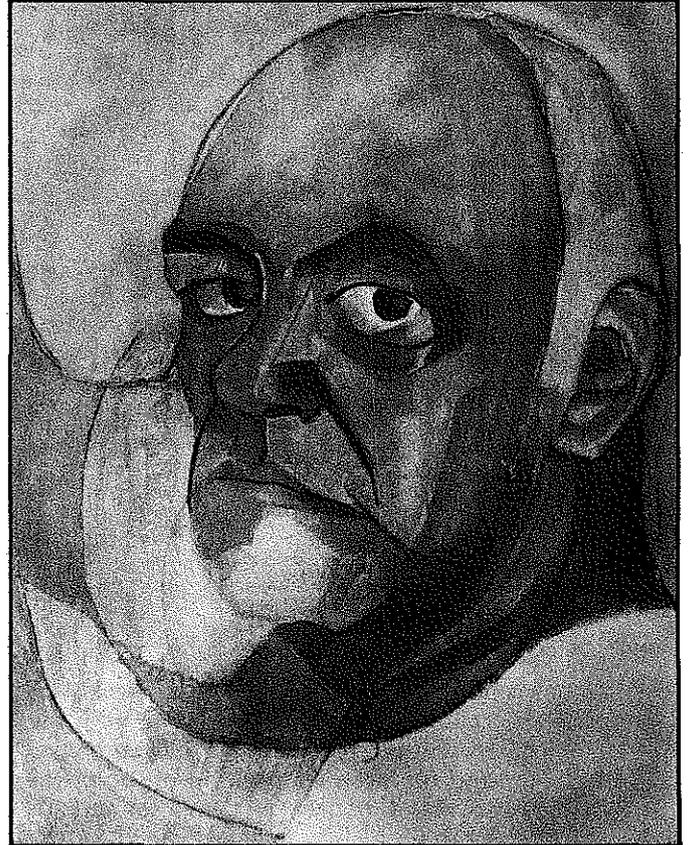
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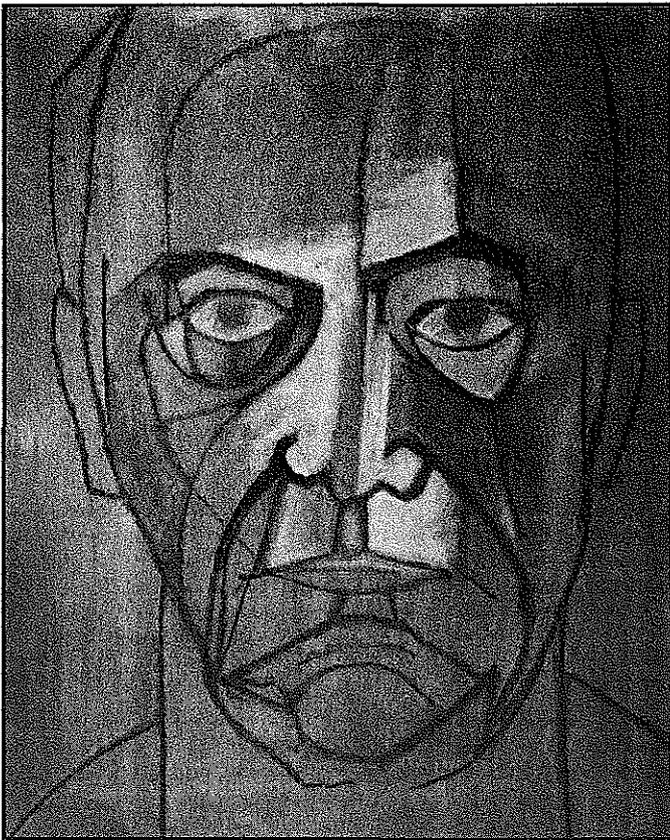
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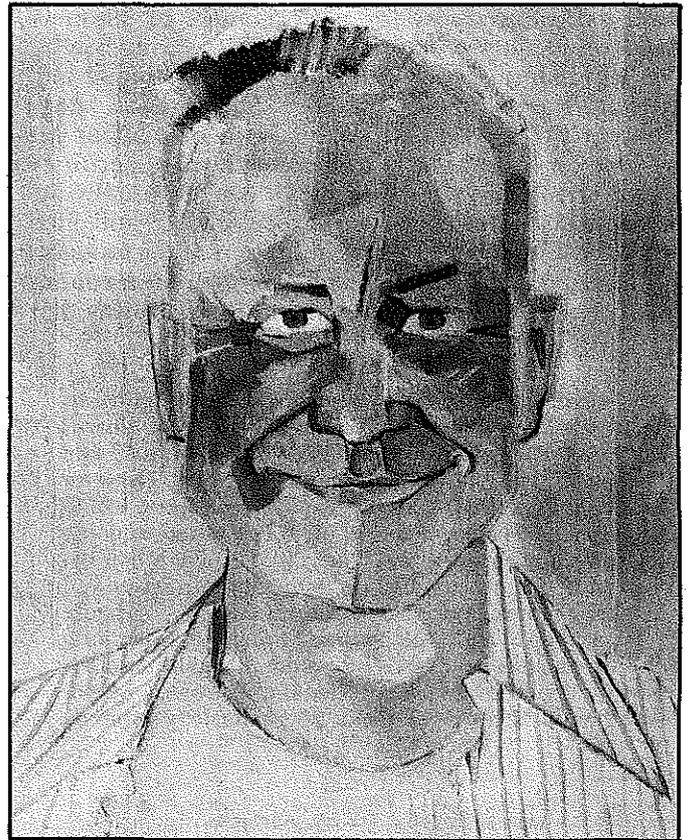
Self-Portrait number 39



Self-Portrait number 41



Self-Portrait number 50



Self-Portrait number 10

The Opera Singer as Interpreter: A Conversation with Sherrill Milnes

Susan Fain

Recently I had the opportunity to speak with Sherrill Milnes, leading baritone with the Metropolitan Opera. Our talk centered around the peculiar position of the opera singer, standing between composer and audience. For twenty years Milnes has performed on the stages of all the world's major opera houses. Most often seen in the popular Italian repertoire, he has also received much critical acclaim for performances of Thomas' *Hamlet* and Saint-Saëns' *Henry VIII*. Of towering height, strongly sculptured facial features, and a unique and powerful vocal timbre, Milnes dominates a stage whenever he appears. In talking with him about his thoughts on opera, one is first struck by the specificity of his insight. The statements he makes are usually accompanied by examples from a particular work, and often even a specific passage is sung in support of the thought.

Opera, to Milnes, is a much bigger-than-life medium. It has a power to reach out to an audience in a way that cannot be ignored.

The music takes longer to develop. In a play you say, "I love you." In an opera that's a ten minute scene. There's no such thing as, "I love you," and "I love you too," and then you go on, which is the norm in a play. However long it would take in a play, in an opera there would be pages and pages of music, with one emotion going for that duration of time. The music is like a two-by-four over our heads which is undeniable in its power. You can't ignore it. To take a simple example, I suppose you could go to a play being tired or angry at something else in your life and really not enjoy it at all. And the play would not demand your attention. The opera would. In general, the music in opera, opera music (symphony

really because it is the orchestra there that is really compelling; a piano wouldn't be as much so though still the music would be more compelling than the spoken word) will just take your attention. You could hardly sit there and ignore it. It makes all of the emotions stronger, bigger, longer-lasting.

For Milnes, opera characters are thus simpler than characters in a play, yet the presence of the music makes them also more powerful. One cannot layer an operatic character with multiple levels of meaning. "You can be Sherrill, being Iago, pretending maybe one other thing. But that's about as far as you can go in duplicity or triplicity of meaning." More complexity simply confuses the audience and there is no opportunity in an opera for a long soliloquy of explanation. The Franco Zeffirelli production of *Otello* at the Met was a case in point.

Franco had a very definite idea about Iago; that he is almost controlled, or consumed by some evil force that is inside him, and over which he has only limited power. Somewhat like an exorcist kind of thing, but Franco didn't say it that way. When Iago says the "Credo"—"I believe in a cruel God who created me in his own image, out of the original slime, and after death there is nothing"—Franco imagined that this is the first time that Iago has ever said this; that it is this spirit that is saying it, and that in fact, he is almost shocked at the words that are coming out of his mouth, over which he has no control. So that at the end of the "Credo," Iago doesn't laugh, but rather emits a horrified scream: "E vecchia fola il Ciel. (Oh my God, what have I said?) AH!" And then I cover my head with my cloak.

When you laugh at the end of the "Credo"—as is traditionally done—then you have to think of the aria as if it is the hundred and fiftieth time Iago has thought this. There's a big difference in the way you do the aria if you consider that he's never said these words before, and that he's listening to some other voice speaking from

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within. And that scares him. But I also found that audiences, however, didn't always understand that. And it makes the end of the third act (where Otello has swooned and Iago stands over him proclaiming "Ecco il leone . . .") a problem if you have rendered the "Credo" in this manner.

Instead of the traditional kicking of Otello, or putting my foot on his chest, Franco had me start to choke the unconscious Otello; to start to kill him, which is also very different. Even though Iago says, "Chi puo vietar che questa fronte prema col mio tallone?" Franco had me start to choke him instead. Then at some point in choking him, all of a sudden he realizes what he is doing. He is killing, he is choking Otello, and he realizes, "This is my leader." In a way, Iago chickens out. He always talks about being the number one, but in fact he doesn't really want to be the number one. He wants a leader next to him. It's kind of a hate and love relationship. In the hate part he's strangling him, and then he realizes, "Oh my God! What am I doing? I want Otello to be there. I don't want to be the number one." He wants to be the number one of the number one, but he doesn't want to replace his boss, really. So he backs off from choking Otello and sort of cringes away.

All of those things had a certain curve and validity, but people didn't understand it. Franco was critical of there being too many layers, and yet he had this Iago very layered. As I recall the original performances, I and the concept were sort of clobbered. They didn't get it at all. Or else they got it—though nothing they wrote indicated they did—and didn't like it. It was very untraditional. There are certain things that people want to see. So now, even in that production, I do the traditional laugh.

For Milnes there is little doubt about the rightness of yielding to the audience on these kinds of matters. Because he sees his purpose as communicating a character to the audience, rather than educating them about the possible ways to think about a character, he is sensitive to the audience's understanding. If the concept of the opera, for whatever reason, fails to effect that communication, then the singer has not achieved his purpose. Milnes then related the story of Nicholai Gedda and the "Flower Song" from Bizet's *Carmen*.

"Bizet wrote a very difficult, but very beautiful diminuendo for the final B flat of the 'Flower Song,' but traditionally, singers unable to execute the diminuendo have sung it loud and to great applause [Milnes then demonstrates the "Carmen, je t'aime" in booming voice]. Gedda was able to diminuendo that B flat gorgeously, almost as no other singer could, but the applause was minimal. The question might be asked, why lower yourself to accommodate the taste of the masses?" For Milnes, and for Gedda, there is no question about the answer. Gedda subsequently sang the ending loudly and everyone raved. Why is this not merely pandering to applause? As Milnes put it, "If you're reaching out and turning on the audience, that's part of what it's all about. The music is there to move the audience. It was written to that end. Part of the performer's responsibility and obliga-

tion to the composer is to elicit that very response, as long as the means used are valid."

This led us into a discussion of whether or not operas should be performed *come scritto* (as written, i.e., exactly as the score indicates) or whether there is room for interpolation and transposition.

Ordinarily I would only interpolate high notes if I think they are supported by the drama. Various conductors around the world—especially Muti in this day—want only *come scritto*; never mind even the understood transpositions like that in *La Traviata* [which Milnes explained and demonstrated]. For example, Muti has a recording of Leoncavallo's *I Pagliacci* where the Prologue is performed just as written: "Pari di voi spiriamo l'aere! Incominciate!" so that the voice goes down at the end of the phrase instead of up. I think that the *come scritto* in this instance is foolish. Someone might say, "Leoncavallo didn't write that. Verdi didn't write that," and so forth, as if to say that we know for sure that what is on the printed page is the only one that the composer liked. Lots of cadenzas and other stylistic things were understood and expected to be done. Certainly in the bel canto period you had to do that. Sometimes the composer would just put a corona and you were supposed to sing measures and measures of improvised music. Various people showing off; that was the idea. Less valid perhaps in Verdi's time, but I can't believe for a minute that interpolations were not expected. These composers were very practical guys, and often they were writing for particular singers who they knew would be singing the part for the first short span of the opera's life. If those singers didn't have great A flats, of course they weren't going to write a high A flat in there. That's one factor to consider.

There is an interpolated high A flat in the "Pieta" in Act IV of Verdi's *Macbeth*: "Pieta, rispetto, amore." It's a little angular to do it. It makes a double dominant chord. You have two dominants before you go to the tonic. That's a little angular musically. But Macbeth is pouring out his heart at that point. "Is my only epitaph to be a curse?" All of this is inside Macbeth and he is wailing his soul at that moment. In that context, to take an extra high note to accentuate the pain of his soul seems perfectly appropriate. Macbeth is looking back over his life and thinking, "I did all these things, but all I ever wanted was pity, respect, and love."

Milnes then talked about what he refers to as the "craft" of singing: the limitations imposed by costume, staging, and the singer's own body. How does Don Giovanni, or Simon Boccanegra, or Scarpia move about the stage? The desired answer is provided by the music and the drama, but to execute that movement requires the "mechanics" of singing.

In the case of Simon Boccanegra [who is a young man in the Prologue and twenty-five years older in Act I] the problem is how do you move as a young man? How do you go from the younger to the older? Those are mechanics. You can't just *think* yourself younger and thereby become younger. You have to be able to make

younger gestures. I have never found that a psychological concept like younger or older can be immediately translated into a physical reality just by *thinking* it. How do you move older? *Thinking* older? What is that—*thinking* older? How do you *think* older? You have to know what muscles to relax. You have to learn how to sit down tired; which muscles aren't as elastic. Gestures have to slow down. I use a cane as Father Germont [in *La Traviata*] because it slows me down and stops muscular gestures. No one on the operatic stage nowadays is so old as to be able to portray old men simply by reason of being old. The operatic stage is energetic in its nature. But you have to slow certain things down. Simone, in the Prologue, has to be more energetic and evidence more off-the-top-of-the-head kinds of gestures than the older Simone. And then you're poisoned and you're slowly dying. How do you do that? There's still muscle in the music. You have to use the curves of the music. You have to get your energy up, say a big important phrase, and then be weak again. You try to portray the death with a certain amount of physiological correctness by using the curves of the music.

Movements are also determined to a large degree by the clothes you are wearing. You have to move in a certain way because the costume demands it. Therefore, we as singers have to learn artificially how to move in the appropriate way since we no longer wear clothes like that. When you get up out of a chair you cannot push yourself up and wiggle your shoulders. That's very inelegant. As nobility you had to move smoothly. The older operatic characters can afford to flop into chairs and struggle to get up from them. Simone does so only when he is dying since he's still a vital man at forty-five.

Characters are often portrayed differently in different productions when they are wearing different costumes. Milnes spoke of some of the differences between a traditional Scarpia [in *Tosca*] and the concept of Scarpia [and the opera] that he encountered with German director Götz Friedrich.

Operatic characters often show different faces in different scenes and sometimes I'm not so sure that there is a connection. Scarpia is definitely one man in the church [in Act I]. That's his external, public face with the things he says to Tosca assumed to be private, even though there is the crowd coming in for the mass. The operatic assumption is that they're not paying attention or hearing what's going on although I do, as Scarpia, from time to time check to see if anyone's watching us, because I think he should. I don't think that the character should assume that no one is looking, even though you know that they're not staged that way, because it's not supposed to be staging from the character's point of view. But that's his external face.

In a certain way, what he does in the first act doesn't so much determine what he is going to do in the privacy of his own living room [in Act II], although his sensuousness is basically the same. Various Scarpias would have to manifest that sensuality differently. If a singer is short and heavy and paunchy he would have to be very careful with the way he evidences his desire for Tosca. In fact, it's even determined somewhat by costume. In

the Götz Friedrich production the black, stark kind of costume stayed for both the first and second acts. The second act opens and Scarpia is there, with his fingers tapping on the table, just staring into space. The curtain opens and he's just staring. He's not eating his food as is traditionally done. He's staring into space and thinking to himself, "I've got to get Angelotti. What am I going to do? Well, Tosca may be my best falcon," and so he speaks aloud his first line, "Tosca e un buon falco." The concept of the whole opera was that Scarpia himself was under time pressure. If he didn't get Angelotti back within a certain time, a day or a couple of days maybe, his own head could roll; someone is looking over his shoulder. Of course, none of this is in the opera but it also makes perfect sense. So Scarpia is thinking to himself, "I gotta get him. I gotta get him. I just missed him by two minutes in the church," and meanwhile there is this sense of time ticking away. Maybe he's even perspiring. He's worried. Internally he's worried. That's a terrific concept. And you're just staring into space and thinking, "How am I going to get him? Tosca e un buon falco. I'm gonna use her. And if I do this and this and this maybe I'll get Mario and Angelotti both."

In the Met production, however, the costume in the second act, very unlike the first act, is French Revolutionary foppish. Also correct as the style of the time. But the false elegance of the costume negates somewhat that sense that time is ticking away; that very intense kind of portrayal. So I started thinking that maybe the intense number wasn't right with the look of the costume—that false elegant, almost foppish kind of thing with vest, long coat and all that. So I went back to the also valid, more traditional, eating food. With that, instead of the driven thoughts of the Friedrich concept, Scarpia is just thinking calmly, "Well, Tosca is probably my best falcon," as he's eating his food and drinking some wine.

This concept [with Scarpia calmly eating] sets up something that I do later in the second act: throwing the wine in Spoletta's face. It's a good bit but the Spoletta has to say it's all right. I usually ask. The actual act of doing it is dramatically powerful because people aren't expecting it. If Scarpia takes a bite or two of the banana, a couple of sips of wine right away, and then goes into, "Tosca e un buon falco," then when he goes back to do the throwing of the wine, it's much more set up than if he were only to take it into his hand right before he's going to throw it in Spoletta's face. Then it looks a little bit like you're picking it up because the stage directions say so. Also there's a practical consideration. You drink it down so that there is only about a half an inch of wine and you don't have liquid all over the stage. If you threw a whole glass of wine the Spoletta would be drenched.

Scarpia is a very special part. In a way like Iago, there are many ways to do it. I don't mean many ways from A to Z. There are not a lot of totally different concepts in terms of the whole arch of it. But there are a lot of ways to go from A to B and from B to C—the little curves all along the major curve of a character. Iago the same way.

Once the vocal line is secure and the technical aspects of a part are in place, is it necessary for the singer to understand his character as a human being? For Sher-

rill Milnes, the answer is often "yes." At the time of our conversation, Milnes was preparing to sing the title role in Verdi's *Simon Boccanegra*—a beautiful but complicated opera about a young man who loses his daughter and then finds her again twenty-five years later, having in the meantime become the first plebeian Doge of Genoa.

There are such good human values in *Simon*, especially in the relationship between the father and daughter. It is the kind of role for which a singer should be older himself. Vocally, it's very difficult for a young singer because the center of the part sits low and yet you have to be able to dominate. Vocally it requires maturity, but also because of the special character of the father and daughter relationship. The more you can feel about real children, particularly having children of your own, the better that will work.

Simone was also almost too good a man. If he had been a little more savvy, a little meaner, he would have dumped Paolo and never have allowed him the opportunity to poison him. Somehow he couldn't believe that anyone could do something as heinous as that. So in a way, Simone is naive.

Once on stage, the performer does not have the opportunity to think about who his character is; but part of what sets Sherrill Milnes apart from less talented singers is his ability to understand the man he is embodying. Though operatic characters are indeed simpler and louder and larger than life, for Sherrill Milnes they seem never to cease to be human, even an enigma like Don Giovanni. How evil is Sherrill Milnes' Don Giovanni?

There's a balance. In a Salzburg production by Jean-Pierre Ponnelle he staged it so that at the end, when Giovanni goes to hell, my body is still there on stage and Leporello covers me with my cape. Each person comes up to me and sings their parts and there's almost a sense that, "Gee, it's almost too bad he had to . . . No, no, no, he was an evil man and the right thing happened." There was a little sense that life was more interesting with him around. There was just a touch of that. But the Giovanni must also be dangerous enough to merit his demise. If he's just a happy-go-lucky Giovanni who likes the girls, and likes to play jokes a lot, then he's not an important enough representative of the forces of evil to merit everlasting damnation. He has to be dangerous. Fun-loving, but mercurial. He doesn't mind killing. He's rather amoral, although that's not really true. I think he does have his own code of ethics. When he kills the Commendatore he senses for the first time in his life that something may be going awry. He has broken one of his codes. He has fought an old man although he had tried not to. He still does it. He doesn't run away. Someone from his own rank. An old man. And I have the feeling that some kind of an alarm goes off inside Giovanni even when he runs him through, and certainly in the recitative right after. He doesn't exactly feel remorseful, because I don't think he knows how to feel remorseful. But for the first time in his life he may be worried. A little alarm goes off, so that in the first recitative, "Leporello, ove sei?" he evidences his concern. Leporello asks, "Who's dead? You, or the old one?" and

Giovanni responds, "Que demando la bestia? Il vecchio!" In that response, especially if one pauses between the phrases, one can hear the warning going off. I killed an old man though he forced me into it. I could have avoided it. It was wrong of me. Of course I was going to beat him. And I shouldn't have done it. It is this little alarm that seems to keep pushing Giovanni through the entire opera. All operas at that time were 24 hour operas. Everything took place in 24 hours. And Giovanni is propelled through this time as if he's saying, "We're going to have fun even if it kills us." He and the time keep racing on. For all of Giovanni's recitatives I would almost run onto the stage. He's racing around through the town as if saying to himself, "Why did I do this? What am I going to do?" And he's worried. He's never been worried before. Now sometimes he forgets this alarm, like when he sees Zerlina and is distracted. But for the most part, it's always there driving him onward.

Mr. Milnes was then asked about the difference between Mozart's *Don Giovanni* and the Don Juan stories and legends that can be read in books. What happens to the story when it becomes an opera?

The beauty of the music is of course the first thing, and then the emotional power of this story being presented as an opera. One is hit over the head with the emotional power of the story when it is accompanied by Mozart's music. You don't seem to get emotionally tied to the various Don Juan stories in the same way. The great beauty of the music creates bigger-than-life emotions so that it can reach out in a much more overt and powerful way to say something that the stories cannot say by themselves.

One thing that is striking about *Don Giovanni* is that even though the Don is the title role in what is often considered the perfect opera, from a performer's standpoint, Don Giovanni himself is very shy. When you take away the recitatives, as you do when the singers rehearse just with the orchestra, Giovanni has very little to say. And yet he is the driving force. The opera has to hinge on him. Yet it is the other people in the opera who have all the big set pieces. He has only the champagne aria and the serenade, and in the serenade he is disguised. And both of those pieces are very short. The most satisfying scene with the orchestra is the supper scene where Giovanni really gets to sing. At all other times he's always playing at something else, even playing at being Giovanni. So it is in the recitatives that he has the most to say and where he is most himself. This is the hardest part to communicate to the audience—the conversational things—because it is pure language. Yet this is where Giovanni is most himself. And with Leporello he is always himself.

When you are playing Giovanni onstage, you are not thinking about the question of good and evil that governs the opera. You are doing the human things that a Giovanni would do in this stylized story. We have to assume that he spent three days with Elvira and couldn't stand her anymore. And he doesn't get to Zerlina for a variety of reasons. In the opera, during those last 24 hours, Giovanni succeeds with no one. It's really the rise and fall of Don Giovanni and the opera deals with the fall—the last 24 hours of his life.

Dynamic Symmetry, A Theory of Art and Nature

Howard J. Fisher

Just before the onset of the 1920s there began to be promulgated a certain theory that was partly mathematical, partly historical, and partly aesthetic. This theory was the invention of Mr. Jay Hambidge, who was an artist and designer, and by it he set out to explicate some remarkable characteristics he had found in classical Greek and Egyptian designs. He propounded the theory under the title, "Dynamic Symmetry." This name was meant to be a translation of the Greek mathematical expression *δυνάμει σύμμετροι*, a term we know from Euclid. The Euclidean expression describes a relation between magnitudes which, though incommensurable directly in length, are "commensurable in square." The side and diagonal of a square are two such magnitudes. As we well know, these two magnitudes have no common unit. But the squares constructed upon them respectively do have a common unit; in fact the square on the diagonal is just double the square on the side, as we learn in *Meno*.

"Dynamic Symmetry," then, is a study of magnitudes that are commensurable in square only. It is too bad that both words have acquired meanings that are rather distant from their Greek cognates, as it makes the name of the study somewhat non-explanatory today. But the name "Dynamic Symmetry" has survived; and in any case, respect for Jay Hambidge's steadfast pioneering probably dictates that we should retain it.

Hambidge did not take a mathematician's approach to the incommensurables. His study was applied exclusively to problems of design and proportion in archi-

ture, pottery, sculpture, landscaping, furniture-making, typography, and other arts. In fact he regarded Dynamic Symmetry as a rediscovered ancient art of design and composition which had been perfected by Egyptian and, especially, by Greek craftsmen long before its more refined appearance as a theoretical science in the mathematics of Euclid and others.

According to an account which Hambidge accepted, Greek artisans had obtained from the Egyptians their techniques for correlating design elements during the 7th and 6th centuries B. C. E. They perfected this knowledge as a practical geometry which for some 300 years provided the basic principles for design in the Classic period. Traces of this practical geometry survived, in a more highly evolved, mathematized form, in Euclidean geometry; but the secrets of its original artistic application otherwise disappeared. Sadly, no accounts remain that would reveal to us how the ancient craftsmen developed their designs or what principles and elements they may have employed. In the absence of historical evidence, the principles that guided the makers must be sought through examination of the surviving works themselves. This means that any theory of the *design* of these things must begin by advancing a theory of *analysis*: it must instruct the spectator how to approach the work in order to understand it as a composition.

In this Egyptian bas-relief (Fig. 1) the goddess is supporting a formalized sky in the shape of a bar. The space between the vertical bars on each side is in the original filled with hieroglyphic writing, which is not shown in the sketch.

To analyze this design, Dynamic Symmetry looks first to the containing rectangle AE; then to subordinate rectangles such as AC, DE, and FB, that appear to indicate an underlying scheme to the composition. Rectangles DE

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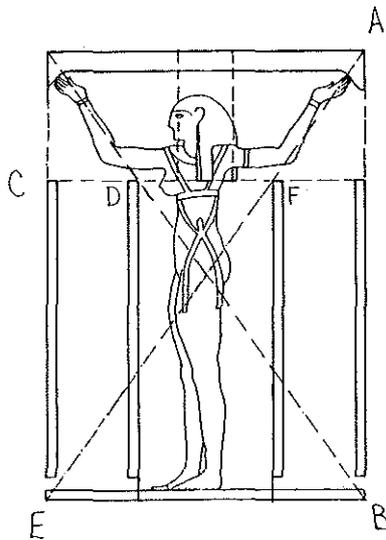


Figure 1

and FB are directly given by the hieroglyphic columns. Rectangle CB (which is a square) is determined by the tops of the columns. The goddess's head occupies the space between the two remaining squares in the upper corners.

In all cases it is the proportions of the rectangles, the ratios of their sides, that the analysis seeks to uncover. For according to Hambidge, all rectangles other than the squares that were used by the classical designers have sides that are not commensurable in length, but are only commensurable in square—*δυνάμει σύμμετροι*.

The first labor of Dynamic Symmetry is, then, to bring to light the elementary rectangles that govern the classical designs. Yet this enterprise cannot proceed without a simultaneous investigation into the geometric properties of these rectangles, of their possibilities for combination, subdivision, and exhaustion, as well as other relations. Euclidean geometry is the science that investigates these properties. I will therefore first set out some of the elements of Dynamic Symmetry from a geometrical point of view. Then I will discuss a few examples of how these are thought to have been made use of in the design of some works of Greek pottery and architecture. Such is the order that Hambidge himself followed in most of his writings; but it has this defect, that it inevitably makes it appear that knowledge of mathematical theory was prior to the design process, or that the designer was striving to illustrate some geometrical theorem in his work. Any such view would of course be highly anachronistic, and is quite the reverse of Hambidge's position. Nevertheless he has been misunderstood on this point by at least one critic.¹ Let me therefore emphasize that the Euclidean geometry shall be only instrumental here. It is *our* indispensable pathway to, as the only surviving remnant of, the ancient principles of design. But even if we are obliged to use a

mathematical language in their reconstruction it is our task to see through the mathematized version, so to speak, and to recover what we can of the ancient practices in their own terms. These practices, in Hambidge's view, would have been exclusively empirical. They were, from the first and always, directed to the ends of *making*, to the employment of human powers in a world riddled with other powers both active and passive.

I

If limited to the intended role of a translation from the Greek, the expression "dynamic symmetry" properly signifies only the mathematical character of commensurability. But Hambidge expanded his use of the expression, playing as he did so upon a meaning which attaches to the word "dynamic" in modern English. In its modern signification, "dynamic" expresses the action of force or the exchange of energy. Conformably to this, Hambidge taught that there were two kinds of symmetries in design. Opposed to "dynamic" symmetry which carried overtones of life and activity, there was the so-called "static" symmetry, suggestive of inertness. In thus opposing "dynamic" to "static" (in the same spirit as did Leibniz and the later physicists) he made the deliberate and irrevocable step of tying the theorems of Dynamic Symmetry to Nature—both human nature and nature at large—and particularly to *growing* nature.

Let us turn to a thing in *growing* nature from which we may make a beginning. (Fig. 2) This thing is the shell of the nautilus, or rather the shape which that shell preserves throughout its development. This shape is the logarithmic or equiangular spiral, and though it can be apprehended under many of the different properties it exhibits, we shall pay attention to its characteristic of *continued proportion*. The spiral (Fig. 3) can be understood

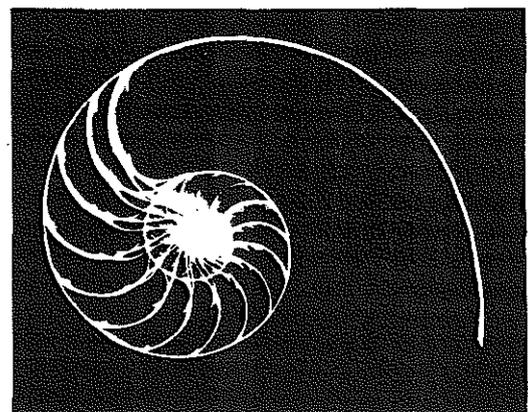


Figure 2

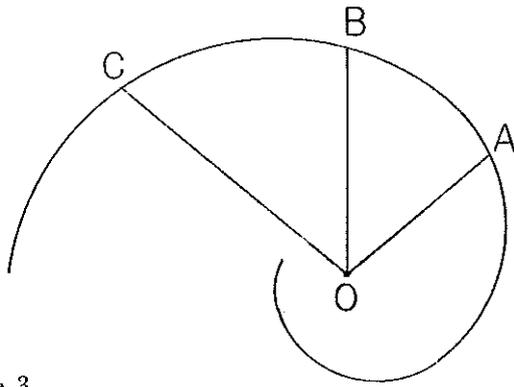


Figure 3

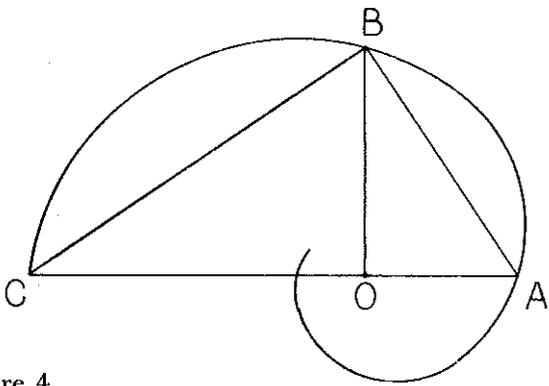


Figure 4

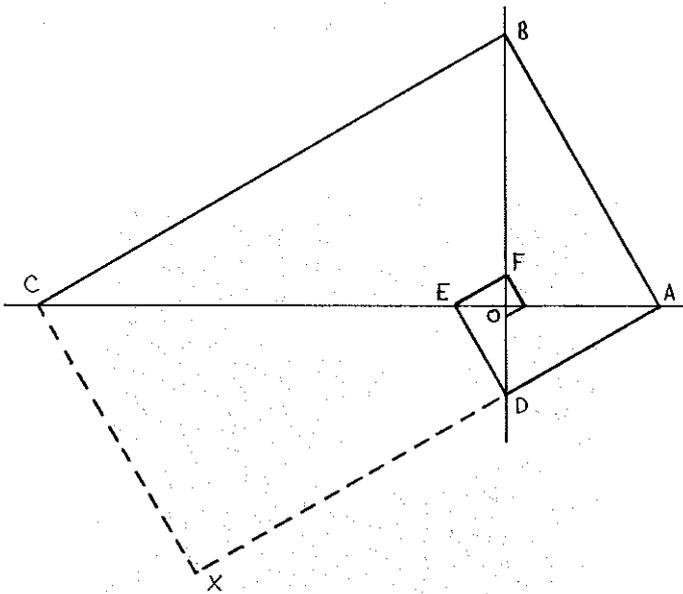


Figure 5

as centering about a point or pole O (to which the curve approaches indefinitely close). If, from O , radii are drawn meeting the curve in A, B, C , with the angles AOB and BOC equal, it will be found then that the radius OB is the mean proportional between OA and OC .

Now in particular let the equal angles AOB and BOC be right angles (Fig. 4). Then since OB is the mean proportional it follows that if AB and BC be drawn, the angle at B will also be a right angle.

Continued construction of the parallels meeting the four radii, in both directions, results (Fig. 5) in the infinite "curve" called the *rectangular logarithmic spiral*. As you see, this shape is strictly analogous to the smooth spiral curve, only it is constructed in jumps instead of in the continuous progression that the nautilus shell appears to exhibit.

Observe that since the angles at A, B , and C in this rectangular spiral are all right angles, we may therefore complete the rectangle $ABCX$ in which AC is the diagonal and in which, by hypothesis, OB is perpendicular to AC . This reveals the principle whereby a rectangular spiral may be constructed within a given rectangle:

In the given rectangle (Fig. 6), draw the diagonal BD . From a corner C drop CO perpendicular to BD , and extend it to meet AB in E . Continue constructing perpendiculars EF, FG , and so on. $Q. E. F.$ Notice that the particular proportions of the spiral — that is the ratios of its successive radii or chords — are determined in advance by the proportions of the given rectangle.

Now in the same diagram, extend EF to meet CD in X . I say that rectangle $EBCX$ is similar to rectangle $ABCD$.

The similarity follows from the continued proportion of the radii from O . But here is a quicker way to see it. Since the diagonal and all sides of the smaller rectangle are respectively perpendicular to their corresponding

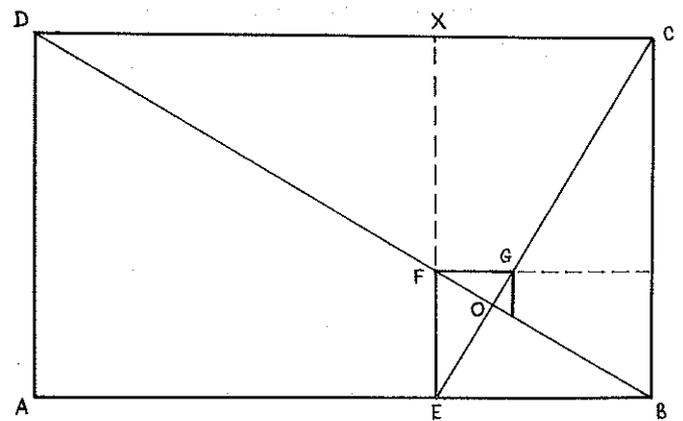


Figure 6

elements in the larger rectangle, rotate the smaller one through a right angle. The two rectangles will then share a corner and a diagonal, and so must be similar—by Euclid VI.24. This rectangle EBCX which was constructed on one end of the given rectangle and also similar to the given rectangle is called the *reciprocal* of the given rectangle.

The term “reciprocal” also has an algebraic meaning. Suppose we are confronted with a rectangle (Fig. 7) contained by sides equal to *unity* and *m*, respectively. What will be the length of the non-unit side of the reciprocal rectangle? By the similarity of the figures, it must be *x*, where

$$x : 1 :: 1 : m$$

or, algebraically expressed,

$$x = 1/m \text{ or } m = 1/x.$$

I leave it to you whether the geometric or the algebraic expression is the more fundamental.

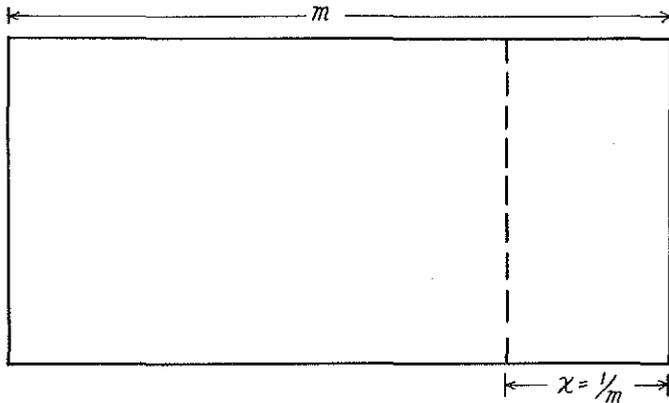


Figure 7

Every rectangle has two diagonals, as AC and BD (Fig. 8), as well as two possible locations for its reciprocal—one at each end. So in every rectangle there are four “poles” or “eyes” where the diagonals of the reciprocal rectangles intersect those of the given rectangle, as the upper sketch shows. Joining the poles G,H,J,K produces one central rectangle and four rectangles at the corners. These are all similar to one another and to the containing rectangle, since they share diagonals with the containing rectangle. A little later we will look at a Greek vase whose design plan grows out of this idea.

Now every rectangle exceeds its reciprocal. But there exists a series of rectangles that are *integral* multiples of their reciprocals. Such are called “root rectangles.” Here are some examples.

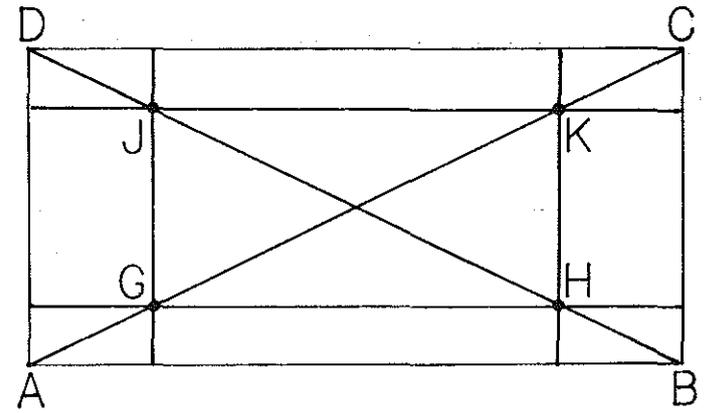
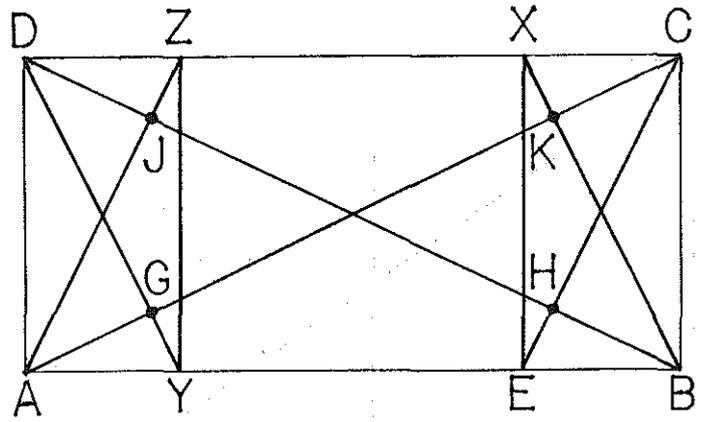


Figure 8

Consider the rectangle ABCD (Fig. 9), which is *double* its reciprocal FBCE. If we choose FB equal to unity, or 1, then DC equals 2. What then will be the length of BC?

As we have seen, the sides FB, BC, CD must be in continued proportion, with BC the mean proportional; hence

$$1 : BC :: BC : 2$$

or, algebraically,

$$BC^2 = 2$$

$$BC = \sqrt{2} \text{ or “root two.”}$$

Thus the ratio between the shorter and the longer sides of each of these similar rectangles is the ratio of one to root two. For the rectangle ABCD in particular, if we now take BC equal to 1 (Fig. 10) we then have the longer side AB equal to root two. The rectangle is therefore called the “root two rectangle.” Naturally its reciprocal is also root-two, since reciprocal rectangles are similar to one another.

It is easy to describe other root rectangles in the same

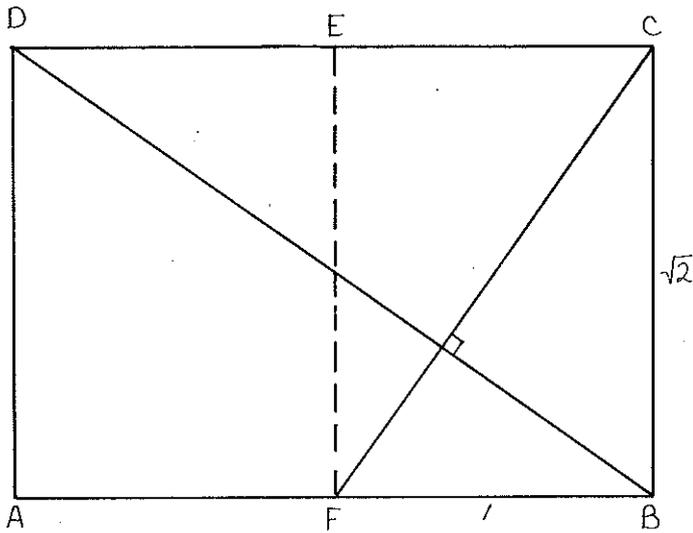


Figure 9

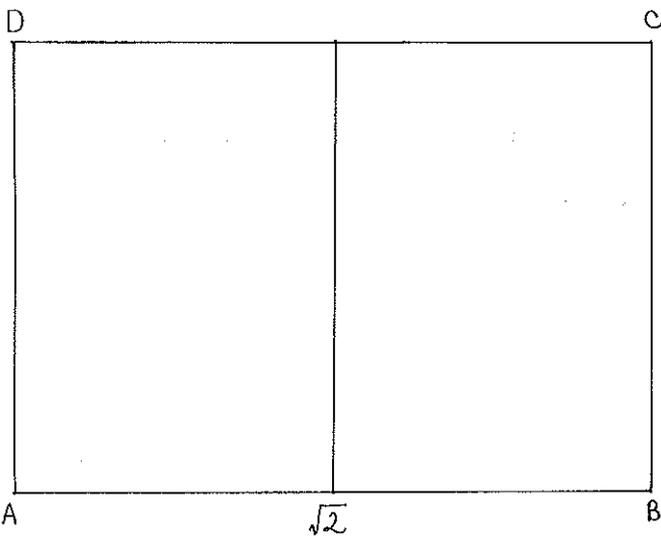


Figure 10

way. For example (Fig. 11), let the side AB of the given rectangle be *triple* the side FB of the reciprocal rectangle. Then if FB equals 1, AB equals 3; and we shall have

$$1 : CB :: CB : 3$$

or, algebraically,

$$CB = \sqrt{3} \text{ or "root three,"}$$

which identifies the given rectangle (and its reciprocal) as the "root-three rectangle."

Root rectangles, then, have integral relations to their reciprocals. The root-two rectangle is double its reciprocal, the root-three rectangle triple its reciprocal, and so on. Clearly the number of root rectangles is

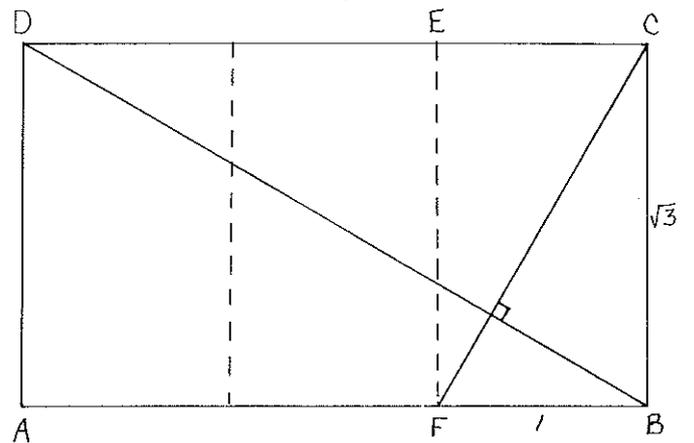


Figure 11

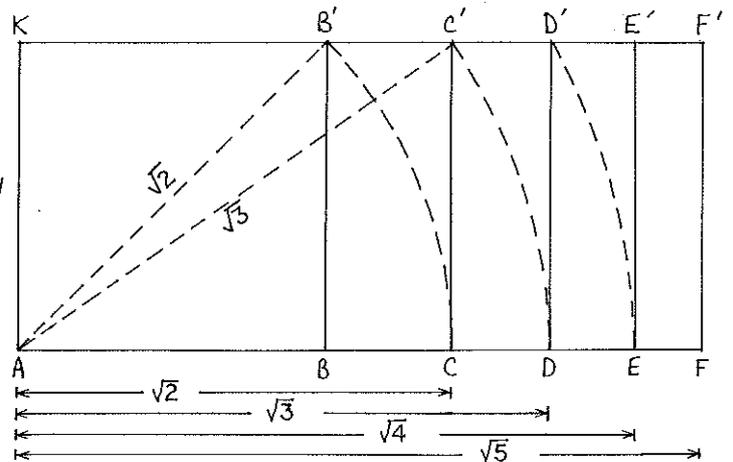


Figure 12

unlimited; there are as many kinds of them as there are integers. But we must distinguish between root rectangles proper—such as root-two, root-three, and root-five—and others which are root rectangles in name only. The "root-four rectangle," so-called, is actually just a double square. Its sides are in the ratio two to one; thus they are rational and directly commensurable. So with all other root rectangles whose integer is a perfect square number; they are all multiple squares, so we will not consider them to be root rectangles, properly speaking.

There is a more methodical way to construct the root rectangles, which is based on their serial evolution from a square. Consider (Fig. 12) the unit square $ABB'K$, with AB and KB' extended as necessary. Swing the diagonal AB' down to AC and complete the rectangle $ACC'K$. I say that rectangle $ACC'K$ is the root-two rectangle. For it has been constructed upon the unit as one of its sides; and its other side is equal to the diagonal

of the unit square, which is of course $\sqrt{1^2+1^2}$ or $\sqrt{2}$. Therefore its sides are in the ratio of one to root two. Q.E.D.

By a similar application of the Pythagorean Theorem to rectangle ACC'K we see that its diagonal, AC', must be equal to root three. Therefore, swing diagonal AC' down to AD and complete rectangle ADD'K; it is clear that rectangle ADD'K is the root-three rectangle. In the same way, rectangles AEE'K and AFF'K are seen to be the root-four and root-five rectangles.

Once a single root rectangle has been selected, the designer can construct innumerable related rectangles according to a procedure called "application of areas." In Euclid, as also in Apollonius, application of areas is a method of comparing unequal areas by comprehending them under the same height or in the same width; only attention is paid not to the size but to the *shape* of their difference. This, like other Euclidean topics, Hambidge viewed as the outgrowth of an earlier body of empirical knowledge or lore, supposedly serving the needs of designers. Perhaps for this reason, Hambidge was a little careless with the Euclidean terminology, preferring instead a locution that was simpler than but not fully consistent with Euclid's. I am going to follow Hambidge's account, but remember that it is not quite the same as Euclid's.

Application of areas is indicated in a classical design whenever we find one rectangle superimposed upon a second, so that it shares a side² or end with the second rectangle but exceeds it or falls short of it in extent. As in Euclid, attention is paid not to the size but to the *shape* of the excess or defect, "in order," as Hambidge says, "that the area receiving the application might be clearly understood and its proportional parts used as elements of design."³

Suppose a square, as AC (Fig. 13), be applied to the end AH of rectangle AB. (Euclid would have said that

square AC is here applied to the *side* AG of the rectangle, within the end AH as breadth.) It then *falls short*, and the part left over is rectangle DB. If a square, as AF, be applied instead to the side, AG, it *exceeds* by the rectangular area BE. It is by such application of areas that many design themes are developed. Let us examine the process as applied to the root-two rectangle.

If (Fig. 14) a square AB be applied to the end of a root-two rectangle, it falls short and leaves the remainder BC. If then to the end of this remainder a square CD be again applied, it again falls short and leaves the remainder EB. I say that EB is also a root-two rectangle. Thus application of areas preserves the proportions of the original rectangle!

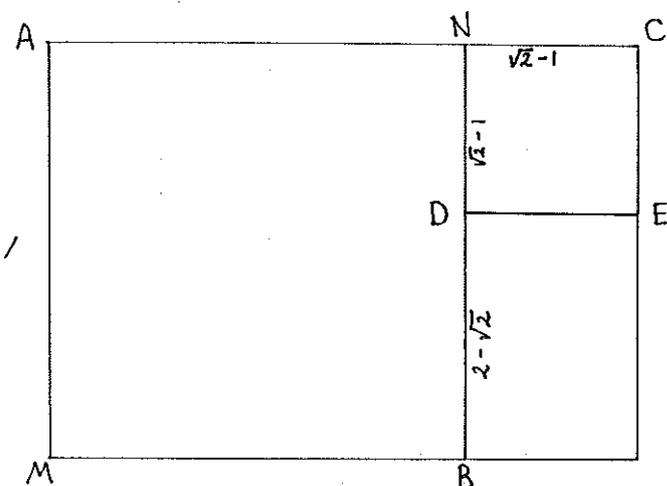


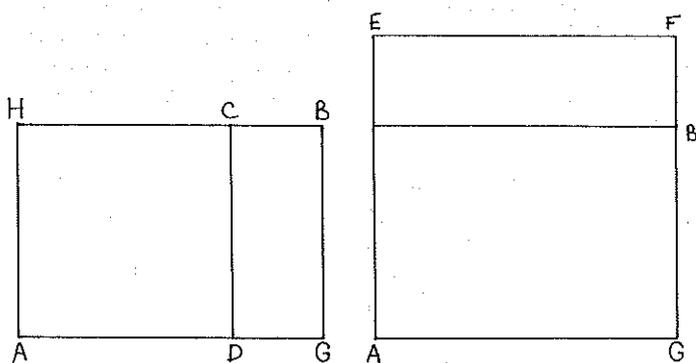
Figure 14

We could prove this by the methods of Euclid, Book I. But I will show instead a straightforward calculation of the sort Hambidge employed. It is more adapted to the needs of the craftsman in getting results for a particular case. Euclid himself does much the same in some of the later books, where the circumstances are similarly specific.

Let AM be unity, so that AB is the unit square. Then by hypothesis, $AC = \sqrt{2}$, and NC and DE are each equal to $\sqrt{2}-1$. Moreover, $DB = 1 - ND$; and this reduces to $2 - \sqrt{2}$. Hence the ratio of sides of rectangle BE will be

$$\frac{DB}{DE} = \frac{2 - \sqrt{2}}{\sqrt{2} - 1} = \sqrt{2}$$

Q. E. D.



Square applied to end

Square applied to side

Figure 13

Calculation is easier, even in the age of digital electronic calculators, if we allow ourselves the use of rational approximations to the irrationals involved, such as 1.414 in place of root two. But since inaccuracies are introduced by the rounding process, I wanted you to see that in this case, at least, the analysis is exact.

In the same way we can show (Fig. 15) that if a square, as CB, be applied to the *side* of a root-two rectangle, as CK, the space FB by which it exceeds the rectangle is made up of two squares and another root-two rectangle. If root-two rectangles CK and DB are applied to both sides of the square at once, the rectangles will overlap to the extent of DK, and we can see by the equality of the sides of the square that this space comprises one square and two root-two rectangles, as the sketch shows.

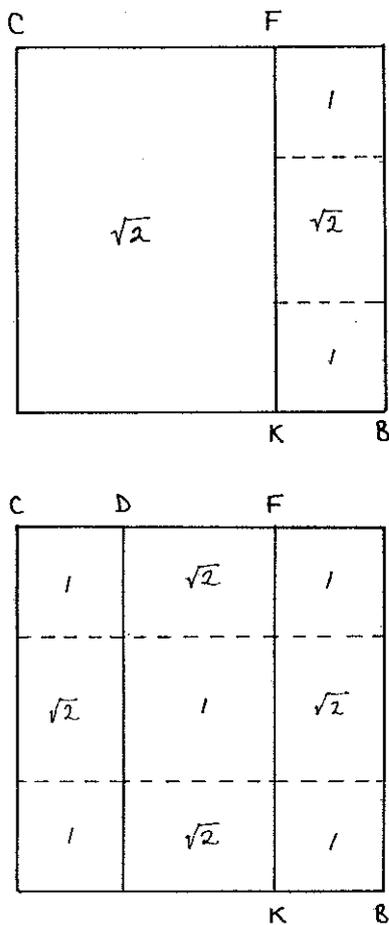


Figure 15

Application of areas is striking in the composition of the Egyptian design that served as our first example. (Fig. 16) The containing shape for the composition as a whole is a root-two rectangle, AE, sketched here as having been evolved from square CB which is applied to it. DB and

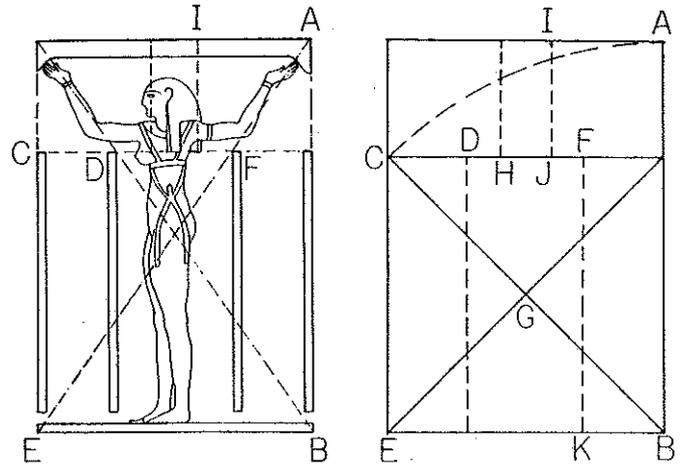


Figure 16

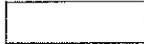
EF are root-two rectangles, for they share diagonals with the containing figure. To each end of the upper rectangle AC has been applied a square; so, as we just saw, each of the remaining rectangles AH and IC must be root-two. These two overlap to the extent of rectangle IH, which frames the goddess's head. (But notice the delicate leftward shift of her face and throughout her figure.)

Now let us investigate the proportions of the remaining areas: IH, DE (which is the same as FB), and DK. We proved (Fig. 14) that when a square is applied to the end of a root-two rectangle the remaining area is composed of a square plus another root-two rectangle. But in the goddess design, AH is a root-two rectangle, and square AJ has been applied to it. Therefore the remainder IH is made up of a square and a root-two rectangle. But rectangle AC is a square plus a root-two rectangle; so rectangles AC and IH are similar. And the *end* of one of them is equal to the *side* of the other; therefore rectangle IH is the *reciprocal* of rectangle AC.

Turn now to rectangle DE. It is the excess area that arises when square CB is applied to the *side* of root-two rectangle DB. As the previous diagram (Fig. 15) showed, it must be composed of two squares plus a root-two rectangle. And in the same diagram we saw that rectangle DK has to be made up of one square and two root-two rectangles.

There is a remarkable pervasiveness of the root-two proportion scheme throughout this design. We have first the root-two rectangle itself, as AE, whose side—when the end is taken as unity—is 1.414. We have next rectangle DK, with side 2.414, which is one plus root two. Next, rectangle AC, whose side is 2.707; this is one plus one plus the reciprocal of root two. Finally, rectangles DE and FB, whose sides are each 3.414, or one plus one plus root two. Serving as a common element in all the foregoing rectangles—a kind of universal co-ordinating element, since it does not belong to any single root family

in particular — is the square, with side equal to one. Here are the proportions, tabulated in order.

Rectangle-Root-Two Family	Ratio	Length of Side
	1:1	1
	1:1.414	$\sqrt{2}$
	1:2.414	$1 + \sqrt{2}$
	1:2.707	$1 + 1 + \frac{1}{\sqrt{2}}$
	1:3.414	$1 + 1 + \sqrt{2}$

These figures show the remarkable power of application of areas to generate new rectangles which are still expressible in terms of the fundamental rectangle. This preservation of the proportions of the fundamental root rectangle is what Jay Hambidge called the “theme integrity” of Greek design. Virtually all of the designs studied by Hambidge show that the craftsman chose a single root rectangle and held to it. We almost never find combinations of root-two and root-three rectangles, for example, in a single piece.

Now the method of application of areas automatically preserves theme integrity among the resulting rectangles — but *only* if the rectangle that serves as the base of the system is a root rectangle proper. Rectangles with *rational* sides cannot be classified into “theme” families at all!⁴ This is the mathematical reason why the root rectangles proper, rather than rational rectangles, were favored by the Greek designers, according to Hambidge. Only the root rectangles allow such universal harmonization between the elements and the whole.

I said earlier that the number of kinds of root rectangles is unlimited. But clearly as we move to higher and higher roots it becomes increasingly difficult to distinguish them visually from one another. Now according to Hambidge, the Greek artists seldom if ever made use of a rectangle of an order higher than root five. It would, however, be most rash to conclude that the reason for this upper limit was imprecision with respect to sight. I have here drawn (Fig. 17) the root-five and root-six rectangles side by side. They do resemble one another closely; but I doubt that anyone will maintain that the eye is powerless to distinguish between them, provided there is a sufficient artistic motive to do so. The considerations here are analogous to the tuning of musical scales. The difference between the true diatonic pitches A-sharp and B-flat is small, to be sure. But we cannot know whether it is *insignificant* until we know what are the tonal demands

of the music that is to be played. The criteria lie in the intelligible forms, not in the sensory apparatus of the beholder.

In fact there is a mathematical consideration, which has nothing to do with visual discrimination, that singles out the root-five rectangle. This is its close relation to another rectangle which was regularly employed in Greek design — the rectangle of the “Golden Section.”

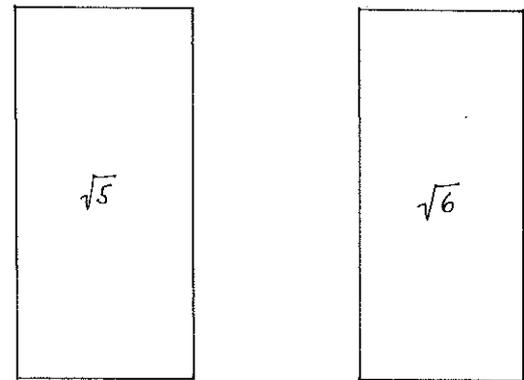


Figure 17

II

As we began our study of reciprocal rectangles by reflecting upon the appearance of the spiral in growing nature, so again let us return to another phenomenon of growth in order to approach the Golden Section.⁵ Although there are a host of actually-occurring natural phenomena that could be chosen, I prefer to consider a somewhat fanciful one, which was put forward as a problem by Leonardo of Pisa between 1202 and 1228.⁶ This is the question: “How many pairs of rabbits can be produced from a single pair in one year?” Leonardo supposed that every month each pair begets a new pair which, from the second month on, become themselves productive. With this supposition he found that the number of pairs in successive months would be:

1, 2, 3, 5, 8, 13, 21, 34, 55, 89, 144, 233, 377, . . .

These numbers follow the rule that each one, after the second, is the sum of the two that precede it. This is a *summation* series, but it is widely known as the Fibonacci series in honor of Leonardo, who was the son of Bonacci; that is, Leonardo *figlio Bonacci*.

It is a remarkable trait of summation series that no matter what chance number we may happen to begin with, the series quickly begin to resemble one another. For example, consider this summation series beginning arbitrarily with the number 29:

29, 29, 58, 87, 145, 232, 377, . . .

In fact it is a theorem, which however I shall not here prove, that all summation series, beginning with any number whatever as the first term, approach without limit *the same ratio between successive terms*. We can already see that this ratio, whatever its exact value (a value which is in fact irrational), can be given approximately by the ratio of the last two terms of the two series which so nearly resemble one another; that is to say, by $377/233$ or $377/232$ —which is a value around 1.61 or 1.62. Let us designate the exact value of the ratio, whatever it turns out to be, by the letter ϕ (for *Fi*-bonacci?). I will show you later how to express it more exactly. And let us ask the following question: "Is there a sequence which meets *both* the requirements of continued summation and continued proportion simultaneously?" That is, is there a sequence

$$a_1, a_2, a_3, \dots, a_n, a_{n+1}, a_{n+2}, \dots$$

such that for any three successive terms these relations hold:

$$\frac{a_{n+2}}{a_{n+1}} = \frac{a_{n+1}}{a_n} = \phi \quad (1)$$

and

$$a_{n+2} = a_{n+1} + a_n \quad ? \quad (2)$$

If there is such a series, it will exhibit simultaneously characteristics of the growth of the nautilus and also the growth of a population of Leonardo's rabbits; for each of its terms will be at the same time a *mean proportional* and an *arithmetic difference* between the two neighboring terms. I don't know if that remarkable combination is enough to make you want to call it "Golden." It is in any case reminiscent of the problem that faced the Demiurge in Plato's *Timaeus*: the simultaneous control of geometric and arithmetic means in the tuning of the Pythagorean scale. Suppose then, that there is such a series; divide the terms of equation (2) through by a_{n+1} , and we have

$$\frac{a_{n+2}}{a_{n+1}} = 1 + \frac{a_n}{a_{n+1}}$$

which can also be written

$$\phi - 1 = 1/\phi.$$

What this tells us is, ϕ has a value that exceeds unity by its own reciprocal. No rational value of ϕ can satisfy this condition. But we can give geometrical expression to it as follows.

Consider a rectangle DB (Fig. 18) whose sides are in the golden ratio to one another: let the sides be ϕ and 1, respectively. Then this rectangle must be composed of a square plus its own reciprocal, according to the relation we just derived. For $AB = \phi$, and let square DF be constructed so that $AF = 1$. Then $FB = \phi - 1 = 1/\phi$ as above. Therefore

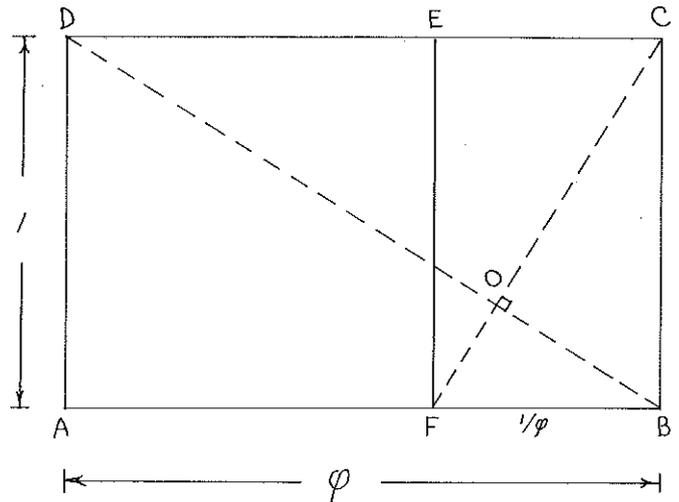


Figure 18

rectangle FC has the same relation to the given rectangle as was set forth earlier in Figure 7, and thus it is the *reciprocal* of the given rectangle. Q.E.D.

The rectangle whose sides are in golden ratio to one another is called, it will come as no surprise to hear, the "Golden Rectangle," and we can state the following theorem about it, which is merely a restatement of what has just been proved: "When a square is applied to the end of a golden rectangle, it is deficient by a space which is itself a golden rectangle."

By this same relation we are also in a position to calculate ϕ . Since ϕ and its reciprocal must differ by unity, or

$$\phi - 1/\phi = 1,$$

Multiply through by ϕ for the following quadratic equation:

$$\phi^2 - \phi - 1 = 0$$

Reducing this by the quadratic formula (but ignoring the negative root), we have

$$\phi = \frac{1 + \sqrt{5}}{2} \approx 1.618 \dots$$

which value is nicely in line with our earlier estimate. We thus have the ratio of sides of the golden rectangle.

It remains only to show how to construct the golden rectangle, since its dimensions are not rational. Euclid gives two methods: Proposition 11 of Book II, To cut a given finite straight line so that the rectangle contained

by the whole and one of its segments is equal to the square on the remaining segment; and Proposition 30 of Book VI, To cut a given finite straight line in mean and extreme ratio. Either of these methods suffices, but here is a shorter way that is given by Hambidge and many other writers.

With AB as base (Fig. 19), construct the square ABCD, and let BC be bisected at E. Join ED, and extend BC to F, where EF equals ED. Complete rectangle AF. I say that rectangle AF is the golden rectangle; and rectangle DF is the reciprocal, for it is deficient by a square.

For let AB equal unity.

$$DE = \sqrt{\left(\frac{1}{2}\right)^2 + 1^2} = \frac{1}{2}\sqrt{5}$$

$$BF = \frac{1}{2} + \frac{1}{2}\sqrt{5}$$

or

$$BF = \frac{1 + \sqrt{5}}{2};$$

and this, as we just saw, is ϕ . Q.E.D.

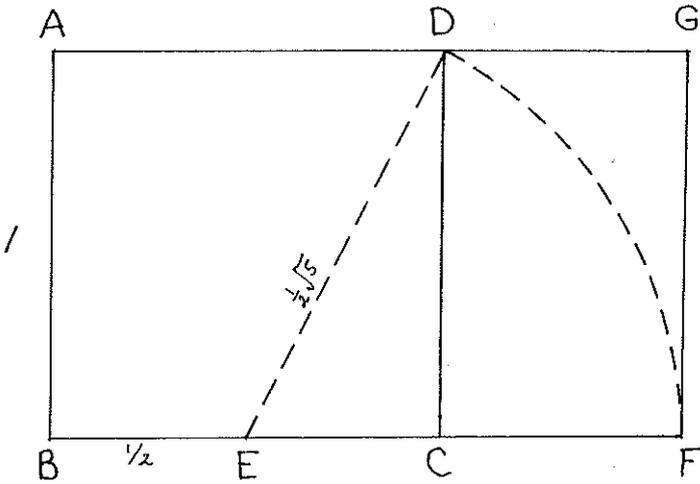


Figure 19

In this same construction we see the close geometrical connection that I said was to be found between the golden rectangle and the root-five rectangle. In the same way that we constructed rectangle DF in the previous figure, construct (Fig. 20) rectangle JB on the opposite end of the figure. I say that rectangle JF, formed of two golden rectangles and a square, is the root-five rectangle.

For let AB equal unity. $EH = EF = \frac{1}{2}\sqrt{5}$. But HF is the sum of EH and EF; thus $HF = \sqrt{5}$, and rectangle JF is the root-five rectangle. Q.E.D.

The root-five rectangle conceived as a square plus two flanking rectangles is a design element which, ac-

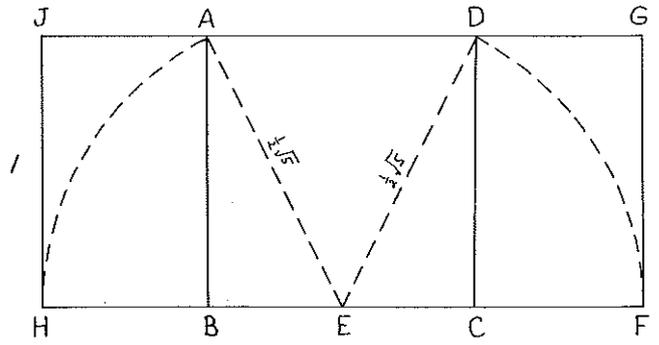


Figure 20

ording to Hambidge, is found frequently in classical compositions. In order to apply it to a particular example, let us draw out a few more properties of this shape.

Let there be given the root-five rectangle AB (Fig. 21) with central square DC and flanking golden rectangles AI and CH. Now rectangles AC and IH are also golden rectangles, because each is formed from a golden rectangle and the square on its side. Draw diagonals AC and HI, intersecting at E. Through E, draw FG parallel to the base, and draw also the vertical, EK.

We may then immediately identify four other golden rectangles, namely EH, EI, AE, and EC; they are all parallelograms about the diameters IH and AC, and are therefore all similar to one another and to the golden rectangles AC and IH.

A Greek drinking cup (Fig. 22) in the collection of the Museum of Fine Arts, Boston,⁷ illustrates the plan we have just set out. What follows is one of more than 200 analyses which were published either by Jay Hambidge or by L. D. Caskey, late Curator of Classical Antiquities at MFA.

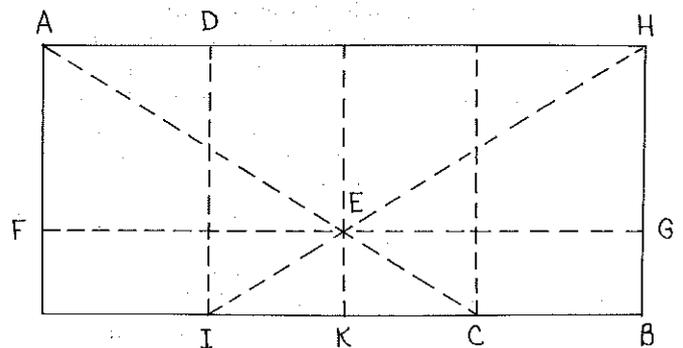


Figure 21

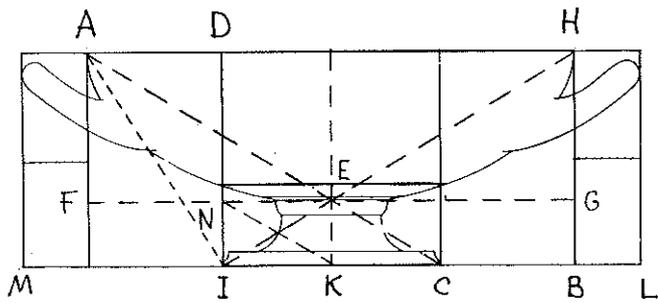


Figure 22

In the sketch, we see the main design plan for the piece: the root-five rectangle $|AB|$ serves as the containing figure for the cup (minus its handles), while the central square DC determines the diameter of the base. The join between bowl and pedestal is fixed by the intersection of diagonals, so that the rectangle AB containing the bowl and the rectangle NC containing the pedestal are similar to one another. Each is composed of two golden rectangles.

The handles extend beyond the root-five rectangle. If spaces AM and HL are added to accommodate the handles, it is found by measurement that each added space is (nearly) congruent with the area NC and that each is therefore also composed of two golden rectangles.

Observe also that the curve of the pedestal appears to be fixed in part by the intersection of diameters NK and EI . Finally, the lower extremity of the handle join lies on a diameter of the flanking rectangle, as AI .

Such an analysis as this one raises a number of questions. Are the geometrical correlations really essential to this design, or are they just accidental? Moreover, do they reflect characteristics that are uniquely pertinent to the root-rectangles, or are they merely relations that are of general validity? For example, rectangles AE and EC have to be similar, no matter what proportions govern the containing figure; we cannot credit the root-five rectangle with this relation. On the other hand, they will be *golden* rectangles only if rectangle AB is root-five.

It would have been equally appropriate to raise such questions in the case of the Egyptian bas-relief. If they seem of greater urgency here, it is probably because of the greater variety of things that are being counted as "correlations" in this analysis, for example, intersections of diagonals at a particular feature.

Hambidge's theories have been subjected to vigorous criticism on just such points as these.⁸ With your permission, though, I would like to defer their consideration until we have seen more of the kind of thing Dynamic Symmetry looks for in a composition. One central idea is illustrated in this example. Dynamic Symmetry is not just a theory of ratios, but rather of spatial relations which certain select proportions make possible. Here, works are viewed in respect of their *containment* by a figure, and in respect of their implicit *articulation* of that figure. In the

drinking cup, the containing figure was the root-five rectangle. But it was the circumstance of the pedestal base being equal to the overall height that brought the figure forth as a square plus two flanking rectangles, rather than some other of the myriad ways in which the root-five rectangle may be subdivided. In Dynamic Symmetry the concern is not with line but with *figure* in the sense of Euclid. (This is not "area," which is a notion that carries metrical connotations that are no doubt anachronistic.) From the point of view of figure, as Hambidge several times notes, *voids* function in a design just as actively as do *masses*. In our example, the "empty" spaces FI and CG —each of which can be shown to be a double square—are part of the spatial structure of this piece.

Now let us take up a more complex treatment of the golden rectangle. This time I will simply assert the proportions of the design plan. The calculations are straightforward enough, but they are time-consuming.

You will remember that when we were talking about the reciprocal rectangles I called your attention to the four "poles" (Fig. 8) which every rectangle has—these are the centers of the four rectangular spirals that can be drawn in every rectangle. Through the poles (Fig. 23) of golden rectangle XY draw lines parallel to the sides,

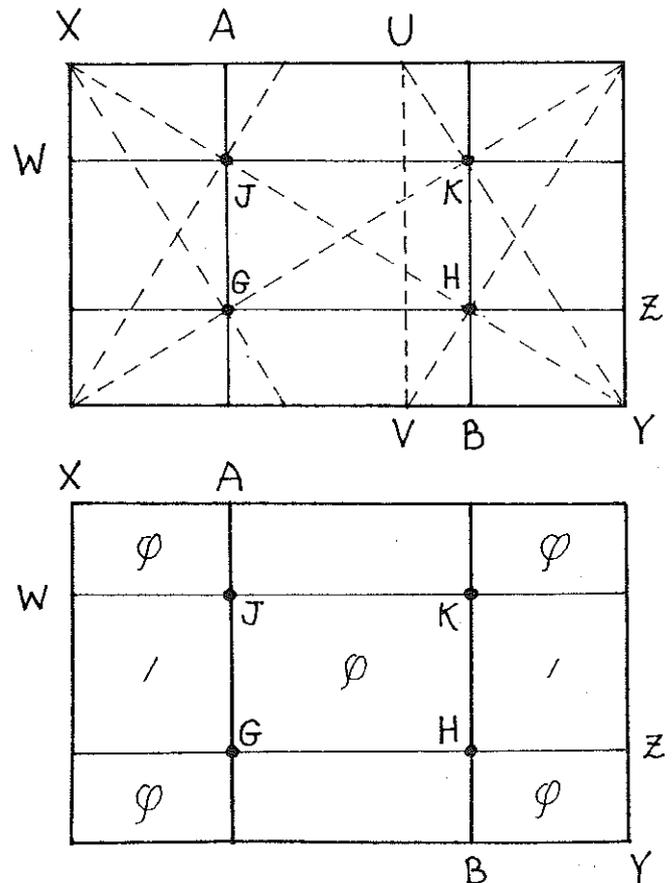


Figure 23

as shown. We will then have golden rectangles at the corners and in the center, and squares WG, KZ remaining. Each of the areas AK and GB is composed of a square plus a golden rectangle (Fig. 24). So we can calculate the ratio of sides of figure AB; it is 3.618 : 2.618, or 1.382.

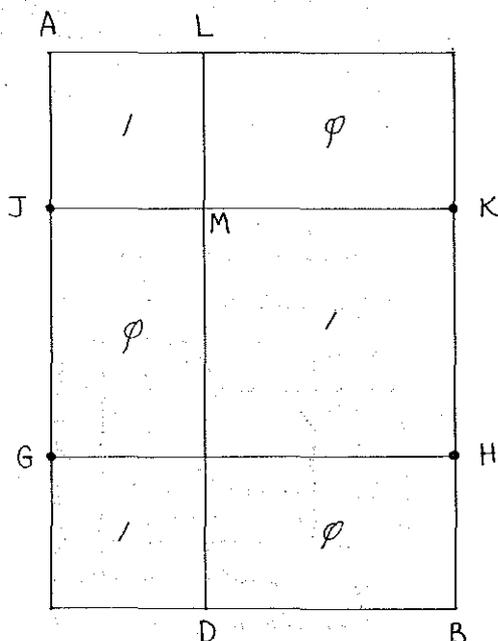


Figure 24

In his book on the Greek vase, Hambidge asserts that many of them were constructed according to proportions inherent in the 1.382 rectangle. Here⁹ is one of them (Fig. 25).

The containing rectangle AB is 1.382. Squares AH and JB are applied at top and bottom to leave the remainders AK and GB which are 2.618. To the uppermost of these, squares NK and AM are applied; and similarly also to the lowermost, as shown in the right-hand sketch. The intersections of diagonals of the squares determine the central rectangle CEFD, which is root-five (for imagine it displaced to the right by the amount FB; it will then be seen to consist of a square plus two flanking golden rectangles). This central rectangle determines the width of the lip and the diameter of the bottom of the base.

The lower portion of the figure is governed by dimensions of the rectangle GB in conjunction with the central root-five area. The intersection of diagonal QD and its reciprocal-producing perpendicular RS determines the level of the top of the base. Diagonal DG passes through

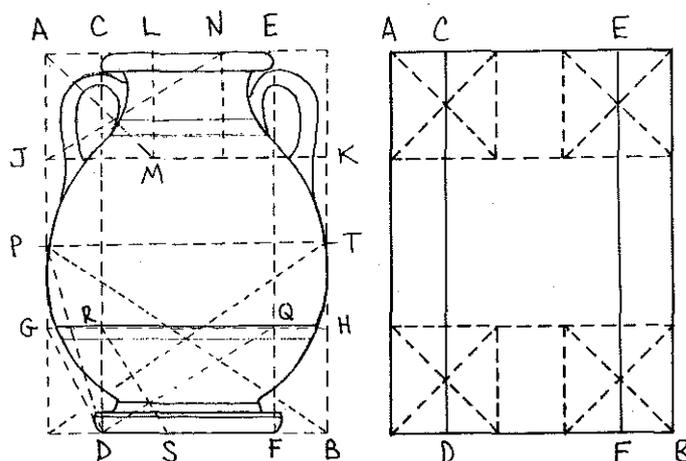


Figure 25

the lower corner of the foot. The upper edge of a painted decorative border coincides (nearly) with side GH.

The upper 2.618 rectangle functions this way. To the applied squares AM and NK correspond respectively the remainders LK and JN, both golden rectangles. The intersection of the square's diagonal, as AM, and the rectangle's diagonal, as JN, determines the level of the upper edge of a decorative border.

Finally, consider a line PT which bisects the containing rectangle just above the vase's greatest width. Diagonals PB and TV intersect at a level which determines the lower edge of the decorative border, while the diagonal PD passes through the upper corner of the foot.

Our two vases illustrate that the classical mode of employment of the golden rectangle was more subtle than some investigators have appreciated. Although both pieces depend decisively upon the compositional properties of the golden rectangle, neither employs it as the overall containing shape. In fact, of the rectangles that do function as containing shapes in Greek pottery, the golden rectangle is by no means a predominating one, though it is frequent.¹⁰

The golden rectangle has been characterized by a host of writers and researchers as the "most beautiful rectangle." Evidently, however, to the Greek designers a "most beautiful" shape was not one to be slavishly perpetrated at every possible occasion. Such an idea would be as ridiculous as Socrates's comic example in the Republic of the man who wanted to paint a statue's eyes purple because "the most beautiful organs deserve the most beautiful color." Rather, as Hambidge observed, the aesthetic significance of the golden rectangle in classical design lies in its value as a co-ordinating factor.¹¹ Its rich system of relations and subtle potentials for transformation afford the designer immense scope of variation while yet preserving the mathematical grounds of that unity of theme which appears to have been so important in Greek design practice.

The methods of analysis used in these examples from pottery are fully applicable in other arts. Except for the relative difficulty of obtaining accurate measurements, analysis of architectural works, for example, proceeds in exactly the same way and discloses identical geometrical themes. In *The Greek Vase* Hambidge says: "There is no essential difference between the plan of a Greek vase and the plan of a Greek temple or theater, either in general aspect, or in detail."¹² In all cases, Hambidge maintains, analysis of Greek or Egyptian compositions shows that the artist worked within a predetermined area:

The enclosing rectangle was considered the factor which controlled and determined the units of the form. A work of art thus correlated became an entity comparable to an organism in nature. . . .

Only such rectangles, simple or compound, were used, whose areas and submultiple parts were clearly understood. If the design for a vase shape were being planned the artist would consider the full height of the vessel as the side or end of a certain rectangle, while the full width would be the end or other side. The choice of a rectangle depended upon its suitability for a purpose, both in shape and property of proportional subdivision. A rough sketch was probably made as a preliminary and this formalized by the rectangle . . . (*The Greek Vase*, p. 44)

Of all the virtues that Hambidge found in designs based on dynamic symmetry principles, this character of governance by the whole was probably in his view the cardinal virtue. Its mathematical basis is the recurrence of the ratio of the fundamental rectangle when given areas are subdivided by application of areas—a recurrence that is peculiar to the root rectangles and which we have already recognized under the name of "theme integrity."

The intimate harmonization of whole and part was for Jay Hambidge a reflection of the organic designs produced in nature, and this impelled him to play increasingly upon the word "dynamic." Gradually abandoning its original, severe role—the mere translation of the mathematical adverb *δυνάμει*—he more and more began to rely upon a more current usage, a usage increasingly expressive of force, life, and energy.

Hambidge repeatedly contrasted the dynamic symmetry of figure and its associations with life and organism with an inferior, arithmetical¹³ kind of symmetry that is based on the lineal unit, or direct commensurability of line. This kind of symmetry he called "static." "Static" symmetry so-called is based on a fixed unit. It is the kind of ubiquitous commensurability we come up with when we design on graph paper. "Static" symmetry characterizes the art of most of the great civilizations, ancient and modern. According to Hambidge, only the Egyptians and the Greeks mastered the practices of dynamic symmetry: and even the Greeks seem to have gone through a stage of "quasi-static" design before bringing the dynamic techniques to full fruition—and later, in the Hellenistic period, to have reverted to the static methods. Certainly the great Renaissance artists used static rather than

dynamic symmetry. Nevertheless, Hambidge thought that it was an inferior kind of symmetry, and it eventually became the major part of his program to effect a reintroduction of the dynamic techniques into contemporary design.

Here (Fig. 26) is a sketch of a ground plan that appears in one of Leonardo da Vinci's notebooks. It is easy to see how the plan is based upon the multiple repetition of the little square as unit. This is severe static symmetry.¹⁴ What is most lacking in this kind of design, as compared with the dynamic designs we have studied, is the sense of governance by the containing whole. The subdivisions in the Leonardo design are not obtained from the containing figure but from the Cartesian grid

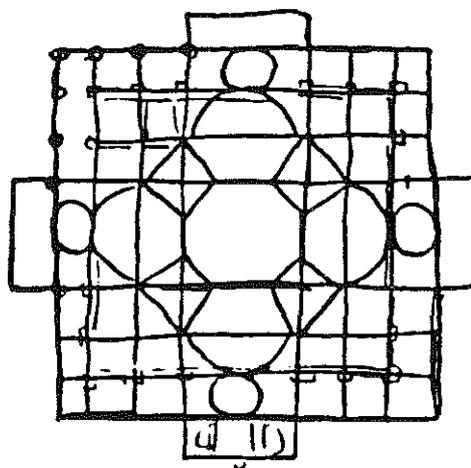


Figure 26

(or "trellis," as Hambidge calls it). In fact this trellis vies with the containing shape for dominance and may even appear to be logically prior to it. A Cartesian grid is essentially infinite¹⁵ and is "contained" only in a most accidental sense by the overall shape. "Limited," in fact, rather than "contained," is probably a better word with which to express the relation of a statically symmetric shape to its outline. There is no reason inherent in the Cartesian grid why the overall shape should not have been wholly different; and if it were, the pattern of subdivision based on repetitive units would be affected not at all.

When the grid pattern is as emphatic as it is in the Leonardo sketch, we can easily have the sense that the grid is threatening to break out of the square into elongations and extensions. This actually happens—as when an addition is made to an existing building. In any case, the static treatment tends to emphasize *measured, counted* space over *shaped* space.

"Static" symmetry need not be based on the square. It is imposed whenever there is used a repetitive element, whatever that element may be. It could be (Fig. 27) the

equilateral triangle, the hexagon, or even one of the root-rectangles. The mere deployment of a root-rectangle does not achieve dynamic symmetry unless its peculiar potentials for explication by application of areas are made use of.

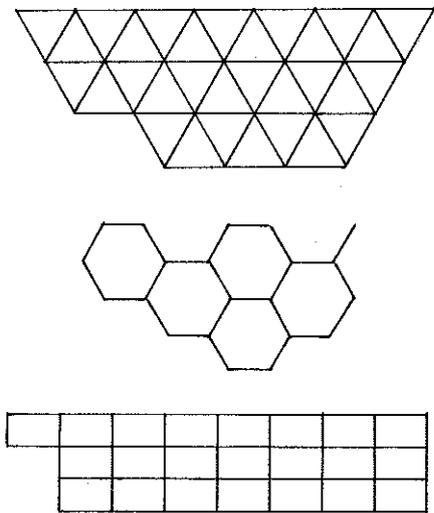


Figure 27

III

To conclude this talk, I would like to voice a few thoughts about Dynamic Symmetry as an historical theory. Understandably, it is the historical aspect of Hambidge's teachings that has commanded most attention and generated most controversy. He asserted that the Greek designers did deliberately aim for governance and theme integrity, and that they consciously and masterfully cultivated a system of empirical geometry to further those ends. Given the nature of the available evidence, this is an extremely difficult thesis to establish. Only occasionally can its components be formulated in a clearly testable way, and even then, the "test" is not always decisive. Hambidge and his collaborators repeatedly tried to show that analyses of Greek artifacts according to dynamic symmetry principles were in significantly better agreement with the actual dimensions of their subjects than were other, competing, analytic systems. But these claims were just as vociferously by other parties denied.¹⁶

Fruitful pursuit of this controversy is even now hindered by a lack of sufficient understanding of the very canons of evidence themselves. For example, what level of precision is to be regarded as significant in the measurement of otherwise undocumented artifacts? For we have somehow to take account of the likelihood that the dimension specified by the designer (if, indeed, there

was an antecedent specification — this is one of the questions at issue) may not have been successfully achieved by the builder, in the case of an edifice, or may have been altered in the firing process, in the case of a clay vase. And we must admit the effects of vandalism, decay, erosion, and other ravages of time in obscuring even the dimension that was in fact achieved. Next, is it possible to give a retrospective analysis of a given geometrical form, otherwise undocumented, that can ever be more than speculative? For example, if a certain architectural facade should measure, say, 69.52 feet by 39.93 feet, for a calculated ratio of 1.741 — are we to understand this as an intended construction of the root-three proportion, 1.732, or of the simple Pythagorean ratio 7:4, which is 1.75? Or of some altogether different significance — or none at all?

Furthermore, what categories of geometric "facts" in a design are to be regarded as having aesthetic significance? We found a feature in one of the Greek vases that fell neatly at the intersection of two diagonals. But in the overall design there are dozens of diagonals, and hundreds of such intersections. The likelihood of a chance coincidence between a design feature and one of these intersections is high, as Hambidge's critics have noted, perhaps so high as to deprive even the most conservative analysis of any statistical validity.

All of these criticisms were amply voiced during Jay Hambidge's lifetime. He and his collaborators were not without a defense of their position, but it cannot be said that the defense is satisfactory in all respects. There remain powerful inducements to skepticism, both of a methodological and of an evidentiary nature. But despite its glamour and notoriety, I do not think that the historical aspect was the main component of Hambidge's program. His overriding aim was to restore Dynamic Symmetry to a place among the practical resources of the contemporary working artist.

Most directly serviceable to the artist was his setting out of those design objectives that are advanced by the distinctive geometry of the root rectangles: elevation of area relations over line relations, efficacy of the containing rectangle, and the unity of proportion theme. Hambidge never tried to promote these attributes as eternal or universal aesthetic values; still less did he believe that the techniques for achieving them constituted a recipe for the manufacture of beauty. But he did believe that any activity that aspired to creative power demanded a substantial fabric of know-how and collective intelligible experience if it was to achieve anything. This credo found voice in his many and vigorous exhortations to practicing artists to put dynamic symmetry techniques to use in their own work. Hambidge's rationale for such a redirection of artistic attention was that it would restore a vigor and direction that, he felt, had been lacking in modern design. There was, he asserted, a malaise plaguing twentieth-century art, in the form of an excessive preoccupation with the individual, the superficial, the unique and the gimmicky. It had its root in a cultural

malady that was more profound: our wholesale loss of the vision of Nature as an objective but accessible intelligible order. For the artist, absence of such a public Nature is equivalent to an emasculation of all the formal elements of his craft. Hambidge wrote:

Modern art, as a rule, aims at freshness of idea and originality in technique of handling; Greek art aimed at the perfection of proportion and workmanship in the treatment of old, well-understood and established motifs.

... this is the lesson that modern artists must learn; that the backbone of art is formalization and not realism. . . . The Greek artist was always virile in his creations, because he adopted nature's ideal. The modern conception of art leads toward an overstress of personality and loss of vigor. (*The Greek Vase*, pp. 44 and 142)

Hambidge's writings played down the real primacy of his restorative program for the working artist. His arguments were skewed to the historical question to a degree that was partly unavoidable but partly needless and misleading. He wrote as if it were the fact of the Greeks' success with these methods—assuming it to have been a fact—that made plausible a modern restoration of the dynamic techniques.

The weakness of such an appeal is obvious; if the truth of the historical claim is doubted, then so is the conclusion of superior merit correspondingly weakened. The nature of the evidence, the evaluative tools of archaeology and metrology, and the formulation of appropriate statistical treatments were all in the 1920s too undeveloped in the directions required by Hambidge's study either to corroborate it or to refute it; and in such a case weight remains with the skeptical position.

The situation is largely unchanged in the 1980s, although comparable evidentiary and methodological questions have begun to be addressed more adequately. Much of this attention has been in response to the work of Alexander Thom on megalithic monuments in Britain and to other archaeoastronomical investigations in Britain, Mesoamerica, and the southwestern United States.

Uncorroborated (but, I say again, equally *unrefuted*) by other sciences, Dynamic Symmetry's appeal as a modern design practice depended essentially on the persuasive powers of one man: Jay Hambidge. During the short period of his public activity in this cause he was active indeed. Besides his own research he inspired and partly guided the research of others.¹⁷ He published four books (with two more that appeared posthumously) and edited a journal, all devoted to Dynamic Symmetry.¹⁸ He conducted classes and lectures for students in New York and Boston, and he regularly addressed professional associations of artists and designers here and abroad. His influence spurred Tiffany's of New York to offer a line of silver vessels made according to the "dynamic" ratios. But Jay Hambidge died in 1924; and with his death the

influence of his ideas ceased to grow, despite the labors of a company of dedicated followers whose numbers have not vanished to this day.

I am sorry that obscurity has devolved upon Jay Hambidge's work. Besides the metrological questions that it raised, which archaeology and the other sciences of antiquity will continue to address in one form or another as their methods develop, there is that in Hambidge's work which is particularly valuable to the spectator of art, in expanding his observational powers. By forcing our attention beyond the line and the curve, to the rectangular shapes they may imply, Hambidge opened up what is literally a new dimension in seeing. He once expressed the germ of this idea in the form of an aphorism. It might be a little overstated—but evidently he didn't think so. I leave it with you as a provisional final word:¹⁹ "The line means nothing to design; the area means everything."

FOOTNOTES

1. Rhys Carpenter, "Dynamic Symmetry: A Criticism," in *American Journal of Archaeology*, Second Series, XXV, 1 (1921). See especially page 35, where Carpenter assumes that if the theory of Dynamic Symmetry is true, "slaveborn humble artisans" would have to have known a great deal about "all this geometry." For Hambidge's opinion to the contrary, see *The Diagonal*, I, 1 (November 1919), p. 8 (note 11 below).
2. Generally I use "side" to denote indiscriminately either the longer or the shorter of the lines that contain a given rectangle. But when distinguishing them is important, I shall use "side" to denote the longer line and "end" to denote the shorter.
3. Jay Hambidge, *Dynamic Symmetry: The Greek Vase*, New Haven, Yale University Press, 1920. Abbreviation for references: *The Greek Vase*.
4. *Rectangles with commensurable sides cannot be classified into theme families*. For the ratio of sides of any rectangle belonging to the \sqrt{m} family can be expressed as

$$\frac{a + b\sqrt{m}}{c}$$

where a, b, c, m are integers. The family will be a "proper" root family only if m is a nonsquare integer; if m is a square integer the radical can be eliminated and the family is said to be merely "nominal" (like the so-called root-four family).

Any rectangle with commensurable sides has ratio p/q, where p, q are integers. Then if possible, let

$$\frac{p}{q} = \frac{a + b\sqrt{m}}{c}$$

Then, first, since p , q , a , b , c are all integers, m cannot have any nonsquare value; thus the rectangle does not belong to *any* proper root family. Moreover, with integers p , q given and m any square integer, integral values of a , b , c that satisfy the equation can always be found. Thus the rectangle belongs simultaneously to *all* nominal root families. Hence rectangles with commensurable sides cannot be classified into theme families. Q.E.D.

5. The term "Golden Section" is of 19th-century origin. An earlier term, "Divine Section," appears in Kepler and other 16th-century writers. Proclus refers to it simply as "the Section," and in Euclid it is the division into "mean and extreme ratio." See R. C. Archibald, "Notes," in *The Greek Vase*, pp. 146-157.
6. Published for the first time in 1857.
7. Museum of Fine Arts, Boston, No. 03.784. See *The Greek Vase*, p. 116; also L. D. Caskey, *Geometry of Greek Vases*, Boston, Museum of Fine Arts Communications to the Trustees, V, 1922, p. 175 (Fig. 132). Caskey reports a bowl diameter of 27.4 cm and a height of 12.05 cm which, however, appears to be a misprint for 12.15 cm. According to the latter figure, the bowl diameter exceeds a true root-five rectangle by less than 3 mm.
8. E. M. Blake, "Dynamic Symmetry—A Criticism" in *The Art Bulletin*, III (1920). Also see Rhys Carpenter, *op. cit.*
9. Pelike, Metropolitan Museum, New York City, No. 06.1021.191. From *The Greek Vase*, pp. 95, 98.
10. Caskey, *op. cit.*, p. 6.
11. Jay Hambidge, ed., "The Diagonal" (a periodical) I, 5 (March, 1920), p. 91. A total of twelve issues of this journal were published by Yale University Press; the first dated November, 1919 and the last dated October, 1920.
12. *The Greek Vase*, Foreword, p. 6.
13. "Arithmétique" is my epithet, not Hambidge's.
14. The plan also shows radial symmetry, which according to Hambidge is another static form.
15. For a haunting treatment of this Cartesian truth, see Jorge Luis Borges' story, "The Library of Babel," in *Ficciones*, New York, Grove Press, 1962.
16. Rhys Carpenter, *op. cit.*
17. Especially L. D. Caskey.
18. Besides *The Greek Vase* and *The Diagonal*, already cited, these writings of Jay Hambidge are listed in the Library of Congress Card Catalog: *Dynamic Symmetry*, Boston, c. 1919. Microfilm 36800NK. *The Parthenon and Other Greek Temples: Their Dynamic Symmetry*, New Haven, Yale University Press, 1920. *Dynamic Symmetry in Composition as Used by the Artists*, Cambridge, Massachusetts, The Author, 1923. N7430.H3. *The Elements of Dynamic Symmetry*, New York, Brentano's, c. 1926 and Dover, 1967. NC703.H25. *Practical Applications of Dynamic Symmetry*, ed. Mary C. Hambidge, New Haven, Yale University Press, 1932.
19. *The Diagonal*, p. 92.

The Song of Timaeus

Peter Kalkavage

This lecture is about the strangest of Plato's dialogues, the *Timaeus*. I would like to focus our attention this evening on the famous *eikos mythos*, the "likely story," told by the character Timaeus.

The likely story tells about the beginnings of the visible, touchable world. Our story-teller, Timaeus, takes us through the process by which the world was generated from its most radical causes and principles. Whereas the *Republic* dramatizes the founding of regimes both in city and in soul, the likely story shows the founding of the cosmic regime, the government of the world. For Timaeus, the world's founding depends to a great extent on the power of mathematics. Throughout the likely story, Timaeus draws the listener's attention to the arts of arithmetic, geometry, and especially the theory of ratio we find in the fifth book of Euclid's *Elements*. Timaeus' physicist is a mathematical physicist, and his bond with mathematics expresses his dream that the world be well-governed, that the cosmos no less than souls and cities display the virtues of stability, moderation, and wisdom. Timaeus at one point articulates the motto of such a physicist. It takes the form of a little jingle in Greek: *pan dê to agathon kalon, kai to kalon ouk ametron*; "All the good is beautiful, and the beautiful is not measureless."¹ The physicist for Timaeus represents all that is decent, healthy, and beautifully arranged, all that is conveyed by that rich Greek word *kosmos*. Throughout the likely story, goodness is associated with the beautiful structures of mathematics, and badness is associated with the ugliness of disorder.

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I will try in this lecture to say what the world, our world, looks like through the eyes of Timaeus' motto about the good, the beautiful, and the measured.

The *Timaeus* is the most artful and artificial of all the Platonic dialogues. There is really not anything in it that could be called conversation. And the dialogue as a whole, so plentiful in references to life and motion, seems somewhat lacking in vitality and spontaneity. The major characters—Timaeus, Critias, and Hermocrates—meet Socrates according to a preestablished plan. Socrates appears in a most uncharacteristic way. He is dressed up, *kekosmêmenos*, as though he were going to some formal event.² Socrates expresses a desire for a war-movie in speech, then seems eager just to sit back and listen. The entire program is presented with extreme formality by Critias.³ In fact, all the speeches to be given do constitute a formal event. That event is the feasting of Socrates, the dialogue's central dramatic image.

The likely story of Timaeus fits well into this highly artful setting. Artfulness plays the central role in Timaeus' mythical physics. The very word *kosmos* suggests not only a world-order but ornamentation. Timaeus' story is composed of what Socrates calls a *prelude* and a *song*.⁴ The pair of terms also means *preamble* and *law*. The song of Timaeus, the *nomos* as Socrates calls it, embraces two forms of artfulness, that of music and that of politics. Timaeus' speech will show us how artfully arranged the world of becoming is. His song sings the praises of the god *Kosmos*, who for Timaeus is the whole of all generated things.

The Platonic dialogues are all imitations of live conversations. They are living images, dramas. This is true even of the *Timaeus*, which seems at times quite lifeless and undramatic. Very often in the dialogues something in a speech or interchange is not so much spoken about as it is playfully enacted. In the likely story, it is easy

to see what is being enacted, or rather re-enacted. It is the birth of the world as we know and experience it. The likely story is mimetic in this precise sense: it "plays at" world-building. It imitates the noble, though often risky process by which the gods made a world-order. At the beginning of the *Critias*, the dialogue which immediately follows the *Timaeus*, Timaeus calls the cosmos "the god who was born once upon a time long ago and who was just now begotten by speeches."⁵ The likely story, in other words, imitates the artist-god or demiurge. It is recreational. When god makes the world-soul, *we* are engaged in the various constructions. When the gods make us, *we* are involved in the work of putting ourselves together. The world with all its structure comes to light for Timaeus in a divine activity we ourselves take part in. Timaeus calls this activity of world-building in speech "thoughtful and measured play."⁶ Such play for Timaeus is identical with the activity of the mathematical physicist. To read the likely story profitably, we must therefore relax our preconceptions about the serious nature of physics. We must exert our imaginations and, I think, our sense of humor.

There are many obstacles the reader confronts as he reads the likely story. The story is very long and very technical. Furthermore, it cannot help but strike us as whimsical and ridiculous, a sort of prank. This is the story, you remember, that Timaeus places in the region of trust, *pistis*.⁷ Yet what could be more unbelievable, more unworthy of our trust, than some of the explanations we get from Timaeus? Take, for example, the story of the liver. Timaeus describes the liver as a sort of movie-screen for the soul. And the pancreas is said to be the liver's wiper.⁸ Is there anything less unbelievable, I wonder, in the apparently more scientific parts of the story? True, there is bound to be some sense behind such unbelievable accounts. But even while we see a certain sense to what Timaeus says, it is impossible not to say to ourselves "Hah! A likely story." Whatever region the likely story occupies, that region cannot be identified simply with trust.

But there is another difficulty with the likely story. The story is apparently incoherent. It is not one seamless narrative but is composed of *three* stories. Timaeus makes two radically different beginnings. And in his third story, he makes no effort to show how the two beginnings are related. This problem is the greatest occasion on which the story seems to be incoherent.

Timaeus himself warns Socrates and us about this problem the first time he uses the phrase "likely story." It is worthwhile quoting the whole passage in which the phrase first appears:

Don't wonder, Socrates, if we are not able to pay you back with speeches about the birth of gods and of the All, that are not in every way in agreement with themselves and altogether precise. But you must esteem the speeches we provide as likenesses inferior to none. You must remember that I who speak and you my judges

have human nature. So, in order to receive the likely story about these things, it is fitting not to search beyond this.⁹

The physics of Timaeus will be a likely story for two reasons. The first is that the world is not a being in its own right but an appearance, a moving and unstable likeness of an intelligible, stable model. Proper speech about the world must therefore take the form of imagery. Secondly, the story-teller and his listeners are human, not divine. They must know their place and not search beyond the likely story. This passage ends what Socrates refers to as Timaeus' prelude. Socrates' response to the prelude is extremely interesting. He tells Timaeus to "perform the song," a command which can also mean "execute the law."¹⁰

Now there are many strange things about the passage I quoted. It is very important, first of all, because it is addressed explicitly to Socrates. But the most important feature of what Timaeus says is that he articulates the limitations of the upcoming myth. Socrates is being asked, as a human being, to take the likely story about the cosmos as *merely* a likeness, not as the truth. That is, the likely story begins with an apology and a caution.

But why apologize for a likeness? Myths after all are likenesses. No one needs to be reminded of this fact. And Socrates, although he tells many stories, never feels the need to apologize for any of them. Indeed, we sometimes feel that a Socratic *mythos* has the power of showing us what dialectical *logos* cannot explain to us. At the end of the *Gorgias*, just before the concluding myth, Socrates says to Callicles, "You may think it is only a myth, but I take it to be a true account."¹¹ I take what Socrates tells Callicles here to be true of all the Socratic myths. These myths are images without apology because, as likenesses, they aim at and in a certain sense contain truth. Likenesses in this sense do not function as boundaries. They are rather springboards for our perception of invisible, eternal truths. Socrates would never say, "You are only human; do not search beyond the likelihood of my story." For Socrates, myths appear to belong to the level of the divided line called imagination, *eikasia*, the level at which images take us beyond themselves to that which they image.¹²

As I mentioned earlier, the story of Timaeus is composed of three separate stories. The high-point of the first story is Timaeus' construction of the divine, intelligent soul. In the second story, Timaeus unveils the receptacle, the supreme condition for all body, change, and appearance. The third story is about the birth of human nature. This third story is the most bizarre and most playful story Timaeus tells.

The remainder of this lecture will be divided into three parts, corresponding to Timaeus' three stories:

- Part I--The Story of the Soul
- Part II--The Story of the Body
- Part III--The Story of Human Nature

One reminder before we begin. Timaeus is a character in the dialogue, not Plato's spokesman. Plato causes us to reflect on the problem of a world not by a direct encounter with the issues but through a human soul and its various motions, through the soul of Timaeus. We will thus have two questions before us constantly: What is the world; and Who is Timaeus? We must be careful not to separate these questions. It is by no means clear that the likely story represents what has come to be called "Plato's cosmology."

Let us now turn to the likely story.

Part I—The Story of the Soul

The deed imitated by Timaeus' story is the birth of the world. The story is filled with language that suggests begetting. Later in his story, Timaeus will tell us that the world is the "offspring" of a "father" and a "mother."¹³ He will also tell us that the pyramid is not only the element but also the *seed* of fire.¹⁴ Human souls are planted, originally, in their individual stars.¹⁵ The star-gods themselves are referred to as god's "children."¹⁶ The likely story thus aims at being a likely biology as well as a likely physics. Timaeus acknowledges that the realm of becoming is also the realm of procreation.

But the central, overriding image for the likely story is that of artful production, *technê*. God is a craftsman, a demiurge, who makes a world by giving it mathematical order. This is very different from the story in the Bible in which God says to his creatures, "Be fruitful and multiply." In the likely story, the goodness of a cosmos derives wholly from mathematical ordering. Insofar as becoming is good, it is mathematically structured. Fruitfulness is not good for its own sake. In fact, as we see at the end of the story, the *erôs* for begetting stems from our mindless and tyrannical nature.¹⁷ The female kind is derived from the "first men" who were cowardly and unjust.¹⁸ Procreation comes about because the first men "fell" from their divine and orderly condition.

The theme of art is central to the entire *Timaeus*. The dialogue takes place on the feast day of Athena,¹⁹ and there are numerous references to Athena in both the *Timaeus* and the *Critias*. Athena is called a lover of war, wisdom, and art.²⁰ She is the patroness of Athens which, as Pericles reminds us, philosophizes without becoming effeminate.²¹ I think that Athena, or more precisely the birth of Athena, is one of the dialogue's implied images. Athena was born out of Zeus' head. This intellectual, masculine birth takes place just after Zeus swallows up the Titan Metis, whose name means craft or cunning. The myth about Athena's birth seems to me to provide an accurate image for Timaeus' re-creation of the world through art. Timaeus seems to be imitating Zeus. Having swallowed up the mathematical arts, Timaeus gives birth out of his head to an artfully constructed, eminently

masculine world. The likely story imitates Zeus giving birth to Athena; a most accurate image, I think, for the mathematical physicist and his various brain-children. Even when Timaeus introduces the "mother" of becoming later in his story, I think he retains his role as Zeus. He re-creates the womb of becoming as a dynamic medium for artful, mathematical construction.

The likely story begins with the divine craftsman, the demiurge, who gazes upon a perfectly stable and utterly intelligible model of the world. The model or paradigm simply *is* and thus experiences no becoming. It is that being which the cosmos imitates at the level of regular, periodic motions and the "laws of nature" which govern such motions.²² As the not-yet-actual structure of a moving world, the intelligible paradigm functions for the craftsman as a kind of "cosmic blueprint," a plan which guides the construction of the cosmos and in which the various forms of motion, power, and life find their prophecy.

By consulting this model, the god tries to make Becoming as beautiful, that is as orderly, as possible. Before the divine ordering, Becoming is said to be in a state of disorder. Timaeus calls this condition "not at peace and out of tune."²³ In order to regulate and tune this ugly condition, the god consults not only the cosmic blueprint but also the goodness of his own intelligence. He looks within himself in much the same way that the mathematical physicist looks within his intelligence for the mathematical principles of order. The god desires that the world imitate *him* as much as possible.²⁴ To this end, the god constructs intelligence within the soul and soul within body.²⁵ The soul is that on account of which the cosmos is a living being.

What Timaeus' construction means here is that the cosmos is alive for the sake of being intelligent, not because life is a good in itself. Life is present because it is impossible, says Timaeus, to make the world intelligent without also making it alive. And unless intelligence is put into the world, the world will not be the best and most beautiful of possible worlds. At this point the cosmos is said to be an animal composed of body, soul, and intelligence. The cosmos is patterned after what Timaeus calls "the intelligible animal."²⁶ The intelligible animal contains the forms of all the animals that are really living and are contained within the sensed cosmos.

The notion of an intelligible animal is one of the most perplexing notions in the likely story. It is extremely difficult to see how an intelligible dog, for example, could be called an animal. This difficulty comes up again and again for the likely story. It reappears when we are asked to accept the existence of an intelligible fire.²⁷ As a really living, vibrant whole with all the signs of life, the sensed cosmos appears to be more truly what it is than the original it copies. The reason is that the sensed cosmos is possessed of a soul. I think we need to remember here that, although Timaeus appeals to the image-original relationship we find in many other dialogues, this relationship has a special context in the likely story. It is in

the context of productive or demiurgic art. The artist works from a vision of perfection that appears within his intellect. So long as this vision is in the intellect alone, the perfection is uncontaminated and stable, yet unfulfilled. Fulfillment comes in the act of bringing forth the vision of perfection, actualizing it in time and space. In the context of productive art, the relationship of original to image is the relationship of blueprint to fully actualized structure. The sensed cosmos, though an image, is nevertheless the fulfillment of the idea within the mind of the demiurge.

Timaeus proceeds to show, first, how the body of the world was constructed, and secondly, the soul. The body of the cosmos displays the good and beautiful ordering of mathematics. The four elements of body—fire, earth, air, and water—are arranged in a continuous proportion.²⁸ The entire body of the world is then given spherical shape and the motion of rotation. Soul is constructed next.

The story of the soul is one of the most exquisite pieces of architecture in the likely story. It is based on a remarkable premise—that a soul can be *built*. In the likely story, we are treated to a vision of a likely soul, that is, a soul whose being in speech consists in its being constructed. This is all part of the re-creational activity of the likely story.

The construction of the divine soul takes place in three stages. The god first mixes together the forms of Being, Same, and Other. This is accomplished, Timaeus says, “with force.”²⁹ Next, the god articulates the mixture into a spine-like band, the sections of which correspond to several octaves of the Pythagorean scale.³⁰ Finally, he slices and bends this spine-like band into the circuits of Same and Other.³¹ You know these circuits from your study of Ptolemy. Timaeus gives a two-fold meaning to the circuits. They are the outwardly appearing motions of the heavenly bodies and also the inner, invisible “revolvings” of our thinking, of our *dianoia*. Timaeus goes on to tell us how the circuits of Same and Other, that we see in the heavens, constitute the moving image of the eternal which we call *time*. The circuits of Same and Other cause the world to be measured by recurring cycles. In this way, Becoming imitates the utterly non-moving look of Being. Because of these intelligent circuits ordered according to musical ratios, the world is filled with timeliness. It is characterized by time not merely as duration, but time as a principle of “right timing” or seasonableness. Once the circuits are set in motion, the world becomes thoroughly musical as the moving structure of time. The world is enlivened and also “set straight” by the periodicity of rhythm as well as the periodicity of the musical scale.

I think it makes sense to compare the soul as Timaeus constructs it to a spine. Our drawings for the cutting of a monochord certainly resemble the spine with its vertebrae. Owing to its musicality and seasonableness, the soul seems indeed to function as the backbone of a constantly moving order. It gives poise and rigor to an

otherwise flabby and graceless world. This is much like the way in which the Pythagorean scale gives structure to the music we hear or the way in which Timaeus' song as a whole gives backbone to our flabby conception of the world.

It is important to note that these two contrary circuits which govern Becoming, the circuits of Same and Other, are not confined to the heavens. The soul is said to be “woven throughout” the body of the world “from center to extremity.”³² The soul ensures that the entire world is filled with the recurring patterns characteristic of music. Musical intelligibility exists everywhere. It exists not only in the heavenly motions but also in something like the vibrating string. A string vibrates periodically. It displays the togetherness of sameness and otherness. The circuits of Same and Other are therefore not confined to a place. Like music, they do not belong exclusively to the realm of body or to the realm of soul. It is impossible to say, when we are listening to a piece of music, that the music is *either* inside us *or* outside us. It seems to be everywhere. We do not “stand back” when we are really listening to a piece of music. The music penetrates and engulfs us.

Timaeus' account of the soul is a powerful transformation of our ordinary experience of the world. The account requires that we see the world through the eyes of the imagination. Usually we distinguish rather rigidly between the inner and the outer; the non-extended and the extended; the soul and the body. But in the likely story the world is approached through the power of likenesses. For Timaeus the soul's act of thinking and the world's act of turning in a circle imitate one another. Now our souls contain the divine circuits of Same and Other. In the act of thinking we too “revolve within ourselves.” The circuits are housed in our heads, or more precisely, in our brains. This true self of each of us, the intelligence, is planted in a star before being submerged in the violent flux of becoming. As we gaze out and away from ourselves into the heavens, we are in fact looking upon an appearance of our most intimate selves. We are in a sense gazing within and not out towards a “beyond.” Now gazing at the stars is an activity we all love. This ordinary activity so often associated with softness and romanticism has a very specific meaning for Timaeus. A star is perfectly shaped, it is always brilliant, and its motions are unwavering and thoroughly regular. Also, a star is deathless. No wonder gazing at the stars can fill us with admiration and longing. We are remembering, remembering what it was like, in our Golden Age, to be entirely healthy and well-formed. Through the study of astronomy we return to a likeness of what Timaeus calls “the form of our first and best condition.”³³ Astronomy is the true homecoming of the human soul.

Another powerful transformation of experience occurs in Timaeus' story of the divine soul. This transformation has to do with that special phenomenon, the physicist himself. Timaeus' story “saves” this phenomenon. That is, it shows how the activity of the physicist forms a vital

part of the whole, how thinking about the cosmos is itself the world's own most essential act. The likely story "saves" the phenomenon of the physicist himself by allowing intellectual activity to permeate the whole ceaselessly. Thinking finds itself reflected in the object of thinking, especially in the heavens. This is another way of saying that *logos* as thoughtful speech as well as *logos* as ratio permeates the whole. The cosmos of Timaeus is an intelligent animal. It is always engaged in giving accounts of itself to itself.³⁴ The physicist, then, does sporadically, partially, and sometimes out loud what the cosmos does continually, fully, and in silence. Strange as the likely story is, it nevertheless has the power to account for the presence of physics and the physicist within the world. This should come as no surprise to us. As I have tried to suggest in my discussion of Athena's birth, the world of Timaeus has its home in the mind and speech of the physicist. It is his brainchild. Such a world is not the world in its originality but the world as it is re-created through the powers of art. Throughout Timaeus' praise of the god Kosmos, he is praising the physicist's god-like power of re-creation, the power of bringing the world into being through speech.

The world is fulfilled for Timaeus in the physicist's act of thinking. There are of course many wondrous and admirable motions which the cosmos displays. Yet its highest activity for Timaeus is clearly that of thoughtfulness or reflection. The world longs, one might say, to make itself known and articulate. Only through the powers of intelligent human speech does the world shine forth as what it most truly is—an intelligent, living embodiment of artful structure and purpose. Timaeus calls the cosmos a "happy god."³⁵ This god would not be happy, would not be fulfilled, were it not for the human beings who tell likely stories about the world's structure. Through the recreational powers of the physicist, the world comes to possess something like a plot, a *mythos*. In this way, the world comes to be an object of trust. We can place our trust in the appearances only once we have saved them with the peculiar powers of a likely story. At the beginning of the story, Timaeus invoked *to hêmeteron*,³⁶ that is, ourselves and our own powers of mathematical story-telling. Our trust in the likely story is also our trust in a world that we ourselves have brought into being.

Part II—The Story of the Body

In Timaeus' first story of origins, time plays the central role. Time is said to be the moving likeness of eternal, changeless being. I think this means not that time as duration goes on forever, but that time is one of the world's supreme ordering principles. Timaeus agrees with Aristotle in the sense that time is conceived as the measure of motion.³⁷ Time gives the various happenings of the world rhythm and periodicity. In the cosmic region below the heavens, the world is constantly coming together and falling apart.

But this region is nevertheless ruled by the ever-intelligent circuits of Same and Other. The world in a sense "knows" when to do what. In his second account of origins, Timaeus unveils the other supreme ordering principle and dimension of a world—space as the giver of place. For Timaeus, space, like time, is a moving structure. Space shakes what is within it.³⁸ Just as time is associated with the world's stability, space is associated with the excitation of all things that have place.

Timaeus' first account of body at the very beginning of his speech took the four elements of body as the uncuttable simples out of which body was composed. In his second story the simple-minded notion of an element proves to be insufficient. What confronts us in the region below the heavens is the *change* of elements *into each other*. Fire acts on water to beget steam, a form of air. Water evaporates, steam condenses, and fire goes out, leaving its descendants earth and smoke. The element of fire is given special attention by Timaeus. Of all the elements, fire is the most spirited, the most ambitious, and the most desirous of gaining victory over the others. The elements, in other words, are themselves unstable. They appear in the wondrous display of appearing and disappearing. In order to "save" this perplexing phenomenon, Timaeus reconstructs the four elements out of the regular Platonic solids.³⁹

This ingenious construction accomplishes two highly important goals. First, the elements are shown to have parts. These parts—the various sides of the regular, geometrical solids—can be rearranged to form other elements. Timaeus' mathematical physics thus accounts for the fact that an element can have integrity and identifiability while at the same time being able to suffer transmutation. There is a second goal which is of great importance to the likely story. The regular Platonic solids are called by Timaeus "the most beautiful bodies."⁴⁰ What this means is that Timaeus accounts for the structure of body in terms of principles that are beautiful and good. Timaeus here puts to work once more the motto of his physics that I quoted earlier: All the good is beautiful, and the beautiful is not measureless. Of course, what I have been calling an account of the elements is, like all accounts of Becoming, a likely story. It represents the attempt on the part of the physicist to construct the best of all possible worlds in speech. Timaeus constructs the paradigms or archetypes of the four elements. He makes no attempt to deduce the real nature of body and change from the supposition of mathematical principles.

Timaeus' second attempt to account for the world's beginning unveils a new cause at work in the world. Timaeus calls this cause necessity, *anankê*.⁴¹ At one point he refers to this cause as "the form, *eidôs*, of the wandering cause."⁴² Fire does not act on water purposefully. Fire burns because it has to, and water must evaporate whether it likes it or not. In the second beginning Timaeus makes, the world is seen as originating in the cooperation of *two* causes—the good and the necessary. The good is identical with intelligence, or more precisely, with the ordering power and stability of intelligence. In-

telligence is said to *persuade* necessity to take on the beautiful structures of mathematics.⁴³

In his second beginning, Timaeus acknowledges the role that mindlessness and chance play in the scheme of things. This element of chance cannot be eradicated, nor can it be fully mastered. Timaeus' reference to persuasion suggests that the god's work of ordering the world according to an intelligent and intelligible design is limited by the nature of the original condition in which the design is supposed to inhere. What we have before us in the guise of the necessary cause is none other than the primitive and unmusical condition that exists "before" the divine ordering. By leading us back to a reconsideration of this condition, Timaeus introduces us to that dimension of a world which is distinct from the purposeful activity of an intelligent soul. This new dimension is the world of *power*.

When the gods construct our eyes, they do so for reasons that are beautiful and good. We are given eyes so that we might learn the intelligible structure of time manifested in the heavens.⁴⁴ By learning about this structure through astronomy, our souls become ordered and healthy. We become assimilated to our first and best condition as stars. But unless our eyes have the power of seeing, no good will come of them. What I think this means is that astronomy, although it functions as that through which the human soul is rendered musical, is not sufficient for our complete understanding of the world. To grasp the totality of our world, to tell the whole story of the cosmos, we must become students of violent change; we must study the world of efficiency or power. There are no good ends in the world unless there are powers to actualize those ends. Intelligence by itself cannot accomplish the actualization. As Timaeus informs us, the intellect can only *persuade* the necessary cause to work towards the best ends.

But what is ultimately responsible for this turbulent though necessary aspect of the world? What is that *in which* change appears? What is that in which the crafty god builds his mathematical models of the four elements? Timaeus calls this medium for appearing the *receptacle*.⁴⁵ He refers to it also as the *mother* of becoming⁴⁶ and *ever-existing space*.⁴⁷

Timaeus makes several attempts to say what the receptacle is. This proves to be no small matter for the receptacle, as the material ground or condition for the appearance of determinate though shifting natures, does not itself possess a determinate nature. If the receptacle is said to possess a nature at all, such a nature must be located in its *indeterminateness*, in its character as the *receptivity* to form.⁴⁸

Timaeus' attempts to speak about the receptacle take the form of likenesses. The receptacle is compared to *gold*, which receives constantly changing shapes,⁴⁹ to the neutral *base* in which perfumes can be mixed,⁵⁰ and to an instrument for purifying corn.⁵¹ The use of images to explain the receptacle is well-suited to the receptacle's all-receiving nature. For the receptacle is not only the medium for change and the womb of becoming. It is also

the ground of all appearance and imaging. It functions like the surface of a mirror. As the womb of becoming, the receptacle is "impregnated" with the mathematical structures of the four elements, that is, with the regular Platonic solids. The divine craftsman gazes at the purely intelligible forms of fire, air, earth, and water. At the same time, he is said to *schematize* the receptacle "with shapes and numbers."⁵² The purely intelligible form or *eidos* of each element is called by Timaeus "father."⁵³ In other words, the world of change and appearance is born of two "parents," the formless and all-receiving receptacle and the purely intelligible *eidos*. Timaeus makes it clear that the offspring which is the cosmos is something *in between* its two parents. The world is neither pure formlessness nor pure form but a peculiar mixture of the two. The world is the presence of intelligibility *within* the realm of flux.

Now before the divine act of ordering, the receptacle is already filled with "traces" of the four elements.⁵⁴ What this means is that the primordial chaos could never have been ordered unless it were *potentially* ordered, unless it had a predisposition to be formed. Since the receptacle and its contents are in perpetual imbalance, the ghostly pre-cosmic elements are constantly vying for each other's proper places. Through its vibratory motion, the receptacle tries to send these wayward elements back to their proper places. There is a marvelous poignancy and aptness in Timaeus' account of the pre-cosmic condition. Since the dynamic interplay of receptacle and contents *persists* once the elemental traces are schematized with shapes and numbers, this interplay may be said to characterize the world as we know it. As our experience of our world testifies, things that are made, whether by art or by nature, tend to become *unmade*. The world displays itself as a realm in which things that are brought to order and unity, at the same time tend to fall to pieces. The world tends both to order and to disorder, a fact seen most vividly perhaps in the founding of cities and in their constitutions, but seen no less in the history of all plants and animals. In modern theories of the cosmos this tendency is seen even in those celestial beings, the stars and planets. Timaeus' receptacle confirms our sense that the realm of change is also the realm of *mortality*.

Timaeus' reference to "traces," *ikhné*—literally "footprints"—of the elements suggests that prior to the divine schematism body does not exist. The so-called elements, *stoicheia* or letters of the alphabet, are not really elements at all. They are rather the result of a subtle and beautiful construction. So far are fire, earth, air, and water from the status of genuine elements, that a man who possessed just a little prudence, according to Timaeus, would not even liken them to syllables.⁵⁵

Body, then, comes into being only with the god's construction of the regular Platonic solids in the medium of the receptacle, the medium of eternally unstable space. Insofar as body for Timaeus can be studied, it is indistinguishable from a mathematical object endowed with mortality. According to Timaeus' provocative definition, body is that which possesses the third dimension of *depth*,

bathos.⁵⁶ The definition allows Timaeus to identify bodiliness with solidity, and solidity with three-dimensionality. More precisely, body's solidity derives from the dimension of depth. The depth of body takes on immense mythical significance when we remember that the cosmos for Timaeus is a living being, a being with a soul. While it might seem difficult to grasp the connection between the living character of the whole and the three-dimensionality of body, Timaeus' emphasis on depth does point to the absurdity of a two-dimensional living being. But why should a living being necessarily be "solid," that is, possessed of the third dimension of depth? The answer lies, I think, in something Timaeus says about the soul; he speaks of the soul "circling back upon herself," *autē te anakukloumenē pros autēn*.⁵⁷ The soul or animating principle of the whole, in other words, is a principle of inwardness and reflection. One might call it a principle of "depth," without which the world would be superficial and lifeless. The depth Timaeus sees as the defining characteristic of body thus supplies a home—mythically—for the eternally reflective source of life.

I say "mythically" in order to remind us that although Timaeus' account of body dwells in the region of mathematical physics, its primary dwelling-place is the realm of stories and images. Timaeus makes no effort to derive the "real" properties of body from his mathematical principles. The likely story supplies no *explanation* of the descent from the purely intelligible *archai* to the world of body and change. All takes place by way of analogy and image-making, so that the most technical constructions (like that of the musical scale or of the regular solids) hover between the invisible and true beginnings and the world as it is given to sight and touch. Fire is not a moving pyramid; it is merely *like* a moving pyramid. Nor does the likely story claim to be able to derive the mathematical structure of fire from the *eidōs* of fire, from "fire itself by itself."⁵⁸ Even at its most apparently scientific moments, the likely story retains its character as a mathematical *poem*, a poem that places the mathematical arts in the service of non-mathematical meaning and "depth."

In the entire discussion of body and bodily change, Timaeus makes several references to guarding and saving the power, the *dynamis*, of likely accounts.⁵⁹ Indeed, an invocation of "Zeus the Preserver"⁶⁰ stands at the head of Timaeus' second attempt to speak of beginnings. In the same breath Timaeus calls his second story about a mathematics of body "a strange and uncustomary exposition." Zeus is invoked to save us during the strange business of constructing a mathematical poem about body. He seems to be the patron god of likely stories. The account will begin in distrust, perhaps even in our laughter at such absurd hypotheses as those made by Timaeus. But our imaginations will presumably save us from distrust once we see that the mathematical hypotheses succeed in saving the appearances, once these hypotheses supply a reasonably coherent *story* of body and bodily change. The safety of a likely story thus stems

from our remembering that what we are doing is building mathematical models or analogies, that we are being recreational. The likely story in this way dramatizes for us what we now call a scientific *theory*. A theory must be careful not to promise what it cannot deliver. It does this by acknowledging and insisting upon its origins in a productive, imaginative intellect. Strictly speaking, theories, for Timaeus, do not belong in the realm of knowledge but in the realm of trust, *pistis*. For this reason, mathematical physics aims at *persuasion*. It is a form of rhetoric. The rhetorical connection between physics and the world is strongly implied by the fact that the divine intelligence itself is said to *persuade* the receptacle to assume the best and most beautiful mathematical form.⁶¹

We must remind ourselves at this point that the entire *Timaeus* addresses the problem of the world in its totality. The world of all generated things—gods and men, cities, customs, reputations, and also likely stories. All such generated things reveal in their individual fates the life of the whole to which they are subject; all reveal the pervasive and inescapable workings of necessity within the receptacle. The receptacle comes on the scene in answer to questions of physics proper. Yet Timaeus' mode of speech suggests that we see the world of bodily change as revelatory of the soul, of our souls. In fact, at the end of the likely story, we find souls going up and down the scale of animality.⁶² This happens in just the same way that the four elements of body go up and down in their violent change of place. The cosmos, you remember, is both body and soul. And the receptacle, as the mother of all becoming, is necessarily the place of souls as well as the place of bodies.

No one can deny the power that place as well as time exerts over our lives. Time and place together have to do with the meaning of a life within becoming. Such a life is unintelligible without history or, if you will, without the *story* or plot of a life. Insofar as an individual life comes to be defined as a story, it is governed by the Where and the When. It is of the utmost importance to us that we have a place; and at the appropriate times it is good and necessary for us to change place. Sometimes the change of place, like the change of the elements, is not smooth and continuous but is a violent upheaval.

Timaeus' account of the receptacle fits well with Critias' story about the great cycles civilizations go through and the great wars between cities. In Critias' story Athens plays the role of the great liberator of the political world. Athens fights against the insolent kings of Atlantis who attempt to enslave the entire mainland. But as we know from the account given to us by Thucydides, the Athens of Plato's day launches an insolent campaign against the great and powerful island of Sicily, a campaign which proves to be Athens' downfall. In the course of history, the roles have been reversed. What is true in the political order seems to be true in the cosmic order as well. The life of the whole cannot be identified simply with the serene motions of the heavens. Life is not only intellectual activity; it is also the passion and vibrancy which cause the whole to be

alive in the first place, to reach glorious moments which tend towards tragic decay. At the beginning of the dialogue, Socrates says he is filled with a desire to see the best city go to war, to a fitting and beautiful war. Socrates seems to be mimicking our fondness for life in the sense of passion and vibrancy, and also our desire to witness a beautiful show of strength. Socrates is asking to see the best city transformed into a heroic city, a feat that requires great skill in the making of lively images. Timaeus' two stories of origins—the story of the soul and the story of the receptacle—reflect the two senses of the term *life*. The divine soul, manifested as the moving structure of time, embodies life as intellectual activity. The receptacle embodies life as passion and vibrancy. Both senses of life are necessary if we are to tell the whole story about the life of the whole and our own spatio-temporal lives as well. Yet it is no easy matter to say how these two senses of life can combine to form a coherent whole.

In the last third of the likely story, Timaeus attempts to “weave together” the two supreme causes of Becoming: the good and the necessary.⁶³ He attempts, in other words, to harmonize the two senses of life which the two stories of beginnings have uncovered. We might expect that given these two accounts of the world's founding, Timaeus in his third story will tell us how the two different accounts of origination are reconciled, how it is possible for the soul to be the first and best of generated things⁶⁴ and for the god to have constructed the elements of body *first*.⁶⁵ But Timaeus makes no effort to explain how the first story of origins fits with the second. He leaves us with two beginnings, two *archai*. This incoherence of beginnings is meaningful. It suggests that neither time nor space was constructed first. The world itself is characterized by a *double* beginning. Time as intelligence and space as receptacle interpenetrate but are not reducible to each other. This doubleness of goodness as intelligence and the necessity of the receptacle makes its most dramatic appearance in Timaeus' account of human nature. For Timaeus our nature and the nature of the whole imitate one another. If we find an incoherence in our own lives, a tension between our intelligent and our passionate selves, this is because such a tension exists in the world which we imitate and to which we necessarily belong. The cosmos for Timaeus is something like the human soul, and the human soul's incoherence, writ large.

Part III—The Story of Human Nature

We know from the dramatic prologue to Timaeus' speech that the likely story is intended by Critias to be a preface to Critias' own story about Athens and her day of glory. You recall that the *Timaeus* begins with a very watered down summary of conclusions we find in the *Republic* about the regime that would

be best according to nature. But Critias is not satisfied with Socrates' concern for a non-historical city, a city which had no actual birth in the realm of becoming: “The citizens and city you went through for us yesterday as in a myth we will now carry over into the realm of truth.”⁶⁶ For Critias, Socrates failed to give an account of the best city insofar as this city would have an actual birth in the realm of becoming and history. History—or rather the *memory* of past deeds—is identical with truth. Critias does not distinguish between the faithfulness of this memory and the truthfulness of what he remembers. His memory is etched with stories he heard as a young boy. Critias scrupulously avoids the word *mythos* when he refers to his own story. He claims boldly that his account is “true in every respect.”⁶⁷ It is through Critias, in other words, that we come to be suspicious of anything that has the character of a likely story.

Socrates' speech is mythical for Critias, mythical in the bad sense of the term, because it was about a city with no history. It was about form without motion and place. Critias attempts to correct this lack by transforming Socrates' best city by nature into a young and glorious Athens. But Critias needs a transition from Socrates' inquiry into Being to his own concern for a begotten and therefore genuine city. Timaeus supplies this transition. Timaeus will generate a world in which things come to be and pass away in a splendid show of beautiful structure and purpose. He will construct the cosmic *background* and context for the cycles of human history. As Critias says, Timaeus will generate the universe down to the birth of human nature.⁶⁸ What this means is that human nature is the intended goal of the likely story.

Timaeus' story of human nature began just before the gods confronted the problem of the necessary cause, the cause of power. The star-gods, who are said to be the *children* of the demiurge, put us together piece by piece, organ by organ. What Timaeus shows us in this very odd and at times repellent view of human nature is that for him human nature is something neither whole, nor natural, nor especially attractive. The human animal is a creature of great vulnerability and multifarious needs, and it is to these needs that Timaeus' likely story is addressed. Our neediness is summed up by the fact that we are not *spherical*: we lack the self-sufficiency and general happiness Timaeus associates with the spherical cosmos. Timaeus' identification of happiness with sphericity reminds us of the myth Aristophanes tells in the *Symposium*. But whereas that myth attempts to ground our happiness in the love we have for other human beings, Timaeus' story grounds our happiness in the study of the heavens.

It is true that our complicated bodily arrangement demonstrates how well-meaning and ingenious the gods were. Like the world as a whole, man is a sort of cosmos, an artfully arranged living order. But precisely because man is so artfully constructed in the likely story, he is also something artificial or, as we say, synthetic. There is something grotesque about him. Man is a moving network of parts and functions. There is one and only one

thing about man in the likely story that is completely non-artificial and unconstructed. This is his passionate nature, the nature that is at odds with the intellect's efforts to give life order and artfulness.

Human nature starts out as a *head*. The head contains the divine circuitry of Same and Other. To this head the gods attach a torso and limbs to serve as the head's means of transport.⁶⁹ The gods then put the mortal parts of the soul into the torso. Spiritedness and the love of winning go in the chest, and the desire for food and drink goes in the belly.⁷⁰ An amusing and plausible topology of the human soul! Timaeus describes this addition of spiritedness and desire to our divine intelligence as a *pollution* of the divine.⁷¹ To minimize the bad effects the mortal parts of the soul have on the intellect, the gods construct a buffer to go between the head and the torso. That is to say, the gods invent the *neck*.⁷² Like the belly-button of Aristophanes' myth, the neck is a constant reminder of our "fall" from sphericity and happiness.

Like all the bodily constructions we find in this part of the likely story, the invention of the neck points to some invisible truth about the human soul. Timaeus' account of the neck shows us in its peculiar comic fashion that human nature is ultimately absurd and incomprehensible. There is really no *logos* of human nature, no reasonable explanation of how the best in use is related to the worst. This seems to be implied also by the fact that Timaeus compartmentalizes the soul: intellect goes in the head, spiritedness in the chest, and desire in the belly. One can only tell likely stories about human nature, and such stories look at man in terms of artful construction. The ingenious invention of the neck shows us that we do not cohere *by nature*. Intelligence has no business mingling with the passions, but it must mingle with them if human nature is to be born at all. The neck forcibly joins the head to the rest of us and at the same time supplies some protection for the head's "private life" of thinking.

In the likely story, human nature is the most mixed and most terrible of all things. We are composed of all animal possibilities the world has to offer—the highest, the lowest, and all the stages in between. Our soul in its humanness is everything life can be. In our heads, we lead the divine life of thinking. But owing to our other parts below the neck, we partake of mindlessness. Because of this region below the neck, we run the risk of losing our human shape in our next birth. The penalty for a deficient life is transformation into a lower animal. That is, contained within our human nature is the full range of animal possibilities corresponding to the various forms of unintelligent life. This range stretches from the stars all the way down to the stupidest, most worthless animals there are. But the cosmos requires even these most worthless animals if it is to be whole. Deficiency itself seems to be necessary to the world order, and this deficiency, witnessed in the moral hierarchy of animals, is rooted in the all-encompassing nature of man. The cosmos approaches its final perfection and completeness for

Timaeus as the original, healthy condition of human nature becomes degenerate with time. In the closing scenes of the likely story, the cosmos receives the animal forms destined for it by the "intelligible animal."⁷³ These forms are generated, so to speak, by the need in man's nature to actualize in time all the possibilities which lurk within him and which constitute his being. For Timaeus, the cosmos is both just and beautiful: just because it seeks a harmonization between type of soul and type of body, beautiful because through such harmonization it shows itself to be a genuine *kosmos*, that is, a world governed by a wondrous symmetry and coherence, even for those beings farthest removed from the motions of intelligence. Divine care in this way makes a blessing even of the curses that man's nature brings upon the world. This intelligent care which orders all things and which seeks to make good out of bad, perfection out of deficiency, seems to be an instance of Timaeus' guiding song: "All the good is beautiful, and the beautiful is not measureless." The beauty and nobility of intelligence consist in its care that the good triumph in all things. This divine care for the order of all things is the same as the generosity of the demiurge. It is that goodness which Timaeus, at the very beginning of his talk, characterized as the god's lack of *phthonos*, envy.⁷⁴

As we have seen, human nature in the likely story contains within it all the animal possibilities the world has to offer. These possibilities spring from the complexity of our own nature. This complexity which makes us what we are can be looked at in the light of Timaeus' two great cosmic principles—the necessary and the good. These two principles define human life as well as the cosmic life. Timaeus associates the passionate part of us with the necessary cause, with the receptacle. As always in the likely story, goodness is associated with the orderliness of intelligence.

When Timaeus introduces our non-rational nature, he calls the passions "terrible and necessary."⁷⁵ The passions belong to our necessary nature insofar as we are absorbed in the life of bodily desire, honor, and victory. The turbulence with which these passions fill us remind us strongly of the turbulence within the receptacle.

The passions are necessary because without them we would not be human. To have human life at all, we must be absorbed in the impulsive, non-reasoning sense of life. To be sure, as long as we are men and not stars, life in this sense is a condition for the life of thinking. If we do not care for our whole human lives as human beings, our intellectual life suffers. Thinking presupposes that our lower desires are held in check and that we get enough food, sleep, and exercise. Furthermore, if we had no spiritedness we would lack the daring it takes to tackle and solve such things as mathematical problems. But the lower passions are disruptive, terrible as well as necessary. Human nature is therefore in the following quandary: the necessary condition for our happiness is also an enemy to our happiness.

One might be tempted to think that the gods should

have made our passions less terrible before they put them into our souls. But this, I think, would deprive them of their nature and function as passions. A passion, insofar as it is a passion, cannot be anything other than consuming and measureless. Passion must contain the possibility for being terrible. I think it is this boundless and frightening character of our passions that Timaeus points to when he says that the gods mixed all the passions with “love, *erôs*, that attempts all things.”⁷⁶ Since the passions for Timaeus are causes of disorder, they must be subjugated by the force of intellect. Timaeus is clear about how the intellect itself becomes fit to rule the soul. It becomes fit through the study of astronomy. This study restores our intellect, our circuits of Same and Other, to the originally divine and musical condition we lost at birth.

As I mentioned at the beginning of this lecture, the likely story takes the form of a song. Timaeus sings the praises of the god *Kosmos*. He sings the world into shape with the beautiful constructions of mathematics and harmonics. The song of Timaeus, the *nomos* as Socrates calls it, gives the world its musical and lawful shape. The center of the song’s teaching is this: all the good is beautiful, and the beautiful is not measureless. It is now time for us to ask what we are to make of Timaeus and his song of order.

We know from the very beginning of the dialogue that the making of order within becoming will be the dialogue’s central concern. Socrates gives us our clue in his mathematical account of who is present. He counts people. That is, he replaces their human identities by their general characteristic of countableness. By counting his hosts, Socrates also implies the connection between time and number so important to Timaeus’ story. By asking *where* the missing fourth is, he implies the importance of place in the dialogue, reminding us at the same time that time and place always accompany one another. But the missing fourth remains unidentified precisely because Socrates uses numbers instead of names. Mathematics, it seems, has the power to order beings, but it is powerless to identify them. Timaeus fabricates an explanation for the absence of the fourth host. Timaeus says he must have fallen ill, for surely he would not be absent willingly from such a meeting.⁷⁷ A likely story! The very first time we meet Timaeus he is playing the role in life that he plays when he delivers his speech about the cosmos.

The dialogue is filled with all sorts of playful references to our desire for the orderliness and beauty implied by that rich word *kosmos*. Even Socrates is ornamented, dressed up for the occasion. But it is in the likely story of Timaeus that all the various senses of *kosmos* find their most original place—in the world as a whole. The cosmos is thus the paradigm and source for all the ways in which order and the making of order appear in human life.

In the light of what we have seen so far about the likely story, let us return to our earlier question: Who

is Timaeus? What sort of man tells a story like the likely story?

Timaeus is described for us by Socrates. Everything about Timaeus is splendid, even his name which suggests *timê*, honor. He is an honored, powerful statesman from Italy. He comes from a noble family, he is wealthy, and he rules a city known for its good laws. Socrates also says that Timaeus has “made it to the top in every philosophy.”⁷⁸ Timaeus is the paradigm of the worldly man, the successful worldly man. Unlike Socrates he is an eminently public man, full of worldly experience and known for his mastery of all learning. He seems too good to be true, more like a work of art than a real human being. I sometimes think this must be why, next to the historical characters in the dialogue (Socrates, Critias, and Hermocrates), Timaeus is conspicuously fictional. He seems to *be* a likely story, that is, an unbelievable though beautiful story.

Beautiful though he is, Timaeus makes us question the virtues of a devotion to orderliness and accomplishment. Through the character of Timaeus, Plato causes us to ask this question: Is it so clear that all the good is beautiful and that the beautiful is not measureless? Is it so clear, in other words, that orderliness and goodness are the same? Even if we follow Timaeus in identifying goodness with intelligence, it is far from clear that intelligence is good solely because it is a cause of order and decency. In the *Republic* we get a different view of the good. There the good is that which yokes together the knower and the known.⁷⁹ In other words, the good is the ultimate cause of truth.

The likely story is possessed of many virtues. Its greatest virtue is, I think, its effect on our imaginations. The story tunes and sharpens our ability to construct and to identify likenesses within a world we are used to thinking of in terms of meaningless facts. Through the power of the likely story, the realm of body and change, the object of the physicist, becomes a realm of meaning. There are *reasons* for the way things are. We are thus able to find ourselves reflected in the cosmos Timaeus builds in speech.

But I wonder if we are able to find ourselves accurately reflected in the likely story. In the story’s devotion to a moral cosmos ruled by orderliness and art, something human seems to get lost. I think the loss is especially felt in Timaeus’ treatment of our passions. For Timaeus our passions are necessary but not good. Or rather, they are good only insofar as they are necessary. The passions pull us away from the orderly life of thinking. Timaeus tells us something we know all too well from experience—that the passions are terrible. But he does not leave room for the possibility that a terrible thing is not for that reason bad. Just as goodness is not necessarily identical with order, badness is not necessarily the same as terribleness. The terrible things in us, those things Timaeus sums up as “love that attempts all things,” could very well have more of a connection with the good things in us than Timaeus is willing to admit. Is not our effort to learn

the truth about all things rooted in a terrible longing, a divine madness as Socrates calls it in the *Phaedrus*?⁸⁰ A soul possessed by the madness of philosophy is surely not the same as a soul which has "made it to the top in every philosophy."

In the likely story, the beautiful appears in one guise only—the guise of mathematical structure. For Timaeus this mathematical beauty is always linked with nobility or good character. It is never treated as something which could awaken love. If longing is at all present in the likely story, it is present in our longing to return to our original condition as stars. But this sort of longing is prompted by our desire to be orderly and well-shaped. Timaeus at one point refers to the lover, the *erastês*, of intelligence and knowledge.⁸¹ But I think this refers simply to the man who loves his own noble activity of building mathematical models of Becoming.

The absence of the sort of beauty I am talking about can be seen in Timaeus' portrait of human nature. The portrait combines the symmetry of structure with the grotesqueness of a medical operation. Let us consider for a moment the beauty of a human face. In the likely story, the face is entirely a matter of organs and their proper functioning. If, for example, you wanted to say that someone had beautiful eyes, Timaeus would point out to you that the beauty of the eyes consisted in their ability to see, especially to see the objects of astronomy. The eyes, therefore, are beautiful because they lead us eventually to the ordering of our soul. Timaeus' account of all the other facial organs follows much the same line of thought. These organs exhibit nothing more and nothing less than the gods' attempt to reconcile the demands of orderliness with those of life's necessities. But a face is not an orderly arrangement of parts that work properly. It is a single, uncuttable look, an *idea*. It is something that allows us to say "This is Socrates" or "This is Theaetetus." Because of the uncuttable look of the face, we can identify Socrates and Theaetetus despite the similarity of their faces. Furthermore, owing to the character of the human face, it is ridiculous to give an account of people by counting them. Timaeus shows us that he does not know how to look at a human face. His ingenious and well-meaning gods do not care if their arrangement of facial organs also inspires longing. Or rather, if they care, they care because such longing would cause us to "lose our heads" and become disorderly and ugly.

The absence of a beauty that inspires longing in the likely story is deeply connected with the absence of philosophical love. The *idea* or look of the human face resembles the uncuttable look of a Socratic *eidôs*. This *eidôs* too cannot be reduced to a proper arrangement of parts. In other dialogues, notably in the *Symposium*, our perception of beautiful bodies is the starting-point for our ascent to the purely intelligible region of the forms. The likely story contains no such ascent. The cosmos is our boundary and law-giver. And, as we saw earlier, we must accept the likely story and not search beyond it.

We never get to the true face of things in the story. We must rest content with a beautiful mathematical facade.

The absence of the philosopher and the philosophical love of the forms in Timaeus' cosmos brings up a perplexity that lies at the heart of the likely story. Timaeus often refers to the region of the forms which our cosmos imitates. He refers also to the dialectical study of the things that *are* always. Why then, when Timaeus constructs the cosmos and all its contents, does he leave out philosophy as the study of the truly intelligible whole? Why does astronomy rather than dialectic become the highest human activity within Timaeus' cosmos? To answer this question, we will seek guidance from the divided line of the *Republic*.

On the divided line the level Socrates calls *dianoia* is situated just below the level of dialectic. To this realm belong all those activities called arts, *technai*. The most important of these arts are the mathematical studies—arithmetic, geometry, astronomy, and harmonics. Socrates distinguishes these arts from the uppermost level of dialectic in the following way. The mathematical arts, unlike dialectic, make use of *hypotheses* which are never questioned. Socrates compares such hypotheses to *images*.⁸² This is why Socrates says that the mathematician merely *dreams* the truth.⁸³ The mathematician is intellectually asleep, and in his sleep he has beautiful dreams whose clarity and distinctness lull him into thinking that he has found the truth itself. He is asleep because he does not search for the original beings, the forms, of which his own mathematical objects are likenesses. Caught up in his dream world of beautiful structures, the mathematician beholds images, thinking all the while that the objects of mathematics are in fact the truest, most original beings. Despite the imaginativeness characteristic of the mathematical activity, he lacks the most important kind of imagination. He is unable to see beyond the clarity of mathematical objects to the more precise, more original, region of the forms. While the mathematician works *down* from his unquestioned hypotheses to necessary conclusions, the dialectician works *up* and *back* to the vision of the forms. The philosophical education Socrates outlines in the seventh book of the *Republic* attempts to undo the mathematician's sleepiness, to make the mathematical studies a ladder to the higher region of dialectic.

What we can say about Timaeus' likely story is that it too works *down* from hypotheses. It embodies that intellectual activity Socrates calls *dianoia*. Unlike the mathematicians described in the *Republic*, Timaeus begins with the realm of the forms—the forms of Same and Other, the intelligible animal, and the pure archetypes of the four elements of body. Timaeus treats the forms themselves as hypotheses from which he then *descends* to make a world. Notwithstanding his supposition of these forms, the motion of the likely story is *away from* the assumed principles rather than towards them. What this accounts for, I think, is the likeliness of the likely story. In the likely story, we descend from the region of being

to the image-world of becoming. We enter the beautiful dream world of the mathematician. We build a hypothetical re-created world in speech.

As the cosmos gets filled and perfected in Timaeus' story, it "closes upon itself." It becomes a self-sufficient, self-contained *god*. As we build this hypothetical world with the powers of mathematics, we move further and further away from the realm of Being which was our starting-point. I think it is in this way that astronomy as the highest of the mathematical arts comes to replace the dialectical inquiry into first principles. This is one of the important things the likely story dramatizes—the covering up and forgetting of first principles as the true objects of inquiry. Such a covering up is vital if we are to guard and save the power of giving likely accounts, of constructing *theories*. In the likely story, our desire to ascend to the *Republic's* greatest study of the good gets "swallowed up" by our attraction to the beauty of mathematical structures. Because of this, the likely story necessarily takes the form of play and diversion from serious matters. True to our familiar expression "entertaining a hypothesis," the likely story comes before us as a form of entertainment for Socrates. As we have seen, Socrates fully accepts Timaeus' conditions. He accepts the likely story as his guest-gift and does not, on this occasion, search beyond it. He thereby takes the story in just the right spirit, the spirit that shows exactly what

a likely story about Becoming is.

As the silent Socrates listens to Timaeus' song of law and order, we of course wonder what he is thinking. My guess is that he is enjoying his feast of speech, though not because he is persuaded of its teaching. I think Socrates must all the while be looking into Timaeus' face, thinking about the quality of Timaeus' soul as it is revealed in the likely story. He may be searching for some trace of philosophical longing buried beneath the clever constructions and worldly accomplishments that have no doubt spoiled the glorious Timaeus.

Something is surely lacking in the *Timaeus*. This is signalled by the famous absence of the fourth host. The fourth host is perhaps the philosopher, who has no place in the dialogue or in the world as Timaeus re-creates it.

The likely story offers us a strange and provocative look at the world and at ourselves. But we do not find ourselves accurately reflected in the likely world that emerges out of Timaeus' head, the world without human faces. For all its virtues of order and musicality, the likely story leaves us with a need that can be met, I think, only by turning back, back towards the first principles and to those Socratic stories, like the myth of recollection, which encourage us to turn back. Timaeus' cosmic song thus draws our attention to that other singer who, for now, silently listens.

FOOTNOTES

1. *Timaeus* 87c4–5
2. *Ibid.* 20b7–c3
3. *Ibid.* 27a2–b6
4. *Ibid.* 29d4–6
5. *Ibid.* 106a3–4
6. *Ibid.* 59c5–d2
7. *Ibid.* 29c3
8. *Ibid.* 71a3–72d3
9. *Ibid.* 29c4–d3
10. *Ibid.* 29d6
11. *Gorgias* 523a1–3
12. *Republic* VI, 509d6–510a4; 511d6–e5
13. *Timaeus* 50d2–e1
14. *Ibid.* 56b3–5
15. *Ibid.* 41c6–d3; 41e4–42a3; 42d2–e4
16. *Ibid.* 42e5–43a6
17. *Ibid.* 91a4–b7
18. *Ibid.* 90e6–91a1
19. *Ibid.* 21a1–3; 26e2–27a1
20. *Ibid.* 24c7–d1; *Critias* 109c7–8
21. *Thucydides, Peloponnesian Wars*, II 40
22. *Timaeus* 83e4–5
23. *Ibid.* 30a4
24. *Ibid.* 29e2–3
25. *Ibid.* 30b4–6
26. *Ibid.* 31a4–b3
27. *Ibid.* 51b7–c5
28. *Ibid.* 32b6–7
29. *Ibid.* 35a8
30. *Ibid.* 35b4–36b6
31. *Ibid.* 36b6–d7
32. *Ibid.* 36e2–3
33. *Ibid.* 42d1–2; 90c6–d7
34. *Ibid.* 37a2–c5
35. *Ibid.* 34b8–9
36. *Ibid.* 27d2
37. Aristotle, *Physics*; IV, 219b1–2
38. *Timaeus* 52d2–53a7
39. *Ibid.* 53c4–55c6
40. *Ibid.* 53d7–e2
41. *Ibid.* 47e4–5
42. *Ibid.* 48a6–7
43. *Ibid.* 48a2–5; 56c3–7
44. *Ibid.* 46e6–47c4
45. *Ibid.* 49a6
46. *Ibid.* 50d2–3
47. *Ibid.* 52a8
48. *Ibid.* 51a1–b2
49. *Ibid.* 50a4–c6
50. *Ibid.* 50e4–8
51. *Ibid.* 52e5–53a2
52. *Ibid.* 53b4–5
53. *Ibid.* 50d2–4
54. *Ibid.* 53b2
55. *Ibid.* 48b5–c2
56. *Ibid.* 53c5–6
57. *Ibid.* 37a5
58. *Ibid.* 51b8
59. *Ibid.* 48d1–4
60. *loc. cit.*
61. *Ibid.* 48a2–5; 56c3–7
62. *Ibid.* 92c1–3
63. *Ibid.* 68e1–69a5
64. *Ibid.* 34b10–35a1
65. *Ibid.* 69b8–c1
66. *Ibid.* 26c7–d1
67. *Ibid.* 20d8
68. *Ibid.* 27a3–6
69. *Ibid.* 44d3–45a2
70. *Ibid.* 69c5–70e5
71. *Ibid.* 69d6
72. *Ibid.* 69d6–e3
73. *Ibid.* 39e3–40a2
74. *Ibid.* 29e1–2
75. *Ibid.* 69c8
76. *Ibid.* 69d4–6
77. *Ibid.* 17a4–5
78. *Ibid.* 20a1–5
79. *Republic* VI, 508e1–509a5
80. *Phaedrus* 243e9 ff
81. *Timaeus* 46d7–8
82. *Republic* VI, 510b4–511a2
83. *Ibid.* VII, 533b6–c3

A Note on Eva Brann's "Roots of Modernity"
Chaninah Maschler

This note is a rather over-sized response to Eva Brann's recent "Roots of Modernity." (*St. John's Review*, Spring 1984) Even after several readings I find the essay (originally a lecture for students at a college under Presbyterian auspices) hard to understand. Its aim, in terms of the original audience, seemed to be to help students feel the weight of their religious heritage by proposing the thesis that not only they, as Christians, but all of us, as moderns, live on or from Christianity. Christianity's "world-historical" significance is made palpable by her sketching of an argument according to which those respects in which modern life and thought differ most profoundly from ancient life and thought (p. 69 list) can all be connected with Christianity, either directly, as preserving and implementing Christian "spiritual and intellectual modes" (p. 66), or indirectly, as expressing and drawing out the consequences of a great refusal of at least portions of Christianity.

What I call a "great refusal" (negation, rejection) is given the rather different name "perversion of." Here begins one of my difficulties. Miss Brann's attitude to the three men whom she singles out as "founders of modernity" (Galileo, Bacon, Descartes) is complex. Sometimes she

praises them with faint damns, as when she writes:

I am not saying that these founders of modernity played silly and wicked and blasphemous games, but only that they still had the theological learning and the grandeur of imagination to know what their enterprise resembled [namely, the rebellion of Satan.] (p. 68)

Sometimes she takes grim satisfaction in their getting the fall they deserved:

Their rebellion is . . . against all intermediaries between themselves and God and his nature. They want to be next to him and like him. So they fall to being not creatures but creators. (p. 67)

Below I will try to state some of my disagreements with both these passages. Right now it is the pro-and-con attitude itself that I am taking up. A to my mind already perplexing situation (in which many of us are caught), namely, that of a non-Christian teacher who seeks to persuade Christian students, on non-Christian, intellectual grounds, to work at appropriating their own Christian heritage so that they may receive help from it in fashioning or preserving a "framework" for their thinking about "the nature and ends of their life" (p. 69), is made still more perplexing because the teacher chooses to describe a negation or rejection or refusal of elements of Christianity in words borrowed from the Christian tradition, words that would be

appropriate for someone who cleaves to the teachings of Augustine but which I find confusing as coming from someone who expressly distances herself from those teachings. What confuses me is that the "complex" attitude seems weighted in the contra-direction; I am unable to sort out Miss Brann's reasons for this choice.

When Augustine says that Satan "did not abide in the truth because the truth was not in him," he seems to identify Satan's pride with envy, envy of the Son. By the standards of Augustinian Christianity (though not, perhaps, by those of Thomas), all human pride is *resentiment* at our being made the mere image and not the reality of God, which is why people try to play lord over one another, pretending to an inequality as that of God to Man. Since, however, Miss Brann declares herself a non-Christian, she can be presumed free to distinguish proper pride from soul-and-world-destroying envy. Moreover, since, for her, Christ would either be a prophet (as he is for Moslems and Jews) or a teacher, it should be possible according to her for a later prophet or teacher so to interpret Christ's message that its spirit is saved while its killing letter is killed. It should even be possible respectfully to decline the teacher's teachings. Why, then, does she not grant this kind of liberty to the founders of modernity?

Descartes, for instance, in Meditation IV, claims a will so large that it can double back on itself and shrink "committed" to the sphere of what is evident to the merely finite human understanding. The cure for error, and even sin, is strictly

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in his own power. Indeed, his "method" looks as though it should not only rid him of errors previously committed but protect him against error and sin henceforth. By teaching such Stoic self-help to others he certainly seems to make the Sacraments superfluous to the Sage. Why call this rebellion? Why isn't it, like Miss Brann's own non-Christianity, a selective by-passing of Christianity?

Again, Bacon when he writes (in "Of Goodness and Goodness of Nature"), that without goodness (which "answers to the theological virtue of charity;") "man is a busy, mischievous, wretched thing" can be read to give expression to something like that welcoming attitude to the present and to one's fellows for the lack of which Miss Brann so much condemns Heidegger. This attitude Bacon claims to find in a properly doctored Christianity. When he adds the sentence from Machiavelli "that the Christian faith had given up good men in prey to those that are tyrannical and unjust," isn't it in the name of charity rightly understood that he protests against such overweening charity as does not heed God's command to love our neighbor as ourselves (a command which he construes to mean that "Divinity make the love of ourselves the pattern; the love of our neighbors but the portraiture")? To someone mindful of Luther's protest against the pride of those men who presume to "imitate Christ" it is not at all obvious how Bacon's "realism" isn't a reminder of the need for humility.¹ Admittedly, Bacon casts himself for the role of Advisor to Princes (Queen Elizabeth and King James I). In that capacity he defends doctrines of royal authority at odds with those which claim that secular rulers, being charged merely with the safeguarding of goods of the body, are inferior to spiritual rulers, who are charged with the perfecting of the human soul. But critique of the doctrine of Papal Plenitude of Power (see Introduction to Marsilius of Padua, *Defendor of the Peace*, Harper, 1967) was not initiated by Bacon. He was trying to preserve the English monarchy's earlier gains in authority. Since he served the ruler and the church of the realm to the best of his ability, I again wonder on what grounds he is called a rebel, though I recognize that from a Roman Catholic perspective he would deserve to be called so.

Miss Brann's come-back, if I understand her, is that not only or chiefly in her estimation but in their own, the men responsible for the "project" of finding out the true constitution of the universe and of using this knowledge to improve the

conditions of human life were rebels, not against the church and the state, nor against God, but against the "traditional wisdom" which teaches that men can only have opinions about good and evil but cannot gain moral *episteme* (science). Bacon, Galileo, and Descartes *themselves* (on this reading of "traditional wisdom") held that the idea of a science of good and evil is "demonic."

I choose Goethe's word (which is not Miss Brann's) for two reasons: First, because as he came to use it, for instance of Napoleon, a romantic flavor clings to it and it is such a romantic reading of *Paradise Lost* that seems to me presupposed by her sentence about the three founders "all" having a "cautiously sympathetic respect for Satan" (p. 67). Nicholas Machiavelli didn't call himself "Old Nick." Second, because what prompted me first to set pen to paper was my more than uneasiness over her willingness to use Augustinian vocabulary to characterize the work of men who, in a period of European history when demonology had regained frightful power, tried to re-assert sanity.² The reason for my believing that it is important to determine how the great teachers of Christian doctrine meant their passages about Satan to be understood is that it seems to me I cannot otherwise understand or appraise opposition to their teaching. My current guess is that the Christians and non-Christians who wanted to de-emphasize the Augustinian tradition were right in holding that this tradition gave support to the witch-craze. That there had been such a craze on the continent I happened to have learned in a Dutch elementary school, where children were taught to take pride in the fact that in the little town of Oudewater a scale-test was substituted for the water-test: Anyone accused of witch craft should show levity rather than gravity, it was argued. Therefore, if the pan with the witch in it went down, that proved that the accused, though perhaps guilty of other crimes, was not guilty of a pact with the devil. Elsewhere the test was whether, when thrown into the water, the accused floated or drowned. Floating proved witch-craft. Drowning proved the contrary.

More recently, I read in Montaigne's "Of Cripples" (iii,11):

The witches of my neighborhood are in mortal danger every time some new author comes along and attests to the reality of their visions. . . . To kill men, we should have sharp and luminous evidence; and

our life is too real and essential to vouch for these supernatural and fantastic accidents. As for drug-gings and poisonings, I put them out of my reckoning; those are homicides. . . . However, even in such matters they say that we must not always be satisfied with confessions, for such persons have sometimes been known to accuse themselves of having killed people who were found to be alive. . . . My ears are battered by a thousand stories like this: "Three people saw him on such and such a day in the east; three saw him the next day in the west, at such and such a time, in such and such a place, dressed thus. Truly, I would not believe my own self about this. How much more natural and likely it seems to me that two men are lying than that one man should pass with the winds in twelve hours from the east to the west. How much more natural that our understanding should be carried away from its base by the volatility of our untracked mind than that one of us, in flesh and bone, should be wafted up a chimney on a broomstick by a strange spirit.

I tried to get an idea of just how reliable the rumor about the witch craze was by reading H. R. Trevor-Roper's *The European Witchcraze of the Sixteenth and Seventeenth Centuries* (Harper, 1969), E. William Monter's *European Witchcraft* (John Wiley, New York, 1969), H. C. Erik Midelfort's *Witch Hunting in Southwestern Germany, 1582-1684* and the already mentioned book about Witch belief in England by Trevor Davies. If these authors are trustworthy, Montaigne's principle, ". . . it is putting a very high price on one's conjectures to have a man roasted alive because of them," was very far from the prevailing one. By some estimates, now considered melodramatic, 100,000 people were killed for witchcraft in Europe between 1500 and 1700. The only book I have so far found that gives careful details about how its figures are arrived at is Midelfort's. According to him, "at least 3,229 persons were executed for witchcraft in the German Southwest" between 1561 and 1670 (p. 32). Of course, no such figure means anything exact until one knows population figures too. But that rumors about 30 Charles Mansons a year would be pretty frightening is, I think, fair to say. I bring up his name because someone asked me whether it isn't

necessary to examine whether some of the accusations for witchcraft wouldn't by our own standards be warranted in the sense that real crimes were committed by those who stood so accused. Norman Cohn takes up the question in *Europe's Inner Demons* (Basic Books, 1975). The crimes (*maleficia*) of which witches were accused were: causing hailstorms or unseasonable rain to ruin the crops; causing miscarriages or impotence; bringing on sudden illness, mental derangement, or accidents, or deformities; and worst, killing babies, cooking, and eating them. The power to harm was always the result of a pact with the devil, sealed by terrible obscenities. Cohn argues (to me convincingly) that the pattern of accusation is so stereotypical (he traces it to the second century, "when pagan Greeks and Romans attached it to the small Christian communities in the empire"), and every supposedly documented case of witches's sabbaths or infant cannibalism is so dubious that the title of his book is warranted. He chooses a passage about custom's being a treacherous school mistress from Montaigne's "Of Custom, and Not Easily Changing an Accepted Law" (i, 23) as frontispiece. Since I am acquainted with the customary ritual murder accusation against the Jews, and since some admittedly less than wholehearted investigation of this charge has never presented me with reasons to believe the justice of the accusation, I remain a partisan of those who sought to disenchant the world. Amongst these I count Galileo, Bacon, and Descartes.

Bacon dedicates the *New Organon* to King James, before whom he dangles the wonderful saying "that it is the glory of God to conceal a thing but the glory of the King to find a thing out." (*New Organon*, LLA ed., p. 15) Certainly Bacon hopes to win the King as patron for large-scale projects of scientific research and technology. But I wonder whether he isn't also trying to distract the King's curiosity from witchcraft's secrets (on which James had written a book—*Daemonologie*, Edinburgh, 1597; 2nd ed. London, 1603) and to fasten it instead on "white magic." It is perfectly true that such a hunch would have to be backed up by passages from Bacon's writings. But these are not entirely lacking (*Sylva Sylvarum*, Stebbing's *Works of Bacon*, ii, 642f), and it cannot be considered unimportant that Parliament in 1604 passed a new statute against witchcraft according to which not the actual harm done through such craft but "the mere fact of a contract with the devil"

was to be punished by hanging. That a contract with Satan existed could become known through confession or by finding "witches's marks" (insensitive spots) on the naked body of the accused (Trevor-Davies, p. 62).

I even wonder whether the passion that went into Descartes's program of taking life and soul out of nature had something to do with disgust at the demon mania. That Cartesianism was later used in the fight against the witch craze is shown by the Dutchman Balthazar Bekker's *Betoverde Wereld* (*The Enchanted World*, 1691) and Malebranche's *Recherche de la Verite* (excerpts pp. 121ff of E. W. Monter's *European Witchcraze*).

We would gravely wrong Christianity if we supposed that it was chiefly responsible for originally stocking the world with demons. There's plenty of Roman and Greek demonology, and Hellenistic Jewish Apocrypha are full of demons too. Only, whereas in the so-called dark ages many a bishop taught that belief in werewolves and witches is unchristian, church leaders between roughly 1500 and 1700 mostly encouraged rather than discouraged popular fears. Around 1500, the Dominican inquisitor in the little diocese of the Province of Como reports that a thousand witches were tried and a hundred burned in his area every year. According to the books I cited (to which Bodin's *Demonomanie* must be added), the situation in Como was not an isolated one. If the historians' reports (not easily dismissed, even by sceptics, seeing how numerous, serious, and large the tomes on witchcraft became with the invention of print) are reliable, then it is reasonable to wonder whether the founders of modernity concluded that *they could no longer rely on the churches (Catholic or Protestant) to gentle and raise up the populace.*

None of the men singled out by Miss Brann were given to public ranting against the church or clergy of the country or city where they resided. They were quite scrupulous to obey and to recommend obedience to others, at least as scrupulous as Socrates had been. They not only wrote of an "interim ethics," as Descartes does in Discourse III and Bacon in the *New Organon*, where he provisionally distinguishes "the proud and ambitious desire of moral knowledge to judge of good and evil" from "natural philosophy," but they also practiced it. And I do not see how, except by impersonating the standpoint of the Inquisitors, Miss Brann could blame Bacon and Descartes for meditating on the possibility

of an ultimate "moral and political philosophy" that would be part of a perfected "natural philosophy." True, there is a great difference between meditation and publication. Still, I wonder at the ease with which she judges as due to "unspeakable" pride what others might regard as due to a noble sense of responsibility.

Let me turn now to those small but perhaps telling literary and art-historical facts on which Miss Brann's lecture relies to make vivid that the three founders were both warning their followers of the dangers of the enterprise of establishing "the kingdom of man" and advertising the glory of it.³ They are:

a) that in aphorism xciv of Bk I of the *New Organon* Bacon writes:

Then only will there be good ground of hope for the further advancement of knowledge when there shall be received and gathered together into natural history a variety of experiments which are of no use in themselves but simply serve to discover causes and axioms, which I call *experimenta lucifera*, experiments of light.

In her judgment, this last tag is intended to recall Satan's name before he became rebel from envy of the Sun-Son.

b) that at least two of our authors seem to be intent on creating a new heaven and earth, else why should they mimic the Divine rhythm of creation by laying out their scientific synthesis over six days?

c) that in his Letter to the Translator of the *Principles* Descartes compares philosophy to a tree (cf. *New Organon* I, 107; *Advancement of Learning*, Everyman ed. p. 88; "tree of Porphyry"), which can be presumed to be the very one that stood in our First Parents' garden as the forbidden tree, and which also appears on the title page of Descartes' *Principles* and Galileo's *Discorsi*.

When first one registers that Descartes' *Meditations* are spread out over a week sans Sabbath; that the *Discourse* too is divided into six; that Bacon's *Great Instauration* (Renewal) was meant to have six parts; that the College of Bensalem is called the College of Six Days; that the Latin name of the "Preparation for Natural and Experimental History" is *parasceve*, which is Latin for the Hebrew *Erev Shabbath* (cf. the prayer that concludes Bacon's Preface to the *Great Instauration*); and yes, that Galileo's *Dialogues* may have stopped on the fourth day because that is the middle of the seven and the day on

which the heavenly bodies were made— one does stand amazed.

Nor would I want to deny the Millenarian flavor of Bacon's Sabbath talk. But it seems to me that every "apocalyptic" passage in Bacon that I can remember debunks the Biblical book *Apocalypse*. For instance:

. . . All depends on keeping the eye steadily fixed upon the facts of nature. . . . God forbid that we should give out a dream of our own imagination [whether of a world so thoroughly gentled by the Lamb as to hold no violent motions or of a world delivered up to Demons] for a pattern of the world; rather, may He graciously grant us to write an apocalypse or true vision of the footsteps of the Creator imprinted on his creatures.

The passion for knowledge is substituted for the passion for revenge! Bacon and Descartes, far from being the ones to make the world shudder with the birth-pangs of the Messiah, are trying to still those pangs: to invite men to become "masters and possessors of nature" is their way of casting out demons. Their tactics may have been ill-advised. May be the Counter-Reformation Church, which took a leaf from Euripides' *Bacchae* and tried to tame the tumult through theatre and its equivalent, was wiser. (I mention the play to indicate that I am not even confident that Biblical Messianism, Jewish or Christian, was the "root" of Europe's upheaval). But I do not see how we can judge one way or the other until we have learned something of the political, social, economic, religious circumstances that Bacon, Galileo, and Descartes were up against. That these weren't pretty is insinuated by Bacon when, in the essay "Of Custom and Education," he drops the names of Friar Clement, murderer of Henry III of France, and considered for canonization by Sixtus V; Juan Jaureguay, would-be assassin of William the Silent; Balthazar Gerard, the man who succeeded in murdering William. That Descartes too wants us to understand the violent circumstances surrounding his meditations on *renovatio* is shown by his explaining that what brought him to Germany and to that famous *poêle* where he was sufficiently "free of passion" to think were the religious wars which, at the time of his writing of the *Discourse*, and even in the year of their publication, "were still not at an end."

Some twentieth-century historians

blame the Thirty Years War (1618-48) for Germany's political backwardness as compared to other European nations, identifying it as the "root" of the horrors of the first half of the twentieth century. More than a third of the population of Germany and Bohemia was killed off during that war.

Returning to the much more pleasant business of gauging the sense and the weight that is to be given to the motif of the tree and the six days, I should mention that only because, like Miss Brann, I was intrigued by these details, I learned that there is a long Christian tradition of hexahemeral (six-day) literature which goes back to the church fathers. It seems intermittently to intersect with a similar Jewish tradition, of which kabbalah is one expression. St. Basil wrote a *Hexaemeron*; so too did St. Ambrose and St. Bede, and Oxford University Press recently published a *Hexaemeron* by Grosseteste, this last unfortunately not yet translated.

Of these books I have so far read only St. Ambrose's. It is a series of sermons delivered over the first week of Lent. St. Ambrose affectionately describes the beautiful natural world that God made. He seems to be using the opening chapter of Genesis as a topical outline for natural history.⁴ From the translator's editorial notes one learns that many of the joyous descriptive passages are culled from secular Latin authors while others are recognizably lines from Job, Psalms, the Prophets, or the New Testament where the relevant natural wonder comes up. The effect isn't really bookish. The congregation, eagerly waiting for Easter, must have felt confirmed in its faith that everything that God made is beautiful and good, that God cares for men. There is no hint of a conflict between secular and sacred narration or of a tug of war between edification and description.

Ambrose, as he unselfconsciously allows Pagan authors (Cicero, Virgil, Ovid, even Lucretius) to testify, reminded me of how I felt when, not far from Ambrose's Milan, in the little town of San Giovanni di Bellagio on the shores of Lake Como, I attended a festival honoring the lake and the saint who said that God is love (that saint being the one after whom the town is named). Perhaps this merely private reminiscence of the great fish catch, the young men's rowboat race, the lights on the water, the local padre's blessing of the children while he munches on chicken drumsticks, the sound of the churchbells, is not entirely irrelevant to the question why Galileo, Bacon and

Descartes became "conspirators" for a post-medieval way of life (cf. *Preliminary Discourse to the Encyclopedia of Diderot*, LLA ed. pp. 72-80). Before they came on the scene, others—I am thinking especially of Colet, Erasmus, More, but perhaps Nicholas of Cusa should be counted in this group as well—had done all in their power to work conservingly for reform, for restoration of something like the pastoral life and spirit (in all senses of the adjective) I felt in Ambrose and the festival of San Giovanni in Como (see *Three Oxford Reformers* by Frederic Seebohm, London 1869; any of Trevor Roper's books on sixteenth and seventeenth century Europe; Henry Kamen's little Signet paperback on the Spanish Inquisition). Their failure, in my judgment, has great bearing on the choices made by Bacon, Galileo, and Descartes.

As luck would have it, St. Ambrose, while celebrating the works of the third day, seems to comment on the tree pictured under the titles of the books of Galileo and Descartes published by the Leiden Elzeviers.⁵

In truth, while you realize that you possess frailty in common with the flowers, you know that you have access to delight in the use of the vine, from which is produced wine, wherein the heart of man finds cheer. Would that, man, you could imitate the example of this species of plant, so that you may bear fruit for your own joy and delight. In yourself lies the sweetness of your charm, from you does it blossom, in you it sojourns, within you it rests, in your own self you must search for the jubilant quality of your conscience. For that reason he says: 'Drink water out of thine own cistern and the streams of thine own well.' First of all, nothing is more pleasing than the scent of a blossoming vine. Furthermore, the juice when extracted from the flower of this vine produces a drink which is pleasureable and health-giving. Again, who does not marvel at the fact that from the seed of the grape springs forth a vine that climbs even as high as the top of a tree? The vine fondles the tree by embracing and binding it with vine leaves, and crowns it with garlands of grapes. In imitation of our life, the vine first plants deep its living roots; then, because its nature is flexible and likely to fall, it uses its

tendrils like arms to hold tight whatever it seizes. By this means it raises itself and lifts itself on high. Similar to this vine are the members of the church, who are planted with the root of faith and are held in check by the vine shoots of humility.

A little further on in the sermon Ambrose, by merging the *tower* of Isiah's Song of the Vineyard with the *tree* just described, comes to identify the tree as the church leaders — "the apostles, prophets, and doctors" — while the *vine* remains the *Christian Congregation*.

If you look again at the Elzevier emblem you will see that what twists 'round the tree is a grapevine with bunches of grapes and that the scholar who stands beside the tree seems to be plucking some (cf. *New Organon* ii, p. 156 and 161 on "first vintage").

Consider next a passage from Pico's *On the Dignity of Man* (LLA ed., p. 28):

As the farmer marries elm to vine, so the *magus* marries earth to heaven, that is, lower things to the qualities and virtues of higher things.

Pico's lines alert us that, while listening to Ambrose, we didn't pay attention to the question who planted the tree (now identified as an elm) and who trained the vine to grow upon it. The matchmaker, God, was not pictured in Ambrose's sermon. Only His voice was heard, from far away, by those who remember the Prophet who pleaded God's case with the Congregation of Israel and its leaders ("I ask you to judge between my vineyard and me. What else could I have done for it that I have not done? I expected it to yield cultivated grapes, but sour ones were all it gave.") In Pico the matchmaker is on the scene, as he is in the Elzevier picture.

Abstractly considered, Pico need not have known Ambrose's use of the vine-sustaining tree; he could have taken it straight from the Italian landscape or from Virgil's *Georgics*. But a passage in the *Heptaplous* (LLA ed. p. 72) shows that Pico did know Ambrose's sermon (or at least, knew of it).

Putting the two passages together, we seem to get a triple analogy: The *magus* imitates God by imitating the farmer, because as the farmer follows God's example when joining vine to tree in the manner of God's joining the congregation to its teachers, so the *magus* joins earthly to heavenly things.

Now that the man in scholar's garb on the Elzevier picture has been identified as a magician, Miss Brann's case seems clinched. We all know about Faust, how he made a pact with the devil and gave himself over to magic. Pico, however, believes that there are two kinds of magic. The first, he says, the Greeks called *goeteian*.

The second sort they call by its proper and peculiar name, *mageian*, the perfect and highest wisdom as it were. Porphyry says that in the language of the Persians, magician means the same thing as *interpreter* and lover of divine things means in our language. . . . The first is the most fraudulent of arts, the second is firm, faithful, and solid. . . . From the second comes the highest splendor and glory of letters, desired in ancient times and almost always since then. No man who was a philosopher and desirous of learning good arts has ever been studious of the first. Pythagoras, Empedocles, Democritus, Plato, traveled across the sea to learn the second. When they came back, they preached it and held it chief among their esoteric doctrines. . . . *As the first magic makes man subject to and delivered over to the powers of wickedness, so the second makes him their prince and lord* . . . The second, among the virtues sown by the kindness of God and planted in the world, as if calling them out from darkness to light, does not so much make wonders as carefully serve nature which makes them. (*Heptaplous*, LLA ed. pp. 27, 8)

We shan't know what Pico means until we figure out what the powers of wickedness are and what lower and higher things his *magus* joins in wedlock.⁶ Since the Hermetic writings on which he relies contain passages as crassly demonological as the terrible stuff one reads when one studies the court records of the sixteenth and seventeenth century witchtrials, one cannot rule out the possibility that *goeteia* is black magic and that the powers of wickedness are *incubi* and *succubi*. But I feel pretty confident that Miss Brann's suggestion that the *magus*, emulates the ordained priest by joining conjuring words to things (so that, where the priest "makes Christ" from wafer and wine, the *magus* "transsubstantiates" portions of nature) won't work: In the first place, the eucharistic miracle keeps the *species* (which to the scholastics means precisely

the *looks*) the same though the *substance* is altered whereas Pico's and Bacon's transformations alter the *species* but not, I believe, the *substance*, since the presupposition of alchemical practices is one of "catholic matter" (Newton's word). Second, the last sentence in the passage from Pico's *Oration* seems to rule out any except *natural* wonders. Indeed, it is not hard to read what Pico says about *goeteian* as making fun of priestly hocus pocus. This is not necessarily the same as impiety: Zwingli is a pious Christian. But it would be a scandalous reading, and I simply do not know Pico well enough (the tone of the *Heptaplous* is rather different from that of the *Oration*) to judge: *Goeteia* may be witchcraft or black magic.

If, then, "higher" and "lower" (in Milton, who used the same tree-vine pair, identified with Adam and Eve) are not an analogue to sacramental words and things, I can think of only two other possibilities: that the superlunary world is higher and the sublunar lower and the *magus* an alchemist, who knows how to channel astral virtues into earthly things so as to raise them up; or that *mathemata* (shapes, numbers, order relations) are the higher activating powers and sensible things lower.⁷ The contrast between a stellar and a mathematical construction of "higher" things is probably erroneous from the perspective of the *magi* themselves. But either way, what matters is that the *magus* does not draw the liberal/servile arts distinction in the manner of the dominant Platonic tradition, that he does not deem the farmer's work so far beneath him that it cannot remind him of God's work and lure him on to do his own work.

Simon Stevin, that wonderful physicist and engineer who served Maurice of Nassau and his country so well, comes to mind. Stevin seems to have designed his own logos. One of these, the endless chain accompanied by the motto "wonder/miracle that is no wonder/miracle," is familiar to older St. John's alumni and tutors.⁸ There are two others: The first shows a man digging and a woman spinning and bears the words "*Labore et Constantia*." The second is a picture of an open drawing compass, and the maxim that goes with this mathematician's tool is *the same* as the one that flanks the picture of the farmer and his wife.

When, in an earlier review of Miss Brann's *Paradoxes of Education in a Republic*, I used the phrase "salvation through work," I was thinking of an attitude such as Stevin's. I intended to contrast it both with Lutheran teachings concerning

salvation by faith and with Catholic teachings concerning the indispensability of the church sacraments. I was, without saying so, "secularizing" the notion of salvation, no longer considering the soul in terms of its thousand-year journey and life eternal, but rather the human being in terms of the three score years and ten granted him or her on earth. This earthly life is disfigured by much meanness, vanity, pain, insecurity. The new *burgher* mood, I thought, was that of trusting that God helps those who help themselves and one another, that not only physical but even moral improvement comes, if it comes at all, from work; from the products that it yields, but also from working, and from the intellectual, moral, psychological, social, political conditions needed for work and in turn produced and maintained by work.

This work ethic is often regarded as Protestant. But it really is not clear to me that it is fundamentally Christian. Yves Renouard's writings on the *ethos* of Renaissance Florence, Genoa, Venice, Pisa (Catholic cities all) and Trevor-Roper's critique of the Weber thesis that there is a special connection between Protestantism and the spirit of capitalism, suggest that the Christianity of those who "believe in" the work ethic may be accidental. Experience of town life, and relish for it, respect for, and knowledge of, the varieties of expertise and discipline of fellow townsmen, may have more to do with it.

I hope that it is becoming apparent that I am using this note as an occasion to express doubts about the insulation of "ideas" from economic and political conditions of life; just as I am questioning the comforting hypothesis that the books that made a major difference to our ancestors' thought and life are always books that we find fascinating.

Even if it could be said that I have shown that the choice of the six-day motif does not, *of itself*, mean "Let me do it" (said by the child, the eagle-men, to God the father)—"I can do it just as well as you, and better than my elder brother;"—and even if the Elzevier tree is probably not hung with apples, Miss Brann's contention (if I grasp her meaning) that a kind of *bleak defiance* undergirds "modernity" might still be justified. But I would urge that if one finds such a spirit in Goethe's Faust, or Marlowe's, or in Milton's Satan, it would take much analysis and argument to show that this is what secretly drives Descartes, Bacon, and Galileo.

In Descartes one might see a terrible

ambition to be self-begotten and self-raised which, in its twentieth century working out, self-destructs into solipsism and "no longer hoping to be less miserable but only to make others such as he is." But the *prima facie* differences between him and Bacon and Galileo seem to me so great (despite Descartes's aping of Galileo's *cameraderie* with master artisans and his citing of many a saying of Bacon's) that I believe more is gained from studying these three men's books separately and seeing the differences than from trying to find the features of Descartes underneath the skin of Bacon's and Galileo's faces.

For instance: I spent much time puzzling over the sentence about not brooking intermediaries cited above. I considered four possible interpretations: 1. intellectual tradition and collegiality as "between" God and self; 2. "adventitious" experience as "between"; 3. ordinary pre-scientific experience and ordinary ways of talking as "between"; 4. Christ and Christ's vicar on earth as "intermediaries between themselves and God and his nature." I had difficulties with all four. I'll pass them in review.

Galileo expressly rejects the phoenix-like solitary genius picture of himself (*Assayer, Discoveries and Opinions of Galileo* (Stillman Drake, Vintage ed., p. 239), is entirely willing to distinguish peripatetic university science (represented by an anonymous individual coyly given the nickname Simplicius after that *commentator* on Aristotle) from Aristotle (whom he regards as a fellow scientist; see e.g. *Dialogue*, 2nd day, pp. 110f), is glad to recognize other men's splendor (e.g. Michelangelo's or Copernicus's), builds his case against the peripatetic world system little by little and in great detail. How different his attitude to his fellows is from Descartes's becomes apparent when one compares *his way of writing dialogues with Descartes's in the Dialogue on the Search for Truth*. Bacon too, though he certainly makes fun of the "vermiculate" questions of the scholastics (*Advancement of Learning*, Everyman ed. p. 26) and the gabby post-Socratics, does not preemptorily dismiss them but explains at length what of their teaching he deems pernicious and why. To argue against someone is, to my mind, to acknowledge him. Thus, only in Descartes could I find that isolation which, on one interpretation of her sentence about dispensing with intermediaries, is meant by Miss Brann (cf. Bacon's *Advancement of Learning*, p. 30 Everyman ed. on the subject of many wits and industries and one wit; for contrast,

see Machiavelli *Discourses* IX and Descartes' ruminations on city planning and legislation in *Discourse* II.)

With respect to their attitude to sense experience and the question how one prepares oneself for being graced with insight into the principles formative of nature, Descartes again seems to me quite different from Galileo and Bacon. Yes, Galileo extols Copernicus (*Dialogue*, 3d day, p. 328) for having had the courage to "rape" the senses (as one translator has it; I have not checked the Italian). Yes, he distinguishes "primary" from "secondary" qualities (*Assayer, Discoveries and Opinions of Galileo* ed. Stillman Drake, Vintage, pp. 275ff). But, in the first place, it is not at all obvious precisely how this is "modern" (post-Christian, or "Christian by negation of Christianity"); that is, what more there is in Galileo's favoring of *koina aestheta* over *idia aestheta* than there already was in Democritus, Parmenides, and Plato (cf. *Theaetetus* 185ff and elsewhere; *De Anima* 425a15f).⁹

In the second place, many passages in the *Dialogue* (Stillman Drake ed., University of California Press, 1962, 1st day, pp. 61f, p. 76, p. 101; see also p. 51 on how one moves to axioms) seem to me to show how much Galileo enjoys rather than detests the fact that it is in encounters with the *given* world that generative ideas are suggested to the human mind. His parable about the man who has fallen in love with sound (*Assayer*, cited ed., pp. 256ff) confirms for me Curtis Wilson's distinction between Descartes, who gives metaphysical primacy to *mathemata*, and Galileo, who gives them methodological primacy.¹⁰

Descartes reminds me just a little of Pentheus in his fear of "wet and wildness" (Hopkins' "Inversnaid"). For the reasons sketched earlier, we might do well to take his *aristeia* against the malicious demon rather literally and to regard the metaphysical search for *guarantees* of men's being *capax veritatis* as a *theomachia*!

I see no such desperation in Bacon. It is true that he likes to assume a *grappling* stance and that there is much talk of overcoming nature as though she were an enemy (who ought to be killed?) But when he writes that nature, "to be conquered, must be obeyed," or that he wants to restore "intercourse" between the mind and nature, or that he hopes to "wed" the rational and empirical faculties, he shows, I think, that nature the adversary is also the paramour. For *us* it's hard to square atomism with a sense for the life in nature. But this may merely go to show

that Bacon's and perhaps even Lucretius's atomism was different from Dalton's (though the prevalence of sexual metaphors like "elective affinities" in chemistry lasts through the nineteenth century). At any rate, that, even if one might accuse Descartes of pretending to seraphic direct and immediate knowledge of the nature of things, *Bacon* does not so pretend, is shown by many passages, for instance:

To God, truly the Giver and Architect of Forms, and it may be to the angels and higher intelligences it belongs to have an affirmative knowledge of forms immediately, and from the first contemplation. But this assuredly is more than man can do. . . . (*New Organon* II, 15.)

I reserve discussion of the moderns' alleged by-passing of or disdain for pre-scientific "ordinary" experience and language for another occasion, but want to call attention to their relish for the language of the market place.

This leaves the last interpretation of the sentence about not tolerating intermediaries between themselves and God, according to which neither Christ nor the church as avenue to Christ but the Promethean makers of modernity "save" mankind. I do not see how one can attribute such ambitions to *Galileo*, except on the supposition that anyone who claims to know how the heavens go *thereby* claims to know the way to heaven. Enough said about why I am uneasy about dealing with "moderns" *en gros* rather than *en detail*.

It is a lot more plausible to credit *Bacon* and *Descartes* with the ambition to replace Christ. Miss Brann believes she is *obliged* to ascribe this kind of vainglory to them because otherwise it is, to her, incomprehensible that these men, whose imagination should have been well-taught in the dangers of such knowing as removes boundary stones set to human power, were so fearless.

Let me put this another way, in terms of the opening of Pico's *Oration on the Dignity of Man*. Pico, after citing a sentence from the Hermetic book *Asclepius*,¹¹ according to which a certain Moslem, Abdul, and the god, Mercury, agree that nothing on the world's stage is more wonderful than man, goes on to explain how he, Pico, interprets their saying:

. . . For the sake of your humanity and with kindly ears, give me your close attention: Now the highest Father, God the master-builder, had, by the laws of his secret

wisdom, fabricated this house, this world which we see, a very superb temple of divinity . . . With the work finished, the Artisan desired that there be someone to reckon up the reason of such a big work, to love its beauty, and to wonder at its greatness. Accordingly, now that all things had been completed, as Moses and Timaeus testify, He lastly considered creating man. But there was nothing in the archetypes from which He could mold a new sprout nor anything in His storehouses which he could bestow as a heritage upon a new son, nor was there an empty judiciary seat where this contemplator of the universe could sit . . . Finally the best of workmen decided that that to which nothing of its very own could be given should be, in composite fashion, whatsoever had belonged individually to each and everything. Therefore He took up man, a work of indeterminate form; and, placing him at the midpoint of the world, He spoke to him, as follows: "We have given to thee, Adam, no fixed seat, no form of thy own . . . A limited nature in other creatures is confined within the laws written down by Us. In conformity with thy free judgment, in whose hands I have placed thee, thou art confined by no bounds; and thou wilt fix limits of nature for thyself . . . Thou, like a judge appointed for being honorable, art the molder and maker of thyself; thou mayest sculpt thyself into whatever shape thou dost prefer. Thou canst grow downward into the lower natures which are brutes. Thou canst grow upward from thy soul's reason into the higher natures which are divine."
O great liberality of God the Father.
O great and wonderful happiness of man! It is given to him to have that which he chooses and to be that which he wills. (*Oration*, LLA ed. pp. 4,5)

Comparison with *Republic* IX 588ff should make one wonder why what is in the *Republic* chiefly regarded as a risk (the risk of starving the puny little man inside and feeding the lion and the many-headed snake) is in Pico's *Oration* described as a marvellous opportunity (cf. also Plato's *Protagoras*).

The very premature guess at an answer that might (if I have understood her) be in accord with Miss Brann's

Hegelian-style hypothesis I suppose to be this: After centuries of the Church's teaching men their unfreedom (their incapacity to nourish their humanity except through humble submission to mystery) and after long observation of the worldly advantages gained by those who hold monopoly-access to the "works"¹² through which men are bought free from the powers of darkness, those who learned that only a fraction of humanity is raised on the doctrine of original sin came to wonder ever more passionately at the truth of this teaching. When someone who has doubts about the truth of a doctrine takes cognizance of the advantages gained from this teaching by those who teach it (cf. the Pico citation on p. 12 above, italicized sentence about the first magic), he is unlikely to continue in a condition of doubt. He is prone to deny it, or to affirm the truth of the formerly doubted proposition's contradictory. Pico's hymn to human freedom I view as an affirmation of the contradictory of the Christian teaching that men are conceived in sin. It seems psychologically plausible that a person who believes that he has "seen through" the orthodox teaching of our fall in Adam should feel as elated as a patient who finds out that the physician who warned him that the condition of his lungs was such that he'd die within the year had mistaken another man's chest x-ray for his. The source of Pico's optimism, on this reasoning, would be the joy felt at being delivered from despair.

Delivering men from despair is Bacon's greatest ambition:

By far the greatest obstacle to the progress of science and to the undertaking of new tasks and provinces therein is found in this, that men despair and think things impossible . . . And therefore it is fit that I publish and set forth these conjectures of mine which make hope in this matter reasonable, just as Columbus did, before that wonderful voyage of his across the Atlantic, when he gave the reasons for his conviction that new lands and continents might be discovered besides those which were known before. (*New Organon* I, 92)

Most of the *New Organon* is given over to uncovering and putting away grounds for despair over the human ability to acquire more perfect knowledge than is taught at the universities. But Miss Brann's identification of the Elzevier tree with the tree of knowledge gave expression to her wondering about the sources

of Bacon's confidence in men's *right* to, and *moral fitness* for, such more perfect knowledge.

As for the right, why not, provisionally, trust that Bacon gets his hope from where he *says* he gets it, the verse in the creation chapter where God plans to make man in His image and such as to have dominion over all sublunar things (Genesis I:26; cf. *New Organon* I, 129, Parasceve last sentence; *Great Instauration*, Preface)? Yet the non-Christian tradition upon which Bacon and Pico are drawing, when *it* concerns itself with re-entering Paradise, stresses the great danger to individual and community when men who are not morally fit in terms of native temperament and careful training "resume" (by studying *maaseh bereshith* — indifferently the *narrative* of beginning and the *making* of the beginning) the knowledge Adam had been granted: According to one story, four men entered *pardes*: one went mad, one became a traitor, one died, and only Rabbi Akiba came forth whole. According to another, certain scholars who had been studying the creation story together for three years came to understand it. As a result, "a calf was created for them." They slaughtered and ate it. But when they had concluded their meal all their understanding proved to have left them! These stories re-affirm that what is in question is not men's ability to convert knowledge to use (as did Thales and Archimedes too) but the desirability of doing so, and the limitations, if any, upon such conversion.

But *is* that the issue between "ancients" and "moderns"?

It is *an* issue, and a very important one, in the opinion of those who are less persuaded of the soundness of Mr. Klein's distinction between "essential" and "accidental" history (or between "tracing things to their roots" and "tracing their history") than is Miss Brann. To *them* much of Bacon's interest in technology seems motivated by patriotic concern with the stability of the realm. Fastening men's interests, energies, intelligence on economic well-being in this life is to distract them from divisive religious passions and to unite them against those who, by promising a bliss that none has recently returned to tell of, inflame the human imagination with a zeal that is uncheckable because falsity of promise is entirely unverifiable. Precisely such promises were, according to Bacon, made to the regicides mentioned by name in "Of Custom and Education," and are, according to current newspaper reports, being made to Shiite terrorists!¹³ It is also to give hope to the English nation and their

ruler that England can, by industrial and commercial superiority, prevail over Spain and France. I am urging that Bacon's *New Organon* be read against the background of the *Essays*. The *Essays* (e.g. "Of Unity in Religion," "Of Nobility," "Of Sedition and Troubles," "Of the True Greatness of Kingdoms and Estates") supplement what one gathers from Bacon's "Letter of Advice to Queen Elizabeth" of 1584, from his proposals for legal reform and his urging of a more rational economic and tax policy: Bacon is continually worrying over impending civil war. Less than a generation later that war broke the nation apart. It was not because he was "modern" and "charged the now with special significance" that he had a "feeling of crisis." It was because he looked across the waters and saw what was happening on the Continent and realized that many of the conditions prevalent there also obtained in England.

If this suggestion, that Bacon takes a *statesman's* interest in technology, checks out, then we, who in the twentieth century have learned something about nationalist excesses, will of course want to learn why Bacon mistrusted nationalist passions less than religious passions. We cannot pursue that question now. Notice though that if this *is* the right question to ask, the "transformations" that Bacon had in mind (primarily agricultural, metallurgic, medical and only very very ultimately political) were a lot less radical than those that a Marxist stateless and classless humanity would require.

In fact, my recent reading of Bacon makes me wonder whether we do not altogether misconstrue him by ascribing a rectilinear idea of time to him (cf. "Of Vicissitudes"). His frequent talk about time seems to me quite compatible with a cyclic picture: There is "progress" also for those poised on the wheel of fortune, when the semicircle down has been completed. Neither self-love nor *philanthropia* nor nationalist ardor require that gains (in knowledge, power, security, public morality), to rank as gains, be permanent. For Lucretius, not only individual organisms and civic bodies but even worlds are mortal. Nevertheless book v lays out the story of the progress of civilization. It seems to me at least as plausible that Lucretius served Bacon as inspiration as that Christian *Heilsgeschichte* did. The a- or even anti-political character of Lucretius's teachings is not a good argument against me, since original Christianity is equally a- or anti-political.

There are, of course, also very great differences between Bacon and Lucretius: Lucretius's theoretical interests are so

limited as to be virtually non-existent. Any likely story that allays fear of death and of avenging gods will do. The only *causal* account he is serious about is an anthropological and psychological one, which shows that nearly all wickedness stems from fear of death. Bacon, contrarywise, though he cannot be credited with a single scientific discovery and even though he speaks much about science for *use*, knows of the happiness that comes of trying to find out how things really are. I venture to say that (not unlike Hobbes and Spinoza) he may even share in some version of the Platonic or Pythagorean faith that seeking to know makes human beings *better*, which would explain why he doesn't build hedges around potent knowing (in the kabbalist manner) but trusts that scientists will use their knowledge charitably. (LLA ed. *New Organon*, p. 15. But cf. Laurence Berns, "Bacon and the Conquest of Nature II," *Interpretation* VII, 1 pp. 1ff)

This brings me to my conclusion. If I am permitted to omit the case of Descartes, made complicated also by his expatriate condition, I would urge that Miss Brann misconstrued the moderns's interest in fruits and undervalued their interest in light. It is because of the *hidden* and *dynamic* nature of what is really real that the modern natural philosopher, like the presocratic students of nature, must take an interest in the arts and crafts:

It is the mechanical arts which give the better insight into the *secret places* of nature. Uncontrolled nature, with her profusion and spontaneity, dissipates the powers of the understanding and by her variety confounds them. In mechanical operations the attention is concentrated and the *modes and processes* of nature, *not merely her effects* are seen. (cf. pp. 73, 107, 109, 122, 53 of LLA ed. of *New Organon*, all on *forms as laws of action*)

Again and again Bacon writes that "works are of greater value as pledges of truth than as contributing to the comforts of life" (p. 114 LLA ed. of *New Organon*) or words to that effect.

And even if it were to be shown that he conceives his own role to be that of a *magus* who joins the people or vine to the elm tree or ruler, there is not only pride but also humility in that matchmaker's work, since it is to be tested by the sweetness of the grapes so produced. The great question is who shall be the wine-taster.

FOOTNOTES

1. "Bürgen" Luther writes: "soll man würgen . . . Standing surety is a work that is too lofty for a man; it is unseemly, for it is presumptuous and an invasion of God's rights. For, in the first place, the Scriptures bid us to put our trust and place our reliance on no man, but only on God; for human nature is false, vain, deceitful, and unreliable . . . He who becomes surety puts his trust in a man, and risks life and property on a false and insecure foundation; therefore it serves him right when he falls and fails and goes to ruin. In the second place, a man puts trust in himself and makes himself God, for that in which a man puts his trust and reliance is his God . . ." (*Works* iv, pp. 18-24, cited in Benjamin Nelson, *The Idea of Usury: From Tribal Brotherhood to Universal Otherhood*, Princeton, 1949).
2. There are many and long stretches about demons in the *City of God*; see also *Of Christian Doctrine* ii, 23. I used to read these, as well as passages in Luther about the Devil and his cohorts, metaphorically. But I now believe that this is an error. Thomas Beard, Oliver Cromwell's teacher, reports that Luther "in his colloquies telleth us how Satan oftentimes stealeth away young children of women lying in child-bed and supposeth [substitutes] others of his own begetting in their stead, in the shapes of incubus and succubus; one such child Luther reporteth of his own knowledge at Halberstadt. . . ." (R. Trevor-Davies, *Four Centuries of Witch Beliefs*, Benjamin Blom, 1972, p. 102).
3. The tree and day motifs are probably not seriously being offered as "evidence" for the Satanic self-conception of the new science, and Miss Brann may mean no more by "Satanic" than that there is something Promethean about the work and vision of the three founders. But I worry over even jokingly re-establishing connections between the old-time religion and suspicion of science. To her Satan and Prometheus may be one and the same, but to the students she addressed (and not only to them) Satan, the father of lies, and Prometheus, the titan of foresight and the friend of mankind, are not the same. What I am questioning may, therefore, be the advisability of her rhetorical mode rather than the truth of her thesis about the Christian "roots" of modernity. I am really not sure. One of the reasons for my not being sure is that it seems as though the enterprise she calls "tracing things to their roots," which to others looks like "intellectual history," seems to have *practical* implications, or at least, implications for *attitude*; and I have a hard time determining why a plain prose statement about the dangers of technology and the misguidedness of claims for scientific theory stronger than those of the *Timaeus* would not have done just as well as a search for roots.
4. A dictionary observation about this expression may be in order. Bacon and Locke and Boyle and even Teddy Roosevelt all still use the word "history" or "historical" in the "data gathering" or "investigative" sense when they speak of "natural history" or "plain historical method" or "history of the winds" or "museum of natural history."
5. See the entry "Elzevier" in the eleventh edition *Brittanica*. It was the Leiden branch of the formerly Flemish publishing family that adopted the tree emblem (curiously referred to as "the solitary" though the message is "Non Solus") in 1620.
6. I suppose that the words "Non Solus" that accompany the Elzevier emblem allude to the words in Genesis "It is not good for man to be alone." Cf. *New Organon* I, 89 for a "forbidden marriage" and pp. 23, 3, 14 LLA ed. on commended marriages.
7. On alchemy, see Maryjoe Teeter Dobbs, *Foundations of Newton's Alchemy*, Cambridge University Press, 1975. I found this book especially helpful in its effort to explain how and why moral and religious self-formation was thought to be accomplished through alchemical practices. This should be a very important theme to anyone who values the distinction between liberal and servile arts on the ground that, unlike the merely useful arts, the role of the liberal arts is to improve the human soul.
8. Cf. Last sentence of citation from Pico on p. 12 above.
9. The rumor that Galileo's "mathematization" of nature involves its "idealization" has reached me too. But I observe that however irrelevant to the finding of the weight of supposedly impure and consequently inherently inexact sublunar "sticks and stones" the Pythagorean discovery of incommensurability is, Archimedes nevertheless argues the proposition that such bodies balance at distances from the fulcrum reciprocally proportional to the bodies' weights as though they were superlunar exact bodies. Else, why treat the commensurable and the incommensurable classes of cases?
10. How unreductionist Galileo is next to Descartes is seen by comparing what Descartes writes about the heart-as-a-pump with the conclusion of Galileo's parable about the man who loves sound:
Well, after this man had come to believe that no more ways of forming tones could possibly exist . . . when, I say, this man believed he had seen everything, he suddenly found himself once more plunged deeper into ignorance and bafflement . . . For having captured a cicada in his hands, he failed to diminish its strident noise either by closing its mouth or stopping its wings . . . At last he lifted up the armor of its chest and there he saw some thin hard ligaments beneath; thinking the sound might come from their vibration, he decided to break them in order to silence it. But nothing happened until his needle drove too deep, and transfixing the creature he took away its life with its voice. . . . By this experience his knowledge was reduced to diffidence, so that when asked how sounds were created he used to answer tolerantly that although he knew a few ways, he was sure that many more existed which were not only unknown but unimaginable. I could illustrate with many more examples nature's bounty in producing her effects, as she employs means we could never think of without our senses and our experiences to teach them to us, and sometimes even these are insufficient to remedy our lack of understanding.
My point is that although Descartes has read Harvey, he either fails to grasp that a pump that is a muscle is a very remarkable sort of pump or he cares about nothing except its being a pump. (Cf. Arthur Collins's shrewd observations about Descartes' physics in "Unity of Leibniz' Thought," *St. John's Review*, Winter 1982/83).
11. If you want to see *snakes* on the tree, the *cadduceus*, which is both the physician's and Mercury's emblem, is probably the icon to go for.
12. It is a matter of the greatest importance that the dispute between Luther and the Church of Rome over faith and works is *not* primarily or at least not solely a dispute about "passive" and "active" righteousness in the moral sense but very much a dispute about the need for or dispensability of the church *sacraments*. "Works" in Sacred Doctrine corresponds to *avodah* in Jewish tradition. *Avodah* ("service") is, so long as the temple with its sacrificial cult stands, the temple service. Only through the prophets and rabbinic elaboration of certain elements of their teaching, does *avodah* chiefly become "doing justice, loving kindness (*ahavath chesed*) and walking humbly with God." The Roman Catholic church is not just an *ecclesia* or synagogue but a *temple* and the mass is a *sacrifice*. I consider this information indispensable to anyone concerned with the issues Miss Brann takes up. However sane and tolerant modern American Catholics may be, however wholesome, psychologically, a religious tradition which, through its sacrificial cult, makes re-integration of the sinner into the community a public act, the complaint of critics of the church in the days of its corruption through worldliness, namely, that it stood to profit from its monopoly on the instruments of salvation (the seven sacraments) was not fabricated.
13. Religious zeal of this sort is certainly not the privilege of the Roman Catholic Christian, as is evident from the murder of the De Witt brothers by a Protestant mob.

Rhythmic Gesture in Mozart:

Le Nozze di Figaro and *Don Giovanni*

Wye Jamison Allanbrook

Chicago: U. of Chicago Press, 1983.

Pp. xii + 396; 11 figures.

The subjects of Mrs. Allanbrook's book, Mozart's masterpieces *Le nozze di Figaro* and *Don Giovanni*, are two of the most familiar and best loved works in the operatic repertory. Not surprisingly, they are also two of the most thoroughly studied. Mozart's version of the Don Juan legend has fascinated writers from the time of E.T.A. Hoffmann and the early Romantics to the present. *Figaro*, while less an object of interest in the nineteenth century, has in recent years been examined for its underlying political and social message, and in relation to Beaumarchais's *Le mariage de Figaro*, from which its libretto is drawn. Yet the vast body of writings on these two operas by no means leaves modern scholars with nothing to add. It is a cliché, but no less valid for being one, that with a great work of art there will always be more to learn. This is particularly true when a new study offers a fresh perspective from which a work can be reexamined. In her book Mrs. Allanbrook provides a detailed and insightful critical analysis of Mozart's two great *opere buffe*; her fresh perspective is that of the *topoi*, or "topics," that underlie the music of the late eighteenth century.

The term *topos* is borrowed from rhetoric "to designate 'commonplace' musical styles or figures whose expressive connotations, derived from the circumstances in which they are habitually employed, are familiar to all" (p. 329, n. 4). Once the vocabulary of these topics has been understood, they can serve as a source of "independent information [beyond our individual responses] about the expressive content of the arias and

ensembles" (p. 2). The "hunting fanfare," for example, is a topic employed in any number of Classic works in obvious imitation of actual horn-calls associated with the hunt. Mozart's use of this figure to open his String Quintet in E-flat, K. 614, enables a listener to place the work in a general expressive framework. The Quintet is not literally about a hunt, but an audience's recognition and understanding of the figure give the music a certain rustic quality and a sense of lightheartedness and cheerful energy, which derive by analogy from an actual hunting scene.

The connection between the topical vocabulary of the Classic style and the expressive qualities of Classic music has been increasingly recognized in the last three decades. Various topics have already been identified and explored to some extent by other writers, especially Leonard Ratner (in his *Classic Music: Expression, Form, and Style* [New York, 1980]). Mrs. Allanbrook's study concentrates on a particular class of *topoi*: the rhythmic gestures of dance, which, because they depict human beings in motion, are especially valuable topics in opera. The various uses of gavotte, minuet, and so on communicate information about the personality and feelings of each of the characters, as well as about their social positions. (An important question, which Mrs. Allanbrook never answers directly, is the degree to which these rhythmic gestures inform Mozart's non-operatic music, and the operas of other composers, as well as the two works under discussion.)

The study comprises three large sections. In the first, the author outlines the variety of dances known to the late eighteenth century and spells out the social and affective connotations of each. Here she draws extensively on eighteenth-century writings, both of music theorists such as Sulzer and Koch and of writers on dance, most of them less well-known to musicians, such as Bacquoy-Guedon and von Feldenstein. While some of the dance topics are considered briefly in Ratner's book, Allanbrook's discussion is far more detailed and systematic. She shows a clear spectrum of meters from the most exalted, "ecclesiastical" duple meters (*alla breve* and 4/2) that connote the "learned" or contrapuntal style—and by extension the nobility—to the more rapid triple-meter dances with their connotations of humble frivolity. In addition, she analyzes the historical and sociological significance of the two anomalous dances, the contredanse and the waltz, that represent the new trend in the late eighteenth century towards simpler dances for novices.

The second and third sections of the book examine in turn *Le nozze di Figaro* and *Don Giovanni*, using the vocabulary of rhythmic gestures presented earlier to reach some striking conclusions. Allanbrook attempts to demonstrate that the central ethos of *Figaro* is pastoral, and that, far from being an operatic watering-down of Beaumarchais's political message, Da Ponte's and Mozart's opera is most centrally about the friendship between the Countess and Susanna, her maid. The pastoral, with its connotations of bucolic

simplicity, is suggested by several dance gestures used in the opera: the 6/8 pastorale and siciliano, the 2/4 gavotte, and especially the musette-gavotte. As Mrs. Allanbrook argues, the many numbers with pastoral connotations serve to suggest a world in which Susanna and the Countess can transcend the barrier of class to meet as equals and as friends. The heart of this world is the duet "Che soave zeffiretto," whose "pastoral text and music figure the classless, timeless meadow where two women ordinarily separated by circumstance can meet and stroll quietly together" (p. 147). And it is under the aegis of the pastoral affect, at numerous other places in the opera, that the Count's schemes are defeated by Figaro and Susanna and their allies. The argument is a provocative one, though the multiple meanings of "pastoral" are never spelled out with sufficient clarity to support fully the weight of the interpretation. We may see, for instance, why it represents a refuge from the brutal and selfish world of the Count, but it is not clear why the pastoral is "classless."

In her treatment of *Don Giovanni* Allanbrook takes a revisionist view of the central character. While Don Giovanni is the center around whom all the other characters revolve, careful analysis reveals that he is both essentially inarticulate—Kierkegaard saw him as a kind of primitive life force—and empty. The author points out that the Don is anonymous; only once, in "Fin ch'an dal vino," does he sing a solo that is not a conscious performance or disguise. Further, Don Giovanni's obsession with seduction has a coldly automatic quality, like the need of an animal for food. This obsession makes him not so much evil or immoral, as has often been argued, as simply outside human morality.

Don Giovanni is distinguished from *Figaro* by the overshadowing presence of the supernatural (in the overture and finale to act II). Of necessity, this widening of the framework carries with it a price. "In accommodating the divine perspective the opera has somewhat to distort our view of that small part of the world where we were formerly at home: to gain the new dimension the vivid planes of *Figaro's terra firma* must be compressed into a caricature of themselves, a shadow play" (p. 199). The richness and complexity of the world of human

morality and interaction are greatly reduced, so that by comparison to *Figaro* the other characters in *Don Giovanni* (perhaps excepting Donna Elvira) have the quality of stock figures, without much depth and largely without the ability to engage our sympathies. This lack of depth has been pointed out before, particularly with respect to Donna Anna and Don Ottavio; but Mrs. Allanbrook's view of the whole opera provides a powerful explanation for the phenomenon.

The analytical treatment of *Figaro* and *Don Giovanni* that comprises the heart of the book has many strengths. Despite the title of the study, Mrs. Allanbrook's discussion is by no means limited to matters of rhythm; she also employs more traditional methods of harmonic, motivic, formal, and linear analysis. This flexible approach is complemented by the author's concern with textual and dramatic as well as musical matters, which enables her to make many subtle points about the dramaturgy of the works in addition to correcting older misconceptions. She successfully defends, for example, the oft-maligned series of arias that precede the finale to act IV of *Figaro*, by showing how they fit Da Ponte's and Mozart's view of the real subject of the opera. Similarly, she rather convincingly refutes the notion (of Edward Dent and others) that *Don Giovanni* was originally conceived in four acts. In its broader dramatic framework her analysis presents a needed corrective to many older studies that viewed these operas from the far narrower perspective of instrumental music. (This is largely true, for example, of Siegmund Levarie's *Mozart's Le nozze di Figaro: A Critical Analysis* [Chicago, 1952].)

An important key to the success of Mrs. Allanbrook's approach is its creative and "humanistic" orientation. At its best her analysis emphasizes not technical features but revelations of character of musical ethos. She is most concerned with the ethical and moral world inhabited by the characters, and the power of her analysis depends chiefly on the degree to which technical points are linked to the larger central points she is making. At times the many details of the discussion may obscure the main thread somewhat, as during the extended analysis of the Statue scene in the finale to act II of *Don Giovanni*. At a few other moments, an analytic point seems forced or ques-

tionable. Far more often, however, the reader nods and smiles in agreement at a sensitive and insightful discussion of a passage. Mrs. Allanbrook's treatments of two marvelous moments—the final reconciliation between the Count and Countess at the end of *Figaro*, and the Commendatore's death scene in Act I of *Don Giovanni*—are particularly successful. On several occasions the author shows how the rhythmic organization of a theme differs from a hypothetical, more "orthodox" phrasing. This technique, as in her discussion of Donna Anna's "Fuggi, crudele, fuggi," invariably leads to striking observations.

In all respects but one, the production of the volume matches the elegance of much of the writing. The layout and typography of the book are well styled and its abundant musical examples are carefully produced and easy to read. The virtual absence of typographical errors is equally admirable. But the lack of a bibliography is rather frustrating; its absence compels the reader to search through the 53 pages of endnotes for the first reference to a given author.

The central value of Mrs. Allanbrook's study rests on two interrelated accomplishments. The analysis of two of Mozart's greatest operatic masterpieces is challenging and genuinely enlightening. Its flexibility of approach and its concern for ethical and spiritual matters make the book a model of critical analysis at its most humane. But the other achievement of this study, its presentation and demonstration of a largely new conceptual framework for studying the music of the late eighteenth century, is ultimately more far-reaching. As Mrs. Allanbrook shows, a grasp of the topical vocabulary of this music can lead to a variety of new insights into its expressive message. The section on *topos* and the understanding of rhythmic gesture should be required reading not only for lovers of the Mozart operas but for all students of the music of the Classic era.

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The Presence of Grace and Other Book Reviews by Flannery O'Connor
compiled by Leo J. Zuber and edited by Carter W. Martin,
University of Georgia Press, Athens 1983,
189 pp. (\$17.25)

Flannery O'Connor wrote the reviews collected here almost exclusively for the newspapers of Georgia's two Roman Catholic dioceses. Anyone familiar with the species, "diocesan weekly," will know two things. First, at a scant two-hundred words even Flannery O'Connor was reined-in tight. (She called the reviews "notices.") And second, she was running—at least by *New York Review of Books* standards—in a slow pack. Yet in the event, the pieces bear all the marks of the thoroughbred.

Surprisingly few (just 25 of 143) touch on literature or criticism. She mostly reviewed titles in hagiography, studies of scripture, letters, and spiritual meditations. None is superficial, but neither are they "packed." Rather, as one might expect from a writer of her wit and nicety they all are drawn to a telling point. What one might not expect is how much they seem to tell us about Flannery O'Connor herself without being exercises in self-revelation.

Given her unquestionable talents some readers will still presume to lament the "waste" of her energies in a quaint faith and backward country. American writers are, after all, conspicuous "road-players." And although Marion Montgomery's *Why Flannery O'Connor Stayed Home* is one of the better scholarly adventures of recent times, that author's answer, one partly grounded in the reviews collected here, will still puzzle readers charmed by the "free-agency" of contemporary author-celebrities.

Flannery O'Connor did not have a

"career" in any of the conventional senses. She called her activity both a vocation and a craft, the end of which was good writing. Period. She wrote, she said, because she was "good at it," and she stayed at home most happily because she could write there. For her immediate concern was simply practical as it would have to be for any good craftsman—even for a practitioner of some version of "art for art's sake."

If her immediate and public concern was practical, Flannery O'Connor's final concern was private and spiritual. In her review of Caroline Gordon's *How to Read a Novel* she carefully distinguished those concerns. But as her reviews of other books, especially the books of Romano Guardini, make clear, she believed that spiritual and practical things are most true to themselves when coincident in time and place. She hinted at, but lacked the space to develop, what was clearly a sacramental aesthetic. She does direct the reader to her constant source and authority in such questions, Jacques Maritain's *Art and Scholasticism* which she seems to have absorbed but never reviewed.

Just as the "stuff" of her stories came from her locale, the rural South, so the force of her spiritual penetration of that "stuff" came from her Catholicism. She once wrote to Andrew Lytle that ". . . the only thing that keeps me from being a regional writer is being a Catholic and the only thing that keeps me from being a Catholic writer (in the narrow sense) is being a Southerner." Together the South and Catholicism formed Flannery

O'Connor's one home. They combined her immediate concerns and raised her art above the parochialism of both the local colorist and the parish fabulist. More important still, they saved her from that graver parochialism known as the "literary career."

For a long time now writers have felt the need to justify their ways to readers. But often as not they have been more interested in apologizing to themselves for their own strange talents and mysterious gifts. Flannery O'Connor's needs and interests in that last regard were not unique, which is not to say that she gave any of the common accounts of herself as an artist, but it does make the scope of her reading for review less strange than it might at first appear. For she seems to have constantly turned to other minds and voices to help articulate her place, her powers, and her vocation in a world that she knew she did not make.

We regularly celebrate lesser writers for tediously parading their struggles toward self-understanding, something modern writers, like their readers, tend to confuse with their art. Flannery O'Connor simply looked to share her Creator's own view of His creation and to retrieve some nuance of that perspective in her art. She called it seeing the "good under construction." Those who dare to write from such a place verge on prophecy. The prophetic-poet is a frequent, if understated, theme in these reviews. Few modern writers seem to have been so fully conscious of what they were up to. Without pomp or fanfare *The*

Presence of Grace tells us more about what Flannery O'Connor thought she was doing "at home" than we have any right to expect.

No one will rank these book reviews with her fiction, or with her remarkable letters, *The Habit of Being*. *The Presence of Grace*, like her occasional talks, *Mystery and Manners*, can only be read as incomplete notes toward a memoir of Flannery O'Connor's intellectual home. In this in-

stance the neighborhood is peopled with the likes of Hans Kung, Eric Voeglin, and Pierre Teilhard de Chardin, S. J. Like every memory it bears a foreground of things in sharp focus and a background of things begging to be retrieved.

At the very least, the reader who takes the trouble to wade back and forth among these reviews will begin to see in Flannery O'Connor what she remarked in one of her own heroes, Friedrich von Hügel: the

mark of " . . . a genuine encounter with the Church, a wrestling with it, a love tested by considerable adversity. . ." *The Presence of Grace* tells us that a spacious and fearless mind like Flannery O'Connor's is most "at home" in such moments. To witness it here is no small delight.

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