A Declaration by the Representatives of the UNITED STATES OF AMERICA, in General Congress assembled

When in the course of human events it becomes necessary for one people to dissolve the political bands which have connected them with another and to assume among the powers of the earth the separate and equal station to which the laws of nature & of nature's god entitle them a decent respect to the opinions of mankind requires that they should declare the causes which impel them to the separation.

We hold these truths to be self evident, that all men are created equal & independent, that from that equal creation they derive rights inherent & inalienable, among which are the preservation of life & liberty, & the pursuit of happiness; that to secure these rights, governments are instituted among men, deriving their just powers from the consent of the governed, that whenever any form of government becomes destructive of these ends, it is the right of the people to alter or to abolish it, & to institute new government, laying it's foundation on such principles & organising it's powers in such form, as to them shall seem most likely to effect their safety & happiness. prudence indeed will dictate that governments long established should not be changed for light & transient causes; and accordingly all experience hath shewn that mankind are more disposed to suffer, while evils are sufferable, than to right themselves by abolishing the forms to which they are accustomed. but when a long train of abuses & usurpations [begun at a distinguished period] & pursuing invariably the same object evinces a design to reduce them under absolute despotism, it is their right, it is their duty, to throw off such government, & to provide new guards for their future security. such has been the patient sufferance of these colonies; & such is now the necessity which constrains them to expunge their former systems of government.

Editor's Note

Unsolicited articles, stories, and poems are welcome, but should be accompanied by a stamped, self-addressed envelope in each instance. Reasoned comments are also welcome.

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Cover: Superimposed on Thomas Jefferson's "Rough draft" of the Declaration of Independence (composed between June 11 and 28, 1776) upon a Mathew B. Brady photograph of President Abraham Lincoln with General George B. McClellan, October 4, 1862. This latter photograph was taken at McClellan's headquarters near Sharpsburg, Maryland, about two and one-half weeks after the Battle of Antietam.

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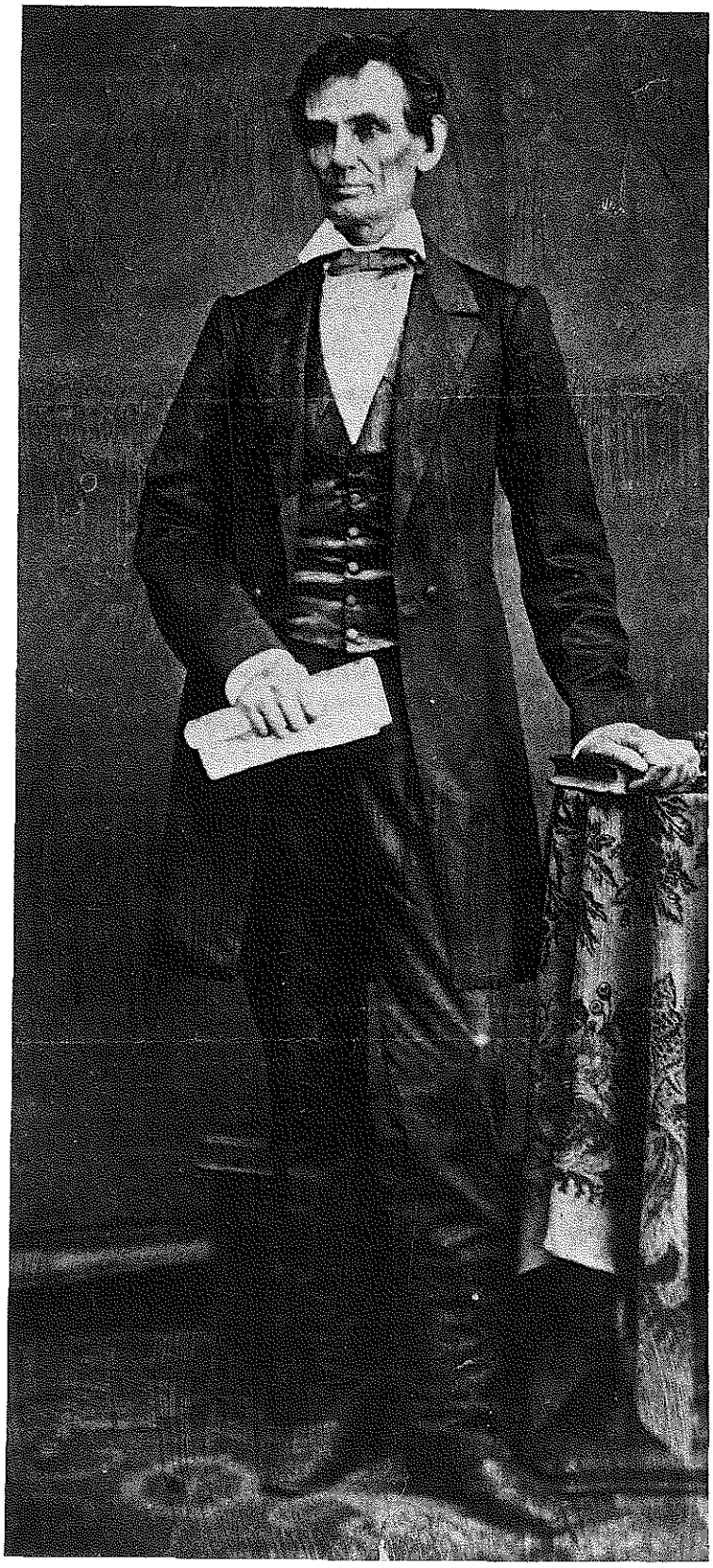

Abraham Lincoln, photograph by Mathew B. Brady, probably taken in February 1860. From the Collections of the Library of Congress.

Inventing the Past

Garry Wills's *Inventing America* and the Pathology of Ideological Scholarship

Harry V. Jaffa

And this too is denied even to God, to make that which has been not to have been.

Thomas Aquinas

GARRY WILLS'S *Inventing America: Jefferson's Declaration of Independence* is a book that should never have been published, certainly not in its present form. Its errors are so egregious that any intelligent graduate student—or undergraduate student—checking many of its assertions against their alleged sources, would have demanded, at the least, considerable revision.

It has been widely hailed as a great contribution to our understanding of the American political tradition. There have been "rave" reviews in the *New York Times Book Review*, the *New York Review of Books*, the *Saturday Review*, the *New Republic*, the *American Spectator*, and *National Review*, to mention but a few of many. It has been praised by such glittering eminences of the academy, and of the historical profession, as David Brion Davis, Edmund Morgan, and Arthur Schlesinger, Jr. These are men who can, if they wish, split a hair at fifty paces. In this instance, their critical faculties seem to have gone into a narcotic trance, proving the truth of the aphorism that ideology is the opiate of the intellectuals. Among the reviewers hitherto, only Professor Kenneth Lynn, writing in *Commentary*, October, 1978, has seen Wills's book for what it is. "*Inventing America*," he writes, "does not help us to understand Thomas Jefferson, but its totally unearned acclaim tells us a good deal about modern intellectuals and their terrible need for radical myths." The myth promoted by *Inventing America* "is that the Declaration is not grounded in Lockean individualism, as we have been accustomed to think, but is a communitarian manifesto derived from the common-sense philosophers of the Scottish Enlightenment..." By this myth, says Lynn, Wills would have "transmogrified" a "new nation, conceived in liberty...into a new nation, conceived in communality," and thus have supplied "the history of the Republic with as pink a dawn as possible."

I think that Professor Lynn is correct as far as he goes. But he does not go far enough. *Inventing America* was received with virtually the same enthusiasm on the Right as on the Left. The reviews in *National Review* and the *American Spectator* were both written by current editors of *National Review*, surely the most authoritative of conservative journals.* (Ronald Reagan's message to the

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*See Postscript

Twentieth Anniversary banquet declared he had read every issue from cover to cover.) But the current editors, we must note, are apostolic successors to Wills himself, who wrote for the journal for a number of years. His account of his days as an *NR* staffer may be found in *Confessions of a Conservative,* published shortly after *Inventing America.* The title of the book is not meant in irony. Wills thinks of himself as a Conservative still, and somehow traces all his serious ideas to St. Augustine. At the deepest level of Wills's being, there is indeed a kind of Lutheran hatred (and Luther was an Augustinian Monk) of classical rationalism. Lynn calls Wills "the leftist (formerly rightist) writer." Yet there is more inner consistency between the two "Willses" than Lynn perceives. That is because there is more inner consistency between the Right and the Left than is commonly supposed.

TO UNDERSTAND where *Inventing America* "comes from," to employ a popular neologism, one must read an essay Wills published in 1964, entitled "The Convenient State." It was originally published in a volume edited by the late Frank Meyer (an *NR* editor, and Wills's close friend), called *What is Conservatism?* Later, it achieved neo-canonical status, by its inclusion in an anthology of *American Conservative Thought in the Twentieth Century,* edited by NR's Editor of Editors, William F. Buckley, Jr. (It is only fair to add that an essay of mine, "On the Nature of Civil and Religious Liberty," was included in the same volume. My essay, however, represented Conservative heresy; Wills's Conservative orthodoxy.) Frank Meyer and I exchanged dialectical blows in the pages of *NR* in 1965, after Meyer published an article attacking Abraham Lincoln as the enemy of American constitutionalism and American freedom. (Meyer's own best known book is called *In Defense of Freedom.*) Meyer in 1965 and Wills in 1964, follow exactly the same line: Calhoun is their hero and their authority, Lincoln the villain of American history. As we shall see, both of them, in the decisive sense, follow a pattern of thought which seems to have been worked out for them by Willmoore Kendall. Kendall was a professor of political science at Yale when Wills was a graduate student in classics there. For Wills, as for Meyer and Kendall, there is no contradiction, nor even any paradox, in identifying the cause of constitutionalism and freedom with the defense of chattel slavery. For all three, the defense of freedom turns, in the decisive case, into the defense of the freedom of slaveowners.

The main thesis of Wills's 1964 essay was that something called "rationalism" is the root of all political evil. This attack on "reason" has been the stock-in-trade of Conservatism since Rousseau's attack on the Enlightenment was fortified by Burke's polemics against the French Revolution. Most present-day Conservatives would be horrified to learn that they are disciples of Rousseau, yet such is surely the case. For it was Rousseau who, in going all the way back to the "state of nature" discovered that man by nature was free, but not rational. The celebration of freedom, divorced from reason, has a theoretical foundation in Rousseau which is nowhere else to be found. The Rousseauan denigration of reason, and the elevation of sentiment to take its place, is the core of nineteenth century romanticism, both in its Left phases (e.g. anarchism, syndicalism, socialism, communism), and in its Right phases (e.g. monarchism, clericalism, feudalism, slavery). Romantic nationalism has been equally a phenomenon of the Right and of the Left. "Rationalism," Wills declared as a man of the Right, "leads to a sterile paradox, to an ideal freedom that is a denial of freedom." What such a remark means can be inferred only from the use to which it is put. Here it clearly refers to the question of slavery, and to the Civil War. Concerning slavery, he remarks, somewhat vaguely, "One cannot simply ask whether a thing is just." Certainly, to ask whether slavery was just was never sufficient, but it was always necessary. One cannot distinguish a greater from a lesser evil, unless one can distinguish evil from good. Wills concedes that "the abolition of slavery [may have] been just," but insists nevertheless that the only politically relevant question was "whether it [was] constitutional." For "what is meant by constitutional government" Wills turns to that statesman of the Old South, the spiritual Father of the Confederacy, John C. Calhoun. According to Calhoun, we are told, constitutional government means "the government in which all the free forms of society—or as many as possible—retain their life and 'concur' in a political area of peaceful cooperation and compromise." We can now better understand Wills's polemic against "rationalism," since among the "free forms" which, by the foregoing statement, ought to be retained, was the institution of chattel slavery.

It was not the slaves whose concurrence Calhoun's constitutional doctrine required, but only those who had an interest in preserving, protecting, and defending slavery. Calhoun provided the slaveholders a constitutional mechanism, in the supposed rights of nullification and secession, to veto any national (or federal) legislation that they regarded as hostile to the interests of slavery. Calhoun's constitutionalism, based upon supposed rights of the states, was originally forged in the fires of the nullification controversy, between 1828 and 1839. Later it was elaborated in two books, the *Disquisition on Government,* and the *Discourse on the Constitution.* Calhoun's main dialectical adversary in 1830 was no one less than the Father of the Constitution, James Madison, although his principal political adversary was President Andrew Jackson, backed in the Senate by Daniel Webster. It was as the heir of Madison, Jackson, Webster (and others) that Lincoln compounded his constitutional doctrine. Lincoln's genius proved itself less by its originality than by the ability to reduce a complex matter to its essentials, and to express those essentials in profound and memorable prose. The essence of a constitutional regime, according to Lincoln, was that it was based upon the consent of the governed. And the consent of the governed was required, because

"all men are created equal." In 1964, Wills rejected Lincolnian constitutionalism because (like the Declaration) it was rational. In 1978, he rejects it because it is based upon an allegedly mistaken understanding of the Declaration. In *Inventing America*, he will undercut what Lincoln has made of the Declaration, by unleashing a barrage of fanciful scholarship designed to transform the Declaration's lucid doctrine of self-evident truths into esoteric eighteenth century mysteries.

Wills's 1964 essay follows the conventional path of Confederate apologists since the Civil War (and Wills is a native of Atlanta). He tries to make it appear that, on the one hand, Lincoln's war was an abolitionist crusade and, on the other, that the South was defending, not slavery, but constitutionalism. Nothing could be further from the truth. As we shall presently see, however, *Inventing America* is less a book *about* Thomas Jefferson and the Declaration of Independence, than it is a book *against* Abraham Lincoln and the Gettysburg Address.

LET US HERE make the record straight, as against the 1964 Garry Wills and his preceptors of the Right, as to what purposes were in conflict, that led to the Civil War, or the War for the Union. (It was *not* a War between the States.) First of all, there was no disagreement between Abraham Lincoln and the followers of John C. Calhoun that slavery was a lawful institution in some fifteen of the States. Moreover, it was agreed that where slavery was lawful, it was under the exclusive control of the States, and that the federal government had no jurisdiction over it. In his inaugural address, Lincoln quoted from a statement he had made many times before, in which he said that he had "no purpose, directly or indirectly, to interfere with the institution of slavery in the States where it exists." He said that he believed that he had "no lawful right to do so," and added that he "had no inclination to do so." Lincoln's anti-slavery policy was comprehended completely by his avowed purpose to have excluded slavery, by federal law, from the national territories, where it had not already established itself. It is true that Lincoln believed, as, indeed, his pro-slavery antagonists believed, that slavery as an institution in the United States was highly volatile, and that if its expansion were prevented, its contraction would set in. And, it was further believed—on both sides—that if contraction once set in, slavery would be, in Lincoln's words, "in course of ultimate extinction."

Lincoln believed that, in the understanding of the Founding Fathers, slavery was an evil. It was an evil condemned by the principles of the Declaration, which Lincoln called "the father of all moral principle among us." It was an evil to which certain constitutional guarantees were given, in the political arrangements of the Founding, because at the time there did not appear to be any alternative arrangements which would not have been disruptive of the Union. Yet the Fathers showed their opposition to its perpetuation in various ways: by the limit placed upon the foreign slave trade, and by the prohibition upon slavery in the Northwest Territory, among others. They had left the institution of slavery where, to repeat, "the public mind might rest in the belief that it was in course of ultimate extinction." Such a belief, Lincoln held, was absolutely necessary, if the slavery question were not to agitate the public mind, and threaten the perpetuity of the Union. Yet the expectations of the Fathers had been upset: by the invention of the cotton gin, by the progress of the factory system, by the enormous expansion of the cotton economy, and with the latter, the expansion of the demand for slave labor. These changes culminated, in time, in the most sinister change of all: that change in at least a part of the public mind which, from regarding slavery as at best a necessary evil, now began to look upon it as a positive good. With this, slavery sought expansion into new lands: into the lands acquired from France in 1803 (the Louisiana Purchase), and into the lands acquired from Mexico as a result of the war that ended in 1848. To prevent this *expansion* of slavery, the Republican Party was formed in 1854, and, in 1860, elected Abraham Lincoln to be sixteenth President of the United States.

The great ante-bellum political question, the one that dwarfed and absorbed all others, was the question of whether slavery should be permitted in the territories of the United States, *while* they were territories, and *before* they became states. The dialectics of this dispute became as complicated as any thirteenth century theological controversy. Yet in the end the legal and political questions resolved themselves into moral questions, and the moral questions into a question of both the meaning and the authority of the Declaration of Independence. The Constitution itself was ambiguous—if not actually self-contradictory—as to whether Negro slaves were human persons or chattels. In fact, the Constitution refers to slaves (which are never explicitly mentioned before the Thirteenth Amendment) only as persons, even in the fugitive slave clause. But by implication, it also refers to them as chattels, since they were so regarded by the laws of the states that the fugitive slave clause recognized. But the logic of the idea of a chattel excludes that of personality, while that of a person excludes that of chatteldom. The Fifth Amendment of the Constitution forbade the United States to deprive any person of life, liberty, or property, except by due process of law. Did this forbid the United States to deprive any citizen of a slave state of his Negro chattel, when he entered the territory of Kansas? Or did it forbid the United States to deprive any Negro person of his liberty, when he entered that same territory? Since the language of the Constitution was equally consistent with two mutually exclusive interpretations, there was no way to resolve the meaning of the Constitution, from the language of the Constitution alone. For Lincoln the question was resolved by the Declaration of Independence, by the proposition that all men are created equal. The right of

persons to own property under the Constitution as under "the laws of nature and of nature's God," was derivative from their right, as human beings, to life and to liberty. Such an understanding of the Declaration alone gave life and meaning to the Constitution. Wills, in "The Convenient State," repudiates the Declaration. In *Inventing America*, he denies that it has any such meaning as Lincoln found in it. In the course of denying that meaning, he denies some of the most undeniable facts of American history.

* * *

IT WAS NOT POSSIBLE, in the free states of the antebellum United States, for public opinion to acquiesce in the proposition that slavery was in itself neither good nor evil, and that it was best to leave to the people of a territory the decision whether they should permit slavery as one of their domestic institutions. This was the famous doctrine of "popular sovereignty," advanced by Lincoln's redoubtable opponent, Stephen A. Douglas. Douglas's doctrine was both appealing and plausible, since it seemed to rest upon and embody the very kernel of the idea of popular self-government, that "the people shall be judge." Here is how Lincoln dealt with it. The following is from Lincoln's Peoria speech, of October 1854:

> The doctrine of self-government is right—absolutely and eternally right—but it has no just application as here attempted. Or perhaps I should rather say that whether it has such application depends upon whether a negro is *not* or *is* a man. If he is not a man, why in that case, he who *is* a man may, as a matter of self-government, do just as he pleases with him. But if the negro *is* a man, is it not to that extent a total destruction of self-government, to say that he too shall not govern *himself*? When the white man governs himself that is self-government; but when he governs himself, and also governs *another* man, that is *more* than self-government—that is despotism. If the negro is a *man*, why then my ancient faith teaches me that "all men are created equal;" and that there can be no moral right in connection with one man's making a slave of another. [All emphasis is Lincoln's.]

I have quoted so much of classic Lincolniana here, to bring before the reader an example of that reasoning that Garry Wills dismisses and ridicules. For Lincoln, of course, the article of his "ancient faith" was such, not because it was inherited, but because it was true. *Inventing America* was written for no other reason than to obfuscate and deny what Lincoln here affirmed. The Declaration, Wills writes, "is written in the lost language of the Englightenment." "It is dark with unexamined lights." It embodies "the dry intellectual formulae of the eighteenth century" which according to Wills "were traced in fine acids of doubt, leaving them difficult to decipher across the intervals of time and fashion." Wills does not think that Lincoln—like Calhoun—was a political thinker of any substance. Rather was he "the great artist of America's romantic period." By his "democratic-oracular tone" he invested the Declaration with a meaning that the Gettysburg Address canonized, but which has nothing in common with the document drafted by Thomas Jefferson in 1776!

The Civil War was not, however, fought because of any merely abstract moral judgment concerning the ethics of treating human beings as chattels. It was fought because eleven states of the Union "seceded," meaning that they repudiated and took arms against the Constitution and the laws of the United States. They did so because they refused to accept the lawful election of a President who believed that slavery ought to be excluded by law from United States territories. (The President, by himself, had no authority to accomplish that exclusion. Nor was there a majority in Congress to pass such a law, before the representatives of the "seceding" states left Washington.) Slavery was, in fact, abolished as a result of the Civil War. This abolition was accomplished, in part, by the Emancipation Proclamation. It was consummated by the Thirteenth Amendment. The former was a war measure, aimed at the property of the enemies of the United States, in arms against the United States. But we cannot forget that the destruction of property by the Proclamation had a double effect, due to the peculiarity of the "peculiar institution" at which it was directed. By the laws governing this institution, certain human beings were legally defined as chattels. Interestingly, the root meanings of both "peculiar" and of "chattel" refer to "cattle." But some eighty-six thousand of these human beings who had hitherto been regarded by law as no more than cattle, enlisted and fought in the Union armies, many of them sealing with their blood their right to that freedom that the Declaration of Independence had proclaimed to be the universal birthright of mankind. Nevertheless, the Civil War was not, we repeat, an abolitionist crusade. It was a war to preserve the Union, to prove that there could not be a successful appeal, as Lincoln said, from ballots to bullets. Emancipation and abolition became, in the course of the war, and because of the war, indispensable constitutional means to a constitutional end. Let us never forget this just but tragic consummation of our history: that men who had been called cattle proved their manhood in arms, and provided indispensable help to save a Union which thereby became theirs. They also vindicated the Declaration of Independence, by proving that human laws which rest upon a denial of the laws of nature cannot long endure. The Union endured, but only by repudiating that denial and becoming a different Union. The original Union—or nation—embodied the Original Sin of human slavery. Without "a new birth of freedom" it must needs have perished from the earth. It is this understanding of the Declaration of Independence, in the light of what "fourscore and seven years" had revealed as to its meaning, that is immortalized by the Gettysburg Address, but that *Inventing America* maliciously attacks.

WHEN WILLS WROTE in 1964 that in a constitutional regime "the free forms of society . . . 'concur' in . . . peaceful cooperation and compromise," he was using Calhounian Confederate code language, implying the rightfulness and constitutionality of "secession." Conversely, he was implying the wrongfulness and unconstitutionality of Lincoln's executive action to preserve the Constitution and the Union. But what was this vaunted "right of secession"? Lincoln called it an "ingenious sophism" according to which "any State of the Union may, *consistently* with the national Constitution, and therefore *lawfully* and *peacefully*, withdraw from the Union without the consent of the Union or of any other State." [Lincoln's emphasis.] But, Lincoln asked, if one can reject the constitutional decision of a constitutional majority, whenever one dislikes that decision, how can there be any free government at all? Unanimity is impossible. Government that is both constitutional and popular also becomes impossible, if the principle of "secession" is once granted. With what right, Lincoln asked, can the seceders deny the right of secession against themselves, if a discontented minority should arise amongst them?

In 1848 Henry David Thoreau published his essay, "Civil Disobedience." At the same time, Thoreau called for the secession of Massachusetts from the Union. He adopted the pattern of abolitionists generally, who declared that there should be "No Union with slaveholders." Thus Thoreau invoked an alleged right of secession *against* slavery, as Calhoun's followers would invoke it *for the sake of* slavery. But Thoreau brushed aside any such notion as that of the "concurrent majority" in Calhoun's sense. Thoreau saw quite clearly that the argument of a minority veto upon majority action, in any matter of interest that could be called one of conscience, did not admit of any stopping point, short of the minority of one. Thoreau declared frankly that, although he preferred "that government . . . which governs least," he would not be satisfied except with that government "which governs not at all." Thoreau believed in the withering away of the state quite as much as Karl Marx, and saw the best regime as an anarchist regime, also quite as much as Marx. But Lincoln, in 1861, showed by unrefutable logic that Calhoun's premises led to Thoreau's conclusions. In short, despotism leads to anarchy, as surely as anarchy leads to despotism. The Garry Wills of 1964 defended despotism. In the later sixties and early seventies, Garry Wills joined those who were protesting and demonstrating in behalf of their Thoreauvian consciences, in behalf of those causes which, in the name of conscience, would arrest the process of constitutional government. But the earlier Wills and the later Wills are like two segments of the same circle. Each leads into the other: like anarchy and despotism.

* * *

IF THE EARLIER WILLS differs from the later one, as John C. Calhoun differs from Henry David Thoreau, so also do the two "Willses" differ as George Fitzhugh and Karl Marx. Fitzhugh (1806–1881), after the death of Calhoun in 1850, became the leading publicist and intellectual protagonist of the thesis that slavery was a positive good. Of all the pro-slavery writers, none roused the anger of Abraham Lincoln more than he did. Yet Lincoln viewed Fitzhugh's argument with a certain grim satisfaction, since it arrived at the conclusion that Lincoln always insisted followed from the pro-slavery premises: namely, that if slavery was a positive good for black men, then it must also be good for white men. Calhoun had already argued that, in the burgeoning conflict in the industrial North, between capital and labor, the South, with its stability rooted in chattel slavery, would be the force making for equilibrium between the two great factions. Fitzhugh went a step farther: only by the enslavement of the white work force, could the North achieve that equilibrium. By way of contrast, Lincoln declared, in March, 1860, "I am glad to know there is a system of labor where the laborer can strike if he wants to! I would to God that such a system prevailed all over the world."

It is a matter of the highest moment for students of the political scene today, to understand that what is now called Conservatism, and what is now called Liberalism (although neither is properly so called), have their common ground in the rejection of the principles of the American Founding, above all in the rejection of the principles of the Declaration of Independence. On both sides, there is a peculiar hatred of Abraham Lincoln, because of the renewed vitality he gave to the authority of the Declaration, in and through the Gettysburg Address. The Liberalism of today—or, more properly the Radical Liberalism of today—stems largely from the Abolitionism of the ante-bellum North (not to mention its successor in the Reconstruction era). And the abolitionist critique of Northern free society, and the critique by Fitzhugh and his pro-slavery coadjutors of that same free society, were not only virtually identical, but were hardly distinguishable from the Marxist critique of capitalism.

Anyone today reading the pro-slavery literature of the ante-bellum South, must be struck by the constant reference to Northern workers as "wage slaves." Indeed, if someone reading these tracts did not know where they came from, and when, he might reasonably suppose that they were written by Marxists of a later period, or even by Bolsheviks. The general argument against Northern capitalism—which as we noted was shared with the Abolitionists—ran as follows. The "free workers" depended upon the owners for their livelihood. But the owners employed them only when they could make a profit from their labor. There was no provision for the workers during the slack periods of business; but neither was there provision for them when they were too young, too old, too sick, too feeble, or too handicapped to be profitably employed. In these respects, Fitzhugh (and all the other defenders of slavery) argued, slavery, with its traditions of paternalism and patriarchalism, with its ethics of responsibility for masters no less than of obedience for slaves, was morally

as well as economically superior. Thus Fitzhugh, at the end of *Cannibals All!* (1857) addresses the Abolitionists as follows. (In today's parlance, a Conservative addressing a Radical Liberal, or Garry Wills, vintage 1964, addressing Garry Wills, vintage 1978):

> As we are a Brother Socialist, we have a right to prescribe for the patient; and our Consulting Brethren, Messrs. Garrison, Greeley, and others, should duly consider the value of our opinion. Extremes meet—and we and the leading abolitionists differ but a hairbreadth. We . . . prescribe more of government; they insist on No-Government. Yet their social institutions would make excellently conducted Southern sugar and cotton farms, with a head to govern them. Add a Virginia overseer to Mr. Greeley's Phalansteries, and Mr. Greeley and we would have little to quarrel about.

Extremes do indeed meet. "Phalansteries" were the Fourierist anticipation of the later and better known "communes" and "soviets." Nearly a century before Hayek's *Road to Serfdom*, Fitzhugh saw with perfect clarity the inner identity of the slave system and a socialist system.

TODAY IT SEEMS as if Conservatism is wedded to the free market economy. But that is true only on the surface. Garry Wills deserted Conservatism rather than embrace the free market. Others embraced the free market, rather than submit themselves to the authoritarianism of the Left. But Conservatives who embrace the free market, not as Abraham Lincoln did, because it implements the moral principles of the Declaration of Independence, but because it is "value free," are building their politics on that same "House Divided" as the ante-bellum Union. For a free market economy committed to nothing but "consumer sovereignty" does not differ essentially from a "popular sovereignty" that is free to choose slavery. Those who look backward to slavery, and those who look forward to the dictatorship of the proletariat, will always have the better of an argument founded upon "ethical neutrality." Critics of Marxism in our time, notably the patrons of the free market economy, constantly marvel at the survival of Marxism as an intellectual force (notably in the minds of college professors of the liberal arts). They marvel at the apparent immunity of Marxism to the disastrous fate of every single one of Marx's predictions, based upon his analysis of the dynamics of capitalism. And this, moreover, despite his claim of "scientific" status for his analysis, and his staking of his claim to that status upon the verification of these same predictions. But the magnetic core of Marxism, the source of the power of its attraction, consists not in its economic analysis, or its economic claims, but in its moral analysis, and in its moral claims. What follows is a representative passage from the *Manifesto*:

> The bourgeoisie, wherever it has got the upper hand, has put an end to all feudal, patriarchal, idyllic relations. It has pitilessly torn asunder the motley feudal ties that bound man to his "natural superiors."

We noted earlier the denigration of reason, and the elevation of sentiment, that characterized the radical thought—equally of the Left and the Right—of the nineteenth century. Capitalism, Marx declared, reduces all human relations to "the naked cash nexus." It is this "nakedness," this reducton of man to a "commodity" which "alienates" him, and leaves him feeling alone in a world without meaning. It is Marxism's promise to restore "community" (where all men will be "comrades"), that is the source of that magnetism to which we have adverted. No promise of wealth to mere "individuals" by a market economy can possibly compete for long with this secularization of Christian eschatology. But Marx's communist moral vision is itself adapted from the moral vision of the *ancien regime* that we find in Edmund Burke. From the standpoint of historical dialectics, it is true that the bourgeois regime is "progressive" compared with its predecessor. That is because, in stripping away "illusions," it prepared the way for the revolution of the proletariat. Intrinsically, however, the *ancien regime* is more humanly desirable, even to Marx, because these self-same illusions made man at home in his world. Men are not as "alienated" under feudalism as they are under capitalism. For in the *ancien regime* there is the illusion that, in being governed by his "natural superiors" the superiors and inferiors are joined together in "community," an organic relationship in which the whole gives independent meaning to each of its human parts. In the meaning that the proletarian whole gives to the lives of each of the comrades, it resembles the feudal order. This is why R. H. Tawney—himself a socialist—could remark, with profound insight, that "the last of the Schoolmen was Karl Marx." Both feudalism and communism see themselves as bonded into a community, which is denied to man in "the lonely crowd" of the de-humanized bourgeois-capitalistic order.

HERE IS HOW Burke's romantic imagination dignified the morality of inequality, of the *ancien regime*. Here, in truth, is the inspiration of Marx's moral imagination. What follows are excerpts from the *Reflections on the Revolution in France*:

> It is now sixteen or seventeen years, since I saw the Queen of France, then the Dauphiness . . . and surely never lighted on this orb, which she hardly seemed to touch, a more delightful vision . . .
>
> Little did I dream that I should have lived to see such disasters fallen upon her in a nation of gallant men . . . I thought ten thousand swords must have leaped from their scabbards to avenge even a look that threatened her with insult. But the age of chivalry is gone. That of sophisters, economists, and calculators has succeeded; and the glory of Europe is extinguished forever . . .
>
> All the pleasing illusions . . . are to be dissolved by this conquering empire of light and reason. All the decent drapery of

> life is to be rudely torn off. All the superadded ideas, furnished from the wardrobe of a moral imagination, which the heart owns and the understanding ratifies, as necessary to cover the defects of our naked, shivering nature...are to be exploded...
>
> On this scheme of things, a king is but a man, a queen is but a woman...

In another famous line, Burke also spoke of that "dignified obedience, that subordination of the heart, which kept alive, even in servitude itself, the spirit of an exalted freedom." Here was the very spiritual charter or gospel of the Confederacy, in building a polity upon chattel slavery. For make no mistake, it was this spiritual justification of the *ancien regime* that became the ideology of the Holy Alliance, and that served the cause of American slavery, when it came across the seas. For the "exalted freedom" of the slaves was compared, to its disadvantage, with the debased freedom of the "wage slaves" of the bourgeois order. How these "superadded ideas" appeared to the leader of the American Revolution, may be inferred from what Washington wrote in 1783:

> The foundation of our empire was not laid in the gloomy ages of ignorance and superstition; but at an epoch when the rights of mankind were better understood and more clearly defined, than at any other period.

Everyone knows that Karl Marx called revealed religion "the opiate of the people." But Marx's critique of Christianity, the very foundation of his system, also had its luminous antecedent in Burke. Here is what Burke wrote, in the *Reflections*, before Marx was born:

> The body of the people...must respect that property of which they cannot partake. They must labor to obtain what by labor can be obtained; and when they find, as they commonly do, the success disproportioned to the endeavor, they must be taught their consolation in the final proportions of eternal justice. Of this consolation, whoever deprives them, deadens their industry, and strikes at the root of all acquisition as of all conservation.

To convert Burkean Conservatism into Revolutionary Communism, all that was necessary was to declare that the disproportion between labor's endeavor and labor's success was the "surplus value" appropriated by the owning classes. To make the proletariat revolutionary, it was necessary to deprive them of that meretricious consolation in the "final proportions of eternal justice." Marx did not state more clearly than Burke the utility of revealed religion for maintaining a regime of unmerited privilege.

IT IS DESIRABLE here to compare the proto-Marxism of Burke, and the Marxism of Marx, with Abraham Lincoln. Here is how Lincoln teaches respect for private property:

> Let not him who is houseless pull down the house of another, but let him work diligently and build one for himself, thus by example assuring that his own shall be safe from violence when built.

Concerning the priority of labor to capital, Lincoln was as emphatic as Marx:

> Labor is prior to and independent of capital. Capital is only the fruit of labor; and could not exist if labor had not first existed. Labor is the superior of capital and deserves much the higher consideration. [Nevertheless] Capital has its rights, which are as worthy of protection as any other rights...

What the rights of Capital are, is seen in the following:

> That men who are industrious and sober and honest in the pursuit of their own interests should after a while accumulate capital, and after that should be allowed to enjoy it in peace, and...to use it to save themselves actual labor, and hire other people to labor for them is right.

The common ground of Burke and Marx is the idea that morality—whether illusory or real—is ineluctably grounded in stratified and invincible class distinctions. For Burke, this stratification follows the arbitrary lines of the feudal regime. It requires, in the name of the myths of such a regime, an unequal distribution of the rewards of life, along the lines of class and caste. Yet the proletarian society of the future—the classless society of Marx—is nothing but a mirror image of that very same feudalism. For it is as arbitrary in its commitment to an equal distribution of the rewards of life, as the other is to an unequal distribution. For arbitrary equality—that is to say, giving equal rewards to unequal persons—is as unjust as unequal rewards to equal persons. Both are equally unjust, *for the same reasons*. The regime of the American Founding, however imperfect the implementation of its principles, is in its principles the perfectly just middle way between these two extemes. As a regime of equal *rights*, it recognizes the justice of unequal *rewards*. There is, said James Madison, "a diversity in the faculties of men from which the rights of property originate." "The protection of these faculties," he added, "is the first object of government." Because of this equal protection of unequal faculties, wealth accumulates and social classes become distinguishable. But neither accumulations of wealth, nor social classes, are fixed in any immutable pattern. As Lincoln declared, on one of many similar occasons,

> There is no permanent class of hired laborers among us. Twenty-five years ago I was a hired laborer. The hired laborer of yesterday labors on his own account today, and will hire others to labor for him tomorrow.

And again:

> The progress by which the poor, honest, industrious and resolute man raises himself...is that progress that human nature is entitled to [and] is that improvement in condition that is in-

tended to be secured by those institutions under which we live...

It is this *moral* vindication of the "bourgeois" regime, as the regime which is truly in accord with human nature, that makes Abraham Lincoln, and his interpretation of the Declaration of Independece, that "hard nut" that the tyrannies of both Right and Left must crack, to establish their sway and domination. It explains the extraordinary efforts in *Inventing America,* of that symbol of the union of Left and Right: Garry Wills.

INVENTING AMERICA begins in this way:

> Americans like, at intervals, to play this dirty trick upon themselves: Pollsters are sent out to canvass men and women on certain doctrines and to shame them when these are declared —as usually happens—unacceptable. Shortly after, the results are published: Americans have, once again, failed to subscribe to some phrase or other from the Declaration of Independence. The late political scientist Willmoore Kendall called this game "discovering America." He meant to remind us that running men out of town on a rail is at least as much an American tradition as declaring unalienable rights.

But Wills is not accurate even in this reference to Kendall. The game Wills calls "discovering America" is called by Kendall "Sam Stouffer discovers America," and may be found described in pages 80 and 81 of *The Conservative Affirmation.* It is Kendall's commentary on a book by Stouffer published in the early fifties under the title of *Civil Liberties, Communism, and Conformity.* It is one of the "classic" liberal attacks on the reactionary public opinion of the so-called McCarthy era; and one should bear in mind that Kendall was one of McCarthy's staunchest defenders. Hence Kendall's testimony is unusual, in this context, for a *guru* of the Left to take as his authority! Here is how Kendall actually described Stouffer's book:

> Mr. Stouffer and his team of researchers asked a representative sample of Americans a number of questions calculated to find out whether they would permit (a) a Communist, or (b) an atheist, to (1) speak in their local community, or (2) teach in their local high school, or (3) be represented, by means of a book he had written, in their local public library. And consider: some two-thirds of the sample answered "Nothing doing" right straight down the line... nor was there any evidence that they would have been much disturbed to learn that the Supreme Court says that the Fourteenth Amendment says they can't do anything legally to (e.g.) prevent the Communist from speaking.

In the poll conducted by Stouffer there is, we see, literally nothing about the Declaration of Independence. What Kendall observes the American people saying "Nothing doing" to—at the period in question—is what the Warren Court (not the Declaration) was saying in interpreting the First and Fourteenth Amendments. And on this point I think the American people (thus polled) were right, and the Court wrong. In 1964 I myself published an essay "On the Nature of Civil and Religious Liberty" in which I argued that precisely on the ground of the principles of the Declaration, Communists and Nazis had no just claim to the constitutional privileges of the First Amendment. Moreover, I know of no such polls or studies, that Wills asserts exist, in which Americans have "failed to subscribe to some phrase or other from the Declaration of Independence."

In any event, it is not phrases that count, but ideas or principles. These must be stated in terms intelligible to the respondent. Perhaps the best known slogan of the American Revolution was "Taxation without Representation is Tyranny." In accordance with it, the Declaration denounced the King "For imposing taxes on us without our Consent." The premise underlying these judgments is that the power to tax is the power to destroy. Does Wills think that Americans today do *not* agree with these judgments or their underlying premise? The Declaration says that the just powers of government are derived from the consent of the governed. Suppose a pollster, asking whether the respondent thinks that any government that governed him, might do so justly without his consent. Does Wills believe that Americans today would answer differently from those in 1776? Does he think that they think that any government might justly levy taxes upon them—*or on anyone else*—without the consent, given by their elected representatives, of the ones taxed?

But perhaps Wills thinks that the arch mystery of the Declaration is the great proposition, upon which Lincoln so concentrated attention in the Gettysburg Address, that all men are created equal. Certainly many are today puzzled by this doctrine. This is not, I think, because of its intrinsic difficulty, but because publicists like Wills have for so long told them that it is a mere vague abstraction. But let us re-phrase the proposition, in some of its applications. Suppose, in conducting a poll, one asked whether the respondents thought it reasonable to divide all human beings (men and women) into the superior and the inferior, the latter to be ruled by the former, and without their consent? Or, to put the same queston slightly differently, suppose one asked whether those who made the laws should live under them, or whether the government might reasonably and justly exempt itself from the laws it made for others. (One example might be whether the lawmakers might exempt themselves from the payment of taxes; another might be whether the punishments for either civil damage or criminal offenses might be different for those in office, as compared with those out of office.) How many today would reject Lincoln's simple maxim—interpreting the proposition that all men are created equal—that no man is good enough to govern another man without that other's consent?

All the foregoing questions are based upon that simplified Lockeanism that Jefferson thought was to be found

in the American mind, no less than in the common sense of the subject. One need not have ever heard of the names of Hume or Hutcheson or Reid or Stewart—indeed one need not have heard of John Locke—to know that the power to tax is the power to destroy, and to draw all the long series of inferences that follow from it. Wills wants to turn the Declaration into an esoteric mystery, by convincing us that we do not know things that we know perfectly well. He would have us think that eighteenth century beliefs are necessarily different from twentieth century beliefs, and that the veil between them can be pierced only by the magic of the cultural (or professorial) elite. This is the priestcraft of our contemporary Dark Age.

TO END THIS DISCUSSION, I would like to make one further comment on Kendall's assertion, endorsed by Wills, that

> the true American tradition is less that of our Fourth of July orations and our constitutional law textbooks, with their cluck-clucking over the so-called preferred freedoms, than, quite simply, that of riding someone out of town on a rail.

Note that even here Kendall says something different from what Wills represents him as saying. Kendall does not mention unalienable rights. The closest he comes to it is when he mentions Fourth of July orations. "Preferred freedoms" refers almost certainly to the constitutional doctrines of Mr. Justice Black, not to those of Thomas Jefferson, or of any other of the Founding Fathers. Yet Kendall here is in fact being squeamish, something certainly unusual for Kendall. Riding someone out of town on a rail is a quasi-euphemism for lynching. Someone—perhaps a specialist in Burlamaqui or Hutcheson—might not know that riding on a rail was usually preceded by tarring and feathering. And tarring frequently resulted in second (and sometimes third) degree burns. Since the tar covered the whole body, the minimum result was usually pneumonia. Not many more survived a tarring and feathering than survived a hanging. But it was a more protracted process, and accompanied by terrible suffering. In the thirty-third chapter of *Huckleberry Finn* we bid our farewell to the Duke and the King. These bunco artists have by now forfeited all of our—and Huck's—sympathy, by betraying Jim back into slavery. In their last appearance Huck sees them being whooped along by the townsmen they had cheated. Huck says he knew it was the Duke and the King,

> though they was all over tar and feathers, and didn't look like nothing in the world that was human...

Although he had loathed them before, and hates them now, he says that

> It was a dreadful thing to see. Human beings *can* be awful cruel to one another.

When Kendall or Wills tells us that lynching is as much an American tradition as declaring that there are unalienable, or natural human rights, they are telling us no more than that evil is as deeply engrained in the American tradition as good. This is a difficult proposition to contest. All that I would contend is that the principles of the Declaration, which embody the principles of the rule of law, stand in direct opposition to lynching, which is the denial or repudiation of lawfulness. And by a disposition of Providence, as poetical as it is historical, Abraham Lincoln's first great speech—his Lyceum Address of 1838—was a denunciation of the growing and dangerous habit of lawlessness, which he observed to be abroad in the land then. In that speech, Lincoln warned that lynch law and free government were enemies of each other, and that one could not long survive in the presence of the other. Lynch law, we repeat, was but one expression of the repudiation of the Declaration of Independence. Slavery was another. Slavery and lynch law went together. Kendall's (and Wills's) tacit patronage of lynch law is but another aspect of their tacit patronage of slavery.

According to Wills, Abraham Lincoln was "a great artist of America's romantic period." This, however, is not intended as a compliment. Rather is it intended as an *a priori* explanation of how Lincoln was able to substitute a fallacious myth of our origins as a nation for the truth about those origins. Lincoln's artistry, he says, fit the anti-scientific, biblical mood of mid-century, so that the "biblically shrouded" figure of "Fourscore and seven years..." presumably evoked acceptance, as "eighty-seven" might not. And Wills is not tender with Lincoln's character, in regard to this alleged deception about the date of the founding of the nation. "Useful falsehoods," he writes, "are dangerous things, often costing us down the road." The Gettysburg Address, beginning with its magisterial invocation of the year 1776 as the point of our origin as a nation, is a "falsehood," and even a "dangerous" one. Wills has summoned up a strict standard of truthfulness, by which he, no less than Abraham Lincoln, must then be judged.

Wills's entire work, as we shall see, actually stands or falls by this claim that 1776 is not, and cannot be regarded as, the birth date of the nation. Lincoln, he says, "obviously gave some thought" to his "Fourscore and seven." Indeed he did.

IN *CRISIS OF THE HOUSE DIVIDED* I pointed out, more than a score of years ago, that the beginning of the Gettysburg Address marked as well the end of the long debate with Stephen A. Douglas. For Douglas had declared that we existed as a nation only by virtue of the Constitution. Notwithstanding the fact that, in other respects, Douglas was a Jacksonian Unionist, in this he echoes Southern—and Calhounian—doctrine. It was axiomatic for Jefferson Davis—and for all who voted for secession in the winter and spring of 1860–1861—that the United

States could be regarded as a single nation, solely by virtue of the Constitution. Each state, it was held, became part of the Union or nation by virtue of the process of ratification. The ordinances of secession were regarded as—and in some cases were actually called—acts of de-ratification. And there can be no doubt that, were the Union or nation created solely by the process by which the Constitution of 1787 was ratified, then it could lawfully have been uncreated by the same process. Willmoore Kendall, whom Wills is obviously following, repeats this Confederate dogma, saying that there was a "bakers dozen" of new nations resulting from the Declaration of Independence. By this interpretation, in the Declaration of Independence the thirteen colonies were not only declaring their independence of Great Britain, they were declaring their independence *of each other.*

Wills thinks that Lincoln would have had some ground for treating 1777 as the year of birth of the nation, since in that year the Articles of Confederation were adopted. But best of all, as a proposed birth date, he thinks, is 1789, the year in which the Constitution came into operation. For this date, he says, Lincoln should have written "Four score minus six years ago..." With this ill-placed facetiousness Wills shows himself completely oblivious of the great ante-bellum debate. He seems unconscious of the existence of the masterful brief, legal, historical, and philosophical, that Lincoln presented, notably in his inaugural address, and still more copiously, after Sumter, in his message to Congress, in special session, July 4, 1861. Lincoln's argument, as to the nature and origin of the Union, is presented with Euclidean precision and classic beauty. It is surpassed by nothing in Demosthenes, Cicero, or Burke.

Wills writes as if Lincoln had suddenly invented the notion that the nation had been born in 1776 as he composed the Gettysburg Address, and that he relied upon the mesmerizing influence of his vowels and consonants (e.g. "by mere ripple and interplay of liquids") to secure his deception. But Lincoln's audience in 1863 and thereafter, unlike Wills, knew very well that the Gettysburg Address was but a moment in a dialectical process that had been going on for more than a generation. Neither Lincoln nor the nation ever imagined that he was appealing to their sentiment, apart from an argument, laid in fact and reason. It would have been perfectly honorable for Wills to have taken up the weapons of controversy against Lincoln's side, as statemen and scholars have done since the days of Calhoun, Jefferson Davis, and Alexander Stephens. But mere malicious sneering has no place in such a debate.

Wills tells us, with easy assurance, that "there are some fairly self-evident objections to that mode of calculating," viz., the mode expressed by "Four score and seven years ago..." What are these objections?

> All thirteen colonies [writes Wills] subscribed to the Declaration with instructions to their delegates that this was *not* to imply formation of a single nation. If anything, July 4, 1776, produced twelve new nations (with a thirteenth coming in on July 15)—conceived in liberty perhaps, but more dedicated to the proposition that the colonies they severed from the mother country were equal to each other than that their *inhabitants* were equal. [Italics by Wills.]

We note that Wills does not say that the delegates were not instructed to form a single nation. He says that they *were* instructed *not* to form (or imply formation of) a single nation. If Wills had said that the instructions for independence were in some cases ambiguous, as to whether the thirteen colonies were to form a single union, state, or nation, he would have asserted what would certainly have been plausible. But in positively asserting an unambiguous intention *not* to form a single nation, he is asserting something for which there is not a shred of evidence.

Not many readers will take the trouble to look up the colonial instructions to the delegates to the Continental Congress, in the spring of 1776. Like most reviewers, they will assume that someone with a prestigious professorship at a major university, with a doctorate from Yale (all things advertised on the dust jacket), will of course have read documents carefully, and reported them faithfully. Errors like Wills's, launched with such authority, spread like plague germs in an epidemic. And although it takes few words to put such errors in circulation, it takes painstaking effort, and detailed analysis, effectively to contradict them.

Turning now to the instructions, we note that they do not contain the word "nation" at all. The word "union" is its nearest equivalent. (We note also that in Lincoln's political vocabulary, the words "union" and "nation" were virtually synonymous.) In the instructions, the word "confederation" is also used in a sense, at least quasi-synonymous with "union."

The important question we must ask, in examining the language of the instructions for independence, is whether the colonies were, in making a single and common declaration of independence, implying or assuming or declaring that they did so as members of a common government. And further, we would want to know whether they implied or stated that they expected their association in and through the Congress to become a permanent one. An affirmative answer to these two questions is all that would be needed to sustain Lincoln's thesis with respect to the "Four score and seven years." Wills, we repeat, by asserting that in July of 1776 thirteen nations or states came into existence by virtue of the Declaration, asserts that the thirteen were not merely declaring their independence of Great Britain, but their independence *of each other.*

Rhode Island, by its General Assembly, on May 4, 1776, instructed its delegates

> to join with the delegates of the other United Colonies in Congress...to consult and advise...upon the most proper

measures for promoting and confirming the strictest union and confederation...

Virginia's instructions—May 15th—called simply for such measures as might be thought proper and necessary

for forming foreign alliances, and a confederation of the colonies.

Here "confederation" is synonymous with "union and confederation" in the Rhode Island instructions.

WE SHOULD BE AWARE, in reading these documents, that we are witnessing a transformation in the use and application of certain key terms. The word "confederation," like the words "federal" or "confederal," was an old bottle into which new wine was being poured. The American Revolution, and the American Founding, produced a form of government unprecedented in the history of the world. In later years, James Madison called the government of the United States a "nondescript," because there was still no word that properly expressed what it actually was. In 1787, in the *Federalist*, Madison called the government of the new Constitution, "partly national, partly federal," although by the traditional understanding of "federal" and "national" such an expression would have been a self-contradiction. As the late Martin Diamond has pointed out, the expression "federal government" would have been a solecism, prior to the emergence of the American form of government. What had hitherto been regarded as federal, could not properly be regarded as a government, and what had hitherto been regarded as government, could not properly admit any distinct or separate sovereignty in any of its parts. In these instructions we see an early application of "confederation" in a sense consistent with what was later understood clearly in the expression "federal government." It would be a mistake to assume that the later meaning was clearly present to the minds of the men of 1776. Yet it would be an equally great mistake to fail to perceive, in 1776, the genesis of the later meaning. Lincoln, one should remember, said that the nation had been born in 1776, he did not say it had already matured.

Connecticut, on June 14, 1776, instructed its delegates in Congress to

move and promote, as fast as may be convenient, a regular and permanent plan of union and confederation of the Colonies...

New Jersey, on June 21st, called for

entering into a confederation for union and common defense...

Maryland, on June 28th, in authorizing independence, also authorized

such further compact and confederation...as shall be judged necessary for securing the liberties of America...

Most extraordinary of all is the instruction of the House of Representatives of New Hampshire. For in this case, the instruction for independence and the instruction for union, given separately in the other cases, were here combined into one. New Hampshire instructed its (single) delegate

to join with the other colonies in declaring the thirteen United Colonies a free and independent state...

Concerning what might justly be called the burgeoning national consciousness, consider the language with which the Georgia Colonial Congress addressed its delegates in the Continental Congress, in April of 1776. They exhorted their representatives that they

always keep in view the general utility, remembering that the great and righteous cause in which we are engaged is not provincial, but continental. We therefore, gentlemen, shall rely upon your patriotism, abilities, firmness, and integrity, to propose, join, and concur in all such measures as you shall think calculated for the common good, and to oppose all such as appear destructive.

We see the coordination of "patriotism" with the "common good," and that this good is said to be "continental" and not "provincial." Can anyone, reading these words, think that in 1776 Georgia (any more than New Hampshire) was engaged in declaring its independence from its sister colonies?

LET US ASK what could lie behind Wills's assertion about these colonial instructions. It is certainly true that the full implications of single statehood, or union, or nationhood, were not visible in 1776. And it is true that all of the colonies, while endorsing union in varying terms, nonetheless did so with reservation. For example, while calling for the formation of the "strictest union," Rhode Island required that the greatest care be taken

to secure to this colony...its present established form, and all powers of government, so far as it related to its internal police and conduct of our own affairs, civil and religious.

Virginia, in like manner, asked that

the power of forming government for, and the regulating of the internal concerns of, each colony, be left to the respective Colonial Legislatures.

Pennsylvania required that there be reserved

to the people of this colony the sole and exclusive right of regulating the internal government and police of the same.

And New Hampshire, the same New Hampshire which thought that the United Colonies should declare themselves a single "free and independent state," nonetheless required that

> the regulation of our internal police be under the direction of our own Assembly.

Could there be any clearer demonstration, than these words by which New Hampshire reserved its right of internal or local government, that such reservations did *not* constitute obstacles, in the minds of those making the reservations, to national unity?

These reservations of local or state autonomy represent, in generic form, the great principle of American federalism. They reappeared, the year following the Declaration, in the Articles of Confederation, in Article II, which reads as follows.

> Each state retains its sovereignty, freedom, and independence, and every power, jurisdiction, and right, which is not expressly delegated to the United States, in Congress assembled.

The Tenth Amendment to the Constitution contains a similar reservation of the "internal concerns" to the jurisdiction of the governments of the states—and to the people of the states—as is found in those colonial instructions of the spring of 1776. It reads:

> The powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States respectively, or to the people.

The notable difference between these two articles is the presence of the words "sovereignty" and "expressly" in the former. But John Quincy Adams, among others, thought that the spirit of the Declaration (and of the instructions authorizing the Declaration) was stronger in the Constitution than in the Articles. The Tenth Amendment, by not referring to the powers delegated as being "expressly" delegated, opened the door to the great contest, begun by Hamilton and Jefferson, between liberal—or broad—construction, and strict—or narrow—construction, a contest which continues until this very day. But the ambiguity in the Constitution which permits two schools of constitutional interpretation is not different from the ambiguity in the original instructions for forming a union. If that ambiguity is regarded as militating against the formation of a national union, then we are no more a nation today than we were on July 4, 1776.

* * *

WILLS, WE HAVE NOTED, denies any credibility to Lincoln's characterization, in the Gettysburg Address, of July 4, 1776, as the birth date of the nation. We have seen that his alleged grounds for this denial, the colonial instructions to the delegates to the Continental Congress in the spring of 1776, do not bear out what he says about them. But Edmund Morgan, writing in *The New York Review of Books*, August 17, 1978, in a generally favorable notice of *Inventing America*, has pointed to a very good test of single statehood in the Declaration itself. For the Declaration reads, near the end, as follows:

> That these United Colonies are, and of right ought to be Free and Independent States. . . and that as Free and Independent States, they have full power to levy War, conclude Peace, contract Alliances, establish Commerce, and do all other Acts and Things which Independent States may of right do.

"Which of these free and independent states," asks Morgan, "undertook to do the acts and things Jefferson specified as characteristic of a state?"

> It was Congress [Morgan continues] that levied war through the Continental Army; it was Congress that concluded peace through its appointed commissioners; and it was Congress that contracted the alliance with France. Congress may not have established commerce, but in the Association it had disestablished it, and in a resolution of the preceding April 6, it had opened American ports to all the world except England.

In denying that there was "one nation" or anything like it, resulting from the Declaration of Independence, Wills makes the extraordinary assertion that the Declaration is not a legal document of any kind. He calls it and the Gettysburg Address mere "war propaganda with no legal force."

Now the Gettysburg Address was an occasional address of the President of the United States. Its force, as such, was moral rather than legal. Its chief feature, however, was to reaffirm the principles of the Declaration, and to reaffirm them in conjunction with another Presidential act, namely, the Emancipation Proclamation. The latter of course *was* a legal act, although its permanent force depended upon the adoption of the Thirteenth Amendment. The purpose of the Gettysburg Address was to help to generate the political forces which would lead the nation from the Emancipation Proclamation—whose legal effect was limited to what could be inferred from the war powers of the Commander-in-Chief—to that permanent abolition of chattel slavery that could only be accomplished by an amendment to the Constitution. It is that fulfillment of the promise of equal human rights by the Declaration, in the Thirteenth Amendment, that constitutes the "new birth of freedom" wished for by the Address. If Wills regards this as mere "war propaganda" then he can have little regard for the abolition of slavery as an event in American history.

To assert, as Wills does, that the Declaration of Independence is not a legal document, is simply amazing. It is among the more stupendous reasons why we think that *Inventing America* should have been shipped back to its author in manuscript. Evidently Wills—and the readers of his manuscript—have never held in their hands the Stat-

utes at Large of the United States, the Revised Statutes of the United States, or the United States Code. The 1970 edition of the United States Code, which is before me as I write, classifies the Declaration among the "Organic Laws of the United States." Of these, the Declaration of Independence is the first. Second is the Articles of Confederation. Third is the Ordinance of 1787: The Northwest Territorial Government. Fourth is the Constitution of the United States and Amendments.

Let us recall that Wills preferred both the Articles and the Constitution to the Declaration, as marking the beginning of American statehood or nationhood. But the Articles declares, in its preamble, that it was done "in the second year of the Independence of America." Moreover, the Constitution, in the form in which it left the Convention, over the signature of George Washington, dates itself

> in the Year of our Lord one thousand seven hundred and Eighty seven and of the Independence of the United States of America the Twelfth.

Both these notable documents—which Wills thinks Lincoln should have preferred to the Declaration—themselves refer to the Declaration as the originating document of the United States.

This dating of the union, at the end of Article VII of the Constitution, has moreover a particular legal application. Article VI reads, in its first paragraph, that

> All debts contracted and engagements entered into, before the adoption of this Constitution, shall be as valid against the United States under this Constitution, as under the Confederation.

From the foregoing, it is clear that there was a "United States under the Confederation" before there was a "United States under this Constitution." The fact that the United States in its subsequent form (that of "a more perfect Union") acknowledges the debts of the earlier United States, shows that it remains the same moral person. But Article XII of the Articles of Confederation accepts responsibility for the debts contracted by the Congress before the adoption of the Articles, just as the Constitution accepts the debts of the government of the Confederation. In short, the United States is continuously the United States, is continuously the same collective identity, the same moral agent, from the moment that it became independent, viz., since July 4, 1776.

In what sense then is the Declaration of Independence a law of the United States; or, rather, in what sense is it the first of the organic laws of the United States? The United States Code does not say. In 1825, however, Thomas Jefferson and James Madison, both members of the Board of Visitors of the University of Virginia, together prepared a list of books and documents to serve as authorities for the instruction to be offered by the faculty of law. On "the distinctive principles of government of our State, and of that of the United States," they wrote, the first of the "best guides" to this end was

> the Declaration of Independence, as the fundamental act of union of these States.

We see then that the Declaration was not regarded by Jefferson and Madison, as it is by Wills (and Kendall), as an act whose sole effect was to *separate* thirteen colonies from Great Britain. It was an act whereby the *separation* from Great Britain was simultaneously accompanied by *union* with each other. It was the accomplishment of *union* that makes it the primitive organic law of the United States. This is why all acts of the United States are dated from the Declaration.

But the Declaration is more even than an organic law. Its statement of principles remains that statement of the principles of natural right and of natural law which is the ground for asserting that the government of the United States (and of each of the States) represents law and right, and not mere force without law or right.

In 1844, for example, in a great speech in the House of Representatives, John Quincy Adams declared that the assertion of principles in the Declaration of Independence, beginning with the proposition that "we hold these truths to be self-evident. . ." constituted the "moral foundation of the North American Revolution." It was, he said, "the only foundation upon which the North American Revolution could be justified from the charge of treason and rebellion."

But Wills hates the very idea that the United States was born out of a dedication to liberty and justice. For him, the belief that our political arrangements are in some particular sense in accordance with universal principles of natural right, breeds only a sense of self-righteousness, and makes us a danger to ourselves and to others. As an example of the latter, he cites John F. Kennedy's alleged willingness "to throw Communist devils out of Russia, China, Cuba, or Vietnam." As an example of the former, he cites "the House Un-American Activities Committee!"

In 1823, Jefferson, writing to Madison on August 30th, referred to a meeting that had taken place the previous month as an anniversary assemblage of the nation on its birthday. When Jefferson thus referred to July 4th as the nation's birthday, Abraham Lincoln was fourteen years old. By this time, such references to the Glorious Fourth were traditional and customary. No one seemed to doubt then that the principles that accompanied our beginnings were as luminous as they were true. It was some years later that men began to discover the "positive good" of slavery, and to mutter that the so called self-evident truths might after all be self-evident lies. Then was the foundation laid for Garry Will's discovery that the Declaration was, after all, written in "the lost language of the Enlightenment."

* * *

WILLS CONTENDS that the major influence upon Jefferson, and upon the writing of the Declaration, was not John Locke, but Francis Hutcheson. Hutcheson was a Scottish philosopher, who wrote a generation or so after Locke. The dates of his books, as given by Wills, are from 1725 to 1755. Locke died in 1704. Indeed, the principal explicit thesis of *Inventing America* is that the Declaration is an Hutchesonian and not a Lockean document. Wills's principal antagonist, within these lists of controversy, is Carl Becker. Becker's *The Declaration of Independence*, published in 1922, has long been regarded as a classic. And in certain respects, its authority—as Wills notes—has gone unchallenged. We would note that Becker was himself an historicist and a relativist, and as such took no more seriously than Wills the Declaration's assertion (in Lincoln's words) "of an abstract truth, applicable to all men and all times." However, Wills cites one noted scholar after another, who has cited Becker, assimilated Becker, built on Becker. "The secret of this universal acclaim," writes Wills,

> lies in the inability of any later student to challenge Becker's basic thesis—that Jefferson found in *John Locke* "the ideas which he put into the Declaration." [Wills's italics]

According to Wills, the thesis of a "Lockean orthodoxy...coloring all men's thought in the middle of the eighteenth century" is one which has not been challenged by "any later student." That is to say, it has not been challenged by a single student prior to Wills.

Wills's bold challenge to Beckerian—and all later—orthodoxy, concerning the Lockean orthodoxy of the American Founding, comes to a climax in Chapter 18. This chapter is prefaced by a paragraph from an influential pamphlet essay by James Wilson, first published in 1774. This passage from Wilson, says Wills, was used by Becker "to establish the orthodox Lockean nature of Jefferson's Declaration." Here it is, as it appears in *Inventing America*.

> All men are, by nature, equal and free: no one has a right to any authority over another without his consent: all lawful government is founded on the consent of those who are subject to it: such consent was given with a view to ensure and to increase the happiness of the governed, above what they could enjoy in an independent and unconnected state of nature. The consequence is, that the happiness of the society is the *first* law of every government. [Wilson's italics.]

Next, we will repeat what Wills says about this passage from Wilson's essay, and what he says about Becker's use of it. We give this paragraph from page 250 of *Inventing America* exactly as it appears there. If the reader finds the paragraph confusing, he must ask the apology of Wills. For Wills has the muddling and confusing habit of using no footnotes, but incorporating all his reference notes in parentheses within his text. As we shall presently see, however, Wills does not only not *use* footnotes, he does not know how to *read* them. Becker, says Wills,

> calls the Wilson quote "a summary of Locke" (*Declaration*, 108), part of America's common heritage of ideas. But if the idea was so common, why did Wilson give a *particular* source for it, and *only* one? Here is his own footnote to the passage (in his *Considerations on the Nature and Extent of the Legislative Authority of the British Parliament* of 1774): "The right to sovereignty is that of commanding finally—but in order to procure real felicity; for if this is not obtained, sovereignty ceases to be a legitimate authority, 2 Burl., 32, 33." He is quoting in summary Burlamaqui's *Principes du droit politique*, 1, v, 1; 6(= *Principes du droit naturel*, 1, x, 2). Now Burlamaqui was a disciple of Hutcheson's philosophy of moral sense (*Naturel*, 2, iii, 1) and therefore he differed from Locke on concepts of right (ibid., 1, v, 10) and property (1, iv, 8), of the social contract (1, iv, 9) and the state of nature (2, iv, 11). If Wilson meant to voice a Lockean view of government, as Becker assumed, he clumsily chose the wrong source.

The unsuspecting reader, confronted by this witches' brew of scholarship, is apt to think that Carl Becker must certainly have been clumsy, and not James Wilson. And it would certainly seem as if a whole generation—or more—of scholars had followed Becker, "like sheep, through the gates of error." It takes two or three readings of this paragraph before one can accustom one's eyes to the forest of parentheses, and then slowly begin to distinguish the sentences within. This, however, is what can be seen at last. Wilson has quoted something in a footnote. At the end of the quotation, and within the quotation marks, he has given a source for that quotation. Wills calls the quotation "a summary" of a certain chapter in a book of Burlamaqui, which parallels another chapter in another book of Burlamaqui. Having read with some care both chapters in both books, I would call the quotation a paraphrase rather than a summary. But that is not important.

What is important is that Wilson does *not* present the paraphrase or summary of Burlamaqui as a source for what he himself has written. Wills's assertion that the passage from Burlamaqui is the "*particular* source" and the "*only*" source for Wilson's alleged "summary of Locke" is simply untrue. It is easier to see this if one has Wilson's essay before one, and if one sees the footnote separated from the text at the bottom of the page. Let us suppose, for example, that after saying that "all lawful government is founded on the consent of those who are subject to it" Wilson had appended this footnote: "Our authority is his consent, Sh., 2 Hen. 6, 4, 1, 316." Would this have meant that Wilson had declared that the source of the idea expressed in the text was the second part of Shakespeare's *Henry VI*? Would it have meant more than that Wilson had found a felicitous expression of his thought in Shakespeare, and that such an expression lent a certain cogency or weight to what Wilson had said?

Wills's assertion that this note gives the "only" source of Wilson's thought, is all the more absurd because Wilson's essay has forty-eight separate footnotes. Some cite Blackstone, some cite Bolingbroke, but the majority refer to decisions of British courts, and opinions of British

judges. As Becker rightly observes, the main point of Wilson's entire essay is to show the close approximation of the principles of British constitutionalism to the principles of natural law. All of Wilson's footnotes are designed to confirm his judgments, not to give sources for his ideas. To repeat: the quotation in the footnote is a paraphrase of Burlamaqui. The reference to Burlamaqui is simply to give the source in Burlamaqui of the passages thus paraphrased. The reference then is to *the source of the footnote*, not to *the source of the text*. All that buckshot spray of alleged differences between Burlamaqui and Hutcheson, on the one hand, and Locke on the other, is simply pretentious nonsense. Wilson has throughout spoken in his own name, not in that of either Locke or Burlamaqui. That he has in the main followed Locke, as Becker says, is not to be doubted on the basis of any evidence supplied by Wills.

* * *

IN HIS ANXIETY to re-write the intellectual history of the American Founding, Wills goes to lengths of hyperbole and exaggeration which are inconsistent with serious scholarship. He says, for example, that there is "no demonstrable verbal echo of the *Treatise* [Locke's *Second Treatise of Government*] in all of Jefferson's vast body of writings." Against the many writers who have said that the Declaration repeats not only arguments, but even the phraseology of the *Second Treatise*, Wills airily asserts that "no precise verbal parallels have been adduced."

Wills, however, thinks that verbal parallels to the Declaration abound in Hutcheson. Here, for example, is a passage from Hutcheson, adduced by Wills as an example of the proximity of Hutcheson to the Jefferson of the Declaration:

> Nor is it justifiable in a people to have recourse for any lighter causes to violence and civil wars against their rulers, while the public interests are tolerably secured and consulted. But when it is evident that the public liberty and safety is not tolerably secured, and that more mischiefs, and these of a more lasting kind, are like to arise from the continuance of any plan of civil power than are to be feared from the violent efforts for an alteration of it, then it becomes lawful, nay honorable, to make such efforts and change the plan of government.

Here is the passage in the Declaration it is compared with:

> Prudence indeed will dictate that governments long established should not be changed for light and transient causes; and accordingly all experience hath shown that mankind are more disposed to suffer while evils are sufferable than to right themselves by abolishing the forms to which they are accustomed.

But here is what Locke, in the Second Treatise (para. 230) had written:

> For till the mischief be grown general, and the ill designs of the Rulers become visible, or their attempts sensible to the greater part, the People, who are more disposed to suffer, than right themselves by Resistance, are not apt to stir.

Who cannot see that the words of Locke are much closer to the words of Jefferson than those of Hutcheson? The phrases "disposed to suffer" and "right themselves" may or may not be echoes, but they are key phrases, and they are identical in Locke and Jefferson.

Here is another example of Hutcheson, provided by Wills:

> A good subject ought to bear patiently many injuries done only to himself, rather than take arms against a prince in the main good and useful to the state, provided the danger extends only to himself. But when the common rights of humanity are trampled upon, and what at first attempted against one is made precedent against all the rest, then as the governor is plainly perfidious to his trust, he has forfeited all the power committed to him.

Here is the parallel passage in the Declaration. This is from the Declaration in the draft originally reported, as distinguished from that finally adopted:

> But when a long train of abuses and usurpations, begun at a distinguished period and pursuing invariably the same object, evinces a design to reduce them under absolute despotism it is their right, it is their duty, to throw off such government...

And here is Locke, in the parallel passage in the *Second Treatise*.

> But if a long train of abuses, Prevarications, and Artifices, all tending the same way, make the design visible to the people, and they cannot but feel, what they lie under, and see, whither they are going; 'tis not to be wonder'd, that they should then rouze themselves, and endeavor to put the rule into such hands, which may secure to them the ends for which Government was first erected...

Once again, we have, not echoes, but identical phrases in Jefferson and Locke. The "long train of abuses" has been the phrase most cited by generations of scholars—although Wills stubbornly denies that they have ever "adduced" such parallels. Even more to the point, is the key word "design," which occurs in both Locke and Jefferson, and which is peculiarly vital to the Declaration's argument.

Edmund Morgan, in the review to which we have already referred, says flatly that the resemblances of Jefferson's language to Locke are closer than anything Wills has found in any Scottish philosopher. But even more to the point—and we will let Morgan make this point for us—is that in the parallels between Hutcheson and Jefferson cited by Wills, "the distance from Locke's political principles is not noticeable, indeed it is non-existent." Yet so insistent is Wills upon this very distance of Jefferson from Locke, that he asserts that: "There is no indication Jeffer-

son read the *Second Treatise* carefully or with profit. Indeed, there is no direct proof he ever read it at all (though I assume he did at some point.)" Wills is aware that Jefferson recommended the book to others but thinks that, like many a professor puffing himself to students, "There would be nothing dishonest about his general recommendation of the *Treatise*, made to others while he lacked any close acquaintance with the text..." Yet in 1790, writing to an intimate friend, Jefferson pronounced "Locke's little book on government" to be "perfect as far as it goes."

Forty-five years later, near the end of his life, Jefferson collaborated with Madison—as we have already noted—in drawing up a list of books and documents for the faculty of law at the University of Virginia. Again—and for the last time—he turned to Locke, as he sought by university education to preserve the principles of the Revolution. In a resolution, prepared for, and adopted by the Board of Visitors, it was affirmed to be

> the opinion of this Board that as to the general principles of liberty and the rights of man, in nature and in society, the doctrines of Locke, in his "Essay concerning the true original extent and end of civil government," [the full title of the *Second Treatise*] and of Sidney in his "Discourses on government," may be considered as those generally approved by our fellow citizens of this, and the United States...

From this recommendation of Locke and Sidney for "general principles" Jefferson went on, as we have already seen, to recommend the Declaration for the "distinctive principles" of American government. The pairing of Locke and Sidney was, as Wills notes, a traditional Whig custom. I do not see how this detracts from the importance of Locke. Wills says that the famous letter to Henry Lee is the only place in which Jefferson ever links Locke and the Declaration. In this resolution however, Locke and the Declaration are again linked, and linked in the most authoritative manner. Coming at the end of Jefferson's life, this resolution has a peculiar and final authority.

Among the many absurdities of Wills's work is that Adam Smith, as a "moral sense" philosopher, becomes a "communitarian." Thus the spiritual father of capitalism—or the system of natural freedom, as he called it—becomes part of the anti-individualism which prepared the way for Marx and today's Left. Had Wills read that notable book linking the *Theory of Moral Sentiments* with *The Wealth of Nations*, Joseph Cropsey's *Polity and Economy: An Interpretation of the Principles of Adam Smith*, he would not have committed such an egregious error. For he would have learned from Cropsey that the Scottish school were emenders of Locke, rather than negators or opponents. All their thought moves within a circle previously defined by Locke, and before Locke, by Hobbes. Indeed, the quotation from Burlamaqui, relating the purposes of civil society to sovereignty, points back from Locke towards Hobbes, rather than forward toward the Scottish school.

An important book may still be written about Hutcheson, and the school he represents, and their influence upon the American Founding Fathers. No responsible scholar has ever claimed that the Declaration of Independence is purely (or merely) a Lockean document. The substitution of "pursuit of happiness" for "property" in the famous enumeration of rights is a sufficient obstacle to such a simplistic view. So is the appeal to the "dictates of prudence." The ultimate authority for the meaning of the intellectual virtue of prudence is Aristotle. For it was Aristotle who separated philosophic wisdom from practical wisdom, *sophia* from *phronesis*, *sapientia* from *prudentia*.

THERE IS ACCORDINGLY a great deal in the Declaration that points backwards from Locke, towards the ancients. In that famous letter to Henry Lee in 1825, Jefferson wrote of the Declaration:

> All its authority rests then on the harmonizing sentiments of the day, whether expressed in conversation, in letters, printed essays, or in the elementary books of public right, as Aristotle, Cicero, Locke, Sidney, etc.

Wills attempts to brush this aside and to ridicule the reference to Aristotle, because elsewhere Jefferson depreciates him. But Jefferson makes clear in the Lee letter that in drafting the Declaration he was the agent of the Congress, and of the American people. What he wrote was not intended as a personal statement, but "as an expression of the American mind." That Jefferson listed two ancients—Aristotle and Cicero—before two moderns—Locke and Sidney—was not casual or accidental. Patrick Henry's famous apostrophe began by noting that "Caesar had his Brutus." The Senate, the Capitol, and many other symbols from the Founding period remind us of the power of the example of ancient Rome, and of ancient freedom. Perhaps Rome was more looked to than Greece. But Cicero himself looked to Athens to discover the principles of Rome's greatness. Cicero was an "academic skeptic," who, although he wrote both a "Republic" and a "Laws," came closer in many respects to Aristotle than to Plato.

Wills ends his Prologue, his apology for writing his book, with an appeal to the authority of Douglass Adair. He cites an essay by Adair published in 1946, in which Adair said, among other things, that

> An exact knowledge of Jefferson's ideas...is still lacking...We know relatively little about his ideas in the context of the total civilization of which he was a part...

This, Wills thinks, authorizes his flat rejection of the Lockeanism of orthodox scholarship. Certainly, Adair was himself something of a rebel against orthodox scholarship. He was also the author of what has often been referred to as the most influential unpublished dissertation of our time. Adair was restrained more by modesty and perfec-

tionism, than by fear of the orthodox. Adair—who died in 1968—was my colleague and my friend, and a copy of his 1943 dissertation is before me. It is entitled *The Intellectual Origins of Jeffersonian Democracy*. Its exceedingly bold hypothesis is: that the most important source of Jeffersonian ideas on the connection between virtue, freedom, agrarianism, and republicanism, was to be found in the Sixth Book of Aristotle's *Politics*. Adair's argument, although brilliantly set forth, is not altogether persuasive. But it adds plausibility to the notion of an Aristotelian influence on the Declaration—particularly since Jefferson mentions that influence himself. When the Declaration speaks of the people, instituting new government, such as "to them shall seem most likely to effect their Safety and Happiness," he is appealing to a tradition of more than two thousand years. For safety and happiness are the alpha and omega of political life, according to a tradition originating with Aristotle. Political life, Aristotle had written, originates in the desire for life, that is, for self-preservation. But it moves on a scale of dignity, from mere life, to the good life. And the name for the good life is happiness.

In his straining to credit everything Jeffersonian to Hutcheson, Wills makes much of the fact that Hutcheson coined the phrase, "the greatest happiness of the greatest number." He is sure that this is what caused Jefferson to write "pursuit of happiness" instead of "property" or "estate," in the famous enumeration. He tells us confidently that from the teachings of the Scottish school "public happiness" is "measurable" and "is, indeed, the test and justification of any government." That public happiness is the test and justification of any government is also the teaching of both the *Nicomachean Ethics* and of the *Politics*. Such public happiness would not, however, be measurable in any mathematical sense. Happiness, according to Aristotle, is the *summum bonum*. As such it cannot be counted *among* good things, since it represents the presence of *all* good things, in the proportions that make them beneficial to their possessor. For example, you cannot be made happier by becoming richer, if you already have all the wealth that you can use well. But where does Jefferson ever speak of measuring happiness, in the mathematical or geometrical manner that Wills imputes to Hutcheson? It bears repeating, that in sketching the literary sources of the Declaration—or, rather, of the American mind that the Declaration expressed—Jefferson names Aristotle first of all. Then, after naming Cicero, he mentions Locke. But the name of Francis Hutcheson, in connection with the Declaration of Independence, is never mentioned at all.

POSTSCRIPT

The two reviewers in question were M. J. Sobran, for *NR*, and Richard Brookhiser for the *American Spectator*. In a later article in *NR*, "Saving the Declaration," (December 22, 1978) Mr. Sobran wrote as follows.

> The Declaration is a republican document, based squarely on Locke's theory...Which brings me to a personally embarrassing point. In his recent book, *Inventing America*, Garry Wills persuaded me (*NR*, July 7), that the Declaration can be understood without reference to Locke. He denied, in fact, that there are any distinct echoes of Locke, either in the Declaration or in Jefferson's writings generally. But a careful reading of the *Second Treatise* makes overwhelmingly clear that Wills is wrong. In diction, terms, turns of phrase, structure, and of course destination, the resemblance is so close that it is hard to feel that the Declaration is anything but a sustained *allusion* to Locke. [Emphasis by Mr. Sobran.]

The reader will, of course, have perceived that in our opinion the Declaration is in fact much more than an allusion to Locke. Without that allusion, however, nothing of substance in the Declaration comes to sight. I am pleased to be able to record that Mr. Brookhiser has authorized me to declare his association with Mr. Sobran's revised judgment of *Inventing America*. This is a most hopeful sign, that for better reasons than mere success, the Right may become the Center of American politics.

Four Poems

Laurence Josephs

Elm Tree

My elm is dead. Its bark
Peels off in shrugs, aghast
Bendings. Though some birds
Still bud there like leaves,
They sing through its bones
Resentfully, and none will nest.

A fairground edge-of-town,
A wreck stripped for the next
Stop, it shows only absence
Down to the last pennant
Where before the summer sky
Gorgeously intervened.

Next spring will hear it
Shrieking in the chain-saw's
Mad embrace, as if
Gargantuan insects
Rubbed mutant wings, until,

Afire in the chimney
And released, all sickness
Burned away, its pale insubstant
Ghost against a pewter sky
Once more will branch
In air, blooming high over the house.

Late Winter Poem

For Frederick Caldwell II

Up early I catch a cold
World almost a part
Of the moon, as if
It had dropped from that
Somehow and hardened.

There has been some snow, I see,
Enough just to receive
The traced pawprints
Of small animals, to and from
The birdfeeder
Where they have mined
A first course of fallen
Seeds left by the birds.

Let me open the door! O let
Me open the window and lean out
Into this mask of silent air!
Has nothing really human
Happened here since last night
Before the snow began to come down?

In the road are tire-tracks:
Tracks of snow pushed aside
To look like sculptured waves—
The wake of someone rushing past my house
As I slept and dreamed.

Professor of English at Skidmore College, Laurence Josephs has published three collections of poems, *Cold Water Morning* (Skidmore College 1964), *The Skidmore Poems* (Skidmore College 1975) and *Six Elegies* (The Greenfield Review Press 1972).

The Porch
(Late August Afternoon)

The breeze is transparent
Ribbons coming untied between the trees.
Far back, tin-voiced
Hawks parade the air, not flying,
But afloat, cruciform, at leisure
Just lower than the cloud.

Somewhere closed in all this
I am lying—a book interrupted
By a forgotten bookmark
Beneath which the page is a slightly
Differing color: a pale
Stripe no one could ever have painted;
Almost a whisper of color, unnameable—

And I hear your voice, unrolling too,
Like the ribboned breeze:
You are saying that summers were always
Like this; always, always the same
As this: that there was even the same
Thunder waiting somewhere near the tall

Glasses of tea the ice had made
Weep through the tea-colored glass
And run down the sides like tears.

Unfinished Self-Portrait and Seascape

Seeing in the glass their life
Losing color—as you saw that last,
Sad summer—painters will make us
Their mirror. Now I am your mirror,
Father, today looking your sickness
Back into your eyes; knowing
Nothing to disguise it in paint or words.

On the easel where an unfinished
Seascape began to grow from canvas,
I see reflected the start
Of a world losing itself in your skill
That was not skillful enough.
Now it will never flow, that ocean,
Though in my eyes its sketchy tide
Stops, starts, subsides; changing
No course as we knew it could not
When you put aside the last brush.

Horizons show beginning
Is the end; endings begin.
And even God, I think, knew this
Ceding the sea nothing but depth
And that restlessness
From which life came crawling up
On a shore unwilling,
As it always is, to support life.

The World of Physics and The "Natural" World

Jacob Klein

I

It can scarcely be denied that at the present time physics and philosophy, two sciences of recognized durability, each handed down in a continuous tradition, are estranged from one another; they oppose one another more or less uncomprehendingly. By the nineteenth century a real and hence effective mutual understanding between philosophers and physicists concerning the methods, presuppositions, and the meaning of physical research had already become basically impossible; this remained true even when both parties, with great goodwill and great earnestness, tried to reach a clear understanding of these issues. When, in the second half of the last century, physicists themselves adopted certain basic philosophical positions, the Neo-Kantian or Machian, for instance, this scarcely affected their genuine scientific work. They did their work independently of any philosophical question; they conquered more and more territory and were not distracted from their course by difficulties appearing from time to time in the interpretation of the formal mathematical apparatus (as in the case of Maxwell's Theory) or in regard to the validity of ultimate physical principles (as in the case of the second law of thermodynamics).

In this respect the situation has now changed in an essential way. To be sure, mathematical physics, in conformity with the basic attitude it has never abandoned, is still content today with what can be established experimentally and can be given an exact mathematical formulation; it refuses to follow philosophy into the region of what is neither experimentally nor mathematically confirmable and hence is almost always controversial. Nonetheless, physics now sees itself faced by questions in its own fundamental work which have always been taken to fall within the domain of philosophy. In its own right physics raises questions about space and time, causality and substance, about the limits of possible knowledge and the epistemic sense of scientific statements and experimental results. Consequently, it now considers turning to "philosophy" as a reliable and valid court of appeal, if not for solutions to these questions, then at least for advice or for new points of view. The unsatisfactory relation between mathematical physics and philosophy has consequently become more acute than it usually was in the 19th century. The *particular* philosophical tendencies involved are a secondary matter. More importantly, it is clear that no agreement about the meaning of the most fundamental concepts which both physics and philosophy employ can be achieved, e.g., the meaning of the concepts "Space," "Time," "Causal Law," "Experience," "Intuition."

Sometimes it seems as if two languages were being spoken, languages that sound the same and yet are totally different. Physicists and philosophers assess this situation differently only insofar as the physicists are inclined—not always, certainly, but for the most part—to regard the language of philosophy as unscientific, while the philosophers —not always, to be sure, but frequently enough—suspect themselves of something like bad conscience in such debates, simply because they think they are incapable of getting to the bottom of the physical concepts amidst the formalistic thicket of differential equations, tensor calculus, or group-theory. This bad conscience is understandable. For, no matter how philosophy expresses itself philosophi-

Delivered as a lecture to the *Physikalische Institut* of the University of Marburg on February 3, 1932, this paper is the only completed work which one of Jacob Klein's literary executors, David R. Lachterman, found among his papers after his death in 1978. The first half, roughly, of the paper is in typescript, the second in manuscript with marginal additions, not always easily fitted into the text. The transcriber and translator, David R. Lachterman, has completed several elliptical references to texts.

cally, no matter what "standpoint" it might adopt, it cannot possibly pass by the problem of the *World*. And does not physics, most of all, have to do with the world around us? Don't the formulae of physics give an answer to the question of the "true world," however "truth" might here be understood? Even when philosophy believes it cannot accept the answer physics gives, even when it regards it as basically unsuccessful, it still has to reckon with it in some fashion, even if only to refute it. Above all philosophy must try to *understand* this answer. Even if philosophy concerns itself exclusively with things falling within that other hemisphere of science, the so-called "Geisteswissenschaften," it should never forget, even for an instant, that mathematical physics is at the foundation of our mental and spiritual life, that we see the world and *ourselves* in this world at first quite ingenuously as mathematical physics has taught us to see it, that the direction, the very manner of our questioning is fixed in advance by mathematical physics, and that even a critical attitude towards mathematical physics does not free us from its dominion. The idea of science intrinsic to mathematical physics determines the basic fact of our contemporary life, namely, our "scientific consciousness."

Mathematical physics and philosophy are nowadays split apart and at odds with one another; they depend on one another, even while time and again they are forced to acknowledge their mutual incomprehension. What is to be done in this situation? We must first of all try to find a common ground, a basis of shared questions, such that our questions are not in danger of missing their target from the start. Is there any common ground? Where should we try to find it? If we cannot glimpse it anywhere in the present, then we have to consider whether we can find it in the past.

Let us remember that there was an age that did not know this hard and fast division between philosophy and physics. Let us recall the title of Newton's work: *Philosophiae naturalis principia mathematica*. For Galileo the true philosophy coincides with the true science of the structure of this world. Likewise, Descrates' entire physics is contained in his *Principia philosophiae*. The *philosophia naturalis* of the seventeenth century is *scientia naturalis*, science pure and simple, the heir to the legacy of medieval and ancient science. The seventeenth century claimed that the foundations it gave to this *scientia* were identical with the foundations of *all* human knowing. Leibniz was the first to open a gap between physics and metaphysics, between the sciences of nature and of philosophy; however, Leibniz himself also exhibited their essential unity in an especially impressive way. In the middle of the eighteenth century the paths of the new science of nature and the new philosophy parted, even though their common origin could never be forgotten. Furthermore, the contemporary tense division just noted between physics and philosophy has its roots in precisely this *history* of the two disciplines, a history which leads them from an original unity to an increasing mutual estrangement.

Accordingly, we must try to gain purchase on that common ground by going back to the initial situation, the situation of science in the seventeenth century; from this we might *possibly* gain a measure of enlightenment concerning present-day difficulties, even if we simply come to understand the *nature* of these difficulties better. We should not forget that all of the basic concepts of contemporary science were given their now-authoritative stamp in the seventeenth century. This holds especially true of the basic concepts of physics, at least of "classical" physics, to speak in the idiom of modern-day physics. However great the changes modern-day physics is about to make, or has already made in its foundations, no one will deny that it stands squarely on the shoulders of classical physics and, thus, of seventeenth century physics.

Reflection on the historical foundations of physics is not an utterly wayward and irrelevant beginning, since physics itself, even in its most recent phase, has been forced again and again to look back to the past in order to recognize the limited character of many of its basic concepts. Thus, the designation "classical physics," used to refer to the physics of the seventeenth, eighteenth, and nineteenth centuries, arises from the debate between quantum mechanics and relativity-theory and the basic concepts of Galilean and Newtonian mechanics. In their own day, the debates between the mechanistic and the energistic conceptions within physics led to the historical investigations of Mach and Duhem. What we have to do, in my judgment, is make this turn to historical origins even more radical. Not only is this demanded by the issue itself, it is most intimately connected with the basic presuppositions of our knowledge of the world.

II

Let us begin by picturing the general situation of science in the seventeenth century: A *new* science, desirous above all of being a science of Nature and moreover a "natural" science, *opposed an already extant science*. The conceptual edifice of this new science was built up in continuous debate with the traditional and dominant science of the *Scholastics*. The new concepts were worked out and fortified in *combat* with the concepts of the old science. As has been emphasized time and again, the founders of this new science, men like Galileo, Stevin, Kepler, Descartes, were moved by an original impulse quite alien to the erudite science of the Scholastics. Their scientific interests were inspired by problems of practical mechanics and practical optics, by problems of architecture, machine construction, painting, and the newly-discovered art of optical instruments. An open and unprejudiced eye for the things of this world took the place of sterile book-learning.[1] However, it is no less true that the conceptual interpretation of these new insights was linked in every case with the old, traditional concepts. The claim to communicate true science, true knowledge, necessarily took

its bearings from the firmly-established edifice of traditional science. At all events, such a claim presupposes the fact of "science"; it also presupposes the most general foundations of the theoretical attitude which the Greeks displayed and bequeathed to later centuries. The battle between the new and the old science was fought on the ground and in the name of the *one, uniquely true* science. One or the other had to triumph; they could not subsist side by side. This explains the great bitterness of the battle which lived on in the memory of succeeding generations, a bitterness immediately evident even today in the difficulty we have when we try to distance ourselves from the interpretation the victors gave both of the battle and of the enemy they vanquished.

What especially characterizes this battle is not only the *common* goal marked out by those most general presuppositions, viz., the one, unique science, but, over and above this, a definite uniformity of the weapons with which the battle was fought. However different their viewpoints, however antithetical the contents designated by their concepts might be, the antagonists are very largely in accord as to the way in which these contents are to be interpreted, the way in which the concepts *intend* what is meant by them whenever they are employed, in short, the conceptual framework or intentionality [*Begrifflichkeit*] in which their antithetical opinions are expressed. This accord has all too often been overlooked. The only issue is: Which of them handled these weapons more suitably, which of them filled in the conceptuality common to both with contents genuinely in harmony with it? No doubt, the outcome gives the victory to the *new* science. When it mocks at the physics of the Scholastics, the physics of "substantial forms," the new science is striking primarily at the unquestioning attitude of the old science, the Scholasticism of the sixteenth and seventeenth centuries, an attitude which made this old science unable to detect the tension between the *contents* of its concepts and the *use* it made of these. Such an unquestioning understanding of oneself always exhibits a failure to comprehend one's own presuppositions and thus a failure really to grasp what one pretends to know. This is the danger to which science is always exposed; this is the danger to which Scholastic science in the sixteenth and seventeenth centuries succumbed as no other science had done before.

To penetrate to the foundations of the new science and, in this way, to the foundations of mathematical physics, we have to keep this general situation of science in the seventeenth century constantly in mind. It determines in the most basic way the horizon of this new science, as well as its methods, its general structure. It determines, above all, the intentionality of its concepts as such.

There is a long-standing controversy over how the experiential bases of physics fit together with its specific conceptuality. The very possibility of distinguishing "experimental" from "theoretical physics," a distinction which surely rests on nothing more than a didactic, or technical, division of labor, illustrates the problem. The reciprocity of experiment and theory, of observation and hypothesis, the relation of universal constants to the mathematical formalism—all of these issues point again and again to the two antithetical tendencies pervading modern physical science and giving it its characteristic stamp. This controversy, familiar to us from the nineteenth century, fundamentally concerns the preeminence of one or the other of these two tendencies. Nowadays, depending on the side one takes, one speaks of Empiricism or Apriorism; physicists themselves customarily side with the so-called empiricists and confuse apriorism with a kind of capriciously speculative philosophy. The good name of Kant has been made to bear the burden of furnishing ever-new fuel for this controversy. I am not going to take sides in this controversy. The controversy itself first grows from the soil of the new science and must be clarified by turning back to its origins in the seventeenth century. What is primarily at stake is an understanding of the *particular* intentionality, the *particular* character of the concepts with whose aid the mathematical physics which arose in the seventeenth century erected the new and immense theoretical structure of human experience over the next two centuries.

This intentionality is that of contemporary Scholasticism. The Scholastics believed that by using it they were faithfully administering the legacy of knowledge handed down to them by tradition. They believed that they were reproducing ancient doctrine, especially ancient cosmology, in exactly the same way as it was understood and taught by the Greeks, that is, by Aristotle. They identified their own concepts with those of the ancients. The new science, moreover, followed them in this matter. It, too, interpreted ancient cosmology along the lines of contemporary scholastic science. It was, however, certainly not content with this. Rather, it called upon the things themselves in order to rebuke the untenable doctrines of this Scholastic science, with its seemingly unquestioning certitude. In doing so, it exposed the incongruity between Scholastic intentionality and the contents the traditional concepts were intended to refer to. Furthermore, it went back to the sources of Greek science, neglected by Scholastic science; these sources, too, were interpreted in terms of the intentionality it shared with Scholastic science. And this interpretation of the legacy of ancient teachings, involving a characteristic modification of every ancient concept, is the basis of the whole concept-formation of the new science.

As a result, the special character of these new concepts can be brought to light in one of two ways. First, we can contrast the Scholastic science of the sixteenth and seventeenth centuries with genuine Aristotelianism. If we do so, a direct path leads from the lengthy and little-read compendia of Cremonini,[2] Francesco Piccolomini,[3] Buonamico,[4] Zabarella,[5] Toletus,[6] Benedictus Pereirus,[7] Alessandro Piccolomini,[8] etc., and, above all, of Suarez, as well as from the humanistically-influenced interpretation of Aristotle (e.g., in Faber Stapulensis and Petrus Ramus),

back to the Nominalism of fourteenth century. As Duhem has shown, initiatives leading to the modern science of Nature are present everywhere in fourteenth century Nominalism. Secondly, we can confront Aristotle himself as well as the other sources of Greek science, most importantly Plato, Democritus, Euclid, Archimedes, Apollonius, Pappus, and Diophantus, with the interpretation given them by Galileo, Kepler, Descartes, Fermat, Vieta, et al. In what follows I want to discuss only this second path, selecting just a few characteristic examples. Nonetheless, before I begin I must make a more general remark.

Since the pioneering works of Hultsch and Tannery on the history of ancient mathematics, the relation between ancient and modern mathematics has increasingly become the focus of historical investigation as well as the theme of reflection in the philosophy of history. Two general lines of interpretation can be distinguished here. One—the prevailing view—sees in the history of science a continuous forward progress interrupted, at most, by periods of stagnation. On this view, forward progress takes place with "logical necessity";[9] accordingly, writing the history of a mathematical theorem or of a physical principle basically means analyzing its logic.[10] The usual presentations, especially of the history of mathematics, picture a rectilinear course; all of its accidents and irregularities disappear behind the logical straightness of the whole path.

The second interpretation emphasizes that the different stages along this path are incomparable. For example, it sees in Greek mathematics a science totally distinct from modern mathematics. It denies that a continuous development from the one to the other took place at all. *Both* interpretations, however, start from the present-day condition of science. The first measures ancient by the standard of modern science and pursues the individual threads leading back from the valid theorems of contemporary science to the anticipatory steps taken towards them in antiquity. Time and again it sees contemporary science in ancient science; it seeks in ancient science only the seeds of now-mature fruits. The second interpretation strives to bring into relief, not what is common, but what divides ancient and modern science. It, too, however, interprets the otherness of ancient mathematics, for example, in terms of the results of contemporary science. Consequently, it recognizes only a counter-image of itself in ancient science, a counter-image which still stands on its own conceptual level.

Both interpretations fail to do justice to the true state of the case. There can be no doubt that the science of the seventeenth century represents a direct continuation of ancient science. On the other hand, neither can we deny their differences, differences not only in maturity, but, *above all*, in their basic initiatives, in their whole disposition (*habitus*). The difficulty is precisely to avoid interpreting their differences and their affinity one-sidedly in terms of the new science. The new science itself did exactly that, in order to prove that its own procedure was the only correct one. The contemporary tendency to substitute admiration or tolerance of ancient cosmology for condemnation contributes little to our understanding of that cosmology. The issues at stake cannot be divorced from the specific conceptual framework within which they are interpreted. Conversely, these issues cannot even be seen within a conceptual framework unsuited to them; at best, they can only be imperfectly described. The best example comes from modern physics itself: the discussion of modern physical theories is ensnared in great difficulties when physicists and non-physicists alike try to ignore the mathematical apparatus of physics and present the results of research in a "commonsense" manner!

We need to approach ancient science on a basis appropriate to it, a basis provided by that science itself. Only on this basis can we measure the transformation ancient science underwent in the seventeenth century. A transformation unique and unparalleled in the history of man! Our modern "scientific consciousness" first arose as a result of this transformation. This modern consciousness is to be understood not simply as a linear continuation of ancient ἐπιστήμη, but as the result of a fundamental conceptual shift which took place in the modern era, a shift we can nowadays scarcely grasp.

I want to try to grasp the nature of this conceptual shift more precisely, that is, to determine more precisely the character of the new concepts in contrast with the old.

III

The unambiguous and explicit preference for quantitative over qualitative determinations in the new science sets it distinctively apart from the old. There cannot be any difference of opinion on this point. How often have those lines from Galileo's *Il Saggiatore* (1623) been cited, that pilosophy is written in mathematical language in the great open book of the Universe! To be able to read it one has first to understand this language, one has to know the script, the letters in which it is written. These letters are "triangles, circles, and other geometrical Figures"; without their aid we cannot understand even a single word of that language.[11] In the second chapter of Kepler's *Mysterium cosmographicum* this idea finds its most pointed formulation:

> God wanted quantity to make its appearance in reality before anything else, so that the relation between the curved and the straight might exist (*Quantitatem Deus . . . ante omnia existere voluit, ut esset curvi ad rectum comparatio.*) Hence, He first selected the curved and the straight in order to spread a reflection of the splendor of the divine creator over the world (*ad adumbrandam in mundo divinitatem Conditoris*); for this purpose the 'quantities' were necessary, namely, figure (*figura*), number (*numerus*) and extension (*amplitudo* or *extensio*). For this reason He created the *body* which embraces all these determinations.[12]

These words point immediately back to Nicholas of Cusa, whom Kepler explicitly mentions, and anticipate Descartes' later theory. However, they are also directly connected with the whole Platonic-Pythagorean and Neo-Platonic tradition and, above all, with Plato's own *Timaeus*. This tradition had always remained alive. For example, in Roger Bacon's *Opus Maius* (1266–68) we can find statements such as these: "Mathematics is the gateway and key to all other sciences." "Anyone who does not know it cannot understand either the other sciences or the things of this world" (*Qui ignorat eam, non potest scire caeteras scientias nec res huius mundi.*) "Logic, too, depends on mathematics. Nothing of great significance in the other sciences can be understood without mathematics." (*Nihil in eis potest sciri magnificum sine mathematica.*)[13] What distinguishes Kepler's and Galileo's words from such statements in the earlier Platonic tradition? There clearly must be a distinction here, one that shows itself in the quite different influence, that is, the entirely different role played by mathematics in ancient and modern science. Is the distinction merely that Kepler and Galileo spoke from a first-hand, living experience of things, while the earlier authors were attached only to traditional texts? Or, did the two traditions understand something different by "quantity," by "mathematical science?"

To answer this question, I have chosen examples relevant to the foundation of analytical geometry and algebra. Both analytical geometry and algebra stand in the closest relation to one another from the outset, although algebra asserted its primacy within this relation. Both belong to the foundations of mathematical physics. Vieta took the decisive step in the realm of algebra, basing himself both indirectly and immediately on Diophantus. Fermat and Descartes, who, as is well-known, count as the founders of analytical geometry, rely directly on Diophantus and Apollonius, as well as on Pappus. In both cases, then, we can confront the old and the new concepts by paying attention to the way Diophantus and Apollonius were received and construed. In both cases, what is at issue is nothing less than the creation of a formal mathematical language, without which mathematical physics is inconceivable. I shall begin by considering Apollonius' relation to Fermat and Descartes.

IV

A. Two works by Apollonius particularly captured the interest of sixteenth and seventeenth century mathematicians: (1) the first four books of his *Treatise on Conic Sections*, available in the original Greek since the fifteenth century and since 1566 in the first usable Latin translation made by Fredericus Commandinus; (2) his "Plane Loci" in two books. Only fragments of the latter are preserved in the *Mathematical Collection* of Pappus, the Latin translation of which—also by Commandinus—appeared in 1588. These works—along with those of Diophantus, Archimedes, and Euclid—are among the basic books of seventeenth century mathematical science. Fermat, for example, undertook to reconstruct the "Plane Loci" on the basis of the fragments in Pappus and in the light of the *Conic Sections*. In an introduction added later, the *Isagoge ad locos planos et solidos*, and an appendix, Fermat sketched the basic features of analytical geometry. Among other things, he shows that every equation of the first and second degree in two unknowns can be coordinated with a plane geometrical locus, that is, a straight-line or a curve, if one represents the two unknowns as (orthogonal) coordinates, as we would say today. Among the infinitely many possible curves of this kind are the circle, the parabola, the ellipse, and the hyperbola, that is, the conic sections Apollonius treats in his major work. Independently of Fermat, Descartes, by solving a locus-problem posed by Pappus which goes back to Apollonius, arrived at the definitive conception of this procedure now familiar to us from analytical geometry. In doing so, Descartes took up again a line of thought that had occupied him in his youth. Nonetheless, since the studies of Moritz Cantor, Fermat has rightly been considered the genuine founder of analytical geometry, since his *Isagoge* had certainly already been written when Descartes' *Géométrie* appeared (1637). Strikingly, neither Fermat nor Descartes unleashed one of those struggles over priority so common in the seventeenth century. Fermat made Descartes acquainted with his own works in analytical geometry after the *Géométrie* had appeared; nonetheless, neither of them placed any value on claiming priority for himself. This is all the more astonishing since they did embroil the entire Republic of Letters in the most unpleasant disputes over much flimsier points, as Gaston Milhaud has emphasized.[14] The only explanation must be that neither Descartes nor Fermat believed he had advanced beyond Apollonius on any essential points. What we take to be the enormous achievement of Descartes and Fermat they themselves believed they had learned in essence from Apollonius or Pappus. Fermat finds fault with Apollonius only because he did not present matters "generally enough" (*non satis generaliter*).[15] He says very cautiously that his general procedure for constructing geometrical loci "was *perhaps* not known to Apollonius" (*ab Apollonio fortasse ignorabatur*).[16] And Descartes is quite convinced that the Ancients—he expressly names Pappus along with Diophantus—deliberately erased the traces of their true knowledge out of a kind of perverted cunning (*perniciosa quadam astutia*) and divulged to us, not their own art, but only a few of their results.[17] I want to examine this matter more closely.

When Apollonius considers a conic-section, e.g., the ellipse in Book I, Theorem 13 of the *Treatise on Conic Sections*,[18] he begins by passing a plane through the axis of a cone and then lets the cone be intersected by another plane in such a way that the desired figure, an ellipse in this case, emerges on the surface of the cone; the line of intersection of these two planes forms the diameter of the ellipse (see Fig. 1).

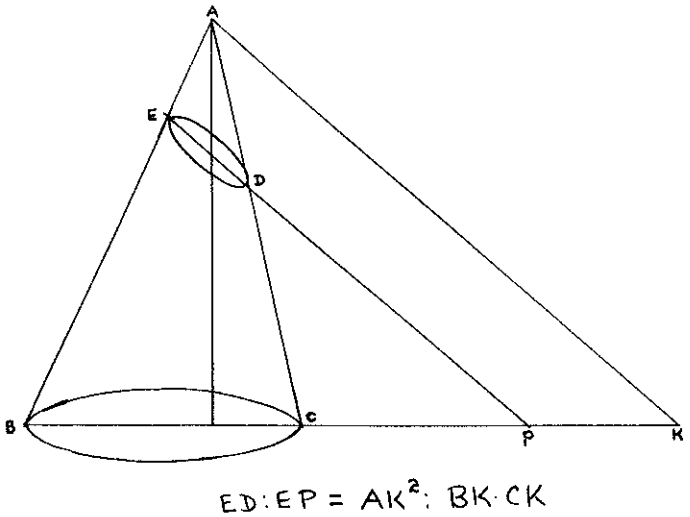


Figure 1

An auxiliary line is drawn from the vertex A which meets the plane of the base of the cone at point K; AK is parallel to the diameter ED. From an arbitrary point F on the ellipse a straight line FM is drawn to the diameter in a determinate manner, namely, in such a way that the chord FF' is bisected by point M. Consequently, FF' becomes—as we say today—a conjugate chord to the diameter ED. (Compare Figure 2.)

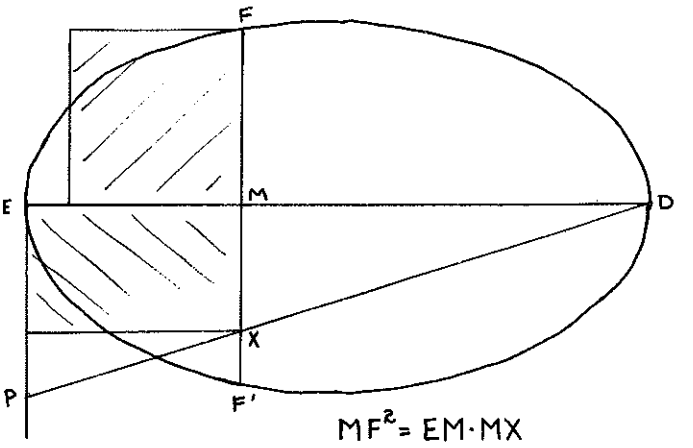


Figure 2

It is then *proved* that the square on FM equals the rectangle made up of EM and a segment MX (in modern notation: $FM^2 = EM \cdot MX$), where the segment MX is defined as follows: on a perpendicular line dropped to E the segment EP is drawn, which stands in the same ratio to the diameter ED as the rectangle BK, CK to the square on AK (in modern notation: $EP:ED = BK \cdot CK:AK^2$). (Compare Fig. 1). The straight-line EP corresponds to what today we call the parameter of the ellipse and in Apollonius is called *ὀρθία*, because it is perpendicular to the diameter and hence is "straight.") If, now, a perpendicular to ED is drawn at M, and P is connected with D, then the segment PD cuts the perpendicular from M at point X, which determines segment MX. The segments EM and FM thus stand in a ratio that can be exactly determined geometrically and this holds true of any point F on the ellipse. In other words, this ratio is characteristic of the entire ellipse and, consequently, of *any* ellipse as such. Apollonius calls the segments EM and FM, respectively, *ἡ ἀποτεμνομένη* (the line "cut off" by the diameter of the chord) and *ἡ τεταγμένως κατηγμένη (ἐπὶ τὴν διάμετρον)* the line "drawn down" to the diameter in a determinate way (that is, not in an arbitrary, but in an "ordered" way)—in Latin translation, *abscissa* and *ordinatim applicata*, or for short, *ordinata*.[19] Apollonius uses these segments, the "abscissa" and the "ordinate," in every individual case, in order to define the general properties, the basic "planimetric properties," characteristic of different conic-sections.

What distinguishes these segments from our "co-ordinates" employed for the first time by Fermat and Descartes? First of all, the axes to which they are referred, viz., in the present instance, the diameter ED and the tangent to the conic at E, "do not constitute a system of lines on their own, but like other auxiliary geometrical lines make their appearance only in connection with the conic section; they are brought into existence by the theorem to be proved in each instance."[20] This procedure, which for the Greeks themselves belonged to "Analysis," has been called "geometrical algebra." This expression, first used by Zeuthen[21] and now widely current, is quite felicitous insofar as it hints at both the affinity as well as the difference between the Greek and the modern procedure. The term, however, does not indicate that the procedure can only be carried out on *different* conceptual levels in these two different cases. In each case Apollonius has in view the *particular* ellipse, which is cut out on the surface of a *particular* cone by two *particular* intersecting lines. The representation in the drawing gives a true *'image'* [*Abbild*] of *this* cone, *these* intersecting lines and *this* ellipse. There are infinitely many possible cones, sections, and ellipses. The procedure specified is applicable to all of them—its generality consists in this—but to this *generality of procedure* there does *not* correspond the generality of the object. There is no "general object" for the drawing ing to represent in a merely symbolic way [*symbolisch*]. There are infinitely many possible, more or less good, images of the one ellipse represented here. And there are, in turn, infinitely many such ellipses which can be exhibited or "imaged." The characteristic of the *μαθημάτικα*, mathematical objects in the Greek sense, is precisely that they can be grasped by the senses only in images, while they themselves, in their unalterable constitution, are accessible only to the discursive intellect; however, there are infinitely many of these objects.[22] What the phrase "there are" is supposed to mean here, how the mode of being of

mathematical objects is to be understood, is one of the great disputes in Greek philosophy. No one disputes, however, that mathematical science as such has to do with these "pure" figures or formations [*Gebilde*] whose nature is accessible to the intellect alone. The lines drawn in any particular diagram and their ratios belong to this "pure" ellipse which is exhibited by them. To be sure, in the case of every individual ellipse—thanks to the generality of the procedure—such "abscissas" and "ordinates" can always be singled out, but each time line-segments belonging to the particular ellipse in question are intended. This is not due to the imperfection of Greek mathematics, its defective means of presentation, or its inadequate capacity for generalization, but is rather entailed by the specific intentionality of Greek science. Its concepts in each instance intend the individual objects themselves; they are—to speak in Scholastic language—*intentiones primae* ["first intentions"]—that is, concepts which refer immediately to individual objects. This is in harmony with the means of presentation which Greek science employs. The lines drawn in the figure exhibit the object, they "image" it. Consequently, the mode of presentation of Greek mathematics—with a single exception which we shall come to later—is never merely representative [*stellvertretend*], never symbolic, but is always the presentation of an image [*abbildlich*], and in this way first-intentional. For this reason, the designation "geometrical algebra," which perhaps takes its bearings too much from the exceptional case we shall discuss later, does not really do justice to the facts of the case.

In contrast to analysis in our own sense, Greek analysis does not merely have a different style of presentation, but embodies a fundamentally different relation between the style of presentation and *what is presented.* What, in fact, do the lines which Descartes and Fermat employ as abscissas and ordinates signify? What do the curves which they draw mean? In the second part of his *Discourse on Method,* Descartes gives us exhaustive information on this point.[23] In these curves he intends to exhibit only relations or proportions (*nihil aliud quam relationes sive proportiones*)[24] and to do so in the greatest possible generality (*et quidem maxime generaliter sumptas*).[25] The exhibition of these relations in line-segments is only the *simplest and clearest illustration* for the senses and the imagination, so long as it is a matter of a *single* relation. In order to survey many such relations together and to be able to keep them conveniently in memory, they have to be simultaneously *represented [representiert]* by appropriate signs of ciphers, namely, by letters. Illustration by lines and representation by letters are thus merely two modes of the very same symbolic style of presentation. Lines and letters both are here simply the most suitable *bearers* of the *general* relations and proportions being considered; they are merely "les sujets qui serviraient à m'en rendre la connaissance plus aisée."[26] The ellipse inscribed within coordinate-axes (as we employ them today, using the method worked out by Descartes and Fermat) (Fig. 3)

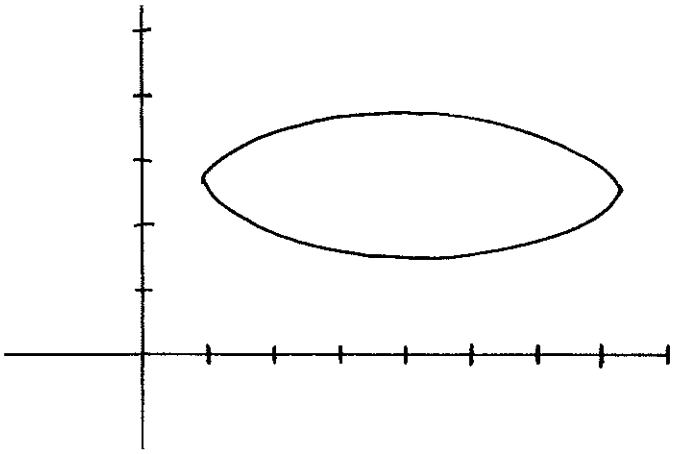


Figure 3

is thus no longer an image of the "pure" ellipse, the Ellipse-Itself. The coordinate-axes drawn are no longer images of a pair of straight lines applicable to the "pure" ellipse, but merely symbolize the generally possible use of such a pair. The abscissa and the ordinate of a point when actually *drawn* no longer exhibit particular line-segments in the manner of images, but "illustrate" the *general procedure* of Apollonius; in other words they stand immediately only for the general concepts of "abscissa" and "ordinate" resulting from that procedure and not for the line-segments directly intended by these concepts in each individual instance. Accordingly, the modern *concepts* of "abscissa" and "ordinate" are *intentiones secundae* ["second intentions"], concepts which refer directly to other concepts, to *intentiones primae,* and only indirectly to objects. In the language of mathematics this means: They are concepts of the "Variable n." For this reason the abscissa and ordinate axes can be detached from the realm of objects. All the curves investigated with their help are from now on nothing but symbolic exhibitions of various possible relations, or of the different "functional" relations, between two (or more) variables.

All this, however, is only one side of the matter (the side emphasized principally by the Neo-Kantians and viewed by them as the only essential aspect). It is no less essential that these *symbolic* curves were *understood* as the images of the curves exhibited by the Ancients. For example, the ellipse inscribed within coordinate-axes was regarded as the very same ellipse treated by Apollonius. Precisely this assumption led Fermat and Descartes to believe that they were not proceeding any differently than Apollonius had. Although, in fact, there has been a shift in conceptual-levels, Fermat thinks that he has simply interpreted many of Apollonius' theorems more generally (*generalius*),[27] that his procedure merely opened up a "general path" to the construction of geometrical loci (*generalis ad locos via*)[28] in exactly the sense in which Apollonius says that Book One of his *Conic Sections* treats things more generally or uni-

versally (*καθόλου μᾶλλον*)[29] than his predecessors had done. (And not even this is certain for Fermat, if we reflect on his word *fortasse* ["perhaps"].) What Fermat and Descartes call "generalization" is in reality a complex conceptual process ascending from *intentio prima* to *intentio secunda* while, *at the same time*, identifying these. Only in this way can we understand what Descartes means when he characterizes his analytical procedure as a unification of the geometrical analysis of the Ancients with algebra. This unification is brought about through a symbolic interpretation and exhibiton of geometrical forms, on the one hand, and of arithmetical ratios, on the other. Both kinds of "quantities" are viewed together with regard to their common, "general" quantitative character and exhibited in this generality. Consequently, the modern analytical procedure has to do immediately only with "general quantities." However, these "general quantities," on the whole, can only be sensibly exhibited because their generality at the same time is understood as variability, that is, because these magnitudes are thought of from the start as "alterable." (And, indeed, this holds true as much of the magnitudes posited as 'constant' as it does of genuine variables.) The "being" of "general magnitudes" consists here only in their peculiar ability to take on all, or all admissible, values one after the other. This is exactly what gives all of them the capacity to replace *particular line-segments* or *particular numerical values*. Their symbolic exhibition corresponds to what Kant understands by a *schema*. Kant says:

> This representation of a universal procedure of imagination in providing an image for a concept [i.e., assigning to a first intention the image belonging to it], I entitle the schema of this concept.[30]

The schema can be directly transformed into an image [*Abbild*], if the segments and ratios of segments, of which it consists, assume numerically determinate lengths and values. The possibility of identifying *prima* and *secunda intentio* is, therefore, based on this, that the schema is ordinarily understood as a schema already transformed into an image. Schematic imageability [*Abbildlichkeit*] is thus the element which allows us to illustrate the generalization of *Arithmetic* into Algebra, or, in other words, to "unite" geometry and algebra.

Only in this way can we come to understand that Descartes' concept of *extensio* identifies the extendedness of extension with extension itself. Our present-day concept of space can be traced directly back to this. Present-day Mathematics and Physics designate as "Euclidean Space" the domain of symbolic exhibition by means of line-segments, a domain which is defined by a coordinate system, a relational system [*Bezugssystem*], as we say nowadays. "Euclidean Space" is by no means the domain of the figures and structures studied by Euclid and the rest of Greek mathematics. It is rather only the symbolic illustration of the *general character of the extendedness* of those structures. Once this symbolic domain is identified with corporeal extension itself, it enters into Newtonian physics as "absolute space." At the present time it is being criticized by Relativity Theory, which has been steered by the question of "Invariance" into trying to break through these symbolic bounds, while continuing to use this very symbolism.

B. The founding of analytical geometry by Descartes and Fermat is also conditioned by the immediately preceding development of algebra and the language of algebraic formulae. Vieta, as I have said, provided the decisive impetus here. I want to consider now, as a further example of this conceptual shift, Vieta's relation to traditional algebra.

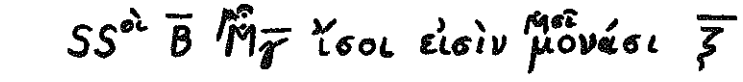
The science of algebra, in the form in which Vieta encountered it in the sixteenth century, namely, in the form of a doctrine of equations, was received in the West from the thirteenth century on as an Arabic science. This Arabic science was, in all probability, nourished essentially by *two* Ancient sources. We can identify one of these straightaway, viz., the *Arithmetic* of Diophantus; the other can only be indirectly inferred. (Tannery believed that he could recognize it in a lost work by a contemporary of Diophantus, sc., Anatolius.) In any case, Diophantus is by far the most important source, as the very name "Algebra" indicates: the word "Algebra" (a '*nomen barbaricum*,' as Descartes says) is in Arabic nothing more than the first half of a formulaic expression for the basic rule for solving equations that Diophantus sets out at the beginning of Book I of his *Arithmetica*.[31]

The doctrine of equations had made great progress in the West, before people began, in the second half of the sixteenth century, to take up Diophantus' work itself. Modern algebra and modern formalism grew out of Vieta's direct occupation with Diophantus; later writers merely elaborated and refined his work. Here, then, in Vieta's reception of Diophantus, we encounter one of those nodal-points of development, a point where the new science arose from the confrontation of two distinct conceptual planes.

The surviving six books of Diophantus' *Arithmetic** teach how to solve problems of reckoning which today are familiar to us as determinate and indeterminate equations of the 1st and 2nd degree. Diophantus, in giving these solutions, uses, in addition to other signs, a series of abbreviations for the unknowns and their powers. In *every* case it is only a matter of a simple abbreviation; this is above all the case with the sign for the unknown, which is nothing other than an abbreviation of the word *ἀριθμός*. Heath has conclusively explained this point. Diophantus' "epochal

*[Readers of the *Review* may be interested to know that the "lost" books of Diophantus' *Arithmetica* have now been discovered in an Arabic translation. See J. Sesiano, *The Arabic Text of Books IV to VII of Diophantus' Ἀριθμητικά . . . edited, with translation and commentary* (Ph.D. Diss., Brown Univ. 1975).]

invention" (to use Hultsch's phrase)[32] consists in his having introduced this sign into the logistical procedure of solution, that is, he *reckons* or calculates with the unknown. Apart from the unknown or unknowns and their powers he admits only formations that correspond to rational numbers, i.e., to integers and fractions. In modern terminology, only numerical coefficients appear. What does an equation look like in Diophantus? Let us look at a very simple example which I shall write in its simplest form:



That is, *ἀριθμοὶ δύο μονάδες τρεῖς ἴσος εἰσὶν μονάσι ἑπτά*. Or, in English, "Two numbers [*ἀριθμοί*] and three units are equal to seven units." The sign ς is a ligature for *ἀριθμός*; the sign Μ (or μ^{o}) is an abbreviation for *μονάς* or *μονάδες* (the plural is also written μ^{σ}). The corresponding equation in Vieta, which for the sake of simplicity I shall write in modern form, since this does not basically deviate from his, is: $2x+3=7$. Is this merely a technically more convenient form of writing? Do the two equations say entirely the same thing, if we disregard the mode of writing? To answer this question we have to look a little more closely at the Greek manner of writing. (It is of no importance here whether Diophantus wrote in exactly this way; the extant manuscripts reproduce what is essential.) What is particularly surprising is the addition of the sign for *μονάδες*. Scholars have tried to explain this as intended to discriminate with sufficient clarity the numerical signs which specify the number [*Anzahl*] of *ἀριθμοί*, i.e., the number of the unknowns (thus, in our case, the sign $\overline{\beta}$), from the signs for the purely numerical magnitudes (in our case the sign $\overline{\gamma}$). If the sign Μ did not stand between $\overline{\beta}$ and $\overline{\gamma}$, then the expression could be read: 2 *ἀριθμοί* and 3 *ἀριθμοί* together make 7. Regardless of the fact that in a great many instances confusion is not possible at all, this interpretation fails to recognize the fundamental importance of the monad, or the monads, for Greek arithmetic. Hence, it also misjudges the Greek concept of *ἀριθμοί*, the Greek "number-" concept in general. *Ἀριθμός* does not mean "*Zahl*," [number in general] but "*Anzahl*," viz., a definite number of definite things: *πᾶς ἀριθμός τινός ἐστι*. ("Every number is a number of something."[33]) In daily life we frequently have to do with numbers of visible and tangible objects, each of which is in each case just *one*. However, the very possibility of counting, where we utter the same words again and again, viz., "two," "three," "four," etc., while referring to different things at different times, points to objects of a quite different sort, namely, to incorporeal, "pure," ones, to "pure" monads. The Greek science of arithmetic is occupied with *these* monads. For this reason the well-known definition of *ἀριθμός* in Euclid runs as follows: *το ἐκ μονάδων συγκείμενον πλῆθος* (Euclid 7, Def. 2), "a multitude composed of monads, of unities." What it means that there *are* such monads, the question of the mode of being of these pure monads, is the great issue in Greek philosophy, as I have already mentioned. Indeed, the case of the monad is one of the ultimate issues which divide Plato from Aristotle. It is *not* a matter of controversy, however, that only these pure monads *as such* can be the object of scientific arithmetic. According as one interprets the mode of being of these pure monads there can or cannot exist a scientific doctrine of reckoning, a logistic, alongside arithmetic, the doctrine of pure numbers and pure numerical relations. Diophantine arithmetic is in this sense a *scientific logistic* and stands to arithmetic in much the way the metrics of Heron of Alexandria stand to theoretical geometry.[34] It focuses upon the field of pure monads. Every single number which it treats is a number of such monads. Its mode of writing is accommodated to this fact. Even the unknown, the *ἀριθμός* which has to be reckoned, is a definite number of monads, although still unknown at first and "indeterminate" in this sense alone. All the signs used by this logistic refer immediately to the enumerated objects in question here.

How does the *new* science interpret this situation? In his work "In artem analyticen Isagoge" published in 1591 Vieta introduces the fundamental distinction between a "logistica numerosa" and a "logistica speciosa." The former is a doctrine of numerical equations; the second replaces numerical values with general "symbols," as Vieta himself says, that is, with letters. (We can, in this context, disregard the fact that Vieta, in accordance with his "Law of Homogeneity," has these symbols apparently refer to geometrical formations.) *Logistica speciosa* gives Vieta the capacity, not only of *writing* an expression such as $ax+b=c$ (in a much more detailed form, with which we are not concerned here)—initiatives in this direction can be found prior to Vieta—but also of calculating with this expression. With this step, he becomes the first creator of the *algebraic formula*.

How are we to understand this step from $2x$ to ax, from the numerical coefficient (the term "coefficient" stems from Vieta himself) to the literal coefficient? Could Diophantus have taken basically the same step? The answer to this depends directly on how we interpret the numerical sign "2." For Vieta the replacement of "2" by "a" is possible because the concept of "two" no longer refers, as it did for Diophantus, directly to an object, viz., to two pure monads, but in itself already has a "more general" character. "Two" no longer means in Vieta "two definite things," but the general *concept* of twoness in general. In other words, in Vieta the concept of two has the character of an *intentio secunda*. It no longer means or intends a determinate number of things, but the general number-character of this one number, while the symbol "a" represents the general numerical character of each and every number. In this sense the sign "a" represents "more" than the sign "2." The symbolic relation between the sign and what it designates is, however, the *same* in both cases. The replacement of "2" by "a" is in fact only "logically required here." However, in this case as well, this "2" is identified

with the sign employed by Diophantus—and *this* is the decisive thing. The concept of twoness is at the same time understood as referring to two entities. (Modern *set theory* first tries to separate these two constituents, to clarify what "at the same time" means.) In any case, Vieta, as the result of this identification, understands Diophantus' logistic as a *logistica numerosa* which "logically" presupposes the "more general" *logistica speciosa*. Thus, Vieta says in paragraph 14 of his *Isagoge* that Diophantus practiced the art of solving equations most cleverly. He continues: "*Eam vero tanquam per numeros, non etiam per species, quibus tamen usus est, institutam exhibuit.*" ("However, he exhibited it [this art] as if it were based on numbers and not also on *species* [that is, the literal-signs,] although he nonetheless made use of these species.")[35] Diophantus kept silent about the latter, in Vieta's opinion, only so as to make his acuity and his skill shine more brightly, since the numerical solution-procedure is indeed much more difficult than the convenient literal-reckoning. The relation between Fermat and Apollonius finds its exact counterpart here: Vieta sees in literal-reckoning only a more convenient, because more general, path to the solution of the problems posed. He can do this because he interprets the numbers with which Diophantus dealt from a higher conceptual level, because, in other words, he identifies the *concept* of number with the number itself, in short he understands *Anzahl* [counting-number] as *Zahl* [number in general]. Our contemporary concept of number [*Zahlbegriff*] has its roots in this interpretation of the Ancient ἀριθμός.

We can now understand how important it is that Bachet, who in 1621 (hence, after Vieta) published the first usable edition and Latin translation of Diophantus, abandons the current rendering of the sign for the μονάς. "Who," he says, "does not immediately think of six units when he hears the number 6 named?" ("*Ecquis enim cum audit numerum sex non statim cogitat sex unitates?*") "Why is it also necessary to say 'six units,' when it is enough to say 'six'?" ("*Quid ergo necesse est sex unitates dicere, cum sufficiat dicere, sex?*")[36] This discrepancy—felt to be self-evident—between *cogitare* (thinking) and *dicere* (saying and also writing) expresses the general shift in the meaning of the concept from *intentio prima* to *intentio secunda*, together with their simultaneous identification. Consequently, there is no longer anything to prevent Vieta's *logistica speciosa* from becoming a part of geometrical analysis; this is exactly what Fermat and Descartes explicitly did. The unification of these two disciplines is basically complete in Vieta's *ars analytica*. Modern analysis is, therefore, not a direct combination of Ancient geometrical analysis with the Ancient theory of equations, but the unification of both on the basis of a transformed intentionality. The same shift in meaning can be established in a whole series of concepts. For instance, the mathematical term δύναμις, 'power' in ancient mathematics, means only the *square* of a magnitude, while we speak as well of the third, the fourth power, etc. We do not encounter this relation in the mathematical domain alone. It also holds between the modern concept of 'method' and the Greek term μέθοδος, between our 'theory' and Greek θεωρία. In two cases, those of *substance* and *causality*, this shift in meaning was of the greatest importance for the construction of the new science. I cannot discuss these now. I want simply to remark that the relation here is more complicated, inasmuch as these concepts—like all concepts belonging to πρώτη φιλοσοφία, the Ancient ontological fundamental-science—themselves already have the character of *intentiones secundae*; this is why the new science considered itself the sole legitimate heir of ancient philosophy, why, in other words, mathematical physics can in a certain sense replace ancient ontology for us. I want now, by way of conclusion, to turn to the exception I mentioned earlier and thereby compare one of the bases of ancient cosmology with the fundaments of the modern study of nature.

C. I said that what is peculiar to the conceptual intention of ancient science—and especially of Greek mathematics—is that its concepts refer *immediately* to definite objects. This obviously does not hold true of the 5th book of Euclid's *Elements* which goes back to Plato's friend Eudoxus. This book contains the so-called *general theory of proportions*, that is, it treats ratios and proportions of μεγέθη, magnitudes in general. Accordingly, it does not treat the ratios of particular magnitudes, geometrical forms for instance, or numbers or bodily masses or time-segments, but ratios "in themselves," the wholly undetermined bearers of which are *symbolized [symbolisch . . . versinnbildlicht]* by straight lines. The fifth book of Euclid, in fact, contains a "geometrical algebra." The exceptional character of this branch of Greek mathematics brings it into immediate proximity to Greek ontology. It is not surprising, therefore, that it had an exemplary, although diverse, significance for both Plato and Aristotle.

This καθόλου πραγματεία,[37] this *scientia generalis* or *universalis*, took on an even *greater* importance for the new science, if that is possible. A direct path leads from the fifth Book of Euclid and the late Platonic dialogues, through the preface of Proclus' Commentary on Book One of Euclid, and the Latin translation of that work by Barozzi in 1560, to Kepler's astronomical researches, to Descartes' and Wallis' *mathesis universalis*, to Leibniz's universal characteristic and *finally* to modern symbolic logics, on the one hand, and, on the other, to Galileo's mechanical investigations and to the conception of natural laws in general. (The latter connection has not been sufficiently emphasized up to now.) The close relation between the general theory of proportions and the new science is established from the start by their kindred conceptual basis.

What is important, however, is the very different ways in which ancient cosmology and seventeenth century physics made use of the concept of proportion. I want to

try to define this difference by using the example of seventeenth century interpretations of Plato's *Timaeus*. In that dialogue, the mathematician, the "Pythagorean" Timaeus, gives a genetic presentation of the construction of the world. (In this context, and only in this, can we disregard the fact that this presentation does not claim to be a valid ἐπιστήμη, a true science, but claims only to give an εἰκὼς μῦθος, an image approximating the truth as closely as possible.)[38] A chaotic state of the world-matter precedes the origin of the world: Fire, Air, Water, and Earth are in disharmonious and disordered motion, they pass freely into one another, they are at first nothing but πλημμελῶς καὶ ἀτάκτως κινούμενα.[39] The divine demiurge brings them from this condition of dis-order into the condition of order, of τάξις: εἰς τάξιν . . . ἤγαγεν ἐκ τῆς ἀταξιάς.[40] How does he bring about this condition of order? By producing a self-maintaining equilibrium among the world-materials, so that their restless passage into one another yields to well-balanced rest, turns into ἡσχία. Ἀναλογία, proportion, is best suited for this purpose, in the first place, because it knits together a firm connection, a firm bond, a δεσμός,[41] among the world-materials, a bond which proves to be unbreakable throughout almost all internal changes in these materials, that is, throughout the overwhelming majority of possible permutations of the elements within this proportion; secondly, because the proportion is a bond which, among all possible bonds, is itself most of all bound to what it binds together, that is, it binds itself most intimately with what is bound together so as to form a unitary whole: αὐτόν τε καὶ τὰ ξυνδούμενα ὅτι μάλιστα ἓν ποιῇ.[42] Proportion has both of these features by virtue of its incorporeality. Thus, its incorporeality, by virtue of which it institutes wholeness and brings about order, makes it akin to what we call "soul," ψυχή. Indeed, it is difficult to say whether the *Timaeus* allows us to draw any distinction at all between ψυχή and ἀναλογία. All of the world-materials together from now on form a structured whole, because their quantity, the size of their respective bulk (cf. ἀριθμῶν ὄγκων-31c), remains in a fixed ratio throughout all changes or at least comes very close to this fixed ratio: as Fire is to Air, so Air to Water, and as Air is to Water, so Water to Earth. Just as a single, living, "besouled" organism maintains itself as a whole throughout the constant changes of its bodily materials, so, too, the entire visible world maintains itself, thanks to this proportion among its materials, as this one, perfect whole (ἓν ὅλον τέλεον).[43] And that means: as this *living* whole. It is only through this proportion that a "world" arises at all, that is, an ordered condition of the world-materials, which we call a cosmos. Κόσμος thus means a self-maintaining condition of τάξις (order). This condition is the basis of life, life that maintains itself, produces itself time and again. For life alone creates itself *ad infinitum*. Hence the world, precisely as an ordered world, is a self-sufficing animal, a ζῷον αὐταρκες.[44] Its own being, as well as the being of its parts, is φύσις, that is, "natural" being. The natural being of every entity existing "by nature" is determined by the fact that it continues to produce itself anew, renews itself again and again as what it already is within the texture of the world-order. Thereby it helps this world-order, this τάξις, to be continuously maintained. The being of every natural thing, therefore, is determined by the world-order as such, the τάξις of the world, the ψυχὴ τοῦ κόσμου [soul of the world] and, finally, by the ἀναλογία. Τάξις is thus the basic concept of ancient cosmology, not only Plato's, but also Aristotle's, in the version transmitted to the Christian centuries.[45] But τάξις, order, essentially means in every case a definite order, an ordering according to a definite point of view, in conformity with which each individual thing is assigned its place, its location, its τόπος. Order always means well-ordering. For this reason ancient cosmology, as topology, is not possible without the question of this ultimate ordering point of view, without the question of ἀγαθόν, the Good. And ancient cosmology reaches its fulfillment in the doctrine of the different τόποι [places]. This doctrine also investigates the ratios and proportions in which the celestial bodies appear arranged in their spheres.

How did the new science receive this ancient doctrine of τάξις and ἀναλογία, of *ordo* and *proportio*? In his *Dialogue on the Two Chief World Systems*, Galileo takes his bearings continuously from the two basic books of traditional cosmology, Aristotle's *De caelo* and Plato's *Timaeus*; in battling against Aristotle he relies again and again on Plato. The entire construction of Galileo's dialogue is in a certain sense determined by the construction of the *Timaeus*. Like the *Timaeus*, Galileo, too, bases all further cosmological explanations on the thesis that the world has an *order*. Its parts are coordinated in the most perfect manner ("*con sommo e perfettissimo ordine tra di loro disposte.*") In this way the best distribution ("*l'ottima distribuzione e collocazione*") of the heavenly bodies, the stars and the planets arises. However, what is important here is how Galileo understands the Platonic principle that the divine demiurge brought the world-material from disorder to order. He thinks that Plato meant the following: each of the different planets has a different orbital velocity within the present order of the world. In order to reach these velocities, they must, from the instant of their creation, have passed through all the grades of lesser velocity. The creator let them fall close to the mid-point of the world in rectilinear motion, so that the uniform acceleration peculiar to falling-motion (free fall) could bring them gradually to their present velocity, at the moment when they reached the place assigned to them. Only then did He set them rotating, so that they proceeded from the non-uniform rectilinear motion to the henceforth uniform circular motion in which they persist until today. Non-uniform rectilinear motion along the vertical corresponds, for Galileo, to the state of disorder, ἀταξία, of which Plato speaks, while uniform circular motion, that is, motion along the horizontal line (for "horizontal" originally means the direction of the circle of the horizon) corresponds to the present state of order. With this interpretation, Galileo intends above all

to defend the Platonic principle against Aristotle's criticisms in *De caelo*.[46]

It is not crucial here that Galileo's interpretation finds no support in Plato's text. What is significant is the direction in which he looks for the distinction between order and disorder: not in the ratio or absence of ratio among the quantities of the basic materials, not in the correlative positions of the celestial bodies (although these do appear, in accordance with the construction of the *Timaeus*, as the genuine theme of his inquiry), but in the differences in the states of motion as such. The bodies themselves are not subject to comparison (*comparatio*, as Cicero in his translation of the *Timaeus* says for *proportion* as well), only a mode of being of these bodies, namely, their motion. The application of proportion in Galileo's mechanical works is also consonant with this. The connection with the Greeks' general theory of proportions is immediate here, thanks to the direct reception of Euclid and Archimedes, as well as indirectly, by way of a qualitative doctrine of geometrical ratios stemming from the 14th century Nominalist school.[47] What we today call Galileo's laws of free-fall are intended by Galileo himself as Eudoxian-Euclidean proportions. In the *Discorsi* (Third day, Second Book, Theorem II, Proportio II) a proportion is derived with Euclidean means which we today would write as:

$$S_1 : S_2 = T_1^2 : T_2^2.$$

Both types of magnitude (S and T) are symbolized by straight lines, in accordance with Book Five of Euclid. The decisive difference from the cosmological proportion in the *Timaeus* is that time becomes one of the elements of the proportion. What I have said about Galileo also holds true of Kepler, whose lifework, in his own opinion, consists in the restoration of the Platonic doctrine of order and proportion. The relation between the square of the periods of the planets and the cubes of the great axes of their orbits, familiar to us as Kepler's Third Law, is once again conceived as a Euclidean proportion, of the form

$$t_1^2 : t_2^2 = r_1^3 : r_2^3,$$

or, as it has to be written to conform with Kepler's own wording in Book One of the *Harmonice mundi*:

$$t_1 = t_2 = (r_1 : r_2)^{3/2}.$$

Taken together with the other two proportions which we today call Kepler's First and Second Laws, it determines the cosmic order in which we live. In these Galilean and Keplerian proportions the concept of law, of the *lex naturae*, becomes visible for the first time. (Although neither Galileo nor Kepler uses this word as a technical term; it is first given a fixed sense by Descartes.)

The relation of the new to the old intentionality here becomes immediately comprehensible. For Greek cosmology, ἀναλογία is the expression of τάξις, of order; for the new science, it is a "law." Accordingly, the new science interprets τάξις, *ordo*, as law, and construes the order of the world as the lawfulness of the world. The shift in the meaning of the concept of *ordo* has its concrete basis here in the possibility of transferring proportion from the ratios among the quantities of the relevant elementary-bodies, or from the ratios of their correlative positions, to the state of motion of these bodies. This shift, however, eliminates the order of the elementary-bodies, their τάξις, in the sense of well-ordering. For the lawfulness of their motion, the regular sequence of their states of motion, can be constructed only on the basis of their complete equality in rank, their lack of ordering in the strict sense, that is, their complete indifference to the *place* they occupy. The new science now understands just this lawfulness in the *course* of motion, in the *temporal* sequence of states of motion, as the order of the world. The order of things moves up one story higher, so to speak, when the temporal dimension is added. At the same time, however, the disorder of the elementary-bodies, on which the lawfulness of the world is based, is now understood as "order." Let us hear Descartes: In chapter 46 of the Third Part of his *Principia* he sets out the basic assumptions of his physics. In the next chapter Descartes refers to his earlier attempt to derive the present state of the world by assuming an original chaos. He says: "Even if, perhaps, this very same order of things, which we encounter now (*idem ille ordo qui iam est in rebus*) can be derived from chaos with the help of laws of nature (*ex chao per leges naturae deduci potest*), something I once undertook to show [sc. in *Le Monde*], nonetheless I now assume that all the elementary parts of matter were originally completely equivalent to one another both in their magnitude and their motion... because chaotic confusion (*confusio*) seems to be less fitting to the highest perfection of God, the creator of things, than proportion or order (*proportio vel ordo*) and also can be less distinctly known by us, and because no proportion and no order is simpler and more accessible to knowledge than the one which consists in universal equality." It was only later, through the work of Boltzmann and then of Planck, that this "hypothesis of elementary disorder," as it was called, was made explicit in statistical terms. Its importance for physics is clear from the fact that Planck called the essence of the Second Law of Thermodynamics the "Principle of Elementary Disorder."[48]

The world of mathematical physics built upon this presupposition, the world of natural processes occurring in accordance with law, determines the concept of nature in the new science generally. "Nature" means for it a system of laws, means—to speak with Kant—"the conformity to law of appearances in space and time." All the concepts in this formula (as I have tried to show for "space" and "law") can only be understood by contrast with the corresponding concepts of ancient science. Above all, the concept of conformity to law signifies a modification of the ancient concept of τάξις; τάξις is now understood as *lex*, that is, as order over time. The ascent from *prima intentio* to *secunda*

intentio is initiated here by the insertion of the time-dimension.[49]

How, then, does the new science, on the basis of *its* intentionality, interpret ancient cosmology? How does it interpret the "natural" world of the Ancients, the world of τάξις? It interprets it as the qualitative world in contrast to the "true" world, in contrast to the quantitative world. It understands the "naturalness" of this qualitative world in terms of the "naturalness" of the "true," "lawful" world. Eddington, in the introduction to his recent book, speaks in a characteristic way of these two worlds: "There are duplicates of every object about me—two tables, two chairs, two pens." The one table, the commonplace table, has extension, color, it does not fall apart under me, I can use it for writing. The other table is the "scientific" table. "It consists," Eddington says, "mostly of emptiness. Sparsely scattered in that emptiness are numerous electrical charges rushing about with great speed."[50]

Translated by David R. Lachterman

1. Leo Olschki has forcefully emphasized this point in his important work *Geschichte der neusprachlichen wissenschaftlichen Literatur*, I–III (Heidelberg 1919–1927).
2. *Disputatio de coelo*, 1613.
3. *Librorum ad scientiam de natura attinentium pars prima*, 1596.
4. *De motu*, 1591.
5. *De rebus naturalibus libri* XXX, 1589.
6. *Commentaria una cum quaestionibus in octo libros Aristotelis de physica auscultatione*, 1574.
7. *De communibus omnium rerum naturalium principiis et affectionibus*, 1562.
8. *De certitudine mathematicarum*, 1547.
9. Compare, e.g., Léon Brunschvicq, *Les étapes de la philosophie mathématique*, Paris 1912, 105.
10. See Pierre Duhem, *La théorie physique, son objet et sa structure*, Paris 1906, 444 [English translation, *The Aim and Structure of Physical Theory*, trans. P. P. Wiener, Princeton 1954.]
11. Galileo Galilei, *Opere*, Edizione nazionale, 6, 232.
12. Kepler, *Opera*, ed. Frisch, I, 122 f.
13. Pars IV, Dist. 1, Cap. I & II.
14. *Descartes savant*, Paris 1921, 124–148.
15. *Oeuvres de Fermat* (*ed.* Tannery and Henry), I, 91.
16. *Oeuvres de Fermat*, 99.
17. *Regulae ad directionem ingenii*, Rule IV, *Oeuvres*, ed. Adam & Tannery, X, 376.
18. *Opera*, ed. Heiberg, I, 48 ff.
19. See also Apollonius, ed. Heiberg, I, 6, DeF. 4. (The term "abscissa" was first used in the 18th century; *cf.* Tropfke, *Geschichte der Elementar-Mathematik* (2nd *ed.*, Leipzig 1921–24), VI, 116 f.)
20. Moritz Cantor, *Vorlesungen über Geschichte der Mathematik* (3rd. *ed.*, Leipzig 1907), I, 337.
21. Zeuthen [The author may have had in mind H. G. Zeuthen, *Geschichte der Mathematik in Altertum und Mittelalter* (Copenhagen 1896), ch. IV: "Die geometrische Algebra," 44–53. Translator's Note.]
22. See Plato, *Republic* VI, 510 D-E and Aristotle, *Metaphysics*, #6, 987b15 ff.
23. *Oeuvres de Descartes*, ed. Adam & Tannery, VI, 19–20.
24. *Oeuvres de Descartes*, 551 (Latin text).
25. *Oeuvres de Descartes*.
26. *Oeuvres de Descartes*, 20.
27. *Oeuvres de Fermat*, 93.
28. *Oeuvres de Fermat*.
29. Ed. Heiberg, I, 4.
30. *Critique of Pure Reason*, B 179.
31. [The full Arabic phrase is "al-jabr wa'l-muqabalah." For a contemporary discussion of the meanings of "jabr" and "muqabalah" see G. A. Saliba, "The Meaning of al-jabr wa'l-muqabalah," *Centaurus* 17 (1972), 189–204. Translator's Note.]
32. F. Hultsch, Article: "Diophant," in: *Pauly Wissowa Realenzyklopädie*, Paragraph 9.
33. Alexander of Aphrodisias, *In Aristotelis Metaphysica Commentaria*, ed. M. Hayduck, 85.5–6. See also Aristotle, *Physics* IV 4, 224a2 ff.
34. Compare Heron, *Metrica* (ed. Schöne), I, 6 ff.
35. [Vieta's *Isagoge* has been translated by J. Winfree Smith as an appendix to Jacob Klein, *Greek Mathematical Thought and the Origin of Algebra* (Cambridge, Mass., 1968). The passage cited occurs on page 345. Translator's Note.]
36. 1621—edition, 4.
37. See, for Aristotle, *Metaphysics* Δ 1, 1026a23–27; K4, 1061b17 ff; M2, 1077a9–12; M3, 1077b17–20; *Posterior Analytics* A5, 74a17–25; A24, 85a38–b1. Compare also Marinus on Apollonius [i.e. the mention of a now-lost "General Treatise" (καθόλου πραγματεία) in *Euclidis Opera*, ed. Heiberg-Menge, VI, 234 Translator's Note.]
38. *Timaeus* 29D
39. *Timaeus* 30A
40. *Timaeus*
41. *Timaeus* 31C
42. *Timaeus*
43. *Timaeus* 33A–B
44. *Timaeus* 33D; 37D
45. See Aristotle, *Metaphysics* M3, 1078a36–b6 and compare the title of Ptolemy's work: ἡ σύνταξις (sc. τῶν ἑ πλανωμένων The Ordering-Together of the Five Planets.) For this title, see *Pauly-Wissowa*, s.v. "Astronomie."
46. Γ2, 300b16 ff.
47. Compare P. Duhem. [The author most probably had in mind *Études sur Léonard de Vinci* (Paris 1905–1913)—Translator's Note.]
48. Max Planck, *Die Einheit des physikalischen Weltbildes*, Leipzig 1909.
49. M. Planck, *Das Weltbild der Physik* (Leipzig 1931, 2d. ed.).
50. Sir Arthur Eddington, *The Nature of the Physical World*, New York 1929, ix–x.

"Sexism" is Meaningless

Michael Levin

WHEN MY WIFE AND I PLAY TWENTY QUESTIONS, and my wife must guess a woman, she will often ask "Is this woman famous for whom she married?" Many would label her or her question "sexist." Indeed, few words have figured as prominently as "sexism" in contemporary public discourse. Such currency would ordinarily suggest that this epithet means something, but in the present instance this impression is mistaken. Beyond carrying a negative expressive force, like "Grrrr" or "Goddammit," "sexism" is empty.[1]

What "sexism" is *supposed* to mean is clear enough. "Dr. Smith has a roving eye, and his attractive wife is a notorious flirt" is called "sexist" because it implies that interest in the opposite sex is worse in married women than in married men, and that appearance matters more for women than for men. "*Kon-Tiki* is a man's book" is "sexist" because it implies that men more than women enjoy adventure stories. My wife is a sexist because she believes that fame often comes to women from their liaisons with men, and—more egregious—she isn't indignant about it.

"Sexism," then, is typically used to describe either the view that there are general, innate psychological differences between the sexes, or that gender is *in and of itself* important.[2] Since the first view is simply a factual belief supported by a vast body of evidence, and the second view, however objectionable, is held by almost no-one, neither view is worth attacking. But one thing is clear: those whose active vacabulary includes "sexism" (feminists, for short) take it to describe something that is *both* objectionable *and* widely held, and hence worth—in fact requiring—regular and vehement attack.

This relentless tagging of "sexism" on to what it does not fit suggests, to put it charitably, that feminists are confused about what their subject is and about what they want to say about it. The word "sexism" simply encapsulates and obscures this confusion.

Take the view that there are innate gender differences. I doubt that my daughter will become a quarterback. I expect her to develop habits different than those of my son —and I hope so as well, because I believe that the habits that will serve my son will not serve my daughter. I base these convictions on a belief in a difference between men and women. Call these convictions "sexist" if you wish, but please tell me what precisely is wrong, unreasonable, or even controversial about them. The discomfort of women in milieus demanding aggression has been confirmed by experience countless times. If noticing this is sexism, there is nothing wrong with it. "Sexism" cannot be used to label the factual judgement that the sexes differ in certain specific ways and at the same time retain its automatic pejorative force.

Unfortunately, words are not always used as they should be. "Exploit" means "to use another without his consent," but contractual wages are nevertheless denounced in some quarters as "exploitative." The point of such tendentious misusage is, of course, to get your interlocutor to call wage labor "exploitation" and then to let the negative connotations of that word impel him to denounce wage labor itself. If you succeed, you have boxed him into a substantive moral position by word magic.

Once recognized, this trap is easy to elude. Anyone who approves of wage labor ought to say: "I'll call wage labor 'exploitation,' if you insist on using words that way. But I see nothing wrong with what you call 'exploitation'." The same maneuver avoids the feminist's provocation. If, as it often is, "sexism" is deployed simply to descredit belief in gender differences, anyone who accepts these differences can treat "sexism" as a neutral name for this belief. With a little gumption he can preface his conversations with feminists with this caveat, and continue to judge his belief on its factual merits.

Sometimes the trick of illicitly transferring an epithet is managed by constantly stressing some similarity between its central cases and vaguely peripheral ones. A polemicist may seduce his audience into calling wage labor "slavery" by focusing on what wage labor does share with slavery. (Both may involve working up a sweat.) To transfer an epithet to new cases *ad libitum* is harder, the clearer and more stable its central cases are; easier, the fewer its antecedently clear cases. At the limit of this process are neologisms, like "sexism," which come into the world with *only* negative connotations and nearly unlimited denotative potential.

"Exploitation" derives its force from the recognizable badness of its central cases; abusing it consists in exporting it too far from these cases. One might suppose that

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"sexism" has acquired its force similarly, by describing something *obviously bad*. This would imply that "sexism" does have some legitimate meaning, however much that legitimate meaning has been abused.

Not every word, however, functions like "exploitation": some have *only* the force of disapprobation. Consider the communist practice of endlessly reviling enemies as "bourgeois" and "revanchist." These words have lost all mooring in the descriptive uses they once had. Nonetheless, their repetition induces confusion and guilt in the victims of public hate sessions simply because they convey so much hate.

Words used as vehicles for anger will acquire negative force, *whatever* the source of the anger. Neologisms like "sexism," trailing clouds of rage at their birth, are of this sort. The very ugliness of "sexism" itself supports this account of its genesis, for it you want to endow a word with a negative force, it is helpful to make the word itself repellent. Calling housework "shitwork," and using the grating sound "sexism" for those rare cases to which "misogyny" might have applied, plays on the human tendency to attribute the qualities of words to things, and, by the animosity implicit in flaunting ugliness, communicates the rancor behind the word. (Orwell noted that avoidable ugliness is a sure sign of political cant.) Calling my belief in gender differences "sexist" invites me to perceive my *belief* as ugly because its name is ugly and comes prepackaged with ugly emotions.

IF CALLING THE BELIEF that men and women differ "sexist" makes for sheer confusion, what of using "sexist" to describe the idea that gender is intrinsically important? Obnoxious as this idea may be, it is virtually without adherents. *Suttee* and *purdah* are not features of Western culture. Despite the frequency and vigor with which feminists publicly identify their enemy as the doctrine that "men are inherently superior,"[3] its followers could hold a public meeting in a telephone booth.

That the feminists' enemy here is merely nominal becomes clear with the reflection that "better" *means nothing at all* apart from some specification of abilities or relevant context. Mr. A cannot simply be *better* than Miss B. Of course, we do speak of one person being *morally* better than another, and by this we do perhaps intend a judgement of overall value. The feminist's point can hardly be, however, that women are morally as good as men. Not only does no one deny this, feminists themselves are constantly deploring the "stereotype" that woman's "role" is to civilize the naturally amoral and anarchic impulses of the male.

"Better," then, must mean "better at this or that particular task," and men are so obviously better at some things than women that this "doctrine," rather than being the object of scorn, should pass unchallenged. If "sexism," for example, means the idea that men can hurl projectiles farther than women, it once again becomes impossible to understand why "sexism" is used with such heat. Is "sexism" the view that men surpass women at some highly valued activity, like abstract reasoning, while women are better at other activities like child-rearing—which, outside feminist circles, are valued as highly as anything men do? If so, then the view in question once again becomes a factual hypothesis, indeed a hypothesis which is rather obvious to the unaided and scientifically aided eye. In any case, we are back to interpreting "sexism" as a name for a group of factual beliefs and, as I have already stressed, calling a factual hypothesis by an invidious name is sheer confusion.

The readiness of feminists to attack what no one defends—"men are better than women"—may be explained by the observation that traits can be significant in two different ways. A trait can be important in itself: intelligence, for example, is necessary for a variety of tasks and is valued in its own right. This is why employers may permissibly hire the brightest applicants, and why most people enjoy witty companions.

But many traits not significant in themselves are closely associated with some which are. People may and do heed such derivatively significant traits because they confirm the presence of what actually matters. Illiteracy is not intrinsically bad, but it usually implies deeper incompetence. We permit an employer to ignore illiterates who want to be laser technicians because an illiterate is unlikely to know much about lasers. Similarly, strength is what counts for being a fireman, but size and weight are sufficiently reliable signs of strength to serve as proxies in deciding who gets to be a fireman. Since we can be pretty sure of the results beforehand, it is a waste of time to let a 5 foot, 100-pounder try to drag a 120 pound weight up a flight of stairs.

Values and institutions commonly deplored as "sexist" because they appear to appeal to the intrinsic importance of gender really rest on the idea that gender is highly correlated with traits whose significance is not at issue. Take two examples. Those opposed to drafting women do not argue that women are women, but that women are less aggressive and less tolerant of the stress of combat than men. (They also understand that an army is meant to defend its country, not to serve as an equal opportunity employer or a crucible for social experiments.) The pivotal objection to conscripting women has nothing to do with any inherent "inferiority" of femaleness, everything to do with the ability of women to fight.

Take even the "double standard" which judges female promiscuity more harshly than male. Despite appearances, this difference in attitude is not based on the belief that there is something intrinsically worse about female promiscuity. Even the unanalyzed "gut" double standard that most people still feel rests on a belief about the different psychologies of the sexes. Most people believe that men can divorce their sexual feelings from their emotional commitments more easily than women, and hence can more easily satisfy their sexual appetites without risking rejection and unhappiness. People thus believe, or sense,

that there is *more likely to be something wrong* with a promiscuous woman than a promiscuous man. We expect—and I know of no statistical or impressionistic evidence against this—that willingness to have sex with many partners is more likely to be associated with compulsivity and other personality disorders in women than men. It is this belief, however inarticulate, that underlies the double standard, and even feminists must agree that if it is true the double standard is more than caprice.

I believe that a dispassionate overview would confirm what these two examples illustrate: almost all views labelled "sexist" because implying the intrinsic importance of gender amount to factual beliefs about the sexes.[4]

THERE IS A COMPLAINT of dubious relevance so certain to be raised at this point that it must be heard. It runs that judging people on the basis of what is usually true is unfair to the *un*usual. What of that unusually strong midget who could pass the fireman's test? What if there is a female tougher than most Marines who, because women are barred from combat, will never get a chance to win the Medal of Honor? It must be replied, first, that expectations *must* be based on what is generally, even if not universally, true. A sure way to fail to get what you want is to base your plans on expectation of the exceptional. If ninety percent of the apples in an orchard are green, it is sheer irrationality to expect the next apple you pick to be red. Second, legally mandated discrimination on the basis of derivatively significant traits is relatively rare. All that most people want is the legal *right* to use their own discretion. What is wrong with much "anti-discrimination" legislation is that it forbids attending to what may prove relevant. (The whole matter is exacerbated in this country by the alacrity with which the federal government has overruled local jurisdiction on such matters.) Third, and most important, it is perniciously utopian to demand that exceptional cases have a right to be recognized. It is not unfair, although it is perhaps unfortunate, that a potential female Audie Murphy goes unrecognized. No one promised her she would be appreciated, no agreement has been breached if she is not. Nobody promised you at birth that you would enter the field best suited to your talents, but this hardly violates some mythical right to self-actualization.

BY NOW the impatient feminist might be keen to remind me that there is a middle ground. "Sexism," she might say, is *prejudice* against women and their abilities. According to her, prejudice is a much subtler matter than dislike of a morally irrelevant trait like gender or race: it is the irrational retention of unflattering beliefs about those who have the trait. A racial bigot need not believe that Negroes are "inferior" to whites: his bigotry consists in believing on patently insufficient grounds that Negroes are lazier than whites. Prejudice, moreover, involves self-deception. A bigot may believe he has an open mind—even though he loses his temper whenever anyone tries to change it. Finally, prejudicial underestimation typically serves unhealthy needs: it bolsters feelings of worth by representing the Other as inferior, or forestalls guilt by projecting illicit desires onto the Other. Perhaps, then, "sexism" should be taken to mean the belief, held with irrational tenacity, that on the whole men and women differ significantly.

The trouble with this new gambit is that anyone who claims much of past and current society to be "sexist" in this new sense must deny that there is good evidence that men differ significantly from women, and maintain that people would not change their minds if presented with a disproof of sex differences. This is not an easy position to hold.

The most ardent feminist must admit that all the available evidence favors difference. Women differ physically from men, and act differently. Anyone who has had anything to do with little children observes that these behavioral differences appear before "socialization" takes hold. Every little boy notices that his little girl friends' homework is neater than his own, and that they are not so willing as he is to fight over points of honor. Everyone sees that fathers are usually sterner than mothers. Anyone familiar with the artistic and literary classics of other cultures finds that they represent men and women just about as ours do.

The feminist may deplore these facts, and she may believe that an environmentalist hypothesis will someday explain them, but she cannot deny them. Even she must admit that belief in male/female difference is perfectly reasonable. People think of the typical physicist as male simply because almost all physicists have been male. "Liberated" movies and novels which ostentatiously present female detectives, etc. are so jarring precisely because their self-conscious implausibility destroys the suspension of disbelief. My wife asks her question because many women have derived fame from the fame of their husbands or lovers. To pretend this is not so is to refuse to face facts and to handicap oneself at such practical tasks as winning at twenty questions.

Even if the apparent differences between men and women are the result of conditioning—a hypothesis that can only be invoked *after* the innateness hypothesis has been refuted and some other hypothesis, however *ad hoc*, must be invoked—classifying traits as "masculine" and "feminine" is too well founded to be called prejudice. Even if there is a shortage of brilliant female composers because a conspiracy barred women from conservatories, it is not "sexist prejudice" to expect the next Mozart to be male.

For all its contribution to modern science, the work of Copernicus managed to convince the learned world of a great falsehood: that things are usually not what they seem. Descartes was only the first of many thinkers who, shaken by the discovery that the sun's motion is merely

apparent, resolved to regard his senses as liars until proven truthful, his ordinary beliefs guilty until proven innocent.

In fact, the instance of Copernicus and the others stressed by such champions of scientific revolution as Kuhn and Feyerabend are rare and anomolous. Most things do turn out, under critical scrutiny, to be as they seem. Bread really nourishes, water does extinguish fire, appeasement encourages bullies, and on and on. What science tells us is why and how these things are so, not that they are illusions.

I stress this because the falsehood that most scientific discoveries undo common sense is, I suspect, one of the main supports of the currently rampant scepticism about sex differences. Because common experience points overwhelmingly to important intrinsic differences between the sexes, it is inferred that the job of science, in this case social science, is to explain these differences away. What the history of science should lead one to expect is that, on the contrary, deeper inquiry will explain the gender differences revealed by ordinary experience.

But the acid test of the "prejudice" theory is whether society would abandon belief in gender differences in the face of evidence to the contrary. This question must be carefully distinguished from several others. Since the belief at issue concerns general tendencies, ignoring exceptions is not prejudice. One can consistently believe that men are better at mathematics than women while admiring the work of Emmy Noether. Furthermore, a belief may be important without being irrationally fixed, and serve a need which is profound but healthy. A belief may thus be painful to surrender without being a prejudice. For instance, a man finds it important that his wife's personality complement rather than copy his own. He meets enough duplicates of himself in the impersonal world of work to want something else at home. The suggestion that the complementarity he prizes is an artifact will naturally disturb him.[5] But this does not mean that his belief channels guilt or fortifies a weak ego, or that he is wrong to demand convincing arguments before he accepts the suggestion.

Nor is the irritation felt by many men at the (alleged) influx of women into "non-traditional" fields evidence that belief in sex differences is held with prejudicial tenacity. This outrage is directed against coercion, not against a challenge to faith. It is provoked by the pressure-group agitation, lawsuits, and doctrinaire federal fiats that force women on them. Changes that no one would mind or take much note of had they occurred through necessity or social evolution (like the influx of women into factories during World War II, or the replacement of men by women as telephone operators earlier in this century) are bitterly resented when imposed by ideologues.

Feminists might want to cite, as proof of "sexist prejudice," those famous experiments in which graders gave the same test a higher grade when told that the testee was "Norman" than when told the testee was "Norma." (I will not here go into the serious issues that can be taken with the design and replicability of these experiments, or the ways in which they have been reported.) Even this evidence is equivocal. If a professor has found over many years that females write inferior philosophy examinations, it is reasonable for him to anticipate that the next female philosophy examination will be inferior. His expectation will, of course, influence his perception, but this influence amounts to prejudice only if there is no "feedback loop" by which a run of good female tests can correct his expectation. A baseball scout used to minor-league incompetence can reasonably attribute a B-league shutout to atrocious hitting rather than good pitching. His attitude toward the winning pitcher is prejudice only if he continues to denigrate the pitcher's fastball after it has been clocked at 97 mph. To return to those grading experiments—there is, however, no evidence that teachers persist in anticipating poorer Norma performances after a string of good Norma tests. (It is in any case worth remembering in this connection that the tests which provide the chief quantitative evidence for differences in male/female aptitudes are standardized and computer graded.)

The performance of women in the military hardly challenges the belief that women cannot do some jobs that men can, since women have been accommodated by lowered standards. Barriers on obstacle courses, for example, have literally been lowered so females can get over them. It is an open secret that universities have compromised their standards to accomodate "affirmative action" and live in dread of lawsuits filed by females denied tenure. As a result, it is impossible to gauge the performance of women against the standards of scholarship men have had to meet. Such assessment is made especially difficult by the great number of academic women who specialize in "women's studies" and cognate made-up subjects in other disciplines, subjects in which expertise is the ability to perpetuate the anger that created them. Throughout 1979 the *New York Times* chronicled the troubles of the First Women's Bank, floundering despite a Federal law mandating assistance to firms with a "substantial" number of female managers. This law makes it impossible to tell if women can do as well as men in the realm of finance.

The closer one looks the harder it becomes to evaluate the acid test. There is no way of saying how men might react to evidence against sex differences, because *there isn't any such evidence.* The anthropological "evidence" is fanciful or worse.[6] The most recent psychological and neurological research supports the view that women are more verbal than men, men more at home with spatial abstractions, and so on.[7] Indeed, these studies are so decisive that feminists have lately started to shift the focus of the debate by trying to minimize rather than, as in the 1960's, denying gender differences. For instance, Drs. Macoby and Jacklin insist that of the thousands of variables they studied, men and women differ "only" in four: verbal ability, spatial visualization, mathematical ability, and aggres-

siveness. This is like saying that the difference between me and Pavarotti is insignificant because he and I differ "only" with respect to girth and the ability to sing.

Others who are at least willing to face the scientific facts[8] stress that intra-gender variations far exceed the difference between gender means: e.g. men average about 6″ taller than women, but the tallest man is about 4′ taller than the shortest man. This is so, but it hardly shows that inter-gender differences are trivial. Even though Wilt Chamberlain is *much, much* bigger than I am, I remain *much* bigger than most women.

There is, then, not a shred of support for the view that the ordinary attitudes of ordinary people toward the sexes are prejudice, and hence more reason to doubt that "sexism" is the name of anything in heaven or earth.

BEFORE ADOPTING A STUDIED incomprehension toward those who find "sexism" richly informative, let us recur to our reflections about words as vehicles for negative emotions. One can make a kind of sense of "sexism" in three stages. First, take "sexism" as the feminist uses it to refer to the conviction that men and women differ. Second, take her to believe that many people subscribe to this conviction and are in this sense "sexists." Third, to explain why "sexism" is a term of abuse, attribute to the feminist *rage* at the existence of these differences and people's acknowledgement of them. The feminist's usage now becomes quite coherent: "sexism" denotes a fact of nature while expressing outrage at this fact and its universal recognition.

If this is the real meaning of "sexism," it is a very mischievous word. Its negative charge invites us not to believe—to insist that it is bad to believe—what can be shown to be so. Insofar as "sexism" refers to sex differences themselves, "sexism" invites a negative response to a fact of nature, a response as inappropriate as annoyance at the law of gravity.

Only two obstacles impede attributing this array of beliefs and resentments to the feminist. (1) She herself is unlikely to agree that this is what she means by "sexism," and would probably repudiate it angrily. (2) Rage at the workings of nature is a peculiar and perverse emotion; such alientation is rare and should not be imputed to anyone without good grounds.

As for (1), people often deceive themselves about what they are doing with words and about the feelings that lie behind the ready use of a phrase. Such blind willingness to let language do the work of thought is a hallmark of ideological rhetoric. There is no other way to explain, for example, the evident sincerity of politicians who call the forced transfer of income "compassion."

As for (2), it is not hard to understand this particular form of alienation. Modern society rationalizes tasks, thereby making them less expressive. Male and female impulses remain to be expressed, but it is no longer easy to tell by inspection what is a "male" activity and what is "female." Warming a TV dinner is not especially nurturant, nor does riding a bus to work satisfy the urge to dominate. Western industrial society tends to separate people from a sense of their own gender and hence their own identity.[9] Combine this phenomenon with the radical egalitarianism and environmentalism of the last half-century, and widespread gender confusion becomes inevitable.[10]

A woman who is ill at ease with her essential identity, who has lost the sense of the values peculiar to her sex and to herself as a member of her sex, cannot very well admit this to herself. No ego can support such self-hate, such loss of meaning. But the emotion is there, and the ego must do something with it. Freud first identified the process by which the psyche resolves such tensions: the ego can recognize an unacceptable emotion by projecting it onto someone else. By calling her self-hate the hatred of others, and confirming the attribution by endlessly reviling her imaginary enemies, the feminist can transform a sense of worthlessness into a sense of moral superiority.

Taking this to be the real function of "sexism" explains more than how "sexism" has acquired such emotional freight while failing to attach itself to a recognizable object. It connects as well with the larger distrust of human sexuality that is becoming increasingly evident in the *soi-disant* "women's movement," a distrust fully compatible with its ritual paeans to sexual activity and to abortion as a right coequal with free speech. In addressing the fear that further obliteration of sex roles in the interest of "nonsexist" childrearing will increase the incidence of homosexuality, Letty Pogrebin writes "Homophobia, not homosexuality, is the disease of our times," and "Our fear of lesbianism for ourselves and our daughters may really be fear of selfhood and freedom."[11]

Res ipsa loquitur.

IF "SEXISM" IS SO CONFUSED, why worry about it? Since words that mark no salient fact or distinction usually fall into disuse, it would seem that "sexism" is destined to go the way of the names of the humours. Unfortunately, the situation is complicated by the immense power of "sexism" to intimidate. No one knows what the label means, but everyone—especially politicians—knows he is in for trouble if the label is pinned on him. People have learned to avoid at all costs doing or saying anything that attracts it. Feminists have thus perfected a tool for stigmatizing beliefs that they do not like but which they cannot discredit on rational grounds. The self-evident beliefs most people hold about human nature have been called "sexist" so often and so angrily that continuing to hold them now carries a heavy price. People would rather surrender them than endure the anger and internalized misgivings that holding them provokes. Feminists are not likely to surrender lightly so apt a tool as "sexism."

A parable and a precedent may serve to suggest the

harm done by the persistence of "sexism" in public discourse.

1. Suppose an influential group of people began referring to the belief that automobiles should move in traffic lanes as "stupidism" (or "traffickism"), a word they always used with rage. They denounced as "stupidist" anyone who thought that if traffic were not uniform, driving would be too dangerous. Anyone who requested clarification about why all vehicular institutions to date were "stupidist" was met with redoubled anger. Through repetition, "stupidism" would doubtless come to be regarded as more than a device for expressing rage at the way traffic works. Eventually, ordinary people—and especially politicians—would start to worry about being called "stupidists." To avoid the imputation of stupidism, they would, doubtless, begin to agree that traffic should follow no fixed lanes. They would agree that to say or even think otherwise was stupidist prejudice. Proponents of "automobile liberation" who gained control of highway policy would denounce the desire to *test* the tenets of automobile liberation as the profoundest form of stupidism of all.

I leave to the reader's imagination what a day on the road would be like.

2. In Nazi Germany, the theory of relativity was called "Jewish physics." This meant nothing except, perhaps, the uninteresting fact that the theory of relativity was invented by a Jew. Enough people used this phrase, however, and used it vituperatively enough until—unbelievably, it seems to us—German scientists actually began to disregard the theory of relativity on the grounds that it was Jewish physics.

So don't be puzzled when I say words like "sexism" and "Jewish physics" can mean nothing at all, yet do immense harm by creating aversion to reasonable beliefs. Happily, this conditioning can be resisted. My wife usually wins at twenty questions.[12]

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1. The *1980 Report of the President's Advisory Committee for Women* uses "sexism" freely but without explanation. The word occurs most frequently in the subsections ominously headed "Federal Initiatives."

2. The suffix "ism" suggests, often falsely, belief in a doctrine. Socialism is indeed belief in the virtues of a command economy, but "capitalism"—i.e. the practice of anyone who distinguishes what is *his* from what is *someone else's*—typically involves no beliefs at all about economic organization. So here: "sexism" sounds like a doctrine, and "sexists" its followers. Typically, however, practices labelled "sexist"—such as the use of the generic pronoun "he"—involve no beliefs at all about the sexes or anything else on the part of those who follow them. Calling your opponent an "ist" is a good tactic, since most people are sceptical of worldviews and you can thus create an unearned initial distrust for what you want to attack. I suspect that feminists avoid the word "misogyny" because it carries no connotations of system.

3. See e.g. Iris Mitgang in *Commentary*, March 1981, 2.

4. Judith Finn made a comparable point simply and well when testifying before the Senate in connection with the claim that "sexism" and "sex discrimination" are responsible for pay differences between men and women:

> "Since pay differences are almost completely caused by differences in jobs rather than the failure to obtain equal pay for equal work, understanding the earnings gap requires an explanation of the reasons why women, on the average, hold lower-paying jobs than men. Women have different *job-related* attributes and different amounts of these attributes than men." [Testimony before the U.S. Senate Committee on Labor and Human Resources, April 21, 1981; (my emphasis)]

5. See Bruno Bettleheim, "Notes on the Sexual Revolution," in *Surviving* New York 1979.

6. For the anthropological material on male dominance, see Steven Goldberg, *The Inevitability of Patriarchy*, 2nd ed., London 1977. Martin Whyte has lately offered the Semang (HRAF, AN7) as a matriarchy in *The Status of Women in Pre-Industrial Societies*, Princeton 1978. Goldberg replies in " 'Exceptions' to the Universality of Male Dominance," to appear.

7. Even avowed feminists concede important psychological differences: see e.g. E. Macoby and C. Jacklin, *The Psychology of Sex Differences*, Stanford 1974.

8. Not all scientists are. The *Newsweek* of May 18, 1981, carried that magazine's millionth cover story on "the sexes," which concludes, after much divagation and vague talk about man's ability to "transcend his genes," that the latest research demonstrates gender differences built in by hormones. The editors, perhaps trying to defuse the issue, quote the geneticist Richard Lewontin to the effect that the whole question is "garbage from old barroom debates," as if that renders the question meaningless. Egalitarian fundamentalists are also fond of citing silly nineteenth century phrenological theories, as if that undercuts modern research.

9. Edward Levine and his associates have explored this topic in a series of papers in the *Israel Annals of Psychiatry and Related Disciplines* (1966, 1971, 1972, 1974), *Adolescent Psychiatry* (1977) and *The American Journal of Psychiatry* (1977).

10. This hypothesis predicts parallel if not similar effects among men, and such effects are appearing. For instance, homosexuality among black males is increasing sharply, just as urbanization, welfare, AFDC, and other boons of modern life destroy the black family.

11. *Growing Up Free*, New York 1980.

12. In an essay entitled "Research on IQ, Race and Delinquency" (in *Taboos in Criminology*, ed. E. Sagarin, London 1980, 37-66), Robert Gordon has occasion to ponder the word "racism" as it is used nowadays of scientists like Arthur Jensen. He concludes that this epithet does no work whatever: "Clearly, if a scientist reports or hypothesizes...a non-trivial difference, perhaps genetic in origin, between racial groups... we have added nothing to the content of discourse by describing him in addition as a 'racist.' Employed in this way, the term is simply redundant....But 'racist' is used in a second sense....In this sense, use of the term 'racist' conveys something in addition to the first sense that is not easily communicated by other means, something plainly unscientific and gratuitously invidious." Just replace "racism" by "sexism" here and you have in a nutshell what I have taken many pains to say. The point itself is obvious to Gordon, to me, and I daresay to anyone who reflects on the issue for a single moment. Unfortunately, explaining the obvious involves lessons more complicated than what the lesson is intended to convey.

Going To See The Leaves

Linda Collins

IT WAS MRS. CHILD'S IDEA, to go to Vermont to see the leaves, and to invite their son and his wife to go with them. They could stay, she said, in a really nice inn, and go for walks, and on Saturday, if it was warm, they could find a meadow to picnic in with a view of the mountains.

She had suggested the plan rather tentatively: there would be a lot of driving, and it would be sure to be quite expensive, putting up all four. Besides, she was hesitant about making outright proposals. She preferred to agree to the suggestions made by others.

"And on Sunday," she said, "there is a concert we might want to go to. And start home from there."

But Thomas agreed at once. He said, "Yes, let's."

Elizabeth felt that he had agreed too quickly, there was no chance now for her to explain why it was a good idea, no chance for them to talk about Luke and his wife, Sarah. Thomas said, "Yes, let's," in a voice that sounded as though he was putting his newspaper up before his face. Yes, they should go, Elizabeth needed something.

Elizabeth did want something. It had been at one time Thomas who used to say, "Let's take Lukie out West." He had suggested a trip to Kenya, to the Serengeti. One of his partners had gone there and advised him to go soon while the animals were still thriving and before Luke was too old to want to travel with his parents. Thomas's partner had said it would be the experience of a lifetime. But Elizabeth hadn't wanted to go and so they had stayed home and gone to the seaside for a week when Luke came home from camp. But recently Elizabeth thought about places to go, where, she didn't quite know, while Thomas now wanted to stay at home in the evening and on long weekends, as well as on his month's vacation.

Thomas did not know what made him agree so quickly to Elizabeth's suggestion. Still, the proposal struck him as one that would accomplish something that should be accomplished, touched his underlying understanding of things, for even to himself his "Yes, let's" sounded too quickly after his wife's, "Dear?"

THOMAS DROVE, although Luke had offered to drive. After New Haven, they started north. A blue light, soft and even, spread from one part of the sky to the other. It was hot.

Thomas drove, looking straight ahead. Sarah sat behind Elizabeth, looking out the window. Her hair blew across her mouth. She pushed it away with the back of her hand. Luke turned this way and that, trying to find space for his long legs. His mother saw his profile and the full, sculptured curve of his lips. He ran his big fingers through his blond hair which sprang up again after his fingers had passed.

Elizabeth said: "We used to sing on drives."

Luke began: *"Oh, the cow kicked Nelly in the belly in the barn."*

Sarah: *"But the doctor said t'wouldn't do her any harm."*

The two young people sang out with their loud strong voices. They heard themselves. Their voices shook their chests and vibrated in their throats. Sarah tried to outsing Luke, she sent her voice from her diaphragm, a soldier in her cause. Luke heard the challenge but would have none of it. He had no doubt he could wrestle her to the ground, pin her, outsing her, but she would not accept this. Thomas sang with them, then fell silent. Elizabeth hummed.

They passed a clump of low red bushes on the grassy divider. Elizabeth said she hoped they had not come too early, that the leaves would have reached the height of their color.

They drove past the domes and cylinders of Hartford.

There were many cars on the highway with out-of-state plates.

"I wonder how many of these cars are going to see the leaves," said Elizabeth. She had a strong response to the idea of people being brought together; the periodicity of things moved her, and the discovery of community in unexpected places.

Sarah opened her camera case. She loaded three cameras.

"There," she said.

"Black and white?" said Elizabeth, looking over her shoulder. "For the leaves? Why black and white?"

"She takes a dim view of color," said Luke.

"Oh, Luke," said Sarah. "I want to try to do something with the leaves. With the light. I don't want just to gawk at the color."

"You know, in Japan, people swarm to the hillsides to see the leaves," said Elizabeth, while to herself she said that Sarah was not being rude to her, only eager about her work.

Linda Collins's stories have appeared in *The Hudson Review* and other magazines.

"Well, so do we. That's just what we're doing, isn't it? How is it different?" Luke pressed Sarah and his mother both.

"Nobody calls them 'leafies' in Japan," said Sarah.

"How do you know?" asked Luke. "How do you know there aren't just as many scoffers in Japan as here?"

"Peering out from behind screens and saying 'See the reafies' to one another." Sarah took up Luke's scenario with a certain excitement. She tried to adorn it, expand it, but Luke let it go, turned to the window, and Sarah's voice trailed off.

Thomas said nothing. He was the driver. He was the person behind the wheel, taking his wife where she wanted to go, ferrying the young people. It brought a sort of peace to him. He had, when he was young, harbored the idea of some outcome for himself. It had been unclear to him what it would be, but that it would be, had seemed unquestionable. For most of his life, he had taken courage from the thought that a task awaited him. Thomas was still strong, still smooth muscled and fit. Recently, the thought had come to him that perhaps the rest of his life would be no different from the way things were now, that he would not be called upon. Recently, he had found he could no longer contemplate his wife in an erotic fashion. Nothing was said about this. He meant to speak about it, but it seemed unspeakable. He could not raise the subject. He was not sure whether the reason was that he feared to hurt her or that he hesitated to embarrass himself. Sometimes he wished for old age when the issue would be, he thought, dead.

Soon they would pass Deerfield, where Thomas had spent his years from thirteen to seventeen. As the little school buildings came into view, Elizabeth, as she always did, turned her head to look at them across the fields. They seemed far away and very small. There Thomas had played ice hockey and read *Ethan Frome*. In the early morning, in all seasons, thick white fog had sat in the low places in the valley. In spring, limp yellow strings had blossomed on the birch trees. When his parents came to visit, they took him out to lunch in Greenfield. His father asked him how things were going. His mother told him what his cousins and aunts were doing. He felt very small, very young. It seemed at each visit that he and his parents were growing farther apart. He no longer cried when they left. He knew it was untenable to love them.

"How come you didn't send Luke to Deerfield?" asked Sarah.

"Thomas hated Deerfield. They snapped towels at him." Elizabeth was always outraged that his parents had sent him off so young and tender.

But I didn't hate it, Thomas was thinking. That he had been lonely as a child had seemed only ordinary. He had merely waited for the end of childhood.

In school, he had walked from building to building. He had seen, as the morning fog lifted, the color of the leaves, which had grown stronger during the night. No child remarked to another on the color or observed aloud that the trees, which had been green when school started, were now orange, or red. The children noticed the leaves but said nothing.

In the autumn, he had run cross-country; in winter, he wrestled. He grew, he felt himself to be merely the container of his strength. Who could tell how much stronger he might become? Running through tunnels of copper leaves, he thought of nothing but persisting. In winter afternoons in the wrestling room, he heard the thunder of the basketball team overhead. In January, the daylight was gone by the time he got to the gym. Under yellow lightbulbs in their metal cages, he lifted weights and practiced his moves. On Saturday, all honed and pure, he struggled with another youth. His veins swelled. He scarcely saw his opponent. It was all in terms of something else. If I win this match, then. . . what? His thoughts carried him far, but something lay beyond them. There was something more than the trophy to be gained.

In the rear-view mirror Thomas caught his son's glance. Father and son seldom spoke to one another, but each sometimes intercepted the other's gaze. Now Thomas swung out into the passing lane and pressed the accelerator to the floor, causing Elizabeth to sway forward against her seat belt, and the maps to slide along the top of the dashboard. Exhaust fumes entered the car as he passed first one trailer truck, then another, and pulled back into his lane.

"Thomas, my goodness," said Elizabeth.

As they crossed into Vermont, the color in the trees intensified.

"Oh, look," said Elizabeth, as they left the Connecticut Valley and started up into the orange hills, "this really is the peak. We came at the right time."

IN THE MORNING, Thomas and Luke got up first. They met in the hall, testing the locks of the doors they were closing upon their wives who had not yet risen. Sunlight blazed at a little window at the end of the hall. Thomas waited for Luke to reach him. He felt a shy excitement which he was scornful of, but nonetheless he wondered what he could offer Luke that might please him. Luke approached, bending a little under the low ceiling of the hallway, and together they went down the uneven, carpeted stairs to the dining room.

In the morning light, between butterings and bites and swallows, Thomas examined his son. He felt able to look at Luke in a way he could not in his wife's presence. He was anxious to make his observations acutely and quickly, before Elizabeth should appear. Luke's skin was fresh, he looked rested, but what Thomas had thought he had detected yesterday was true, his hair was beginning to recede. Thomas reached up to touch his own hairline, but he blurred the gesture by stroking his head where the hair was still thick.

How old is Luke? he thought. Is he twenty-five or

already twenty-six? Thomas hoped he was only twenty-five.

Luke held his fork with the tines down and pressed a neatly cut, five-layered mound of pancake into the maple syrup which had pooled at the outer edge of his plate. When the syrup had all disappeared into the pancake, he leaned over his plate and brought the forkful to his mouth. It was winking with syrup. When he had finished, he drank the last of his milk, tilting the glass, and then turned to his coffee.

"Good?" said Thomas. "Did you enjoy your breakfast?"

"Listen, Daddy," said Luke. "I know that you are worried about me. And Mommy is, too. I know that. But don't. Or do. I know you can't help it. I will be all right."

The morning sun moved in the sky just enough to brilliantly strike the water glasses and the restaurant silver on the table, flinging blades of light on the walls. The table cloth was too white to look at. For that moment Thomas felt that Luke was the father and he was the son. He wanted to say something to Luke that would be true. At the same time he wanted to say something that would make him be the father again. He raised his eyes from the quivering light and saw that Elizabeth and Sarah were standing in the doorway of the dining room.

"There you are!" said Elizabeth.

Thomas and Luke stood up. Elizabeth wore a white cardigan over a blouse with little lavender dots, and a blue denim skirt. She was wearing pink lipstick. Her "There you are!" had sounded so loud in the dining room that she was surprised. She crossed quickly from the dim hall to the bright square of sunlight where Thomas and Luke were standing, letting herself smile only when she had reached them. Sarah followed. She wore an olive shirt with many pockets. When she moved her head, her long straight hair parted in places, and Luke could see the little turquoise earrings his parents had given her. She seldom wore jewelry and he was glad she had put them on.

"How lucky we are!" said Elizabeth and smoothed her skirt under her as she bent to sit down on the chair Thomas was holding. "What a beautiful day it is!"

Luke winced at the eagerness and timidity with which his mother, dressed like a child, had crossed the room. Both his mother and father had blue eyes. To Luke, it seemed that they both peered at him as if to see what was inside his head. Their look seemed to try to exact something from him, some agreement; for instance, as now, that it was indeed a beautiful day, and since all were agreed on that, all of one mind, some further harmony was bound to follow. The mild questioning look of his mother and father peering at him made him say: "Let's get this show on the road," but when he realized that his mother and Sarah had not even ordered yet, he sat back, abashed.

Thomas ordered Granola for Sarah and muffins for Elizabeth. While they ate, the men drank more coffee, and together they agreed on a plan for the day.

AFTER LUNCH, it took a while to get comfortable. They shook the crumbs off the two blankets and spread them out again to rest on, but they had picnicked in a mown field and the ground was stubbly. Finally, they moved the blankets to the far edge of the field under the trees where the grass was soft. Thomas was reluctant to leave the car so far out of sight, but Luke said he wanted to take a nap and Sarah had her tripod and filters ready and was eager to get to work. For a while, as they carried the blankets across the field, sending up showers of crickets with each step, it seemed they were making too much fuss. Elizabeth tried not to seem to be arranging things. She knew there could be a reaction against her for being too managing, too motherly, but she was willing, right now, to risk it. What had they driven all this way for, if not for this? Nonetheless, as they walked, she hung back, not to be first. Thomas took the lead, and Luke walked with him. The sun shone through the rims of their ears. Sarah noticed this and said to Elizabeth: "The sun is shining through their ears." Elizabeth was offended that this young woman should speak so familiarly about her son's ears, her husband's.

"I think Luke might go back to school next semester," said Sarah in a soft voice. Elizabeth knew she was anxious lest Luke hear them talking about him.

When the blankets were smoothed out, Luke stretched himself out on the plaid one and folded his arms over his chest.

"Night," he said from under closed eyes.

Sarah looked at him, the length of him on the blanket, occupying it fully.

"I'm going to take some wide-angle shots," she said, with a lift of her chin, and she picked up her tripod and bag and stalked off down the field.

And so, when Elizabeth and Thomas lay down on their blanket, having carefully made room for one another, the family was together, mother, father, and son.

After a bit, Luke opened his eyes and turned his head towards his mother. She was lying on her back with her eyes closed. The afternoon sun struck her full in the face. A lavender vein moved stepwise across her eyelid. The lid was rose-colored; the edge of the lid looked moist and it trembled slightly. Her yellow-gray hair lay in flattened coils under the weight of her head. Above her upper lip fine hairs shone in the light, and from the red cave of her nostril long yellow hairs emerged. Luke touched his own nostril and felt the stiff hairs that stuck out of his nose. He raised himself on one elbow and looked beyond his mother. His father lay beside her. Briefly, he saw them both up close, enormous, as though in a fever, or through a lens. Their faces were magnified in his eyes, for a second they occupied the entire landscape.

With a guilty heart, he sat up straight and felt in his buttoned-down shirt pocket for a marijuana cigarette. At the sound of the match striking, both his parents opened their eyes. As he inhaled the smoke, his father said, "Do you have to do that, Lukie?" and he said, "Yes, Daddy, I do."

He sat with his knees up, one arm around them, holding his cigarette with his free hand. His parents sat up and began to brush bits of grass off their sweaters. Leaves, the color of apricots, with an occasional speck of light green, were falling from the tree above.

"There's Sarah," said Elizabeth.

Sarah was at the lower end of the meadow. It was difficult to tell how far away she was. She looked tiny and there was nothing to measure her by.

Elizabeth stood up and waved, but the sun was behind her. "Saaa-rah." She gave a sort of yodel. Sarah turned in their direction but Luke knew that all she could see was the afternoon sun. They watched her walking up the slope with her awkward, determined stride. She could as well have been an utter stranger.

Luke gently tapped his cigarette on a rock in the wall behind him. When he was quite sure it was out, he pinched the end, and folded the remains in a bit of paper which he carefully returned to his shirt pocket. Then he stood up and in long strides ran the length of the field to Sarah who was standing at the edge of the woods in a drift of leaves. She watched him running towards her. The opening and closing of his legs gave her the impression he was running in slow motion and she started to reach for her camera, but he got to her too soon, before she was ready. She hadn't got the lens cap off when he grabbed her and held his arms around her. "Oh, Sarah, don't leave me," he said. She felt his heart leaping like an animal in a cage, she smelled his sweat and felt the moisture on his neck and face.

"I wasn't going to leave you," she said, but she felt, as usual, a certain confusion, an apprehension. Why had he lain down in the field in front of his mother and father and taken up the whole blanket? Didn't that mean she should leave him? How could they be going to lead their whole lives together? Where was comfort to come from, where was happiness? From passion? Perhaps, but it was unreliable. Who was this man, this blond man? How had she come to lie down with a stranger?

The sun was veiled, as a thin skin of clouds rose in the west. As the light in the sky paled, the radiance of the leaves increased. Something solemn and important was happening in the woods. A chill crept over the meadow. Luke's lips nuzzled Sarah's neck. His knee pressed between her legs. She saw the small figures of Elizabeth and Thomas leave the far edge of the field and move toward them over the stubble. Luke inserted his hand under the waist of her jeans in the back and reached down to feel her buttocks, thin and clenched.

"Luke," said Sarah, twisting about, "don't. Don't do that."

Luke began to laugh. He wanted to wrestle with her, to push her down in the leaves. The smell of the woods rode upon the cooling air which poured into the meadow, carrying with it the smell of moss, of mushrooms, of rot, of black mud, of rotting stumps and the rotting bodies of small animals, of chipmunks, rats, mice, squirrels, of everything that dies in the woods. The smell of decaying leaves and decomposition was delicious, it appeared suddenly and turned thoughts to the secrets that lie in the forest. Luke pressed against Sarah.

"Later," said Sarah.

"I would like to go into the woods with you now," said Luke.

He pressed his knee against the hard double seam of her blue jeans. She stepped back and let herself fall to the ground. The wind blew a hard gust. Above, the ash tree let loose a shower of leaves, yellow, the color of dark mustard. They lay in the leaves, laughing.

"OK," said Sarah, in a soft voice, as Luke's parents, smiling uneasily, drew near, "later."

THE WIND BLEW ALL NIGHT LONG. Elizabeth slept and woke, hearing the wind and the tap of branches against the window of the unfamiliar room. She lay in bed and thought about the leaves and their drying stems and the trees they dance upon as they try to leave. She thought about how hard it is for them to leave. The tree sends juices, the leaf clings; the wind blows and the leaf turns, spins, bends back upon its stem.

She went to the window and stood looking out. Her bare feet on the wooden floor made her feel like a girl. The room was cold. She heard the wind and saw that the leaves were still falling in the dark. It was a grave matter that all the leaves were falling, but she was very glad she had come to see them.

THE CONCERT WAS PLAYED in what had been a Congregationalist church, square and white, which had been renovated to accommodate its new function. Moulded stackable seats replaced the pews, and recording equipment stuck out of the pulpit. On the floor, wires trailed.

It took most of the first movement for Elizabeth to begin to concentrate. She had to remind herself to pay attention to the sound which drummed or gurgled in her head, memorably, she thought, but no sooner had the first bit opened into its development than it was gone. And she couldn't get it back. She criticized herself, but at the same time wondered if she was alone in this failing, or whether there were others like herself who were confused.

The cellist plucked a loose strand from his bow and poised himself to plunge in again. The cello was pale, almost yellow; the viola was red. The two violins were similar in color, but one glittered, the smaller one. The second violinist was a woman who wore a long dress of bright green. The dress was sleeveless and the woman's arms were white. Elizabeth thought it was no doubt a convenience for her not to have sleeves. A loose sleeve would get in the way, and a tight-fitting sleeve would pull under the arms, or at the elbow. And yet the young woman was

exposed, and her arms seemed very private, with everyone looking on. Of the four players she was the only woman. She was neither pretty nor ugly. From time to time, as she played, she gave her head a shake, and her smooth brown hair crested and fell back into place. The first violinist played, and she waited, holding her violin upright on her thigh. When he had played for several measures, she raised her violin and held it under her chin, letting the bow hang loose from her right hand, watching the other players, and nodding her head, until, with a sudden deliberate movement, she lifted the bow and began to play vigorously. Her thin arm went rapidly up and down. The four leaned toward one another as they played. The music was loud and strong. Then the three others plucked their instruments and the woman in green played alone.

Afternoon light fell in stripes upon the listeners. In the darkness between the stripes, motes of dust floated. Elizabeth held her breath. Something wonderful was happening. The music rose from the platform and spread to fill the space above. The sound resonated upon whatever it touched, the beams in the ceiling, the planked floor, the walls. The first violinist and the woman in green were playing sweetly and loudly to one another, while the others sustained them with arpeggios. As he finished drawing his bow and with a subtle gesture of his wrist was preparing to return it, she was drawing hers to its tip. Her head was bent down so her chin touched her chest, and her arms were spread wide apart. Her face was hidden. Only the top of her bowed head could be seen. The sounds she was pulling from her instrument were the sounds of tearing, the sound of something long being torn in two. The cello and viola fell silent and then the first violinist stopped playing as though to honor the last of her long trembling notes. Elizabeth thought: Then there is no happiness. A rush of courage filled her completely, and she thought, I can bear it, now that I know.

From above a peculiar noise distressed her. She realized it had been pressing upon her for some time and she had been resisting it, as though holding a door shut against a great force, but now she gave way. She looked up. On a ledge under one of the high windows, birds were sitting. One fluttered out, circled and landed. The others chirped and shrilled. It was a shocking breach. Could the players hear? Elizabeth would have liked to do something to save the situation, but that was ludicrous. What could she do? Nothing, she thought, but sit there and wait it out. Distracted, she waited for the quartet to finish.

When the concert was over and the players had come back several times to bow to the audience, which was standing to applaud, Elizabeth turned around to look up at the eaves. The birds had disappeared, but she thought she saw straw sticking out from one of the high joists. The glare of the lights caught a feather which was floating down in an uneven way, impelled by whatever drafts reigned up there.

Luke followed her glance. He put his arm around her. "Did they bother you, the birds?" he said.

Love for him weakened her. She wanted to sit down. She did not want Thomas to see how moved she was, or Luke either.

"Sparrows, were they?" she asked, turning her face away slightly to hide her eyes.

"*Passer domesticus,*" he said, evoking thus the days when he and she had walked together, noting the particulars of the world. She had carried with her her bird book and little jars in which to bring home beetles or whatever special things they should find. In this manner she had felt she was molding him into the kind of man she dreamed for him to become.

In the parking lot, they saw the cellist set his instrument carefully in the back seat of his car. They said how glad they were that they had already checked out of the inn, that they could start home at once. Thomas agreed that Luke should drive, and so he and Elizabeth sat in the back.

Thomas reached for Elizabeth's hand.

"I am glad we came," he said.

"Oh, wonderful," said Sarah. "Thank you so much. Thank you both."

Thomas fell asleep holding Elizabeth's hand. When she saw that he was deeply asleep, she gently withdrew her hand. Darkness gathered quickly. As the light sank out of the air, the sky became dark blue. Sarah and Luke murmured together in the front seat, laughing occasionally. Then they fell silent. Sarah leaned her head on the headrest. Soon she too was asleep. Elizabeth looked at the red taillights extending far ahead and the sweep of the lights of the northbound cars approaching. By the dim light of the dashboard she could see the line of Luke's cheek and his brow when he turned his head to look in the side mirror.

"Mom?" said Luke softly. "Why don't you go to sleep, too? I'm going to drive very carefully."

"I wasn't worrying," said Elizabeth, quite truthfully, but nonetheless she too then fell asleep.

Although they had agreed to stop for a bite to eat somewhere near the halfway point, Luke did not stop at all. He drove peacefully, absorbed in the task of not driving too fast, or too slowly, in deciding whom to pass and whom to let pass, checking the fuel gauge and the mileage. No one woke until he stopped for the toll at the bridge. Both his parents woke then, and after a minute Sarah, too raised her head.

"Where are we?" she said.

"Almost home," said Luke. "You were asleep almost the whole way."

One Day in the Life of the *New York Times* and *Pravda* in the World: Which is more informative?

Lev Navrozov

To inform is not the *raison d'être* of *Pravda*, for *Pravda* is no source of news for Soviet decision-makers. The latter have for their daily information a multi-tier system of their own "closed" (secret) newspapers like *White Tass*, just as they have their own "closed" statistics, or their own "closed" book publishing. The goal of *Pravda*, as well as all "open" media intended for non-decision-makers, is to assure the Soviet expendable majority (which is to do or die, not to ask why) as well as all vassals, allies, and supporters all over the globe that they are on the right (winning) side of history.

In contrast, the Western media must be informative, for the entire population of the Western democracies makes decisions, if only by voting, in foreign policy, strategy, and defense, and the *New York Times* is the main source of daily international news for top American decision-makers, including the President of the United States.

In short, for *Pravda* to be informative is a gratuitous luxury, while in the case of the *New York Times*, information is a matter of life and death for the United States and the entire non-totalitarian world. But is "international news" more informative in the *New York Times* than in *Pravda*?

The top *New York Times* editors seem to be confident that it is ridiculous even to compare the two newspapers. *Pravda* is free to be informative only within its propaganda assignment. The *New York Times* is free to be as informative as it wishes. Does it not follow therefrom that the *New York Times* is as informative as a newspaper can possibly be?

Who can compare the international news of the *New York Times* whose Sunday edition averaged 558 pages per issue and weighed seven pounds way back in 1967, with that of *Pravda* which still consists of six pages?

In a book of generous self-appreciation written by forty-eight "*Times*men," one of the contributors, Max Frankel, says that at some point in his sojourn in Moscow as a *New York Times* correspondent, he could compose a *Pravda* text in advance, without seeing it, "with 80 percent accuracy":

> WORLD SERIES...TASS...NEW YORK...The peace-loving peoples' valiant struggle for progress throughout the world is being obscured in the American monopoly press this month by a great hullabaloo over what American sport financiers arrogantly call a world championship. Not only the heroic sportsmen of the Great Socialist Camp but even America's poorer allies are barred from the games...[1]

We will see if Mr. Frankel's composition is good even as a parody. Alas, the fact that *Pravda* is a sensitive and

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In 1971 Lev Navrozov left Russia for the United States with all of his family—wife, son, and mother (his father had been killed in action in the Second World War). Trained both in the exact sciences (at Moscow Energy Institute) and in languages, he graduated in 1953 from the Institute of Foreign Languages, Referents' Faculty—a facility, organized on the specific orders of Stalin, to produce "outstanding experts whose knowledge of Western languages and cultures would not be inferior to that of well-educated natives of the relevant countries." In Russia he translated Dostoevsky's *The Poor People* and *Notes from the Deadhouse* and Alexander Herzen into English. In 1975 he published *The Education of Lev Navrozov* (Harper and Row), a work he had written in English in Russia. Among his most important articles are: "The Soviet Britannica" (*Midstream*, February 1980); "Liberty and Radio Liberty" (*Midstream*, January 1981); "What the CIA Knows about Russia" (*Commentary*, November 1978); and a series of reviews of recent novels in *Chronicles of Culture*. In 1979 he founded The Center for the Survival of Western Democracies. This article is taken from a forthcoming book, *What the* New York Times *Knows about the World.*

powerful totalitarian tool in an evil cause does not mean that it consists, as Mr. Frankel assures us, of moronic gobbledygook, in contrast to the *New York Times*, "by every objective criterion the most thorough, most complete, most responsible newspaper that time, money, talent, and technology in the second half of the twentieth century had been able to produce," to quote Harrison Salisbury's *Without Fear or Favor.*

Unfortunately, "totalitarian" and "evil" does not mean "stupid" or "funny." Nor should it be forgotten that freedom means in particular the freedom to ascend to the infinite heights of genius as well as the freedom to descend to the incredible depths of ignorance, stupidity, or general personality degradation, as is exemplified by Walter Durante of the *New York Times* who is now recognized, even by Harrison Salisbury, to have been perhaps the worst non-Communist falsifier of information on Russia in the twenties and thirties.

So let us turn to *Pravda* and the *New York Times* as they are, not as the "top *Times*men" assume them to be. As a sample for comparison I take the issues of both newspapers dated February 18, 1975, a date I picked at random as I scanned the *New York Times* for Cambodia-related reports and articles.

In its "News Summary and Index" the *New York Times* lists five news items as the "major events of the day." The first of them the newspaper summarizes as follows:

> *International*
> Secretary of State Kissinger and Andrei A. Gromyko, the Soviet Foreign Minister, completed their talks in Geneva still in disagreement over the Middle East. After five hours of discussion on the Middle East, Mr. Gromyko told newsmen that "there were questions on which our positions did not exactly coincide." Mr. Kissinger said he concurred with that.

The relevant *Pravda* article is entitled "Joint Communiqué on the Talks Between A. A. Gromyko and H. Kissinger" and is the text of the official document so named. The *Pravda* text is worth reading for seven words near the end of the following paragraph:

> Special attention in the talks between A. A. Gromyko and H. Kissinger has been paid to the Middle East. Both sides continue to be concerned about the situation there which remains dangerous. They have confirmed their determination to do their best for the solution of the key problems of a just and durable peace in this area on the basis of Resolution 338 of the United Nations Security Council, with due account of the legitimate interests of all peoples in this area, including the Palestinian people...

The sole purpose of the "talks" and the "Joint Communique" lay for the Soviet side in these seven words, "the legitimate interests of...the Palestinian people," which were to be officially and publicly endorsed by the United States Government.

The question is: why did the *New York Times* leave out these seven words in all relevant texts of the issue under review?

My explanation, based on my studies of the *New York Times* in the last sixty years, is that the *New York Times* has always tended to conceal unpleasantly dangerous "sharp angles" of the outside world and show it far more benign, safe, and peaceful than it really is.

Here in 1975 there still flourished détente, that is, the unilateral fantasy that the Soviet war-regime is a peaceful, cooperative if essentially Russian and hence outlandish society. And suddenly this American recognition of the "legitimate interests of the Palestinian people" (read: the establishment of "Arafat's Cuba" at the heart of Israel). So the Soviet rulers were pushing their global strategic interests just as before—and much more successfully owing to the American fantasy called "détente"?

This could upset some Americans, especially Jews, and in the ensuing panic, paranoia, hysteria, they might (God forbid!) question the meaning of détente itself!

It is true that the tendency of the *New York Times* to conceal "sharp angles" becomes strong if the (future) tyrant and his (future) tyranny can be connected with "Left-wing" words like "revolutionary," "progressive," "independence," "national liberation," as opposed to "Right-wing" words like "reactionary," "colonialism," "imperialism," "fascism." However, if the tyrant and his tyranny are dangerous enough, the *New York Times* seems to be anxious to play down the danger, no matter whether it can be connected with Left- or Right-wing words.

The *New York Times* was ruthless to Lon Nol's government in Cambodia since whatever its "ineptitude" and "corruption" were according to the *New York Times*, even the latter never suggested that Cambodia under this government was dangerous to any country on earth.

But the more dangerous the regime is the more determined the *New York Times* seems to be to conceal the danger, just as some individuals conceal unpleasant news from everyone around them and even from themselves, and speak especially well of those who are powerful and nasty.

Certainly Hitler and his regime could be much more readily connected with words like "reactionary" or "fascism" than the government of Lon Nol of Cambodia, "inept" and "corrupt" as it was, according to the *New York Times*. But what was the coverage of Hitler and his regime by the *New York Times*?

This digression into the past will not be time wasted.

"If the international Jewish financiers (read: the United States, Britain, and France) go to war with Germany," Hitler stated in the official translation of his speech of January 30, 1939, "the result will be the annihilation of the Jewish race in Europe." That is, Hitler officially declared that he regarded the Jews of Germany and any country he would occupy as hostages whom he would kill off if the Western democracies tried to interfere with his conquests.

The intention was clear already in 1938 as Dr. Goebbels's *Angriff* commented on Kristallnacht, the Nazi's ostentatious pogrom of Jewish-owned businesses in Germany on November 10:

> For every suffering, every crime and every injury that this criminal [the Jewry] inflicts on a German anywhere, every individual Jew will be held responsible. All that Judah wants is war with us, and it can have this war according to its own moral law: an eye for an eye and a tooth for a tooth.

"Excerpts" from Hitler's speech of January 30, 1939, occupy pages 6 and 7 of the *New York Times*. But on the front page we find an article headlined "Hitler's Advice to Us."

I had to read the article twice to get rid of the notion that the *New York Times* was being sardonic. No, it was dead serious. It presented Hitler's speech as Hitler's *advice* to the Americans. I reproduce the article in full, down to the last full stop:

> "Hitler's Advice to Us"
> Berlin, Jan. 30—That part of Chancellor Adolf Hitler's speech dealing specifically with German-American relations reads textually as follows:
> "Our relations with the United States are suffering from a campaign of defamation carried on to serve obvious political and financial interests which, under the pretense that Germany threatens American independence, are endeavoring to mobilize the hatred of an entire continent against the European States that are nationally governed.
> "We all believe, however, that this does not reflect the will of the millions of American citizens who, despite all that is said to the contrary by the gigantic Jewish capitalistic propaganda through press, radio and films, cannot fail to realize that there is not one word of truth in all these assertions.
> "Germany wishes to live in peace and on friendly terms with all countries, including America. Germany refrains from any intervention in American affairs and likewise decisively repudiates any American intervention in German affairs.
> "The question, for instance, whether Germany maintains economic relations and does business with the countries of South and Central America concerns nobody but them and ourselves. Germany, anyway, is a great and sovereign country and is not subject to the supervision of American politicians.
> "Quite apart from that, however, I feel that all States today have so many domestic problems to solve that it would be a piece of good fortune for the nations if responsible statesmen would confine their attention to their own problems."

There is a story about a class at an American school writing an essay on poverty, and one girl stating: "That family was very poor, and their butler was poor, too." The girl differentiated between wealth and poverty, but the scale of differentiation was very narrow: the wealthy employ rich butlers, while the poor poor ones. The *New York Times* differentiated between good and evil. Stalin's regime was good, and Hitler's evil. But the scale of differentiation was very narrow. From the article entitled "Hitler's Advice to Us" it was clear that Hitler referred to "gigantic Jewish capitalistic propaganda" and so he was an evil man. But no more evil than Henry Ford I and other such reactionaries who used the word "Jewish" in this sense. And despite this evilness, the German Chancellor's speech is presented by the *New York Times* as *advice*, good and sensible: he is obviously for peace (the conjecture that Hitler may be for world conquest seems in the context as outrageous as the conjecture that some poor family may not employ even a poor butler).

But what about Hitler's warning that the "Jewish race" in Europe would be annihilated? Surely this was the only news in Hitler's endless verbiage. And surely this only news was the news of the century, certainly so in New York where so many Jews lived. The *New York Times* tucked away this news of the century into the middle of a paragraph, lost in the full-page expanses of Hitler's speech far from the front page. I wonder how many scholars found it. I have never seen it quoted or recalled anywhere.

On page 6, the *New York Times* printed within a frame inside Hitler's speech a summary of the speech as a whole. The summary is attributed to the Associated Press and entitled "Hitler's Salient Points":

> BERLIN, Jan. 30.—Following are important quotations from Chancellor Adolf Hitler's Reichstag speech tonight, as contained in the official translation.

There are four salient points. In point 1, subtitled "Colonies," Hitler speaks reasonably and peacefully about the European colonial powers, though he tactfully mentions no country. Do "some nations" imagine that "God has permitted" them to "acquire the world by force and to defend this robbery with moralizing theories"? The Chancellor suggests a peaceful solution "on the ground of equity and therefore, also, of common sense."

In point 2, subtitled "Support of Italy," Hitler says, no less reasonably and peacefully, that Germany will side with Italy if the latter is attacked.

In point 3, subtitled "Need for Exports," Hitler explains—not only reasonably and peacefully, but indeed in the tone of a pathetic plea—that the "German nation must live; that means export or die." "We have to export in order to buy foodstuffs."

And in point 4, subtitled "Foreign 'Agitators'," Hitler is again made to present a well-justified plaint: when British agitators rail at Germany this is considered part of their sacred rights, but when Germany defends herself against their attacks, this is regarded as an encroachment on these sacred rights of theirs.

So the forthcoming annihilation of the "Jewish race" in Europe is not even a salient point of Hitler's speech.

In other words, part of the American media, including the *New York Times*, had been seeing the totalitarian regime of Germany as a projection of their own American middle-class experience. According to this projection, international peace is something like peace in an American middle-class environment. If *you* have failed to make a

deal, do not blame the other side: *you* have been insufficiently understanding, attentive, accomodating. What on earth are you trying to say? That Herr Hitler does not want peace like all of us? Chancellor Adolf Hitler is human, isn't he? Of course, he is a Right-wing reactionary. So what? What about Henry Ford I? Study the interests of Germany, especially in trade, try to see its side of the case (you must admit that its grievances are just), negotiate, resolve conflicts, settle issues, work out problems, and sign an agreement to your mutual advantage.

Of course, the highest triumph of this kind was the Munich Agreement of 1938. On October 1, 1938, the *New York Times* announced it in its banner headline as: "Anti-War Pact."

> Prime Minister Wildly Cheered by Relieved Londoners—King Welcomes Him at Palace
> By Ferdinand Kuhn, Jr.
> London, Sept. 30—Prime Minister Neville Chamberlain had a hero's welcome on this rainy Autumn evening when he came back to London, bringing the four-power agreement and the Anglo-American declaration reaffirming "the desire of our two peoples never to go to war with one another again."
>
> "For the second time in our history," he told a wildly cheering crowd in Downing Street, "a British Prime Minister has returned from Germany bringing peace with honor."
>
> Mr. Chamberlain was comparing himself proudly to Disraeli, who came home amid similar enthusiasm after the Berlin Congress of 1878.

A cynical outsider might have said that part of Czechoslovakia has just been given away to Hitler in exchange for a piece of paper. The purpose of every conqueror is not fighting, but conquest. The fact that Hitler was taking over part of Czechoslovakia without a single shot fired and could and would conquer the rest in the same way meant that he had won a war without any resistance (the greatest triumph of every conqueror), not that he desired "never to go to war."

> There had been nothing like it here since grateful crowds surged around David Lloyd George during the victory celebrations of 1918. London usually hides its emotions, and all this exuberance was more astonishing than a ticker tape parade on Broadway.
>
> Women Almost Hysterical
>
> It had more than a trace of the hysterical about it. Most of Mr. Chamberlain's welcomers seemed to be women, who probably had not read the terms of the Munich agreement but who remembered the last war and all it meant to them.
>
> They flocked from little suburban homes to watch the Prime Minister pass in his car along the Great West Road leading into London. They stood outside Buckingham Palace in pouring rain with newspapers over their hats waiting for him to arrive for a welcome by King George and Queen Elizabeth.
>
> The crowd set up such tremendous cheers that Mr. and Mrs. Chamberlain had to appear with the King and Queen on the flood-lit palace balcony as if this were coronation time again.

And here is a *New York Times* report from Munich itself:

> "Britain and Germany Agree" by Frederick T. Birchall. Munich, Germany, Sept. 30—The whole aspect of European relations has been changed by developments today following the signature of the four-power agreement over Czechoslovakia in the early hours of this morning.

However, something far more important happened:

> The Czechs have consented to the agreement, but far transcending their acceptance in importance to the world at large are the results of an intimate conversation between Chancellor Adolf Hitler and Prime Minister Neville Chamberlain in Herr Hitler's private apartments just before the departure of the British delegation.

What is the Czech consent to the agreement (that is, Hitler's conquest of Czechoslovakia) compared in importance to the world at large with an intimate (yes, intimate) conversation in Herr Hitler's private (yes, private) apartments?

> These results were made known in the following joint communiqué issued after the conversation:
>
> We, the German Fuehrer and Chancellor and the British Prime Minister, have had a further meeting today and are agreed in recognizing the question of Anglo-German relations as of the first importance for the two countries and for Europe.
>
> We regard the agreement signed last night and the Anglo-German naval agreement as symbolic of the desire of our two peoples never to go to war with one another again.
>
> We are resolved that the method of consultation shall be the method adopted to deal with any other questions that may concern our two countries, and we are determined to continue our efforts to remove probable sources of difference and thus contribute to assure the peace of Europe.
>
> Never has a simpler document been issued in history with consequences more far-reaching or more pregnant with hope. If the two men who issued it stick to their resolves the peace of Europe seems assured for a generation at least.

It is to Czechoslovakia that the *New York Times* devoted about one-tenth of its editorial space:

> Czechoslovakia as it stood before the end of last week was itself the product of a series of major surgical operations made in 1919 by the framers of the Treaty of Versailles. As the world knows, the results of those surgical operations were far from uniformly happy. The city of Vienna, which had been the financial heart of the Austro-Hungarian Empire, became in many ways a shadow of its former self. The German industries in Bohemia, in becoming part of the new Czechoslovak State, were torn from most of their previous market in the old Austria-Hungary. It is partly for this reason that they have suf-

fered so severely that many factories in that district have been shut down and abandoned, often throwing whole communities into unemployment.

So what was happening to Czechoslovakia was good? No: there is a serious *but.*

But if the new territorial amputating and grafting process that is now going on partly corrects some maladjustments, it is more likely to create new and more serious ones.

In other words, the *New York Times* sees Hitler's conquest of Czechoslovakia as a split or merger of a corporation, a mixed bag of advantages and disadvantages.

The message of the editorial is to demonstrate that as far as the still remaining part of Czechoslovakia is concerned, the new split-and-merger gives it on balance more disadvantages than advantages. True, it might have been different:

In a world dominated by pacific sentiments and free trade, changes in political frontiers might have only a minor economic significance. Trade relations would continue largely in their accustomed channels, subject to those adjustments made necessary only by changes in currency, in legal codes, contract forms and courts, and in the incidence of taxes.

Alas, trade relations are not to continue in their accustomed channels:

But the world today is dominated more than it has been for generations by nationalism and the doctrines of protection and self-containment. That is why the amputation of sections of Czechoslovakia is likely to have so serious an economic effect on the part that remains.

On the editorial page the *New York Times* published "Opinions on the Munich Agreement": five letters in all. The first letter says:

The gains from the Munich settlement for the forces of law and order are substantial and far outweigh the sacrifices.

The greatest gain of all is that the democracies set out to enforce peace and succeeded. British and French arms backed by American moral support brought home to Hitler that there is a law which he could not defy with impunity—the law of nations, which though trampled underfoot in China, still has vitality in Europe.

The second letter seems to continue the first:

Despite the scramble for settlement on the part of the democracies and their leaders allowing their powerful countries to be humbled, I think that the Four-Power Pact preserving the peace of Europe is the greatest tribute to the democratic form of government.

The third letter assures the good New Yorkers that the Munich surrender has

made unmistakably clear to the dictators, who have hitherto relied upon the threat of force for the achievement of their ends, that there is a limit beyond which the democracies of the world will not go. Whatever Hitler may have thought before, he knows now that Britain and France are not afraid to fight and that there are issues for which, if need be, they will fight.

The fourth letter states that the relevant countries

have been spared untold agonies of slaughter and have saved billions of dollars by the sacrifice of Czechoslovakia. It is right that millions in these countries now pray and offer up thanks for peace...

And the fifth and last letter deserves to be quoted in full:

To the Editor of the New York Times:

While it was good politics in Munich for Mr. Chamberlain and Mr. Daladier not to underscore the important fact that Hitler retreated shamelessly from the position he took up before the four-power meeting, it is deplorable that the newspapers and the public, instead of emphasizing this outstanding defeat of Hitler's, concentrate on bewailing what Czechoslovakia lost.

If one thing has been proved beyond doubt at the Munich conference it was Hitler's realization that threat of force for power politics does not work anymore, and that the council table has to replace his former methods.

Obviously, if a threat of force is of no use to Germany's future then Hitler is played out, as there are Germans with greater competence available to settle its affairs by discussion. Therefore, for the good of Germany and the rest of the world, it is Hitler's defeat and not Czechoslovakia's loss that should be emphasized and advertised.

Alexander Gross

New York York, Oct. 1, 1938

And here four months after this triumph, Chancellor Adolf Hitler declared like an unreal movie gangster that the Jews of Europe were his hostages, whom he would kill off if the United States and other countries came to the rescue of the rest of Czechoslovakia, which Hitler meant to occupy in six weeks, or Poland, which he was to invade late in the year.

Now we can return to February 18, 1975—to these seven words about the legitimate interests of the Palestinian people which Henry Kissinger duly signed in 1975 on behalf of the United States government, but the *New York Times* deleted.

My *Britannica* (1970) calls pre-1948 Israel Palestine. The Arabs who live on the territory or have fled (though the government of Israel invited them to return, according to my *Britannica*) were first called the Palestinian Arabs, to distinguish them from the Iraqi Arabs, for example. Later the word "Arabs" was dropped (for brevity?) and they became the Palestinians or the Palestinian people. Now, surely Palestine must belong to the Palestinians?

But there is something called Israel in the area? In reply to this supposition, the Palestine Liberation Organization drew in 1968 its "Palestinian National Charter":

> The partition of Palestine in 1947 and the establishment of the state of Israel are entirely illegal, regardless of the passage of time, because they were contrary to the will of the Palestinian people and to their natural right in their homeland, and inconsistent with the principles embodied in the Charter of the United Nations, particularly the right of self-determination.[2]

Still, what is Israel? "Israel is the instrument of the Zionist movement," answers the Charter. But what is, then, the Zionist movement?

> Zionism is a political movement organically associated with international imperialism and antagonistic to all action for liberation and to progressive movements in the world. It is racist and fanatic in its nature, aggressive, expansionist, and colonial in its aims, and fascist in its methods.

On October 28, 1974, twenty Arab heads of government meeting at Rabat named the PLO with Arafat as its leader "the sole legitimate representative of the Palestinian people." The Palestinian Arabs have not elected any sole legitimate representative, you will say. But who elected Stalin, the co-founder of the United Nations, to be the sole legitimate representative there of more than 100 nations of Russia? Arafat is a terrorist? American periodicals I have happened to read at this writing, from the frivolous *Time* magazine to the sedate *Foreign Affairs*, explain that Prime Minister Begin of Israel was once a terrorist too. True, the PLO killed from June 1967 to September 1979 350 Arabs who disagreed with the PLO, including Sheik Hashem Khozander, the Imam of Gazda.[3] On the other hand, I have never heard that Begin ever touched even the most Arab hair on the most anti-Israeli head in the pro-Soviet Communist Party of Israel. But the fact that Lenin killed those who disagreed with him as well, and George Washington did not, is evidently an irrelevant minor difference.

In unison with what was or has since become the prevailing view of the American media, not to mention the media of West-European countries, on July 30, 1974, a "top-level Palestinian delegation," headed by Arafat was officially received by Boris Ponomaryov, "head of the International Section of the Central Committee of the Communist Party of the Soviet Union," and in August it was announced by *Pravda* that the PLO was to open in Moscow a "permanent representation" (a Russian term meaning both embassy and consulate). The "legitimate" (in Russian synonymous with "legal" or "law-bound") interests of the "Palestinian people" had thus come to mean the creation of an "Arab Cuba" to be established at the heart of Israel, this little hard nut of resistance to Soviet expansion in the Middle East, that the Soviet rulers had repeatedly tried to crack by means of wars by proxy, and only an unpredictable counter-attack of Israeli armor had saved Israel in 1973.

How does one know that Arafat's "sovereign state" may be like Castro's Cuba? But how did one know that Castro's Cuba would be a Castro's Cuba? The *New York Times* argued that it would not be: Arafat's "sovereign state" will be small. But Castro's Cuba was even smaller compared with both Americas, Africa, and Asia, and yet look at what it has been doing. There is no harm for the Soviet rulers to try out Arafat: this is only one move by one piece on the global chessboard. If the move does not destroy Israel, some other moves will. If Israel destroys Arafat, not vice versa, there is no end of spare Arafats in this world. And if the war spreads to the entire Middle East, its oil fields will become the first casualty, which will be of immense benefit to Soviet global strategy, and the Soviet invasion of the Middle East will be far easier too. Later, the Soviet rulers will restore oil production in *their* Middle East—possibly with Western aid.

On November 22, 1974, the United Nations Resolution 3236 "legitimized the interests of the Palestinian people," that is, Arafat's armed group. The Soviet rulers (the "Soviet people"?) voted for it with eighty-eight other "nations" or "peoples," including the Byelorussians or the Czechs who also figure as (sovereign) "nations" or "peoples" because their sole legitimate representative Stalin wanted it that way. Most democracies, including Britain, abstained, while a few, including the United States, voted against. In his speech of explanation of the negative vote, the United States delegate said that the United States favored the Security Council Resolution 338 of 1973. The resolution does not mention any Palestinian people, let alone their interests: it called upon the countries which attacked Israel in the Yom Kippur war and Israel which saved herself by accident to cease fire in twelve hours and begin to negotiate.

Pravda's text of the joint document to which Henry Kissinger agreed on behalf of the United States Government refers to "Resolution 338. . . with due account of the legitimate interests of. . . the Palestinian people." The word "legitimate" leaves no doubt as to the meaning: "self-determination and sovereign state of the Palestinian people" in Palestine, as the United Nations resolved. By having signed the "Joint Communiqué" the United States recast its vote in the United Nations, as it were, which constituted the only news the "talks" and the "Joint Communiqué" contained and the *New York Times* extirpated.

This example does not mean that *Pravda* is truthful by definition, while the *New York Times* is mendacious by nature (as *Pravda* would assert). The information on the American side's agreement to "Palestinian sovereignty" that appeared in *Pravda* showed the Soviet readers that at the height of so-called détente early in 1975, the Soviet regime was expanding as victoriously as before: the establishment of an "Arab Cuba" at the heart of Israel could

well mean the destruction of Israel, while the refusal of Israel to have an "Arab Cuba" at its heart would lead to the "international isolation" of Israel, which would also be helpful in the achievement of the same goal.

In general, the veracity of *Pravda* has been improving in proportion to the growth of the Soviet rulers' global might. When *Pravda* said on March 6, 1919: "The Soviets have won throughout the world," and added on the next day: "The comrades present in this hall" (of the 1st Congress of the International) "will see the establishment of the World Federative Soviet Republic," that was wildly untrue. Such a statement today would not be so wildly untrue. *Pravda* does not now need to make such explicit, extravagant, or premature statements to keep the Soviet population as well as Soviet allies, vassals, and supporters, assured as to the "imminent victory of our cause all over the world." Many Soviet inhabitants, whether they identify themselves with the regime or oppose it, now believe in the "ultimate victory" of the Soviet regime without any assurance on the part of *Pravda*. Because the Soviet regime has matched and surpassed American strategic power only in the 1970s, it is obvious to them that the Soviet global game of chess has merely begun, and as in every game of chess, the moves are tryouts, advances, retreats, detours, exchanges. Many Soviet inhabitants understand, for example, that the Soviet rulers keep Eastern Europe on a loose leash just to demonstrate to their potential vassals in France, Italy, or elsewhere that the latter will enjoy some latitude when they come to power in their countries—if they behave, of course. Since the Soviet rulers are after the whole globe, they play with their Eastern European pieces.

What makes Soviet world conquest so plausible to many Soviet inhabitants is not "Soviet gains" in Europe, Africa, the Caribbean, or the Middle East. What impresses them is the very fact that the democracies have been allowing and even helping the Soviet regime to grow from a militarily backward parochial country in the 1930s to the global military mammoth of today. Just think what will happen tomorrow! In 1953 the Soviet regime still produced 38 million tons of steel a year as against the 101 million tons of the United States. In 1978 the Soviet regime produced 151 million tons of steel, used mainly for military purposes, while the United States produced 124 million, put mainly to civilian uses. What will stop the Soviet global military mammoth from continuing to outgrow the democracies? If, having invested in defense since 1947 several trillion dollars, the United States does not yet know how to defend the Middle East, for example, these Soviet inhabitants conjecture that the United States will know how to do it less and less.

In other words, today *Pravda* can often afford the truth and thus gain credibility without sowing any doubt as to the "imminent victory of our cause all over the world." The news that the United States government agreed as of February 18, 1975, to "Palestinian sovereignty," and thus reneged on its United Nations vote of four months earlier, was this kind of truth—a truth in keeping with *Pravda's* propaganda goal.

Inversely, the *New York Times* censored out the news which could prompt some readers to question the view of the *Times* that the foreign policy or strategy called détente was working to the advantage of all concerned and, above all, the United States.

But surely this is a generally expected behavior of an individual or a social group in a democracy. The prosecutor in a court of justice censors out the defendant's innocence, while the counsel for defense the defendant's guilt. Why should not the *New York Times* censor out what contradicts *its* view? The trouble is that the *New York Times* has no adequate opposition source or adequate competitor as regards international daily news for American decision-makers. It is the prosecutor (or the counsel for defense) without the counsel for defense (or, respectively, the prosecutor). The evidence in the twenty years or so, beginning with Castro's seizure of Cuba, indicates that what the *New York Times* censors out usually remains censored out in the process of decision-making in American foreign policy, strategy, and defense.

The rest of the *New York Times* article is sheer verbiage. In contrast to *Pravda*, it is not a documentary text, but its own report, which the *Times* would define as "incisive news analysis" and Soviet decision-makers as Philistine prattle. Whatever it is, it would be misleading in its own way even if the *New York Times* had not extirpated the only grain of news the official text contained.

> In this first high-level Soviet-American meeting since Vladivostok and the chill caused by the Soviet abrogation of the 1972 trade agreement, the atmosphere was described as somewhat more formal and slightly more abrasive than in previous sessions, but on the whole "jovial."

The article is a projection of American middle-class life all over again thirty-six years later—only this time not onto the totalitarian regime of Germany but of Russia. The incidental difference is that while the rulers of Germany were, in the columns of the *New York Times*, American Right-wing corporation presidents, the rulers of Russia are American progressive corporation presidents, pleasant, warm, and forward-looking.

It will be recalled that the "Soviet abrogation of the 1972 trade agreement" the article mentions occurred as a result of the Jackson-Vanik amendment in Congress which tried to "attach political strings to Soviet-American trade and interfere in Soviet domestic affairs," as *Pravda* put it. Many top American decision-makers, including President Ford (whom *Pravda* quotes on the subject in the issue under review), agreed that the "Soviet Union" had a good reason for being offended. And yet the "atmosphere" of the Soviet-American talks was on the whole "jovial." Like up-and-coming American corporation presidents, the Soviet rulers bear no grudge: Russia, Inc. is future-oriented, optimistic, positive—it looks forward to

agreements on world peace, international cooperation, and everything else—in particular in the Middle East, and this is why the Soviet side is so eager to convene the Geneva conference on the Middle East:

> On the Middle East, the Russians have pressed for an early reconvening of the Geneva conference so that they can play a more active role. They are co-chairmen with the Americans.

The fact that the Soviet rulers (the "Russians") prepared two wars by proxy to destroy Israel and have been penetrating the Moslem countries by all expedient means short of the overall invasion of the entire Moslem world, does not exist because the Soviet war-civilization and its rulers do not exist: there is instead Russia, Inc. with its presidents and lawyers, and naturally, they want to play a more active role in the establishment of peace in the Middle East—in order to trade with the Middle East, travel there and enjoy peace in general. What other earthly purposes can a human have?

> The United States would prefer to see the Geneva conference reconvened while there was momentum for further political progress and not as a last-ditch effort to prevent a Middle East war.

Of course, Russia, Inc. is eager to *prevent* a Middle East war. Still greater is its desire to add to the "momentum for further political progress."

> During the discussions, Mr. Gromyko raised the possibility of an accord to limit arms to the Middle East. But this was in the context of what would be in the final settlement, not as a measure to be adopted now.

Actually, "Mr. Gromyko," that is, the Soviet rulers, meant that the United States would "limit arms to the Middle East" while the Soviet regime would send them to their allies, guerrillas, and subversives in the Middle East so secretly that no intelligence agency of the West would know (not that it takes any special top secrecy to achieve this). Anyway, we learn that Mr. Kissinger "dined tonight at Admiralty House with [British] Prime Minister Harold Wilson and Foreign Secretary James Callaghan, who just returned from Moscow."

> They compared notes on Soviet relations. The British leaders were the first Westerners to see Mr. Brezhnev since he became ill in December.
>
> Mr. Kissinger reportedly learned from Mr. Gromyko that Mr. Brezhnev had been suffering from influenza and was now in "fine health" although he would, by doctors' orders, perhaps take two more weeks of rest.

A jovial meeting of corporation presidents and lawyers: Mr. Kissinger and Mr. Gromyko represent different firms, of course, but they always swap tidbits of inside info.

> Joking with Mr. Gromyko, Mr. Kissinger said he could not compete with "the oratorical skill" of his colleague...

Obviously, no meeting of corporation lawyers is complete without their joking with one another, and since the entire description is phoney, jokes may be contrived too.

> The United States discerned Soviet flexibility on extending the agreed 150-kiloton limit on nuclear explosions to peaceful applications.

Yes, flexibility is what also distinguishes Russia, Inc. in negotiations. In fact, the third part of the *New York Times* article is subtitled "A Russian Concession." According to the *Times*, it is the Soviet side, not the American one, which made a concession during these talks. What concession is that?

Having read the two relevant paragraphs of the article, we learn that the Soviet side agreed that the "Geneva conference...should resume its work at an early date," not "as soon as possible," the expression on which the Soviet side had allegedly insisted before. (Is "as soon as possible" necessarily earlier than "at an early date"?) In the *Pravda* text of the communiqué in Russian (which is as valid as the English text of the document) the expression is "at the nearest time." So the "Russian concession" that the *New York Times* espied was lost anyway in the equally valid Russian text.

While the Soviet side is flexible and makes concessions—as a future-oriented, optimistic, positive corporation should—this is more than can be said about the American side:

> Later, on the way to London aboard Mr. Kissinger's plane, newsmen were told that Mr. Gromyko had urged the immediate reconvening of the Geneva conference on the Middle East and had accused the United States of bad faith in excluding the Soviet Union from the Middle East diplomacy.

There is no mention, of course, that Gromyko merely repeated the standard charge Soviet propaganda has been making: the Soviet side is so eager to negotiate, to be flexible, to make concessions, but the egotistic American side does not give the Soviet side half a chance in the Middle East.

To be sure, corporation lawyers rarely agree as soon as they meet. On the other hand, all issues can be finally resolved. After all, every issue between two corporations can be reduced to money: who pays whom how much. And each side will finally decide that it is worth its while to pay the required sum, settle the issue, and recoup elsewhere the money lost.

> The two sides still disagreed on some aspects of the European security conference, but the Americans believe the issues can be resolved.

All that is necessary is good will and legal expertise:

After their talks in the Hotel Intercontinental in Geneva, Mr. Gromyko and Mr. Kissinger came down to the lobby to speak with newsmen. Mr. Gromyko said that "on many of the questions we touched, our positions were close or coincide."

For Stalin's man, Gromyko, who survived Stalin and Beria and Malenkov and Khrushchev, to impersonate for Western consumption a jovial "Mr. Gromyko, Russia, Inc." is about as difficult as for Al Capone or the Godfather to trick school children.

The last sentence of the article adds to the picture of "dynamism and genius" of Mr. Kissinger, America, Inc.:

The Secretary will be in Zurich for luncheon with the Shah of Iran, who is vacationing in Switzerland.

While negotiating on the Middle East (and getting a concession from the Soviet side), on the European security conference, and even on the extension of the 150-kiloton limit on nuclear explosions to peaceful applications, he is taking care at the same time of American-Iranian relations right on the spot, in Switzerland. No wonder the relations between the United States and Iran are so good at this writing, what with the American hostages and the rest.

Pravda did not print a word of this verbiage. Why should *Pravda* mislead its readers in this way? On the contrary, *Pravda* readers must know that the enemy made a concession on "the Palestinian question" because Soviet might cows the enemy, and this is what détente is about: Western concessions, servility, self-disarmament, retreat, surrender, hoping to placate the globally winning Soviet regime. As for that Philistine prattle, let the Western Philistines consume it—the more the better.

What does *Pravda* regard as the most important international news of the day? Britain's signing of several extensive Soviet-British documents, each of which *Pravda* printed in full. Those who were interested (and I prefer to read documents rather than their interpretation by the *New York Times*) could glean from them some grains of news.

From "The Soviet-British Protocol on Consultations" we learn that the Soviet war mammoth and the British midget are "determined to contribute to the deepening of the process of relaxation of international tension [the official Soviet Russian-language definition of the word 'détente'] and to render it [the process] irreversible."

The last word is the key. The natural resources of Britain are small compared with those of the United States, not to mention Russia (the territory of Britain accounts for 1 percent of that of Russia proper, excluding Soviet vassals). When Henry Kissinger launched his détente, the United States preserved at least the economic ability to reverse its policy of transfer of American science and technology to the Soviet military if the Soviet regime openly invaded Afganistan, for example (at that time a wild conjecture, of course). But not Britain. "The Soviet-British Protocol" was aimed at making the "process of détente" irreversible for Britain. The definition of this goal comes up again in "The Joint Soviet-British Statement" (just as do the "legitimate interests of the Arab people of Palestine," though Britain had abstained from the United Nations vote four months earlier). "Irreversible détente": the impoverished Britain would henceforth be like a hungry little fish on a big strong hook inside the bait of Soviet imports and exports. The Soviet turn-off of British-Soviet trade if Britain misbehaved would lead to such deprivations and dislocations that the Government would receive a vote of non-confidence, not to mention the British trade unions' wrath. To bite the bait of Soviet trade, Britain offered the Soviet rulers $2.4 billion in trade credits extended over five years: the little hungry fish paid for at least part of its bait.

In the Soviet strategists' view, Britain is the most resistant country in Europe: it is the only European country that takes defense at least as seriously (if this may be called serious) as the United States: British and American military spending account for almost the same percentage of their respective GNP's, though the living standards in Britain are lower than in the United States.

At this writing, I was interested to see how this most resistant country of Europe had reacted to the Soviet open invasion of Afghanistan. The latest *Facts on File* carries an item of three paragraphs entitled "United Kingdom Retaliates against Soviets."[4] The first paragraph can send a chill down the Soviet decision-makers' spine. Is the little fish off its big hook?

Great Britain Jan. 26 announced a series of retaliatory measures against the Soviet Union for its invasion of Afghanistan.

The second paragraph will move to laughter even the most humorless Soviet bureaucrat:

Foreign Secretary Lord Carrington told Parliament that the government had canceled scheduled visits to London by a Soviet minister and deputy minister, a performance by the Soviet Army Chorus, and such ceremonial military contacts as a planned exchange of naval ships.

The third paragraph announces that the five-year-credit agreement expires in February (that is right: five years have passed since February 18, 1975, the date of the *New York Times* and *Pravda* we sampled). Will Britain stop at least her financing of her transfer of science and technology to the Soviet global war-machine? Oh, no. It will continue to do so "on a case-by-case basis."

I picked up the British newspapers and learned that two days later, on January 28, Mrs. Thatcher said in Parliament with awesome gravity:

We have announced [see above] the measures that we shall be taking with regard to the Soviet Union...

In addition Mrs. Thatcher said she wanted Britain to boycott the Olympics (an awesome retaliation in itself). Alas, the spirit (of Mrs. Thatcher) is willing, but the flesh (of the hungry little fish) is weak, and many British sportsmen will not inflict on the Soviet regime even the grievous damage of staying home.

One section of "The Joint Soviet-British Statement" as published by *Pravda* of February 18, 1975, is subtitled "Bilateral Relations." Here we learn about

> the cooperation between British firms and Soviet organizations and enterprises in the field of reclamation of natural resources, including oil, aircraft building. . . .

Let us pause here. So British and Soviet aircraft builders will cooperate bilaterally? The Soviet regime has been producing at least twice as many helicopters and twice as many combat planes as the United States, even according to what the United States Department of Defense can observe or detect. Is Britain still dissatisfied? Perhaps Britain wants to help the Soviet regime to realize its target of producing one long-range bomber a day? Are there too few Soviet transportation planes to carry troops and/or material to any point of the globe?

The documents *Pravda* published demonstrate how British science and technology are put at the disposal of Soviet military growth. Britain had expelled 105 Soviet agents. But even 10,005 Soviet agents in Britain would hardly be able to pass so much military-industrial information to the Soviet military. Yet, as of 1975 this all-out mass espionage was to be called henceforth bilateral cooperation and include all possible forms of transfer of British science and technology.

Once upon a time Britain acquired colonies in order to import raw materials from them in exchange for her scientifically or technologically sophisticated merchandise and thus support her huge population on a small island. On February 18, 1975, in order to achieve the same economic goal, Britain made a major step toward becoming a Soviet colony in economic reverse: that is, a colony which would supply the Metropolis with her science and engineering in exchange for raw materials and thus support her huge population on a small island. In other words, just as Gambia was once a "raw-materials appendage of Britain" (as Soviet propaganda puts it), so Britain began to move towards becoming a "science and technology appendage" of the Soviet global military machine, and this is the news *Pravda* of February 18, 1975, reported by publishing the relevant documents.

The *New York Times*, which had printed the voluminous verbiage of the "Pentagon Papers," did not find an inch of space for these documents. Instead, the *New York Times* printed again a report of its own, from Moscow "special to the *New York Times*." As nearly all "reports from Moscow," the text could well have been written on the New York premises of the *New York Times*. It is based on the same American middle-class projection: the news is that America, Inc. has been outpaced by Britain, Inc. which landed a huge hunk of trade with Russia, Inc.:

> The announcement of the British credits tended to bolster Moscow's contention that it could find trading partners elsewhere in the West. In renouncing the 1972 trade agreement with the United States last month, the Russians expressed particular annoyance over the low credit ceiling, which is in addition to about $600-million of loans already outstanding.

The United States does not want to sell on credit what the Soviet rulers want? Then Britain will:

> The credits, which Mr. Wilson said would be less than £ 1-billion ($2.4-billion) are part of a broader program for economic cooperation that was signed today. Mr. Wilson characterized it as possibly "the biggest breakthrough in Anglo-Soviet trade that I have known."

Trade, cooperation, good relations:

> The warm tone on which the British visit ended showed that relations between the two countries had emerged from the chill into which they were thrust after London expelled 105 Soviet diplomats on espionage charges in 1971. The Kremlin accepted an invitation for Mr. Brezhnev, Mr. Kosygin, and Foreign Minister Andrei A. Gromyko to visit Britain.

But why does the Soviet global military mammoth keep spies in little Britain by the hundred (or by the thousand)? Because it fears Britain's invasion of Russia? Or because, on the contrary, Britain is for the Soviet rulers just another Czechoslovakia, or Afghanistan, or indeed, Ukraine? In terms of the middle-class projection, the only *New York Times* answer is that Russia, Inc. kept those 105 spies in Britain, Inc. in order to improve trade relations between the two corporations.

Before Henry Kissinger's détente there was a practically universal embargo on strategic trade with the Soviet regime. After the embargo was repealed, each ally of the United States began to reason that if it refrained from a trade deal accelerating Soviet military growth, another country would seize the opportunity. Henry Kissinger destroyed—possibly forever—whatever economic unity existed among the allies of the United States as against the Soviet regime. If Henry Kissinger were in charge of foreign policy in Russia, for that alone he would have been put on trial and shot. But since he is on the other side, he shines at this writing, as ever, and the Soviet rulers certainly owe him a monument for the destruction of a world economic alliance against their war-regime.

Anyway, the state of world trade after the undoing of the embargo on trade with the Soviet regime fits well the misperception of the *New York Times*: the world as just so many corporations vying with each other to sell Russia, Inc. whatever it wants and on terms it chooses:

> Mr. Wilson defended the decision to offer the low-interest credits at a time when Britain has been hit by recession, while

the Soviet Union has been increasing its foreign currency holdings with greater oil profits. Moscow has already concluded deals for cash with other Western countries, notably West Germany.

Or look at France, Inc. Only America, Inc. falls behind, punishing itself:

> The British credit falls short of the $2.5-billion extended by France in a trade agreement signed last December. However, it is seven times more than the $300-million limit set by the United States Congress on Export-Import Bank loans to the Soviet Union in a four-year period.

Let us now proceed to the third of the five "major [international] events of the day" according to the *New York Times*.

"World crude-oil prices have begun to sag noticeably under the impact of reduced consumption by the industrialized nations." No figure for this "noticeable sag." Is it 1, 2, 3 percent? Of what importance was this "sag" if the OPEC countries had been raising the prices 100, 200, 300 percent? The *New York Times* ascribes this "sag" to "reduced consumption" because this tends to support the view that the newspaper has been advocating throughout the 1970s. In his lengthy article (February 1, 1980) to which the *New York Times* referred editorially with approval and which was put on the Congressional Record twice in the same month, George Kennan says: "If the Persian Gulf is really vital to our security, it is surely we who, by our unrestrained greed for oil, have made it so."

One wonders whether it is America's greed for the fifteen raw materials without which the American economy cannot function that has made the rest of the outside world so vital to American security. Must the United States overcome its greed for these fifteen critical raw materials and let the rest of the world go Soviet?

The "greatest real threats to our security in the area remain what they have been all along," Mr. Kennan says after the Soviet invasion of Afghanistan. Predictably, the Soviet invasion is not one of these threats. They are: "our self-created dependence on Arab oil and our involvement in a wholly unstable Israeli-Arab relationship." Not the Soviet involvement in this relationship, to be sure.

Let us assume that the United States has overcome its greed for oil, and so has no need of the Middle East, which duly becomes Soviet. As a result, the Soviet regime will have additional hundreds of billions of dollars annually from oil alone, which means as many dollars for Soviet global military power. Where will the United States take additional hundreds of billions of dollars annually to invest in defense in order to counter the Soviet investment?

In other words, on February 18, 1975, the *New York Times* front-paged an accidental annual or monthly crude-oil price fluctuation to support its view (which is as frivolous as it is lethal) and give it thereby the front-page weight of a "major event of the day." Naturally, *Pravda* (or any other newspaper in the world) did not mention it because it was not an event, whether major or minor.

The fourth "major [international] event of the day" according to the *New York Times* is another failure of the Cambodian Government in its war against the "communist insurgents." Here the view of the *New York Times* and that of *Pravda* (that is, *Pravda's* owners, of course) coincide in the sense that both newspapers assure their readers that the Cambodian Government is doomed and the sooner it will fall the better.

The reports on Cambodia in both newspapers are wrapped in unmitigated gloom (for the Cambodian Government) except one paragraph describing the American airlift. In *Pravda* this paragraph is as follows:

> Washington, 17. (TASS). The United States has started an airlift to supply the Phnom Penh regime with additional military material and ammunition. According to the Washington Post, the first of those transportation planes, DC-8s, which belonged to American Airlines and which the Pentagon has chartered, has arrived in the capital of Cambodia.

The corresponding paragraph of the *New York Times* is:

> With the Mekong blockaded, the Americans have expanded their supply airlift from Thailand. The airlift, technically being handled by civilian contractors but actually run from beginning to end by the American military, is mostly devoted to ammunition so food and fuel are increasingly scarce.

Food and fuel increasingly scarce? But the next paragraph says that "rice and fuel stocks, if stretched carefully, can last well over a month and even two months or more." Does the *New York Times* expect the airlift to carry food and fuel to the city three, four, or *more* months in advance? Does New York have food and fuel stocks for three, four, or *more* months?

The differences between this paragraph of *Pravda* and that of the *New York Times* can be outlined as follows:

Pravda

With Cambodia's defeat made to seem imminent, *Pravda* emphasizes American involvement to show that even the United States is so weak that it can no longer defend any country. Whether the planes belong to American Airlines or the Pentagon is immaterial. Both are ultimately at one and against us.

At the same time, *Pravda* does not want to assure its readers in advance that the American airlift is ineffective

The *New York Times*

The *New York Times* emphasizes the wily wickedness of the American military: they have hired civilian contractors for the airlift, a loophole in the struggle led by the *New York Times* against the American aid to Cambodia.

The *New York Times* wants to assure its readers that *anything* would be futile: that the airlift is "mostly devoted to ammunition," instead of carry-

or futile: no one can predict its outcome, and *Pravda* does not want to commit itself and later look foolish. Our side is winning, but temporary setbacks are always possible.

ing also food and fuel to replenish the city's stocks three, four, or more months in advance. The Cambodian Government is bound to lose, the American aid must be stopped.

The fifth and last "major [international] event of the day" according to the *New York Times* is the theft of pictures at the Municipal Museum in Milan. I am sure that for a large part of the Western media (such as the other two major newspapers of New York) this was the most important international news of the day or the only such news worth reporting. *Pravda* ignored it.

Pravda was called by a Western newspaper the most boring newspaper in the world. It is true in the sense that *Pravda* feels no more obliged to be entertaining than does the American Congressional Record or a CIA report. But, having treated the theft as a major international event of the day, does not the *New York Times* try to relieve its boredom not by interesting information, which is so hard to obtain, but in the same easy way the *New York Post* does? Does not the *New York Times* mix the boredom of *Pravda* (minus some of *Pravda*'s grains of information) and the entertainment of the *New York Post?*

So much for what the *New York Times* regards as the five major international events of the day. Let us now take a couple of international news items of the *New York Times* which are not major events, according to the *New York Times.*

On page 8 we find that in the "new winter-spring campaign" in South Vietnam the Vietcong forces, "with large numbers of fresh North Vietnamese regulars," had "scored their biggest gains in the Mekong area since the 60s."

This is no major international event. True, some readers of the *New York Times* could still remember that on January 27, 1973, the Paris peace agreement on Vietnam had been signed after years of negotiations. So the Soviet rulers, who were behind both the war in Vietnam and the peace agreement in Paris, had treated the United States Government as so many fools and used the "peace" agreement to prepare and launch an open all-out attack and win the war. The impression the article creates, however, is that this attack, brazen, perfidious, contemptuous of the United States, is some remote war of two obscure tribes neither of which has anything to do with the United States, not to mention those jovial corporation presidents and lawyers of Russia, Inc.

Besides, South Vietnam is not really endangered, according to the article. "So far most of the Communist gains have come in the more peripheral parts of the delta."

> Some Vietnamese and Westerners therefore believe that what is happening is a reassertion of the natural balance of forces, which had been artificially extended in the Government's favor by vast American help.

But what about vast Soviet help (which is not even mentioned)? If such exists, it is evidently part of the natural balance of forces. The Soviet rulers are part of the nature in any country: it is the United States which is extraneous, foreign, aggressive everywhere. A truly minor event this war is, a reassertion of the natural balance of forces, a play of nature, as one might say. Who can compare this event to the theft of pictures in Milan or the noticeable sag of crude-oil prices allegedly as the result of reduced consumption!

As for *Pravda*'s coverage of this war, here *Pravda* proves that it is a totalitarian newspaper. The *New York Times* can blot out or distort an event reported by the rest of the media. But it cannot ignore it forever if the rest of the media persists. Now, according to *Pravda,* the war does not exist. Of course, *Pravda* readers know about it from foreign radios. But *Pravda* does not risk the report: what if an American Senator's aide finds such a report in *Pravda?* Here you are (he will say): *Pravda* admits that North Vietnam's perfidious all-out invasion is fully on.

Pravda ran a three-paragraph item entitled "Repulsing the Violators of the [Paris Peace] Agreement" only about a month later, on March 14, 1975, after the Soviet rulers had understood beyond all doubt (if only from the *New York Times'* reports and editorials) that the top American decision-makers regarded the Soviet perfidious all-out attack by proxy on an American ally as something having nothing to do either with the United States or the Soviet rulers.

> Recently [days, weeks, months ago?] the Saigon administration has extended provocations aimed to undermine the Paris agreement on Vietnam.

Fortunately, in South Vietnam there already exists the legitimate government of South Vietnam: the Provisional Revolutionary Government of the Republic of South Vietnam (the PRG of RSV). The PRG of RSV will not allow the "Saigon administration" to violate the Paris peace agreement.

> In response to the appeal of the PRG of RSV, the People's Armed Forces of Liberation of South Vietnam are repulsing with determination the violators of the Paris agreement.

Then for two weeks *Pravda* is silent again. On March 28, 1975, *Pravda* runs a report entitled "Situation in South Vietnam." What is the situation? The same as before. True, *Pravda* now says openly, the Provisional Government of the Republic of South Vietnam governs most of South Vietnam, and surely South Vietnam must be governed by its government, not the "reactionary Thieu clique, stubbornly violating the Paris agreement on Vietnam," as *Pravda* puts it, quoting the newspaper *Nyan Zan* which the "legitimate" government of South Vietnam publishes.

Pravda does not lie when the truth is to the Soviet rul-

ers' advantage. But when *Pravda* is called upon to lie, it lies with the same limitless insolence, professional skill, and almost inhuman hypocrisy with which it lied on the 6th of November of 1917 when Lenin's troops attacked the democratic institutions of Russia, while *Pravda* announced that *we* were being attacked.

The other report of the *New York Times* which it does not list as a major international event of the day, but which is remarkable in its own way, is an especially serene 1000-word fantasy by Flora Lewis entitled "Security Talks Moving to Finale." Since many Soviet decision-makers are male chauvinists, they would classify this report as a starry-eyed housewife's chatter rather than (male) Philistine prattle.

> There has been a great deal of difficulty over the wording of the agreements. For example, a Soviet draft used "important" where a Western draft said "essential."

So this is the stumbling block. Otherwise the Conference on European Security and Cooperation, working on what was later called the "Helsinki agreements," ushering in a new era in the history of mankind, is "moving to finale." Take the third section of its epoch-making agreements, for example:

> The third section, on human contacts and exchange of information, caused problems last year, but has now been advanced to the point where only a few details are in dispute.

What details?

> There was an argument over whether a clause on information should provide for "public access" or "access by the public."

So in the Soviet regime there will be "public access" or "access by the public" (the problem is only to decide which) to exchange of information, not to mention human contacts. The conference is,

> as one delegate described it, the only way "to transform *détente* from just a matter of states to something for individuals, with human meaning."

As of February 18, 1975, Flora Lewis is still living in a détente which is just a "matter of states" (the invasion of the state known as South Vietnam, in violation of an agreement, being a remote irrelevant reassertion of the natural balance of forces). But new agreements (also signed by Henry Kissinger?) are to "transform détente from just a matter of states to something for individuals, with human meaning." As a Soviet lady journalist jeered off the record on a similar occasion: "One feels like singing, laughing, dancing."

Let us turn back to *Pravda*. "True to Lenin's Behest: Patrice Lumumba Friendship-of-Peoples University is Awarded Friendship-of-Peoples Order." The Soviet institution named after Patrice Lumumba, a "hero of African liberation," has young people from eighty-nine countries. This is where future Walter Ulbrichts or Fidel Castros study and are studied *in vivo*, to be selected in order to be trained, introduced to their fellows-in-arms, and helped to come to power in their respective countries: the most ambitious and lucrative profession of today, Soviet satrap. This is the breeding ground for the young personnel of the Soviet global political infra-structure. This is where the Soviet global empire is built.

> A grand meeting in honor of the 15th anniversary of the Friendship-of-Peoples University named after Patrice Lumumba, with the awarding of the [Friendship-of-Peoples] Order to commemorate the event, was held on February 17 in the Kremlin Palace of Congresses.

The *Pravda* article is heavy, oppressive, monumental, as befits the builders of the totalitarian world empire. But it is informative compared with Flora Lewis's daydreams, for example.

> Elected unanimously as the Presidium of Honor was the Politburo of the Central Committee of the Communist Party of the Soviet Union, with Comrade L. I. Brezhnev, General Secretary of the Central Committee, at the head.

This is a university that enrolls young people of eighty-nine countries. Foreign diplomats and correspondents are present at the ceremony. Yet even before it begins, these future doctors, engineers, scientists (and/or subversives, guerrilla fighters, "revolutionary leaders") of eighty-nine countries elect *unanimously* the Soviet Politburo as grand supranational sovereign over them all, while the present governments of their eighty-nine countries are not so much as mentioned.

The speaker is B. N. Ponomaryov, that same "man in charge of the globe" who legitimized in the person of Arafat the "interests of the Palestinian people":

> Great Lenin was the first man to enunciate and champion the right of the people of the colonies to self-determination and national sovereignty. Our country fought for many years to realize this principle. The debacle of the colonial empires was the triumph of Lenin's great idea.

What next?

> In their struggle for their economic independence, the developing countries are more and more determined to nationalize the property of foreign corporations [the Soviet regime's property and personnel in these countries being sacred, of course] and to take other measures assuring their sovereign right to dispose of their national resources, as well as to conduct joint coordinated practical activity in defense of their interests.

"This course of events," Ponomaryov remarks with grim satisfaction, "is obviously not to the taste of imperial-

ism" (that is, any group which resists Soviet global expansion).

> The imperialist powers do their utmost to arrest the progressive changes in these countries and keep these developing states within the orbit of capitalism.

The imperialist powers will fail. Bear in mind growing Soviet global military might:

> However, the international balance of forces has tipped drastically and continues to change in favor of socialism and progress [both of which the Soviet Politburo incarnates]. Under these conditions, the imperialists' possibilities to impose their will on other nations become more and more limited.

The subtext of the message cannot be clearer. Young people of eighty-nine countries! Do you see what is happening in Vietnam? Our side is winning after the United States has paid with more than $100 billion and more than 50,000 American lives to defend its ally against our side. You will win in your country if you are with us. And if you are against us, you will lose, as the South Vietnamese who defended South Vietnam are now losing, and the United States makes believe that this has nothing to do with them or with us.

> We are on the eve of a great day, the thirtieth anniversary of the victory over Hitlerism. It is common knowledge that the Soviet Union sustained the heaviest losses in this war and made the decisive contribution to the rout of Hitler's Germany, to the liberation of the peoples of Europe from fascism, and to the rescue of world civilization.

How is this relevant to the eighty-nine countries today?

> The lessons of World War II remind us of the need to maintain vigilance constantly and wage an uncompromising struggle against the aggressive plans of imperialist reaction trying to impede the process of relaxation of tension [the official Soviet definition of détente].

In other words, on one side, the side of goodness, is the Soviet Union, détente, peace, progress, socialism, those Western capitalists who sell the Soviet rulers strategically important merchandise on credit, the young people of eighty-nine countries, world civilization. On the other side, the side of evil, is Hitlerism, Hitler's Germany, fascism, all who are against détente, reactionaries, war, imperialism, colonialism, capitalism.

To someone like the philosopher Sidney Hook, this Manichaean dichotomy may seem absurd. But to many young people of Asia, Africa, Latin America, and indeed, Europe and the United States, it may look like an adequate general picture of history today. Some of them may even believe that the capitalist United States and the colonialist British Empire were at one with the reactionary Nazi Germany, while the freedom-loving progressive Union of Soviet Socialist Republics challenged them all, liberated mankind, and saved civilization.

> Our ideological enemies have set afloat the slanderous myth of "superpowers." Of course, the Soviet Union is a mighty power. But its might has not been created at the expense of exploitation of other peoples. It has been produced by our people's labor.

Without naming the United States, the speaker makes it clear that the United States has become a superpower by exploiting the poor of the world.

In other words, Ponomaryov is propounding what may be called "global Marxism." According to Marx, the rich in each country have become rich at the expense of the poor (who are poor as a result). The poor must rise in arms and expropriate the rich. "The expropriators are expropriated!" said the Communist Manifesto of 1848. Obviously, the same can be applied on the global scale to the rich (countries) versus the poor (countries). There are dozens of millions of "haves" in the United States, and hundreds of millions of "have-nots" in Asia, Africa and Latin America. Why not sick these "masses of the underprivileged" on the "handful of the rich"? It was done successfully in Russia, Bavaria, Hungary way back in 1918. Why cannot it be done globally—with the aid of the Soviet global armed forces?

Ponomaryov's speech may be summed up by the following statement of his: "Domestic national policy of the Communist Party of the Soviet Union has found its extention on the international arena." If, indeed, the Soviet regime was able to subjugate in the early 1920s the Moslem nations of Central Asia, it can absorb those of the Middle East, for geographically and historically the Middle East is an extention of now-Soviet Central Asia. If the Czechs or Eastern Germans fell under Soviet sway with no more resistance than the Ukrainians or Estonians did, the same strategic techniques can successfully be applied to West Germans or North Americans. Ponomaryov is a universalist: he believes that human nature is basically the same everywhere—in Moscow, Kiev, Prague, Berlin, or New York.

Neither the ceremony nor Ponomaryov's speech are reported in the *New York Times*: The Soviet building of a global totalitarian empire is screened out by the newspaper.

The other news of *Pravda* and the *New York Times* reduces to minor items which can be listed as follows for brief comparison:

The *New York Times*	*Pravda*
"Syria Bids Arabs Bar A Limited Peace." "Syria" is against Israeli-Egyptian rapprochement.	"Syria's Stand." The item shorter, but no less perfunctory, superficial, empty.

"Makarios Requests U.N. Council to Meet." "The Cyprus Government of President Makarios called tonight for an urgent session of the Security Council. . . . Nicosia is believed interested in the Soviet proposal that the whole Cyprus situation be taken up at a large conference." The report does not cite a word of the Makarios statement.

"Statement by Makarios." "I value highly the stand taken by the Soviet Union on the problem of Cyprus, as expressed unequivocally in yesterday's TASS statement," declared President Makarios of Cyprus. ". . . We are grateful to the Soviet Union for its opposition to the Turkish community leaders' arbitrary decision to proclaim an isolated state."

"Ethiopia, Battling Secessionists, asks U.S. for Airlift of Arms." The article does not say or imply that the Soviet regime regards the "military government" of Ethiopia to be on the Soviet side, according to *Pravda*. "United States officials indicated that there was reluctance to comply with the Ethiopian request" for arms because Syria, South Yemen and Libya will not like it: they have been aiding the secessionists of Eritrea. The world is construed by the *New York Times* as a mosaic of totally independent countries: Ethiopia, Eritrea, Syria, South Yemen, Libya.

"For the Sake of Unity." A 300,000-strong demonstration in the capital of Ethiopia to support the "military government" in its war to keep Eritrea from secession. It is clear from *Pravda* that the "military government" is "on our side." Small tyrants are likely to be eventually on the Soviet side. A tyrant will want the democracies to comply with his tyranny. They will finally waver. The Soviet rulers will *never* waver unless his tyranny is against theirs.

"Yugoslavs Sentence 15 as Secessionists." Why Yugoslavs? Is the regime and "Yugoslavs" the same?

"Yugoslavia: Subversives on Trial." The "defendants have close ties with extremist emigré elements in the West.

The other news items do not overlap: *Pravda* ignores the news items of the *New York Times* and vice versa.

The *New York Times*	*Pravda*
"The United Kingdom: Can it Survive?" Secession of various parts of England: "it is not impossible that the United Kingdom, as we know it today, will cease to exist."	"Insolent Challenge." Spain has the insolence of sending warships to its bases in Africa, though every sane person knows that only the Soviet regime can have bases all over the globe.
"Pakistan Charges Afghan Subversion." "Afghanistan . . . has supported a demand . . . for an independent state to be carved out of Pakistani territory." No Soviet involvement at present or in future is conjectured.	"NO! to Bases." A week of protest against imperialist (that is, American or NATO) bases in the Indian Ocean has begun in Sri Lanka. The global system of Soviet military bases is growing without anyone's protests.
"Released Koreans Allege Torture for Confessions." According to this article reprinted from *The Times*, London, the participants in the "demonstrations against the authoritarian constitution" in South Korea in 1974 have been released and "charge today" that they were tortured by the "Korean CIA." Why is the alleged torturing organization called the "CIA"? Is the CIA the world's only institution of torture? "The worst days were the rainy days. I hated them. The C.I.A. would use the sharp ends of their umbrellas to prod us around the cells." Wait for a rainy day to use umbrellas for torture. The "CIA" could not use them very well on a fair day, could it? I doubt that *Pravda* would print something so flippant or unintentionally comical.	"Chile: The Tragedy Continues." *Pravda* is after what may be defined as an ideal democracy, of the kind the United States would have been if Senator McGovern had been elected President, as the *New York Times* wished. The motives of the two newspapers are different, of course. *Pravda* is after an ideal democracy in the "target countries" because it is, according to the Soviet rulers, the best form of government to be first neutralized and finally destroyed. Therefore, *Pravda* is at least as sensitive as the *New York Times* to any violation of an ideal democracy. At the same time, the article on Chile is very sedate. No torture is alleged, and the article merely soberly notes that "even the [Chilean] authorities admit that thousands of political prisoners languish in the prisons of Santiago alone."
"Saigon Drops Case Against Six Papers." The Government of South Vietnam, which the *New York Times* calls in its editorials "totalitarian," has dropped libel charges against six newspapers, and so they can go on publishing allegations of the corruption of the Government, while the invasion of South Vietnam, a minor event of the day, is on, to obliterate the "totalitarian" Government, its alleged corruption, the independent newspapers, their allegations, and all.	"Here Where the Chilean Junta will be on Trial." "It is here, in the Palace of Arts in the capital of Mexico," that the third session will be held investigating the "crimes of Chile's military junta." The relevant "manifesto" has been "signed by a number of organizations, including the youth organization of the ruling Institutional-Revolutionary Party of Mexico." With this sort of social atmosphere, no wonder the Soviet rulers were preparing a Cuba-like coup in Mexico, and only a Soviet defector frustrated it.
"Ford Preparing Busy Schedule of Trips Overseas in the Fall." "One source . . . said that Mr. Ford would like to be on hand to sign personally any Helsinki agreement." There is not a hint that the value of this action is equivalent to Mr. Ford's being on hand to sign personally shopping bags before TV cameras, while its harmfulness goes much deeper than meets the eye.	"U.S. President's Interview." Said President Ford, as translated from the Russian of *Pravda*: "In the United States there are many people who realize—and will realize even better in future—that the abrogation of the Soviet-American trade agreement resulted from ill-thought-out decisions in Congress."

"Gulf Oil Officials in Soviet Talks." Officials of the Gulf Oil Corporation started talks today with the Soviet Government to explore the possibility of helping to market Soviet oil."	"Preparations for the Conference." No, not the peace conference Flora Lewis reports, but the "power conference"—the "conference of communist and workers' parties of Europe."
"U.S. Tuna Men Held in Ecuador Are Bitter and in Fighting Mood." A 1000-word piece about American tuna fishermen wishing to fight for the right to fish within the 200-mile limit off Ecuador though fifty countries have established the 200-mile limit for their territorial waters.	"Victory of Progressive Forces." The "candidate of progressive parties" was elected mayor of Kyoto yesterday. Thus, "among the ten biggest cities of Japan, seven have mayors representing the parliamentary opposition, including the Socialist and Communist Parties."
"Foes Intensifying Drive Against Mrs. Ghandi."	"India: Women's Day." Prime Minister Gandhi: all women of the world, unite!
"Vorster Verifies Visit to Liberia."	"Riots of Reactionaries" (in Turkey).
"Italians Preparing to Send U.S. Extradition Request for Sindona," a run-away Italian banker.	"Gambia Yesterday and Today" provides a specific illustration of Ponomaryov's global approach.
"Saudi Denies Price Talks With Kissinger Over Oil." Kissinger is said to have tried to impel Saudi Arabia to have a heart and bring down the price of oil sold to the United States (oh, the power of Kissinger's diplomacy). However, Saudi Arabia denies all.	"Situation on Madagascar." The "military directoriat" (*Pravda* would not call "junta" a junta it favors)" of the Malagasy Republic" smashed the HQ of the Malagasy Socialist Party and killed sixteen people in the process. *Pravda* regards this little massacre of Socialists as a victory for socialism, that is, the Soviet rulers' power.

There are several more such news items in both newspapers, but we may as well stop here, observing that in the volume of international news data, the issue of *Pravda* (six pages) roughly matches the *New York Times*. International information fills the bulk of *Pravda*, and its presentation is mostly concise and factual, if not documentary, while in the *New York Times* it is scattered like islands over the vastness of the newspaper, and is mostly chatty.

The conclusions?

The international information in both newspapers is superficial, easy-to-obtain and insipid (I disregard the entertainment, such as the reporting of a theft in the *New York Times*). Both newspapers shape whatever meager information they have to fit their respective views (motives or goals).

Pravda's mendacity is instrumental: it is a professional propaganda tool of Soviet global expansion. The mendacity of the *New York Times* is motivated in particular by its narrow-minded spineless middle class desire to wrap itself in its middle-class experience, screen out the outside world, and to substitute an easy fantasy spun out of this experience. *Pravda* deceives only others; the *New York Times* deceives itself as well.

Apart from individual exceptions, inevitable in any institution, neither newspaper is intelligent or intended for intelligent readers: certainly the issues under review do not contain a line which would take more than a mediocre, conventional, and conformist mind to write. A random selection of the same number of news items as supplied by any world news agency would be no less informative.

But all in all, as of February 18, 1975, *Pravda* presents the Soviet regime as an expanding global system of power, with many countries as local arenas of this world struggle. The *New York Times* presents the Soviet regime in a far more false and benign way than the regime presents itself via *Pravda*. According to the *New York Times* issue, the world is a mosaic of separate countries and local events, none of which has any bearing on the Soviet regime, seen as just another chip in this mosaic: a kind of corporation much bigger than General Motors or Chase, but essentially also seeking—through its representatives—good relations, economic cooperation, and trade.

This parochial world fantasy of the *New York Times* makes it on the whole not only uninformative, but misleading. None of those bits of information which the *New York Times* issue contains and *Pravda* does not can compensate for this dangerous deceptiveness of the *New York Times* dreamland, presenting mankind as its middle class milieu multiplied to the global scale.

But when all this is said, we must perhaps look at both newspapers from a higher vantage point.

Quite a few people assume that reality is a certain set of objects, and so anyone can describe reality no worse than Einstein or Chekhov—it is sufficient to name objects in front of you: a house, Mr. Kissinger, a tree. Similarly, it is often assumed that it is no less easy to describe news—changes of reality: the house has caught fire, Mr. Kissinger is going to Moscow, the tree has grown by ten inches in one year.

If we look at the *New York Times* and *Pravda* through the eyes of such a Philistine, both newspapers can be said to describe all the world news there is, and this means all the reality and all its changes. How and what else can one describe?

But looking at both newspapers from a higher than Philistine point of view, it can be said that they have no sense of reality (the *New York Times* is more hopeless in this respect) and hence no sense of changes of reality known as world news. To claim that the *New York Times* presents news about the world at large is the same as to claim that Philistine twaddle is space-time physics or literature.

1. *The Working Press*, New York 1966, 71.
2. "The Middle East and North Africa 1973–74," 20th Edition, Europa Publications, London 1973, 61–62.
3. *Middle East Review*, Spring 1980, 45.
4. *Facts on File*, Facts on File, Inc., New York, February 1980, 67.

The Incompleteness Theorems

David Guaspari

[Every mathematician shares] the conviction (. . .which no one has yet supported by a proof) that every definite mathematical problem must necessarily be susceptible of an exact settlement, either in the form of an actual answer to the question asked, or by the proof of the impossibility of its solution.

DAVID HILBERT

An introduction

The Goedel Incompleteness Theorems are perhaps the most celebrated mathematical discoveries of this century. I hope to make those celebrations more informed; and, accordingly, take as my topic not the nature of mathematics or of the mind—grand things and plausibly related to Goedel's work—but something rather technical and more mundane: What, exactly, do those theorems say? What are the questions to which they constitute some sort of answer and the new questions to which they give rise?

To understand those questions we must devote considerable attention to some of Goedel's great predecessors: Frege, Cantor, Russell (and Whitehead), and Hilbert.

The story begins in 1879 with the invention, by Gottlob Frege, of (formal) logic. This invention was important in two ways:

1. It was necessary for the elaboration of the so-called "logicist thesis": the thesis of Frege that arithmetic is a part of logic; or, as Frege paraphrased it into Kantian terms, that arithmetic is analytic. Russell extended Frege's "logicist thesis" to the claim that all of mathematics is reducible to logic—that is, that formal logic provides a fundamental theory, a grounding, of the whole of mathematics.
2. The devices of formal logic may be used, not to lay out "the" theory of mathematics, but rather as the basis for rigorous axiomatic theories of geometry, algebra, set theory, etc. (For the distinction between "an axiomatic theory of X" and "an axiomatic theory which reduces X to logic" see section 1.) This secondary use of formal logic makes possible a mathematics *about* mathematics, by providing it with a precise object of study—formal theories.

Hilbert proposed the invention of just such a theory of formal systems, "metamathematics" or "proof theory", as the basis for a radical philosophy of mathematics. The domain of *meaningful* mathematics was to be reduced, essentially, to the domain of mere calculation. Mathematics was to be framed within formal theories, and any non-calculational propositions of those formal theories were to be seen merely as byproducts generated on the way to calculations.

Hilbert wanted to have things two ways: to have the power of modern methods, while avoiding the difficulty of explaining or justifying those methods. In order to understand Hilbert we will therefore need to know something about the methods he wanted so desperately to save.

I will use Cantor's invention of set theory as a synecdoche for the whole of the modern upheaval. Cantor did not invent the notion of "set" or "class": he invented set (or class) *theory*. Classifications (rather than things classified) became the objects of study, and mathematics became the study of patterns, not things: of "the third position in the sequence of natural numbers", not of "three".

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After winning his way to this position, Cantor made the further and frightening step of pressing toward its logical conclusion (which, we will see, skirts paradox). We will be interested in Cantor not as a participant in the controversies about the character of mathematics, but as one of the forces which, by radically altering mathematical practice, made those controversies urgent.

I *The logicists*

Classical logic—more or less a code word for Aristotle—is plainly inadequate to give an account of the most elementary sorts of mathematical reasoning, for it gives no account of sentences involving more than one term expressing generality: sentences such as "Everybody loves somebody."

Medieval logicians introduced elaborate theories treating of certain sentences with two general expressions. Those theories were correct in that they certified the correct inferences to and from such sentences; but they were both complicated and incapable of extension to more elaborate sentences; which is evidence that they were just plain wrong.

What was wrongheaded in medieval logic was the attempt to treat "Everybody loves somebody" as though it were like "John loves Mary." "Everybody" was to be, like "John", a kind of name, referring to certain people who somehow or other loved a person or persons denoted by "somebody." The difficulties with this are legion: for example, a proper name like "Mary"always stands for the same person, while "somebody"—assuming it ought to be thought of as standing for someone—can stand even in the same context for different people: If John loves somebody and somebody is the mayor of Cleveland it does not follow that John loves the Mayor of Cleveland. Again: "John loves Mary" is equivalent to "Mary is loved by John." If "everybody" and "somebody" were genuine names we would be able to make the same switch. But we cannot: "Everybody loves somebody" and "Somebody is loved by everybody" are not equivalent.

In the restricted cases to which their theories applied, medieval logicians surmounted such difficulties by making distinctions about the various kinds of ways in which general terms could refer to their objects. Unfortunately there seemed to be no end to the making of such distinctions, and with such a logic the best one could look forward to was an ever-expanding collection of ad hoc methods and distinctions.

According to Frege his predecessors were misled by accidents of grammar, such as the accident that "John" and "somebody" are governed by the same grammatical rules. The logical structure of mathematical statements—i.e., those features in virtue of which statements can legitimately enter into chains of inference—are not systematically displayed (and sometimes not displayed at all) by the grammar of ordinary speech.

If the logical structure of a sentence is to show on its face—in its syntax—then a revised syntax and some new grammatical categories become necessary. Frege's revised language is not intended to give an exhaustive account of natural language. It gives no account of metaphors, ambiguities, tenses, modalities, puns, or jokes. Its success comes to this: the *fact* that all mathematical argument (and therefore all deductive argument) can be expressed in Frege's language and so be made altogether explicit. (The principal novelty is Frege's introduction of the categories of "quantifiers" and "variables", which constitute an analysis of the uses of troublesome general terms like "somebody." He also discards the "subject-predicate" analysis of sentences, because of its intrinsic demerits and because of the requirements of the quantifier-variable analysis of generalization.)

In addition, Frege listed a small number of rules which suffice for the purely formal derivation of all valid inferences. By calling the derivations formal I mean this: We can apply the rules—i.e., determine whether a sentence is an immediate consequence of some other or group of others—simply by inspecting the syntax of each sentence involved; and the procedure for doing so is mechanical. A machine can check such derivations just as it checks multiple choice tests.

Frege wanted to attain rigor—and he did. Rigor cannot go any further: controversy over the validity of a proof came to have the same character as controversy over the correctness of a long division. Frege had made it clear just what complete rigor consisted in.

This achievement did not, however, have the desired practical effect of making mathematical argument completely certain. An attempt to verify the validity of an ordinary prose proof by translating it into Frege's system will in general involve so many steps that a clerical error seems no less likely than a logical error in checking the original informal proof. Nonetheless, the theoretical possibility of rigorously formulating mathematical theories makes Frege's language and logic, and their kin, analytical tools for investigations about those theories.

I will from now on call a language and logic like Frege's a *formal* language and the formulation of a theory in such a language a *formalization* of the theory. Formalization is therefore the first step in laying out a completely rigorous axiomatic theory. It is not a trivial step.

If, for example, we tried to formalize Euclid, we would immediately be forced to see that the basic terms of geometry are not only those denoting its objects—points, lines, planes—but also those denoting certain relations among them: e.g., the relation of incidence, which holds between a point and a line when the point lies on the line. Symbols for those relations would have to be included in the language as part of the special vocabulary of geometry. When we looked for a suitable collection of geometrical axioms we would come to see that Euclid's unexpressed assumptions largely concern those relations.

In 1884 Frege published another book, *The Foundations of Arithmetic*, this one about the *nature* of mathematical truths. He was interested not in how we acquire mathematical truths, or why we happen to believe them, but in the ultimate justification for believing them. Frege asserted that the truths of arithmetic and algebra (although not those of geometry) are truths of logic.

Frege was undertaking to do more than merely to lay out a formalized theory of arithmetic. I might well frame a (mere) formalized theory of arithmetic by beginning with primitive signs for "1", "2", "plus", "times", etc.—signs which, so far as the theory is concerned, are employable only as directed by the axioms. From the rules of logic alone we could then deduce "1 = 1" and even "1 + 2 = 1 + 2", but not, e.g., "1 + 1 = 2". The specifically arithmetical content of the theory I am describing would have to be supplied by a list of arithmetical axioms. (The provision of a suitable list is a mathematically deep, but for our purposes technical, problem.) We need the axioms because "1", "+", and "2", being non-logical (and therefore arbitrary) signs, can stand in no intrinsic logical relations to one another.

If, however, "1", "+", and "2" are signs which are themselves defined in other terms, it might happen that a purely logical explication of those definitions would result in a deduction of "1 + 1 = 2". Frege claimed just that, that plus, times, etc., etc., could *themselves* be defined in "purely logical terms," and that from those definitions alone, and with no need for extra hypotheses, the arithmetical truths would follow.

Arithmetical truths could—and, to be properly understood, should—be regarded as highly compressed abbreviations of logical truths. The statement "2 + 2 = 4" or "there are infinitely many primes" would be more complicated than, but of the same character as, "A implies A." Philosophical questions about the certainty and applicability of arithmetic would then be reduced to questions about the certainty and applicability of logic.

The terms of Frege's proposal require explanation. A satisfactory account of arithmetic must cover not only statements like "7 + 5 = 12" but also certain kinds of empirical statements—but not all empirical statements—involving numbers, for there is no need to account for "2 is my favorite number." The point of contact between arithmetical theory and its empirical application is counting. The record of a bit of counting—"There are 2 bats in the belfry"—is what Frege calls a "statement of number."

We must account for the statements of pure arithmetic and the statements of number.

Next we need to ask what it would mean to "define" 2 at all, and what, in particular, it would mean to cast that definition in purely logical terms. For Frege it is pointless to ask what 2 "actually" is. That does not mean that talk about numbers is talk about imaginings and private fantasies. Rather, to give the meaning of the word "2" is to give an account of the contribution it makes to specifying the conditions under which arithmetical statements containing "2" are true or false. Whatever does so correctly is entitled to be called a definition of "2".

Here is an example, a purely logical explanation of the use of "2" in "There are 2 kings of Sparta."

> For some x and y, x differs from y and each is a king of Sparta;
>
> and,
>
> it is not the case that there are x, y, and z, each of which is a king of Sparta and all of which are different.

This explanation is correct; that is, it is true to say that there are two kings of Sparta in precisely those circumstances in which our elaborate paraphrase is true. Furthermore, the account is perfectly general, being an account of the role of "2" in all such sentences: to explain "There are 2 bats in the belfry" we simply replace "king of Sparta" everywhere by "bat in the belfry." Finally, the fixed terms of this general explanation (that is, all terms except "king of Sparta") are purely logical words; and the non-logical phrases ("king of Sparta", "bat in belfry") occur only in the simplest way possible, as simple predications.

This account is not a definition of "2". It explains the role of "2", "3", etc., in *particular* statements of number—that is, the adjectival uses "There are 2 X's", "There are 3 X's", etc. It is insufficient to account for the uses of "2" as a noun, especially for the thinghood we seem to attribute to numbers by generalizations such as "For every number. . ." Frege took the noun-like uses as fundamental. He argued that it would be incorrect to analyze arithmetical statements in such a way that numbers (some collection or other of entities to be called numbers) disappeared altogether. His analysis replaced each appearance of "2" by a noun phrase denoting, essentially, a certain set or class. He then explained statements of number as elliptical references to such classes and explained generalizations at face value as generalization over the lot of them. This counted as a logical explanation because he regarded a set as a kind of logical object.

My example has been intended only to show what kind of thing a purely logical definition is, and to show that Frege's proposal is: (a) neither opaque nor occult (which already suffices to set it apart from most accounts of the subject); and (b) altogether unconcerned with what happens to go on in my mind when I say or believe that there are two kings of Sparta.

Frege outlined this program (the "logicist" program of reducing arithmetic to logic) in *The Foundations of Arithmetic* and carried it out in the two volumes of *The Basic Laws of Arithmetic*, the first published in 1893 and the second, delayed by the discouraging silence which met the first, in 1903.

There turned out to be a problem. One of Frege's fundamental notions was that of "the extension of a concept"—what we would now call the set or class of things

falling under the concept. He regarded "class" as a logical notion—and in any event could see no way to do without it— but pointed out that its treatment was the problematic part of his system. It turned out to be, in a sense, unproblematic—because it made the system inconsistent.

Frege learned of this, while volume two was in press, in a letter from Bertrand Russell setting out what has come to be called the Russell Paradox. Russell's paradox is a sort of liar's paradox. Formulated for a theory of sets, it shows its sting by demonstrating that an assumption seemingly fundamental, natural, and innocuous, leads swiftly to a contradiction. The assumption is that to every property there corresponds a set, whose members are precisely those things which possess that property. If we apply this assumption to the property "not a member of itself" and call the corresponding set R (so that the members of R are precisely those sets which are not members of themselves) we turn up a contradiction by asking: Is R a member of R? For, R is a member of R as long as R satisfies the defining condition "not a self-member"; which is to say, as long as R is *not* a member of R. Frege dashed off a quick and woefully inadequate fix in an appendix beginning, with characteristic detachment, "Hardly anything more unwelcome can befall a scientific writer..." and concluding, hopefully, "...still I do not doubt that the way to the solution has been found."

Russell was not Frege's adversary, but rather his heir. *Principia Mathematica*, published by Russell and Alfred North Whitehead between 1910 and 1913, advanced even more sweeping claims for logic: the system of *Principia Mathematica* (from now on, PM) was a revision of Frege's logic which purported to reduce all of mathematics to logic. That PM sufficed for the derivation of known mathematics, Russell and Whitehead made clear. That it might justly be called logic they did not. And no one could tell whether PM would suffice for all future mathematics.

II *Cantor and "Modernism"*

Meanwhile, mathematics went on. One of the things that went on is commonly called a "crisis"—a "crisis in the foundation of mathematics"—perhaps suggesting to the innocent (falsely, as it turns out) that mathematicians around the world were hurling themselves from their office windows. The central event in this drama was the appearance of a large array of paradoxes and contradictions in the theory of sets, the Russell Paradox among them.

The thinking man's reaction might well be... So what? Why should the collapse of some particular theory be of more than local interest? Frege's scheme fell to the ground and no "crisis" resulted.

In order to understand why the difficulties with set theory are of interest to other branches of mathematics it is necessary to understand why set theory has become the idiom of mathematics.

Set theory was invented by Georg Cantor in a series of papers published between 1879 and 1897. It is important to know that Cantor's creation of set theory grew directly out of his work on one of the important mathematical problems of his day—on the convergence of a particular kind of infinite series called a Fourier series. Just what a Fourier series *is* is not important to us, but two things *about* Fourier series are: (1) Fourier series are a part of hardcore applied mathematics. (Fourier introduced them in order to study heat transfer.) (2) The theory of Fourier series was, in Cantor's day, at the cutting edge of two important questions: What is the continuum? What is a function?

If I needed a slogan to characterize the radical features of twentieth century mathematics I would try something like this: Functions are things, and things are extensional. "Extensional" stands in opposition to "intensional", in opposition, broadly speaking, to any concern for the "inner nature" of mathematical things.

Consider Euclid's definition of "point." That definition is never appealed to in proofs, and for that reason has no mathematical interest. Nothing *follows* from it. The only way in which something which we might call the "nature" of a point has any mathematical significance is by way of postulates about the relations between points and the other geometrical notions, such as: Between any two points there is a unique straight line. Euclid's definition of point is an "intensional" attempt to tell us something about the "nature" of points.

In contrast, what matters about a function is that certain inputs result in certain outputs. What a function has by way of a "nature" is exhausted by the record of the input-output pairs, conveniently representable as the *set* of all such pairs. Relations are treated in the same way. The "nature" of the relation "less than" comes to nothing but a record of which numbers are less than which.

Calling the things of mathematics extensional comes, grandly and vaguely, to saying something like this: What interests us about a mathematical object is not its putative internal constitution, but rather the role which that object plays in the system of mathematical objects. Mathematics is about the patterns into which things fall, not about the things.

The other half of my slogan reads "functions are things." What is at stake in calling functions things? The account, I'm afraid, will begin and end in metaphor.

Think of a function as a black box from which, in some way or other, the input-output record can be extracted. Then I can, if I want to, take those things, those black boxes, and put some or all of them into another box—so that I have a big box full of functions. I offer this merely as one example of what you can do with *things*. You can heap *things* into big boxes.

I want to contrast this picture of function with another. In the other a function is not a thing, but a kind of continuing process, which you cannot put your hands on all at once and therefore cannot pick up and toss into a box. What's at issue behind these varying metaphors will have to be considered later.

Let me first give an example of the usefulness of the first picture—function as *thing*. Quantum mechanics assigns to each thing in the world—electron, atom, cow—a representative, a function called its *wave function*. Wave functions, it so happens, input real numbers and output complex numbers (the outputs are thought of as representing certain probabilities). All these wave functions are then heaped together in a box called Hilbert Space. What stands for the world is a box of functions.

Now, one of the other things you can do with things, beside tossing them into boxes, is to input them into functions. It turns out that momentum, for example, can be conveniently represented by a function which inputs not numbers but those boxes in the Hilbert Space, and outputs not numbers but other boxes in Hilbert Space. Momentum and its kin, being functions, are therefore things, and can themselves be heaped in boxes, input into still other functions, and so on and on. All these entities have in an important sense the same status as numbers. You can do the same kinds of things with and to them. (An aside: This example may give you some idea why it's wildly wide of the mark to call *our* mathematics a "science of quantity.")

To make functions and relations into things, and to be concerned only with the extensional aspects of those things, is to make the very fabric of mathematics a search for patterns and analogies, whose aim it is to exploit the power of generality. It is important also to realize that study of the tops of those towers of generality can yield consequences about things at the bottom. The elaborate machinery of quantum mechanics yields testable predictions about the behavior of atomic particles. Deep results in number theory, which concerns the integers, have been discovered by studying the calculus of complex numbers. This raises a question to which we will return: Even if such high-powered methods are helpful for finding theorems and their proofs, are they in some way essential?

Set theory is important not in its details, but because the point of view which is so conveniently formulable by means of set theory is fundamental to the current mathematical enterprise. In David Hilbert's famous words: "No one shall expel us from the paradise which Cantor has created for us."

Hilbert was not voicing a consensus. He was uttering a battle cry. The reception of Cantor's work made plain deep and radical divisions among mathematicians. Those opposed to set theory typically argued along lines like this: Set theory is riddled with paradoxes and contradictions because it admits as objects "infinite things", such as the set of all numbers, and the notion of an "infinite thing" is inherently contradictory. The two metaphorical pictures of "function" show the same opposition. A function which is a "thing" is, in general, an "infinite thing"—an endless ledger of inputs correlated with outputs. A function, which is an "uncompleted process", is never present all at once, but is a sort of drama at any stage of which only finitely much has happened. The controversy over set theory becomes "the problem of infinity."

This is not a problem about some alleged power, entity, or principality called The Infinite. I, for one, have no idea what that could mean. Nor has it anything to do with God, goose bumps, mysticism, or eternity. (There is evidence that Cantor thought: that it had to do with all these things; that theological considerations vindicated set theory; and, at times, that set theory had been granted him by divine revelation.)

It would be better, but still not very good, to say that we are asking whether there "really are" infinite sets. Part of the trouble with that formulation (the passionate but redundant "really" gives it away) is that it has an air, wholly spurious, of being clear and commonsensical, as though the matter could be settled by an argument like Samuel Johnson's "refutation" of Berkeley: Johnson's proof that there "really are" stones consisted of kicking some.

The fruitful view, I think, is that the important difference between the two positions is entirely expressed as a difference in mathematical practice. In the mathematical practice of one side infinite sets play the role of things, and in the practice of the other side they do not. (In our speech about Hilbert Space functions are assigned the role of things: they serve as inputs and outputs of functions; they are collectable into boxes; they comprise a domain over which we generalize. . . Moreover, that way of speaking has been fruitful for the physicist as well as for the mathematician.)

In one sense the practical problems of set theory were solved in 1907 by Zermelo, who informally described a notion of set that seemed clear and persuasive, and produced axioms for that notion from which followed all of the desired consequences of set theory and (so it seemed) none of the undesired. To opt for Zermelo's set theory was to opt for treating infinite sets as things. What grounds might there be for making that choice?

The practicing mathematician might be satisfied by the fact that set theory provides new terms in which to answer old questions, illuminates the work of his predecessors, and poses interesting new questions. If unimpressed, however, by Zermelo's framework, he might maintain that "infinite things" had to lead to contradictions and that Zermelo's system would eventually tumble. He might hope to find empirically interpretable consequences of set theory to test against experience. He might be appalled by set theory's sheer perversity: Cantor said of one of his most famous results, "I see it, but I don't believe it."

Set theory, in and of itself, is not a fundamental theory. It is not an attempt to ground or to explain the nature of mathematics, but is rather the organ of a revolutionary change in mathematical practice. A set theorist can happily be an opportunist, tinkering with the axioms ad hoc in order to avoid an awkwardness or a paradox. Set theory is useful to "foundational" studies because it yields a formalization of all known mathematics, thereby making of "mathematics" a precise object of study.

III *Hilbert's metamathematics*

In 1900 Hilbert began to formulate a radically new reason for deciding in favor of set theory, based on the possibility, which he seems to be the first to have fully grasped, of using formalization as a tool for the investigation of theories. Frege, well aware that deductions in his system could be carried out mechanically, insisted on the importance of the fact that those deductions nonetheless had a meaning. According to Hilbert, the fact that "deductions" could be adequately guided by mechanical rules freed us from the burden of trying to assign a meaning to each step. Thus freed, we are free to see that much of the "meaning" we find in mathematics is nonsense.

Hilbert divided the statements of mathematics into two classes: "real" statements, which are intuitively meaningful and can be said to be true or false; and "ideal" statements, which are not, and cannot. Let us for the moment sidestep all dispute about the legitimacy of such a distinction or about where to draw the line, and call anyone who wishes to make such a distinction "Hilbertian." Let us also temporarily adopt a "Hilbertian" position much less stern than Hilbert's own: that the meaningful mathematical statements are the statements of elementary pure arithmetic, such as "2 + 2 = 3", "There are infinitely many primes," etc. Accordingly, propositions about real numbers, calculus, or Hilbert Space are "ideal."

Let us further suppose ourselves to be contentedly employing a formal—and meaningful—theory of axiomatic arithmetic, and to be one day confronted by Cantor. He offers us a (non-meaningful) set theory which incorporates our theory of arithmetic as a small part. Do we accept?

From our "Hilbertian" point of view we can think of set theory as an ideal superstructure superimposed on a meaningful theory of arithmetic. Suppose it happened to be the case that any meaningful proposition derivable in set theory by ideal methods is also derivable by meaningful methods—i.e., according to our present stance, from the axioms of arithmetic. Then, in the "Hilbertian" view, the controversy about set theory would be finessed out of existence. All the ideal machinery could be explained away as an ingenious engine for facilitating proofs. We would have saved set theory without giving in to the vulgar requirements of saving the sets; we would establish a paradise without angels.

To ask whether the ideal machinery of a formalized theory is redundant is to ask a precise mathematical question. By formalizing a theory we make it an object of study. Its statements are patterns of signs, comparable to positions on a chessboard; and we possess, analogous to the rules of chess, specified procedures, colorfully but irrelevantly called proofs, for singling out certain of the sign patterns, colorfully but irrelevantly called theorems. So that the question "Does such and such a statement have a proof employing no ideal mean?" has exactly the same character as the question "Could such and such a position on the chessboard have been reached without White's having castled?"

With some historical justification I will call the proposal to justify the ideal means of set theory by demonstrating their redundancy, the "Hilbertian" Program. To carry out the "Hilbertian" Program we have to prove a mathematical theorem about a theory; and that proof itself must be above suspicion or our justification would be circular. This new branch of mathematics, the mathematical theory of formal theories, Hilbert calls "metamathematics" or "proof theory."

To carry out the "Hilbertian" Program is also to demonstrate that all the meaningful consequences of set theory are true. For we would be guaranteed that any meaningful consequence of set theory, however originally obtained, would also possess an uncontroversial proof, one employing only those arithmetical methods we had previously been content to employ.

The "Hilbertian" Program hopes for a certain rough justice: that meaningful statements should have meaningful proofs seems only fair. There is also some evidence in its favor: many theorems of number theory originally proven by ideal means have turned out to be derivable from the axioms of elementary arithmetic. In any event, there is now out on the table a genuine mathematical question, susceptible to proof or disproof: Can all those positions be reached without castling?

The Incompleteness Theorems answer, among others, that question. Before turning to Goedel's paper, let me summarize these three introductory sections.

Frege began his work as a participant in one of the great intellectual enterprises of the nineteenth century—the attempt to make mathematics rigorous. He succeeded in providing an analysis of mathematical proof which made the notion of rigor precise and which provided all the technical tools necessary for the elaboration of rigorous deductive theories. This analysis led him to the conviction that mathematics is in fact a part of logic. Neither this thesis nor his powerful criticisms of other views of mathematics (the first half of *The Foundations of Arithmetic* is a model wrecking job) received much notice until they were partly rediscovered by Russell. Wider interest in the problems of founding mathematics arose not from Frege's work, but from the practical need to secure set theory from paradox.

Hilbert, guided partly by his "faith"—the belief that all mathematical problems can be solved—and by the specific desire to save for mathematics the generalizing power of set theory, proposed a radically different foundation. Set theory would be saved by declaring most of it to be meaningless; and by a proof (which he hoped to carry out) that set theory could nonetheless be safely employed.

Goedel's 1931 paper "On formally undecidable propositions of *Principia Mathematica* and related systems" replies to the characteristic questions of Frege and Hilbert: Can mathematics be reduced to logic? Are the ideal methods of set theory redundant? Is "mathematics" com-

pletely specifiable? I take this last question to be a concern of both Frege and Hilbert. Frege attempted to encompass mathematics within logic. Hilbert's "faith" can be construed as a belief in the possibility of devising a formal system adequate for known mathematics and capable of proving or disproving every proposition arising within it.

To each of these questions Goedel gives the answer *no*. What, then, can mathematics be supposed to be? Goedel's own view is that mathematics must be understood not as a body of tautologies, or as the result of our constitutive mental activity, but as something we discover.

IV *A first look at Goedel's theorems*

In the first part of his paper Goedel exhibited an arithmetical statement in the language of PM which is *independent* of PM—i.e., neither provable nor refutable from the axioms of PM. By itself, that is a striking technical achievement, and evidence for the fruitfulness of Hilbert's point of view: If you make theories into objects of study just look at the surprising things you can find out.

Let us call a theory *incomplete* if some of its statements are independent; and otherwise, *complete*. It might now seem that we should get to work, promulgating some new axioms in order to extend PM to a theory which is complete. If we can demonstrate the incompleteness of some theories we surely ought to be able to demonstrate the completeness of others. Then we would have justified Hilbert's "faith" by a proof. For a complete formal system provides the means for solving every problem expressible in its language.

Unfortunately, Goedel showed more. He pointed out that his argument applies not only to PM, but to *any* formal system which is *sufficiently strong* (strong enough to contain grade-school arithmetic). Such a system *must* be incomplete.

The last two sentences contain a mild lie. I can easily describe a complete formal theory by stipulating that the list of its axioms is to be precisely the list of all true statements of arithmetic. The trouble with that theory is that we cannot use it. Should someone hand us a purported proof in that theory we would not be able to appeal to any general procedure for checking it, for we have no general procedure for determining which propositions are axioms. If we intend to use a formal theory in our demonstrations or to provide a standard for our demonstrations, then we must at least require that there be an infallible (mechanical) procedure for checking the validity of its proofs. The First Incompleteness Theorem says that any sufficiently strong theory with *that* property (the property that its proofs can be checked mechanically) must be incomplete.

How does this bear on Hilbert, or Frege, or us? Can all mathematical problems be solved? One precise way to construe that question is: Is it possible to construct a usable, complete formalization of mathematics? Goedel's theorem tells us that the answer is no. Frege's program seems dead as well. If arithmetic really *is* logic, then since arithmetic cannot be completely axiomatized neither can logic be. There would be no general procedure for testing the validity of proofs in such a so-called logic.

The "Hilbertian" Program is alive only until we ask: What *about* Goedel's independent arithmetical statement? Is it true or false—or, if the axioms of arithmetic (or PM) contain all that we think we know about arithmetic, does the question of its truth or falsity even have any sense? Goedel's paper contained an informal demonstration that that independent statement is true. His argument can be formalized and carried out in set theory—proving that set theory is *not* redundant. Goedel has provided an explicit example of a "meaningful" statement unprovable by "meaningful" means, but provable by the "ideal" methods of set theory. Therefore our "Hilbertian" Program, and every "Hilbertian" Program which accepts Goedel's independent proposition as meaningful, fails. (It will be claimed below that no "Hilbertian" Program can succeed.)

The Second Incompleteness Theorem speaks directly to Hilbert's (actual) Program, to understand which we need a brief excursion. Hilbert called himself a "finitist". He maintained that a precondition to thought is an immediate intuitive grasp of certain "extralogical concrete objects", which must be surveyable "completely in all their parts" and must therefore be, in particular, finite. It is only about such things and by means of such intuitions that we can perform genuine "contentual" inferences. An adequate expression of "contentual" inference is the manipulation of signs. The concrete objects considered by mathematics are the mathematical signs themselves—the numerals. Accordingly, the "real" propositions are simply the assertions about particular calculations: "$7+5=12$", "$2<3$", "$1\neq 1$", etc. The "contentual" reasoning by which we attain to the truth or falsity of these propositions Hilbert calls elementary.

In Hilbert's thought not even the formula "$x+2=2+x$", regarded as a shorthand for the assertion that "for every x, $x+2=2+x$", designates a real proposition—for we cannot directly verify the infinitely many instances of true propositions which it summarizes. Another way to say this is to say that we cannot really negate that assertion; for the purely existential claim that "there is some x for which $x+2\neq 2+x$", since it points to no particular x, has no finitistic meaning.

Is any mathematics left? Hilbert is willing to admit the "ideal" propositions such as "$x+2=2+x$", the propositions of algebras and calculus, etc., but denies that they have any content in and of themselves. The introduction of "ideal" propositions is analogous to the introduction into algebra of $\sqrt{-1}$, which simplifies and unifies the algebraic rules. Although the ideal propositions are individually insignificant, the system of ideal propositions is fruitful by virtue of its ability to simplify and unify, and the ultimate reason for its success is that it discloses the structure of our thinking.

To justify the introduction of ideal propositions (and rules for their manipulation) we need only an elementary

proof of the consistency of the resulting system. Hilbert's Program is the proposal to provide such a proof.

Hilbert's Program is connected with our previous notion of a "Hilbertian" Program as follows. The calculating rules of grade school arithmetic suffice for the formal demonstration of every real truth. Those calculating rules are derivable in, e.g., set theory. Set theory, however, might also contain a formal refutation of one of those truths. That is, the only way in which set theory could be *non*-redundant (with respect to "contentual" inference) would be the ruinous way of being inconsistent. Hilbert's Program, although differently expressed, is merely that "Hilbertian" Program that corresponds to Hilbert's austere notion of "real".

The Second Incompleteness Theorem says, roughly, that the means available in a theory are not sufficient to prove the consistency of that theory; so that the consistency of axiomatic arithmetic—let alone of set theory—cannot be demonstrated in an elementary way.

All this needs some explanation, since arithmetic is, after all, about integers and not about formal theories. How can we even pose the problem "Is arithmetic consistent?" in arithmetical terms?

The answer is that we communicate with a speaker of the language of arithmetic just as we communicate with speakers of other foreign languages—by means of translations. Suppose we wanted to discuss the consistency of arithmetic with a computer. We could do so be devising a numerical code in which to signify statements and proofs. The statement "Arithmetic is consistent" could then be translated as a lengthy statement, from now on called CON, about numerical calculations involving the code. (Those who are worried by this may be justified. The sense of the claim that the coded translation CON somehow "means the same as" the original is not immediately clear.)

Goedel showed that CON is unprovable in axiomatic arithmetic. Now, axiomatic arithmetic is, I take it, consistent; that is, CON is true under the ordinary interpretation of its signs. Indeed, CON is provable in set theory, and is therefore another example of an arithmetical truth which becomes provable as a result of adding to arithmetic the "ideal" superstructure of set theory. This is a perfectly general phenomenon: no consistent, usable, sufficiently strong theory can prove its own consistency; and whenever we are able to add to such a theory a suitable "ideal" superstructure, the consistency of the original theory becomes one of the newly provable arithmetic truths.

This shows that no "Hilbertian" Program can succeed. An elementary proof that an ideal superstructure is redundant immediately yields an elementary proof that it is consistent. If it is granted that the elementary means of proof, whatever they may be, are exhausted by the means available in ordinary arithmetic, there can be no elementary proof of consistency, and therefore none of redundancy.

If we use a theory we are, of course, implicitly assuming that it *is* consistent. Nonetheless, that supposition is something over and above the suppositions *of* the theory. Whatever convinces us that the theory is consistent lies somehow outside its purview. That fact is a genuine piece of news, even though the consistency of arithmetic is not controversial.

Many mathematical questions which have at one time or another been topics of active research have been shown to be independent of the currently accepted axioms for set theory. It is a distressing fact that few of these problems seem to be solvable by extending set theory along the lines of its original inspiration; and that, indeed, many are only known to be solvable by adding to set theory hypotheses which are at best implausible and at worst bizarre.

As a result the mathematician-in-the street typically responds to such news about a problem (the news of its independence) by losing interest in it and regarding this as evidence that however things might have seemed at one time the problem is not one of central importance. He can sometimes justly say that he was seduced by set theory into studying the wrong problem, or the right problem in the wrong terms; but that would suffice as a general explanation only if the family of set theories were uniquely subject to the Incompleteness Theorems.

V *A second look at the First Incompleteness Theorem*

Let me conclude by stating the First Incompleteness Theorem correctly, in its most radical form, so that it is tied to no particular formalism or formulation of logic, and to no particular notion of proof. To do that it will be necessary to look briefly at its proof. Goedel's original argument, which is important, is widely regarded as utterly mysterious. From this apparent mysteriousness the Incompleteness Theorems derive some of their cachet. I shall outline a different proof, which shows that the Incompleteness Theorems can be understood as facts about mechanical procedures.

In 1936, A. M. Turing produced a precise definition of the notion of "algorithm", or "computing rule" by defining a kind of paradigm computing agent (now called a Turing machine). Turing machines can work in any symbolism you like and on any problem you like. We may as well stick to machines that work on numerical problems. Machines can provide solutions to calculating problems in two ways—by *decision procedures* and by *listings*. Consider the problem of determining which numbers are even numbers. A *decision procedure* for the property "even number" works like this: We hand our imaginary computer the name, in some specified notation, of a number; it calculates awhile and then answers yes or no, according as the number is even or not. It always answers and always answers correctly. A *listing* of the property "even number" works differently: We sit in front of the computer and watch it. From time to time it writes down, in some specified notation, the name of a number. Only the names of

even numbers appear in the list, and sooner or later the name of every even number appears in the list.

There is no general procedure for turning a listing machine into a deciding machine (which might lead one to suspect, correctly, that some listable properties are not decidable). Suppose I want decisions about the evenness of 6 and 7, and try to use the listing machine to get them. I sit and wait. Eventually "6" turns up, at which point I know that the decision about 6 is "yes." I'm still waiting, but there has been no "7". I can never safely conclude "no," because, for all I know, were I to wait just a little longer 7 might turn up in the list.

"Evenness", of course, has both listing and deciding machines, but there are indeed properties which can be listed yet not decided. One example is the property of "being a computer program that will run successfully." If that were decidable (in some efficient way) life would be a lot simpler. A Russian mathematician, Juri Matijasevic, proved in 1971 that there is a listable but undecidable property P of the following remarkably simple kind: For a certain (polynomial) equation with "x" among its unknowns, x has property P (from now on, abbreviated "P(x)"), if there are integer solutions for the other unknowns. That is, P(x) looks *like* the following assertion, which I'll temporarily call R(x): There are integers y and z for which $3xy + 2y^2 + x^2z + 1 = 0$. So that 2 has property R (or, for short, "R(2)") if and only if there are integers y and z for which $6y + 2y^2 + 4z + 1 = 0$.

Here is an outline for a proof of the First Incompleteness Theorem which, in a sense, only restates the fact that there are such simple undecidable properties. Officially we are proving a theorem about PM, but to show how general the proof is, I will point out the only two facts about PM which will be appealed to. The first is this:

(1) PM can "express" some undecideable property—e.g., the P(x) mentioned above. (From now on this will be abbreviated as: PM is *sufficiently strong.*)

It takes a little effort to say just what "expressing" is. For example, " + " does not happen to be one of the signs of PM, but is instead defined in terms of others. So our rendering of P(x) into the language of PM will be a little indirect. That, however, is a minor point and will be ignored. I will suppose that the arithmetical signs we ordinarily use do appear in the formal language, so that "P(x)", "P(0)", "P(1)", etc. occur both in English and in our formal language. More important is the question: What does it mean to say that some formula in a formal theory "expresses" the (English-language) notion P(x)? We can put our rather weak requirement this way: Whatever PM happens to prove about the property is true. More exactly, should the string of symbols for P(17) occur among the theorems of PM, then the English sentence P(17) is true, which is to say that a certain equation with coefficient 17 has integer solutions. Should "not P(17)" occur among the theorems of PM, then we require that P(17) be false. Weak as this assumption is, we could get by with *much* less. If a theory of arithmetic lacked the means to write down simple equations, or had the means but proved falsehoods about them, it would not be of much use. So, for our purposes, this restriction is no restriction at all. The only theories of interest are those which are sufficiently strong.

The other thing we need to know about PM is this:

(2) The property of "being a theorem of PM" is listable.

For our purposes this is no restriction either, because it turns out that (2) is a consequence of:

(2') The property of "being a proof in PM" is decideable.

I have already argued that a theory is of no use for theorizing if we cannot decide what counts as a proof.

The First Incompleteness Theorem says:

Any sufficiently strong, listable theory is incomplete.

Therefore no useful theory—PM, axiomatic arithmetic, set theory—is complete; no useful theory can even settle all the simple questions of elementary arithmetic.

To see the extreme generality of this it might be better to replace the word "theory" by something like "recordable mathematical activity." We need assume nothing about symbolism, logic, or the nature of the proofs that result from this activity, except that the activity can treat of simple equations, and that a machine can decide whether the record of some bit of activity counts as a proof.

The proof of the First Incompleteness Theorem is a proof by contradiction. Assuming first that PM is listable, I will describe a mechanical procedure (from now on to be called M) which is an *attempt* at a decision procedure for Matijasevic's property P. That is, the inputs to M will be natural numbers and the outputs "yes" and "no". We know that there can be no decision procedure for P. That is, for some input M must either give the wrong answer or fail to give any answer at all. On the other hand, from the assumptions that PM is sufficiently strong and complete it will follow that M *is* a decision procedure for P, and therefore at least one of the three assumptions "listable, sufficiently strong, complete" is false. Having established that we have established the First Incompleteness Theorem.

Here is procedure M: Handed an input, say 17, turn on the machine which lists the theorems of PM. If "P(17)" ever appears on the list, output "yes"; and if "not P(17)" appears, output "no".

Suppose now that PM is sufficiently strong. Then procedure M, whenever it does give an answer, gives the right answer. Suppose further that PM is complete. Then procedure M always yields an answer, because one or the other of "P(17)", "not P(17)" is a theorem of PM and is therefore bound to turn up in the list. It follows (from all these assumptions) that M is a decision procedure for P.

That concludes the proof of the First Incompleteness Theorem. (By juicing this up a little bit we can exhibit a particular instance of property P which is independent of PM.)

It might seem that this proof merely transfers the burden onto the shoulders of Mr. Matijasevic, with his magical property P. In fact, simpleminded undecideable properties are not hard to find. I chose property P only because it seems evident that any self-respecting theory ought to be able to express it.

We can easily tidy up the last loose end by showing why (2′) guarantees (2)—why the theorems of PM are listable. A proof is a finite sequence of signs from the language of PM. We therefore begin with a machine that lists *all* finite sequences of signs of PM. (It is left to the reader to build such a machine for himself.) This machine feeds its output to a proof checking machine. (Here is where we make use of (2′).) The proof checker decides which of those sequences are proofs and feeds the legitimate proofs to a third machine; and that one writes down for us the proposition that each proof proves.

(Note: The First Incompleteness Theorem is itself proved by elementary means. Although the hypothesis "PM is sufficiently strong" cannot be so established, the incompleteness of PM *follows from* that hypothesis by a long chain of reasonings of the most elementary sort.)

Goedel's own interpretation of his work is in some ways quite cautious: Hilbert's Program has not necessarily been shown to be impossible, because the notion of "elementary means of proof" is vague.

In other ways Goedel's interpretation is breathtaking: Notice, he says, that the argument of the paper has resulted in a curious situation. Having shown that a certain proposition (CON, let's say) is undecidable in PM, we have nonetheless been able to determine that it is *true*. That is, we have been able to appeal to a standard of truth and falsity independent of the notions of provability and refutability in PM. What could be the basis of such a standard of truth? Here Goedel reaches back to one of the most ancient answers of all—to an independent, extramental world of mathematical objects. We believe in tables and chairs because we see no other way to make sense of our sensible experience. Goedel feels equally compelled, in order to make sense of his "mathematical experience", to believe in the objects of mathematics.

Along this line of argument Goedel has few followers. Aside from its philosophical difficulties, Goedel's view must face a fact of our recent mathematical experience: CON is a proposition which has been cooked up in order to be undecidable. When we consider those set-theoretically undecidable propositions which have simply been stumbled upon in the course of doing mathematics, we almost invariably find that we have no idea how to resolve them or where to look for relevant "evidence."

What, then, do the Incompleteness Theorems say? As soon as we get beyond the bounds of mere calculation, as soon as we allow ourselves to enquire whether something is so not merely for this or that number, but "for *every* number"—we can no longer appeal to any *systematic* method for obtaining answers. No improvements in mathematics or philosophy can get around that fact.

Philosophy *is* called on for a clarification—not to discover the address at which the numbers reside (or, perhaps, their convenience mail drop), but rather to give an account of what we can justifiably mean by those problem-producing generalizations over the (infinite) domain of numbers. To speak in a slightly loose and pre-Fregean way: We need an account of the word "all".

Philosophy and Spirituality in Plotinus

Bruce Venable

1 Knowledge as unity with God

The essential insight of Plotinus and, for us, the central problem in studying the *Enneads* is that in them the practice of philosophy and the desire for mystical experience are inseparable. For Plotinus, a philosophy that does not culminate in mystical experience is an empty speculation; the most justly celebrated passages of the *Enneads*, those that have caused them to be read and cherished, are those in which, after many pages of arduous dialectic, technical distinctions, and dense argumentation, he summons the reader to the state of serene union with God that fulfills and transcends them. He felt, however, that a personal religion that strives for mystical experiences without grounding itself in philosophy is likely to degenerate or go astray, like the Gnostics, into melodramatic fantasies and delusions of cheap salvation. For those who regard philosophy or, if you like, science and religion as independent of one another their mutual dependence in the *Enneads* must seem very strange and might seem even to invalidate them both because Plotinus presents neither a coherent rational philosophy nor a genuine piety, but only an unsatisfactory muddle of the two.

In what sense is philosophy the necessary preparation for mystical experience? In what sense is mystical experience the necessary culmination of philosophy?

Those acquainted with medieval scholasticism should be advised that I shall not discuss this interdependence in the form most familiar to them: the attempt to reconcile faith and revealed religion with reason and philosophy. The problem as it appears, for example, in the first question of the *Summa Theologiae* of St. Thomas Aquinas does not appear in the *Enneads* for two characteristic reasons: Plotinus recognizes neither divine revelation nor an independent science of theology under which the various claims of revelation and philosophy are reconciled.

The strangeness of Plotinus' view can be somewhat dissipated if we try to peer beyond the fantastic formal complications of the Plotinian system in order to isolate the ultimate or highest state of existence envisaged by that system, briefly, a state of unconditioned unity and freedom. It appears in the *Enneads* twice: as the Good or the One that is the unknowable first cause in metaphysics, and again as the self that is the hidden center of the soul. These two are very similar, if not identical, because, for Plotinus, to ascend in thought above all created things to a contemplation of the One is also to descend within the soul to the hidden depths of the self. Furthermore, just as a person does not view his self, but rather comes to exist at that fundamental level, so also a person does not have a vision of the One, but is rather unified with it. Returning upon oneself is returning upon one's first cause and in attaining to this cause, one meets no stranger, but one's very self.

Anyone who makes these assertions would consider religion and philosophy inseparable and even very similar to each other. But these assertions are rather strange. Even setting the One aside for a moment as the mystery it properly is, what about this notion of the self? Where does it come from, what does it mean, and do we need it at all? Plotinus, who was perhaps the first philosopher to feel the need of such a concept of the self, frequently distinguishes the self as more inclusive and elementary than the soul. The soul means the conscious activities, the acquired traits and personality, as well as the latent contents and unconscious powers of the intellect, emotions, and perceptions. The self means something both more primitive and more exalted than the soul. Not acquired or augmented by experience, education, or practice, it does not present itself directly in any conscious activity, although it supports and unifies them; the inclusive totality of the psychic contents and powers, it is also independent of them, isolated and aloof, unmanifested, unknowable, and

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unique. It is freedom. When the soul is free, it has withdrawn itself from its conscious life, its scattered thoughts and feelings, its activities projected outward into the world, and has gathered its powers into a motionless inward concentration. When it emerges again, the soul realizes that all the goods which previously it sought outside of itself belong to it naturally, eternally, are proper and intrinsic to itself. The soul is happy.

This description makes it clear that the self, as Plotinus conceives it, is very similar to the One. It also makes clear why union with the self will be union with the One. But why did Plotinus use or even perhaps invent such a concept of the unknown self that is similar to God, when he had already at hand the perfectly useful notion of the observed soul that is certainly not similar to God? If he had not used this concept of the self he might have avoided his confusion, perhaps an accidental one, between philosophy and religion.

Plotinus was certainly impelled by intimate religious desires to create and teach his philosophy. The fervor of his desire for God is manifest in the *Enneads*, but something of its inner meaning has not been shared with us. Because he expressed his religious desires in the external form of a philosophy that was in constant conversation with his great precedessors in the Greek tradition, we can, by reexamining some relevant aspects of that more familiar or less esoteric tradition, see the innovations of Plotinus in at least the intellectual context in which he himself considered them and found them necessary. Because of his insistence on the mutual dependence of philosophy and religion, Plotinus never teaches any religious doctrine, however intimate its origins, that he would not be prepared to explain, amplify, defend, and fight for on purely philosophical grounds.

There was no philosopher with whom Plotinus' conversation was more intimate than Aristotle. I shall begin, therefore, with that strange passage in *De anima* book three, chapter five that has caused commentators so much vexation and disappointment.

Aristotle says that in every nature there is something that is its matter; this is passive and receptive and becomes all the forms of that kind of being. There is also an active or productive cause that makes all these forms in the passive matter. It is necessary that these two exist also in the soul: there is an intellect that makes all the forms (of knowledge, presumably) and an intellect that receives or becomes these forms. The active or productive intellect is like light which makes potential colors actual colors—the light that makes them visible and actually seen. This active intellect is "separable, impassive, and unmixed." This means that the active intellect is independent of the body. Of these two intellects, Aristotle says, the potential or passive intellect, which receives the forms of knowledge, is temporally prior, but only in the individual; in general, the active intellect is prior. This is more difficult to explain. The first clause seems to mean that in each individual person, the potential for knowing exists before any actual knowledge. But to say that in general this is *not* so seems to imply that there is some other, nonhuman, intellect. Many ancient commentators said, therefore, that Aristotle here refers to the divine intellect.

The view that Aristotle does mean the divine intellect gains support from his following remark that there is an active intellect that is eternally thinking; or, as he puts it, "it does not think sometimes and sometimes not think." But what follows is again more puzzling: "only when it is separated is it just what it is and this alone is immortal and eternal." If "separated" means "separated from the human body," then Aristotle refers here to the destiny of the active intellect of every individual person after the death of the body. What follows seems to confirm this: "But we don't remember because the active intellect is impassible, but the passive intellect is mortal." The most obvious interpretation of this sentence—although I don't suppose that its being obvious must necessarily be held to recommend it—is that every human soul contains two intellects, an active and a passive; that only the active intellect is immortal, but that this active intellect, when liberated by death from the body, has no personal memory of ourselves because it cannot receive the impression of anything merely temporal and transitory, but only makes universal ideas or concepts; the passive intellect does receive the experiences of ordinary life and is related to what we should call our personality; but this intellect perishes along with the body. Thus there would be no personal immortality.

This interpretation was popular enough in antiquity to cause it widely to be believed that Aristotle denied the survival after death of any personal consciousness. Aristotle appeared to many as an enemy of the hopes for the afterlife expressed in the *Phaedo* and the *Republic*.

This interpretation was not, however, without its opponents, who insisted that by the active intellect Aristotle means the divine intellect. Many of these commentators identified the active intellect with the thought of the unmoved mover which eternally thinks only itself. In support of this identification, they argued that it was impossible to imagine that Aristotle refers to any human intellect when he says that the active intellect thinks eternally. But if this chapter of the *De anima* concerns the divine intellect rather than the human intellect, other commentators wondered why it appears in Aristotle's book on psychology rather than in his books on metaphysics or theology. So problems remain.

My only reason for discussing what Aristotle means in this difficult chapter at all is to locate Plotinus in the context of the problems that this chapter caused for ancient philosophers: the possibility of something like God in the human soul. It is easy in this context to combine or confuse metaphysics and psychology, as Plotinus seems often to do. Perhaps it will be possible to combine or confuse metaphysics and religion as well.

One of the most notorious interpretations of this passage in the *De anima* is that of Averroes, an Arabic philosopher

who lived in twelfth-century Spain. Averroes decided that the active intellect is divine, universal, and immortal, while the passive intellect is human, individual, and does not survive the death of the body. An individual human intellect actually *knows* only when it is illuminated by the active intellect, passively receiving from it the forms, essences, or definitions of the things eternally known by the active intellect. The human intellect is the mere disposition to receive intelligible objects and to suffer knowledge to occur in it. Knowledge is not an act of the human intellect, because that intellect is purely passive, but only an event that happens in and to the intellect. The human person is a particular individual, but knowledge itself remains universal. Nevertheless, the individual's experience of knowledge is a kind of contact with God. Because, however, the passive disposition of the human intellect perishes with the body, there can be no personal immortality, no eternal life with God. In the language of religion, the human individual is of no eternal significance and cannot be saved. It is passive, transient, and helpless. There is a conflict between the conclusions of philosophical psychology and the word of God as revealed in the Koran which proclaims salvations and teaches personal immortality.

The consequences of this interpretation seemed intolerable to St. Thomas Aquinas, writing about a century later, and he wrote a commentary on the *De anima* to prove that the interpretation of Averroes was not in fact the doctrine of Aristotle. He asked: If, as Averroes, says, there is no individual active intellect, what sense does it make to say "This individual person knows"? No sense at all, St. Thomas thought. He maintained against Averroes that, distinct from the divine intellect, every human soul contains an active intellect as well as a passive intellect. The passive intellect receives from the senses the images of perceptible things; the active intellect, by its natural power, extracts from these images their intelligible forms, essences, or definitions. The active intellect is said to "spiritualize" the images. In St. Thomas' reconcilation of the psychology of Aristotle with the teachings of revealed religion, the active intellect is spiritual in its essence, survives the death of the body, and is immortal.

What, according to these interpretations of Averroes and St. Thomas, is the relation between the individual soul and the divine truth? Despite the differences between these two interpretations, this relation for both of them is extrinsic or external. In neither interpretation is the act of knowledge a co-operation or conversation between the soul and the truth.

For Averroes, the soul is completely passive; it receives the illumination of the active intellect and experiences knowledge, but remains, nonetheless, unchanged, without any intelligible content or intellectual power of its own. The soul receives the truth as an inspired prophet receives the divine revelation, as a free gift of a God who exceeds the human capacity to imagine his purposes. Because the soul is completely passive, it is not transformed by the truth, nor can the truth save it, because it has no immortal part.

For St. Thomas, it is of the soul's destiny and inherent power to know the divine truth. But the soul constructs this truth for itself, rather than receiving it from God. The soul does not require the direct intervention of the divine intellect to experience knowledge because the soul has an autonomous and immanent power to know the divine truth. This situation implies, however, that the soul is isolated; it does not meet, in the act of knowledge, any divine being, power, or operation. Again, the act of knowledge, and therefore philosophy, is without religious significance for personal salvation. Also, as in the theory of Averroes, knowledge has no specifically individual content. Although the senses have particular experiences, the active intellect extracts a universal meaning from them. Individual salvation, therefore, according to St. Thomas, is conferred upon the soul by an external donation of grace. Although there is a cognitive content to this salvation, it is incomprehensible to the human intellect unaided by grace. For St. Thomas, as for Averroes, the soul, empty and helpless, must accept its hope of salvation from divine revelation alone. There is no continuity between its experience in knowledge of the universal truth and its private desire in religious feeling for a personal God.

St. Thomas and Averroes sought to resolve, perhaps successfully, the conflicts that appeared to remain between philosophical psychology and personal religion. The success of these efforts is not important here, for these theories are far from anything that happens in the *Enneads*. Averroes and St. Thomas begin with a stark contrast and separation of the human and divine intellects; Plotinus regards them as connatural: of the same nature and inseparable, they always act simultaneously. He considers human perfection to be a sharing in the divine act of knowing but he does not want to have anything to do with grace. Perfection must be real elevation of psychic life to a higher act of existence, but must not be given to the soul as something extrinsic to it. Perfection must be internal and personal, it must be a discovery of and a proper act of the self. It must also be divine; it must be contact and union with God.

The difficulty of attaining perfection or even of describing it appears already in Aristotle: there seems to be no internal continuity between the individual human soul and the universal divine intellect; there seems, therefore, to be no way for the soul to share in the divine existence without abandoning its own. In the passage from the *De anima* Aristotle never says that he is discussing the divine intellect, but he must mean the divine intellect when he says that the active intellect thinks eternally, for surely no human intellect can be said to think eternally.

With his usual taste for radical solutions, Plotinus says that the human soul does indeed think eternally. Does this mean that the human intellect shares what would seem to be an exclusively divine power? How can an infinite divine power be present in a finite being without

compromising the absolute distinction between God and the soul (a distinction that Averroes and St. Thomas presuppose)? How can one resolve the problems of knowledge, as posed by Aristotle in the *De anima*, as the relation between the active and the passive intellects, without isolating the soul from God and without separating philosophy from the practice of religion, as Averroes and St. Thomas did? We seem to have either too much unity between God and the soul or else not enough.

The ordinary philosophical question "How does the soul get its ideas?" can develop convolutions that involve the entire destiny of the soul and the religious problems that surround that destiny. The soul has to be in contact with God in order to have knowledge at all, but this contact with God threatens to engulf and dissolve the soul in the ocean of the divine being.

2 Existence as unity with God

I now turn to the question of unity from a metaphysical point of view, rather than from the point of view of knowledge and its possibility. The question of unity again develops consequences for personal religion and spirituality. It will be seen again, I hope, that the distinction between what happens inside the soul and what happens outside of it becomes vague.

The *Parmenides* raises the problem of the participation of material objects in their common, immaterial form. The problem is seen there as an antinomy of immanence and transcendence. If the many particular objects truly participate in the single form, the form becomes immanent in them and is infected with their plurality; if they partake of the form, they seem to take parts of it, to divide it, and so do not all have a share of the same integral form and so cannot all be called by its single name. Yet if the form remains intact, if it remains untouched by, aloof from, and transcendent to, the particular objects, it seems that the particulars cannot participate in it at all.

The philosopher has two problems here: he wants the form to be transcendent to the particular objects, single and undivided, because he wants the form to be the authentic, unchanging object of knowledge, distinct from the uncertain and changing appearances of the particulars, which can be the object only of opinion. At the same time, however, or perhaps not *quite* at the same time, he wants the form to be in some sense the cause of the particulars. This demand seems, however, to imply some contact between the form and the particulars that will violate the integrity of the form as an object of knowledge.

This antinomy quickly became a traditional point of argument in ancient philosophy. Most schools maintained against the Platonists that the forms were in some way immanent, or embedded, in the material particulars; the Platonists strove to preserve the integrity and dignity and the forms by keeping them separate from the sadness and disorder of the material world. One typical gesture in this direction was the view that the forms were the thoughts of the divine intellect, the paradigms that guide its creation of the material world.

Eager to affirm the primacy of unity at all levels, Plotinus would have inclined, as his theory of emanation suggests, to a theory whereby the particulars, produced immediately by their causes, retain contact with them. His religious language, however, constantly exhorts one to flee the confusions of this lower world for the true visions and delights of a divine world somewhere "higher" and certainly separate from this one. The dilemma about unity looks this way in Plotinus: how can the divine power create and sustain the sensible world without (1) compromising its own transcendence and unity or (2) destroying the real multiplicity and diversity of the sensible world? Either the divine power will be dissipated in the world or the world will be completely reabsorbed into the monochromatic unity of the greater power that creates it.

Plotinus devotes two long tractates to this technically complex problem. He begins by attacking the Stoics who, like him, were monists—people who emphasized the unity of all things, but who, unlike Plotinus, were materialists. The Stoics tried to solve the antinomy of transcendence and immanence by making the world-soul present at every point of the material universe. They diffused the intelligent, creative divine power throughout the world. Plotinus objects that (1) the divine power is thus thought of as material and that (2) it loses its unity with itself because it is spread around on or in other material objects. (Nothing will make Plotinus accept materialism: he thinks it degrading. Some of the peculiarity of his own theory of matter is due to this feeling.) Plotinus further objects that the Stoic solution is impossible because two separate material things cannot participate in each other, they only muddle together and lose their mutual independence. If the world-soul is material, as the Stoics held, then the material world cannot participate in it at all. The world-soul is left without any power to create or direct it. The objections of Plotinus to the materiality of the world-soul recall the objections to Averroes' doctrine of the active intellect: it abolishes the necessary distinctions between the creator and the created.

The later Neoplatonists such as Proclus betray a desire similar to St. Thomas Aquinas' in his doctrine of active intellect. They sought to preserve the dignity and integrity of the transcendent form while allowing the immanent form to govern the particulars, by distinguishing simply and sharply between the transcendent forms in the divine intellect, calling them unparticipated forms, and the forms immanent in particular material things. The Neoplatonists had nevertheless to explain the real relation between the immanent forms and the transcendent form, but not, of course, as participation. In their efforts to explain this relation they multiply distinct terms in a relation and then seek to justify their logical continuity—a procedure that contrasts strikingly with Plotinus' method

of establishing continuity between the transcendent form and the material particulars.

I call Plotinus' solution the theory of integral omnipresence. Typically, Plotinus accepts everyone's terms and seeks to solve everyone's difficulties by comprehending them in a universal theory that explains not only how things are but also why other philosophers have the partial and therefore false views of things that they do have. It is a theory of consciousness, of attitudes and knowledge, as well as a theory of metaphysics, i.e., a theory about the objects of consciousness. First, the metaphysical side of the theory because it is slightly less paradoxical than the theory of consciousness, and because this order provides an edifying climax.

The theory of integral omnipresence is a characteristic expression of Plotinus' intuition of the universe as a single spiritual life. In his philosophy, the distinctions of a static structure of reality were overlaid and dominated by the notion that this structure is in fact a dynamic interrelationship of spiritual forces. The notion of life as a power of self-movement and transformation prevails over the notion of existence as formed and completed. Being is primarily power and activity and only secondarily, form and *hypostasis* (6.4.9, 23–25).

For Plotinus a form in the divine intellect is a radiance or a power, illuminating and actualizing the particulars, rather than an archetype or paradigm separate from them. The transcendent form is universally present in particular qualities. Conversely, the particular quality acts as the form, locally present, although with diminished strength and intensity. For example, the white color throughout a bowl of milk is also the white color in two different bowls of milk, because color is a quality not a quantity and, therefore, has no parts (IV.2.1; IV.3.2). In more modern terms, Plotinus equates the intension of a quality, its definition, with its extension, its range of application.

If the form in the divine intellect is omnipresent in its spatially-separated and material manifestations, does this presence not make the form itself spatial and material? If so, Plotinus will have failed in his attempt to outflank Stoic cosmology while retaining its dynamic character.

Plotinus attempts therefore to purify his notion of creation and created diversity from all spatial references, correcting thereby the materialistic implications of his own imagery of emanation by which he represents the diffusion of infinite creative power into successively lower and weaker, but more determinate, forms of existence, descending at last to visible and tangible matter. He takes up his own imagery and revises it carefully to remove from it every spatial or material reference.

> For clarity's sake the argument has often tried to lead the mind to understand the origin of multiplicity by making an image of many radii emanating from a single center. (cf. 5.1.11, 10–15). But one must add to this image the idea that the radii become many while remaining together. One removes, as it were, the lengths of the radii and considers only their extremities, lying at the center, where they are all one. Again, if you add the lengths again, each radius will touch the center still. Nevertheless (despite the length of the radii), the several extremities at the center will not be separated from the primary center but will be simultaneous with it. The centers will appear to be as many as the radii which they touch, but they remain all together. If, therefore, we liken all the intelligible forms to many centers related to and unified in one center, but appearing many because of their radii (although the radii do not generate the centers, but only reveal where they are), let the radii be analogous to the material things which, when the intelligible form touches them, make the form appear to be multiple and to be present in many places. (6.5.5)

In this chapter he uses a spatial image to express a dynamic notion of causality: the generation of multiple beings as distinct forces emanating from a single source of creative power. Plotinus then carefully revises the image in order to remove from it every spatial or material suggestion: he strives to represent direction without quantity and forces without a space across which they are extended. Multiplied and diversified, the power of the creative cause remains (paradoxically) concentrated and undifferentiated in the cause. The diversity of the created world is simultaneous with the simplicity of its cause, but utterly distinct from it because each created being takes a direction in which it is manifested spatially and materially, whereas the single cause is free from every specification and limitation. The relation between cause and effect is asymetrical; the cause has a transcendent existence because it is not exhausted in its relation to its effects: the effects are completely defined by their dependence upon their cause and their limited and local appearance in the sensible world. This asymetrical relation is eternal and can never be reversed. The primacy of the first cause lies in its infinity and power which contrasts with the structured diversity of its effects.

This discussion shows one reason for introducing this new theory. If all individuals, even the archetypes in the divine intellect, are not constantly present to their transcendent cause, the One, they will be separated from it and deprived of its power. They will have no power of self-subsistence and would perish as heat fades when fire withdraws. Their death would leave the One as the single, universal being, the imperishable substrate of its transitory modes or emanations. A further consequence of particular interest is that there could be no personal immortality of the soul.

Plotinus offers this theory as a solution to the pantheistic and monistic dilemmas encountered by his predecessors. Nevertheless, one must admit that in seeking to solve all possible difficulties he has invented a theory that is far stranger than anything his predecessors even imagined.

(I hope that you do not think that I am approaching my subject frivolously. I have been provoked to this somewhat unscholarly fashion of speech in order to set the problems aroused by a prolonged study of Plotinus in all

their immediacy. Many scholars will blandly present a bizarre theory like the present one without a hint of why Plotinus should have desired it at all, without explaining what sort of satisfaction he might have taken in it.)

The weirdest aspect of this theory is that it seems to disregard matter entirely. Plotinus was ready for this objection. He points out that the greatest obstacle to understanding his theory is the persistent human weakness that remains convinced, despite his many demonstrations to the contrary, that the visible world is real and that consequently the intelligible world must be extended in space to form and govern it (6.4.2, 28–43). He insists that the material world is specious, the last feeble manifestation of intelligible power in the blank and insubstantial substrate of matter. This manifestation is appropriate only to the most feeble exercise of thought: the naive opinion that takes things for what they only seem to be.

Let me hasten to add that Plotinus does not deny that matter is somehow real; he merely insists that its reality is not intelligible in itself, but only with reference to the divine intelligible power that creates, informs, and sustains it and with reference also to the power of human intellect that beholds it and seems to penetrate its deceptive appearance. Matter is an illusion only in the sense that it is the most diffused appearance of the divine thought which recognizes it not as delusion or falsity, but as its own exuberance and self-revelation. For Plotinus, all mere existence (for the One is beyond existence) is appearance, a real apparition of divine energy, in a particular intelligible, psychic, or material form, relative to the level of consciousness that is able to perceive and understand it. He insists only that the reality of these appearances is not in themselves but in their cause because reality means intelligibility. All levels of reality are strictly relative to the levels of consciousness—perception, emotion, discursive knowledge, pure contemplation—which apprehend them. The soul ascends to a higher level of reality as it attains to a higher level of consciousness: the soul ascends to God as it attains a divine power of thought. A topography of salvation is completely internalized.

This kind of thinking is unfamiliar to us and even Plotinus' contemporaries seem to have been puzzled by it. Why does Plotinus want to think and talk this way?

Plotinus concludes from the immateriality of the intelligible world that whatever is able to participate in it, participates in it as a whole. Where there is no question of extension or magnitude, whatever is present to any must be present to all (6.4.2, 43–49). The truth of this inference is easy to see in the case of demonstrative knowledge which, if it is to be genuine, universal knowledge, must be the same for all human intellects, despite the differences in human personalities. Plotinus' idea is another form of the Aristotelian theorem that the intellect in act is identical with the intelligible in act. If individual intellects know the identical object of knowledge, they must each become it identically. Plotinus, therefore, says that participation in knowledge, in the divine intellect, is identical because knowledge, being immaterial, is equally present to all intellects that know it. The object of knowledge, likewise, is equally available to any intellect that turns its attention towards it and becomes present to every intellect in proportion to its individual ability to know it. But the differences among actually attained knowledges are all on the side of the individual human intellects; the divine intellect is equally present to all. But this truth is not too obvious in the case of existential participation, e.g. human participation in the divine virtues. Why, one may object, does this participation not also appear uniform? Why in fact does it appear to be wildly diverse, there being perhaps not a single form—justice or beauty, for example—that appears to be evenly distributed in the world? Plotinus answers that there are manifest degrees of participation because they correspond to the differing abilities of created things to accept the impression of the form whose power is nonetheless present and available to it (6.4.8, 39–40; 11, 3–5). These varying abilities to participate correspond in turn to different intensities of the desire to receive the quality or form (5.3.17, 28–32; 5.5.8).

Here Plotinus again uses the vocabulary of psychology in a metaphysical discussion. But Plotinus is not just careless about his vocabulary: he wants the identification or confusion of metaphysics and psychology to be an explicit principle of his philosophy. Free will and not existence is to be its foundation.

Because divine being is omnipresent and because its presence is realized in the actual existence of each particular being according to the capacity and desire of each to receive a divine mode of existence, this relation of the transcendent power and immanent presence of the divine being will be valid also for the individual soul. Because, moreover, all divine reality is both intellectual and intelligible (both thinks and is the object of thought), the soul shares in divine reality through contemplation, both expanding its knowledge and strengthening its power of thought. The metaphysical interrelation of transcendence and immanence is the structure of personal salvation. The soul is elevated through contemplation to a divine and universal mode of existence without losing its uniqueness in that greater power. The divine existence appears as the individual existence without resigning its transcendence.

This development reveals the importance of the idea of the self as distinct from all the powers and contents of the soul. (Compare the argumentation throughout 5.3, 3–4). The human soul and intellect are manifestations of and participations in the world soul and the divine intellect. Just as, in the universe, the world soul and the divine intellect are unified by the comprehensive power of the One, so, in the individual human person, the individual soul and intellect are unified by the comprehensive power of the self, superior to them and usually hidden by them. Further, just as the One generates the world soul and the divine intellect out of itself but remains unlimited by their specific natures and undiminished by their specific activities, so the human self is the real source of the individual

soul and intellect, but a source that remains unaffected by their diverse natures and acts.

> The soul is many things and all things, both the things above and those below down to the limits of all life. We are each one an intelligible cosmos, touching the lower world by the powers of the soul below, but with our higher powers attaining the entire intelligible realm. We remain with all the rest of the intelligible above, but by our lowest edge we are bound to the world below. (3.4.3, 21–27)

Only the attachment of the soul to a material body dulls its perception of its continued residence in the divine world. The soul does not literally descend into a body. Its only descent is ignorance of its divine origin and nature. Detachment from the body liberates the higher sensibility and delivers the soul again to its original beatitude. Salvation, the ascent of the soul to divine life, is therefore self-knowledge; salvation is a re-awakening of the soul from the torpor of incarnate existence to the eternal world of its origin and its higher, inner, and secret life. Because the interior cosmos of the soul mirrors the cosmos of the universe, the life of the philosopher becoming conscious of himself is an archetypal personal history in which his individual existence is elevated to the status of an archetype because it is consciously conformed, through his contemplation, to the pattern of universal being, a pattern that is always present in his soul as an inherent possibility and power of existence, the power to transform his life in the image of the divine realities he contemplates.

As a consequence of the theory of integral omnipresence, a general theory of universal being becomes the equivalent of the practice of the interior life of contemplation. Because of this equivalence, self-knowledge is knowledge of God; because knowledge of God is salvation, self-knowledge is salvation.

Or is it? The One is unknowable.

But is the One God? Yes.

But is the One present in us, so that knowledge of the self can be knowledge of the One? Yes. In the first tractate of the fifth *Ennead*, after outlining his metaphysics, Plotinus continues:

> It has now been shown that we must believe that things are as follows: there is first the One which is beyond being, as our discourse tried to demonstrate, so far as it is possible to demonstrate about such things; next there is intellect and then the soul. As these three exist in nature, so it is necessary to believe that they exist even in ourselves. I do not mean in the perceptible parts of ourselves—for these three are incorporeal—but in those parts that Plato calls "the inner man." Even our soul, then, is a divine thing and of another nature, such as is the universal nature of soul. (5.1.10, 1–12)

Plotinus says in other passages that we are joined to the One, that we touch the ultimate Godhead, by a similar nature in ourselves. He even says at one point, after having described the ethical purification he demands as preparation for the contemplation of divine reality, "but our desire is not to be free of sin, but to be God" (I.2.6, 2–3). What is the meaning of this dark utterance? It is *one* thing, and a thing whose meaning has, I hope, become somewhat clearer in the course of this essay, to say that the authentic self is an archetype in the divine intellect, a self that is therefore unique, divine, and immortal; the self, on this view, is a determinate aspect of the divine wisdom, relative to its limited sphere of manifestation in the created world. But to assert that the One dwells in the self seems to make an unrestricted claim for the divinity of the self, seems to abolish the distinction between the created self and the ultimate source and desire of all created existence. Furthermore, because the One is said to be present in every self and in every form in the divine intellect, it seems that even the distinction between the One and the divine intellect, so carefully made and so strenuously defended, would disappear and with this distinction would disappear all rational justification for created diversity and multiplicity.

The desire of Plotinus to unify metaphysics and personal religion has caused a serious problem.

3 Mystical Unity

I shall proceed obliquely and by negative contrasts. If we find difficulties in the system as Plotinus presents it, let us wonder what it would have been like if it were *not* as Plotinus presents it. Specifically, if we see problems in the distinction between the divine intellect and the One and in the assertion that the soul can be unified mystically with both of them, let us consider what the system would look like without these features. I hope by this procedure to reveal the appetites of Plotinus in making his system and his satisfaction in it.

If, then, Plotinus had not posited above the divine intellect another deity, incomprehensible in thought, but attainable in an immediate, non-rational union, his religious aspiration for union with God could still have been satisfied. He already speaks of the divinization of the soul through union with the divine intellect (5.8.7, 32–35; 5.8.10, 39–40; 5.8.11). He could have developed this idea much as Averroes was to do, by making the conjunction of the human passive intellect with the divine active intellect the goal of all religious and philosophical striving.

Such a theory would, however, have implied a different notion of the self than that embodied in the system as Plotinus has it. The self for such a theory would be defined by its being coextensive with the divine intellect as a system of laws, relationships, and pure archetypes of being. The self would exist insofar as the truth of the divine intellect, its unity as perfect knowledge, is valid. This theory implies a fundamentally abstract and impersonal view of being; the self would be a law of knowledge, coextensive with the divine intellect, rather than a life or a free will. (Averroes, who professed this view of human beatitude, found no need for an additional, personal immortality.)

Even if this system included within the divine intellect the forms of human individuals, the self, although imperishable, would still be defined as a unique point of view on the finite content of the divine intellect. Its desire for union with God would have no uniquely determined personal significance. Its immortality would be guaranteed by the conformity of the intellect to the perfect order of the divine intellect. This order has two essential characteristics: finitude and necessity. The self, in turn, would be finite and contained by the necessity that governs all intellectual being. The divine intellect would be the single, final, and absolutely integrated self and the pattern of all genuine selfhood.

Against or, more accurately, beyond this notion of selfhood and of divinity, Plotinus sets another, for which intellect and consciousness are not the highest values. His decision to do this sets him apart from his predecessors in the Greek philosophical tradition. For Plotinus the two most important personal qualities are freedom and, dependent upon it, love. It is precisely these two qualities, insignificant in an impersonal notion of selfhood and divinity, that Plotinus sought to preserve and exalt in the mysticism that culminates in union with the One.

The basic affirmation of "intellectualistic" mysticism is that each human individual is an archetype contained in the divine intellect. Union with the divine intellect elevates the human intellect to the universality of the divine intellect, but allows no freedom in that unity. If the self is preserved as an eternal mode, moment, or aspect of the divine intellect, its existence is limited and determined by the necessary causal dependence that creates and maintains it. Such a self is not free and its personal religious aspirations are ultimately irrelevant because that self will cease to exist as separate. The intellect sees the One as the supreme object of metaphysical speculation. Personal religion desires not to understand the One, but to be united with it as the object of its love.

This union of love reveals not only a new aspect of the God that is loved, but also of the self that loves Him. (In such descriptions Plotinus uses the masculine pronouns which name a personal God instead of the more usual neuter pronouns which name an abstract principle or impersonal cause.) In this union with a personal God, the self and its love are experienced as infinite and free. The desire to experience the native infinity and freedom of the self, in addition to purely metaphysical reasons, motivates Plotinus' description of the One as itself (or Himself) infinite and free.

Here is a passage from the long and careful discussion of how the One may be said to be free, in which Plotinus makes it clear that his doctrine about the One's freedom implies a similar nature in ourselves, a state of isolation and self-mastery.

> When we say that He (the One) receives nothing into Himself and that nothing else contains Him, intending to place Him outside of chance, we mean not only that He is free by reason of His attainment of self-unity and purity from all things, but also that, if we discover a similar nature in ourselves that has nothing to do with those things which depend upon us and by which we suffer accident and chance (the body and its emotions), we mean that by that nature alone we have the same self-mastery that the One has, the autonomy of the light that belongs to the Good and is good in actuality, essentially superior to any intellectual light or goodness. When we ascend into that state and become that light alone, having discarded everything else, what else can we say but that we are more than (intellectually) free, more than autonomous? (6.8.15, 8–23)

It would be impossible to state more emphatically that the discovery of an utterly transcendent God corresponds to the attainment of a state of personal transcendence that is the unceasing presence of that God within the self. In religion, as in metaphysics, there is a union or coincidence of an immanent power and its transcendent cause.

In this union with God the soul discovers that its deepest ground is not its archetypal being contained in the divine intellect, that its highest aspiration is not, therefore, to become perfect self-consciousness, omniscence, and formed existence. Its ultimate uniqueness is a mystery inaccessible to discursive reason, because its authentic self is infinite and free. The self is an ideal, a teleological notion because the self can withdraw itself from its apparent, projected, personality (within whose boundaries it can have only finite satisfaction) and can thereby discover its infinity and freedom in union with the infinity and freedom of the One (6.5.7). The aspiration of the self to know itself as unique finds its complete satisfaction only in this union with a God unlimited in activity and uncomprehended by thought. The One is experienced in this union as one with the deepest point of the self (6.9.11).

But we must return to our problem: how did Plotinus think that he could get away with this? We must return because Plotinus himself had no patience with religious enthusiasm unsupported by philosophy.

Plotinus does not see this problem quite as we do because he is completely unaffected by incarnational thinking and probably completely ignorant of it. He believes that the divine world is omnipresent: its powers and possibilities underlie every derived existence. The One is present to the intellect as an innate desire to surpass its self-reflective unity of being and thinking; this desire, moreover, is prior to the subject-object duality of intellect precisely because the desire to be at one with oneself is the presence of the One in the human person as its innate unity and simplicity. The life of the One persists in the intellect as its inner light which strives to return from thoughts to its original free and undefined condition. The One is present everywhere as this spontaneous desire to transcend every internal division, as the desire of all things for their inherent unity (6.5.1; 6.9.1-2).

Intellect is a principle of diversity and multiplication, "for intellect is an activity manifest in the expansion of all things" (3.8.9, 20–33). The One is an act of contraction of

the soul upon itself, a descent into itself, a negative activity that shrinks from the nullity of phenomena into the core of the self. All consciousness is concentration, a strengthening of the contemplative power upon the inside of the soul. The One appears as the final event of this concentration. This state is not an intellectual intuition of the self nor of an absolute unity, but is a coincidence of the self with the One, not a coalescence of substances but a coincidence of activities. In this coincidence neither the transcendence of the One nor the dependence of the self as created are violated.

Plotinus often recalls the language of the *Symposium* when describing this union (1.6.7; 6.7.22; 6.7.34–35). Plato interpreted erotic passion as the vehicle of personal transcendence into the world of true being because *eros* discovers and actualizes the likeness of the soul to that world. The sequence of transcendences that conducts the soul to a final vision of the forms and contact with the truth is described in the *Symposium* as an ascending dialectic of desire stimulated and desire fulfilled, of beauty perceived and beauty attained, of love aroused by vision and love at rest in its object. Plotinus makes one significant addition, speaking of "beauty perceived and beauty acquired" as the contemplative soul affectively mirrors the divine perfections it beholds. The soul actualizes its visions as deeper levels of its own virtual existence. Therefore the dialectic of love in Plotinus culminates not in vision but in union. But it is a union of lovers that does not obliterate their distinction, for that would obliterate also their love, but causes them to forget the distance between them.

This union is two-fold: because it is an attainment of the authentic self, it occurs within the boundaries of the soul, but because it is union with the One, it is also a certain transcendence of the soul's individuality. This union is the mystical counterpart of the metaphysical theory of integral omnipresence and is a particular application of it. The One is transcendent because it is the efficient cause of the lower forms of existence which proceed from it; yet as their final cause it is immanent in its effects because they can return to it only by enfolding and concentrating their activity around the center of their own existence. Transcendence corresponds to the desire stimulated by one's unattained good; immanence corresponds to the tranquil possession of one's good as the part and activity of one's own self. The soul is not poor: its best part, its innermost self, is already somehow transcendent (3.5.3, 25–26). The soul does not need to become divine by grace because its deepest point is already God.

> We must put aside all else to remain in that Alone and to become it, discarding all other attachments. We are impatient to depart this life and to be free of it so that we may be enfolded upon our own entirety and have no part in us but that through which we have contact with God. Then it is possible to see Him and one's self together, insofar as one may speak any longer of vision. It is a vision of a self resplendent, full of intellectual light, pure, weightless, lightsome, a self that has become God, or rather that is God always, but only then with its Godhead enkindled. (6.9.9, 50–58)

The spiritual meaning of the theory of integral omnipresence is thus made clear. When the soul is saved, it apprehends and possesses its good, it is assumed into and possessed by the more inclusive existence of its good, but it has not departed from itself in an ecstasy nor has it received a new self by grace; it has only for the first time realized the good inherent in itself.

This union with the God is both the culmination of philosophy (because philosophical contemplation is the only valid preparation) and also a transcendence of philosophy (because the union surpasses and temporarily obliterates the subject-object duality of all contemplation). Philosophy is not a mechanical method that will inevitably supply the desired mystical experiences (such a view would violate the freedom of God); the self must prepare itself for these experiences and wait (5.5.8; also 1.6.9; 5.3.17, 28–32; 6.5.12, 29–31). The visions of the sober intellect are annulled by the experiences of the drunken intellect in love with God (6.7.35). In this sense philosophy is itself left behind by religion, although it will again be asked to interpret the experiences at the essentially inferior level of thought and speech.

The final personal transformation is to have one's desire for God and one's vision of God so closely united to one's essential self that the self becomes the pure mirror into which the final revelation of God is suspended. The whole sequence of contemplative vision is accomplished within the soul as a life of theopathy, suffering the divine, because the transfiguration of these visions occurs only for the soul that is transformed by them. The important factor is the correlation of the real apparition of God to the soul and the soul's degree of inner association with God, the degree to which it concentrates and strengthens its inner light into likeness with God.

The ultimate spiritual attainment of the self and the form of its salvation coincide with the ultimate manifestation of God. The true self, experienced only in union with the One, is perfect freedom; the ultimate God, experienced only in union with the self, is pure creative spontaneity. The return of the soul through gradual simplifications of intellectual vision to the motionless self reveals at the same time that self, in its purity and freedom, as the only perfect revelation of God.

We have returned to the beginning, we have seen Plotinus' idea of the self, its inseparable connection with his experience of God, and we have solved all problems. I hope, finally, that it is clear, through this discussion of the union of the deepest self with the highest God, how the entire philosophy of Plotinus is but the preparation and intimation of the silence of that unimaginable splendor.

OCCASIONAL DISCOURSES

The Permanent Part of the College*

By "the permanent part" of the College in the title of my address, I mean, as you have probably guessed, you, the alumni. That is not just an ingratiating way of speaking devised for the occasion, but it has some facts in its favor.

Before I explain myself, let me remind you of an occasion in which many of you have participated—the president's Senior Dinner. One part of it that is sometimes quite moving is the Dean's Toast to the Republic. If he is feeling thorough, it will have four parts, ascending in order of worldly magnitude and then dropping into intimate immediacy. There will be celebrated the *Republic* of Plato, which is the world's first book to set out the program of a true school, the republic of letters which is the commonwealth of all those who love the word, the republic of the United States of America which is the ground and foundation of our worldly being, and finally, St. John's College, the living community of learning.

The question concerning the continuity of all these commonwealths with each other, and of each in itself, in other words, the question in all its range of the continuity of community has always been a preoccupation of mine. As I understand it, it is an aspect of that question that you, as alumni, want me to speak about, and I welcome the occasion for becoming clear about it to myself. So to return to the position of the alumni within the college community.

Consider the students at any time attending the college. Presently they graduate, they go to a first degree of academic honor and are students in the strict sense no longer. The Board of the college changes all the time; its members have a fairly short term. Our last president was with us an amazingly long time—the longest or among the longest of any twentieth century college president. But he has now sworn not to set foot on either campus for a year, for a well-earned period of distance and refreshment. May our new president, whom you will meet later in the year, be with us for that length of time which betokens a good fit!—but it will not be permanently. And finally, the tutors themselves, who may seem to you to be truly permanent fixtures at Annapolis and Santa Fe—they too must retire late in life and become "emeriti," members of the college by reason of their meritorious past but now completed service.

Alumni, on the other hand, are alumni for good. Their very name proclaims it—they are "nurslings" who have, presumably, absorbed something of the college's substance. By the college Polity all students, once matriculated, become alumni of the college, whether they leave with or without a degree, and no one can retire or "terminate" them. All other membership in the college is by choice; that of alumni alone has in it something analogous to being by nature.

So as nurslings of the institution, alumni are first of all asked to nourish it in return. I know very well and have a certain limited sympathy for the complaint that when the college communicates with graduates it is too often about money—exactly the complaint parents have about their student children. It has to be. Private colleges are charitable institutions that give their services almost half free. Money-raising is the price they pay for their freedom to choose to be what they are. It can be done crudely or tactfully, but done it must be, by our president as by all other private school presidents. Of course, the response is a matter of choice. That choice may well be determined not only by a general sense of responsibility for the continuation of non-governmental education but also by gratitude. For example, I have a fixed, and fairly well-kept rule of sending twenty-five dollars to St. John's whenever the institutions from which I graduated—whom I respected only as the employers of much admired but very remote professors and loved not all—solicit me for money.

But, of course, the notion that the alumni's relation to the college—at least to our college—begins or ends there is absurd. So let me now consider the question what constitutes the after-life of a student from its most specific to its widest aspect.

First of all, and this turns out to be by no means a mere formality, the alumni participate in the governance of the college through their board representatives and informally by the weight of their organized opinion. That opinion has on occasion decided issues—such as the proposed abandonment of our old name.

The college in turn, we all agree, owes its alumni certain reliable services and well-organized, substance-informed occasions for their return. Among the first is the prompt and effective composition of letters of reference. Among the second are Homecoming with its seminars, and the exhilarating summer alumni seminars that take place in Santa Fe. Then there are the alumni meetings in the various cities, such as this one. For all of these affairs the tutors who help with them volunteer their time and efforts, in acknowledgement of the permanent bond between them and their former students.

But the tutors have another kind of duty—that more informal kind of duty which, were it not such a pleasure to per-

*Delivered at a gathering of San Francisco area alumni of St. John's in the fall of 1980.

form, would probably not be very faithfully observed. It is a duty which, even though it is more sporadic than undergraduate teaching, is as serious and as satisfying. It is to be in some practical sense *there* for alumni, to write to in weal or woe, to visit on the way to a new departure or on a sentimental journey, to bring the conclusions of life to. Those visits from former students—sometimes there is time only for fifteen minutes of conversation in the coffee shop—are always talked about among us. Nothing brings home to us the ultimate impotence of the profession of teaching and the deeply dubious character of the program as does a visit from a former student who is lost and who attributes that condition to having been touched by some unassimilable intimation of paradise or of hell in this school. Nothing gives so exhilarating a sense of stability in change as the appearance of alumni who have so well and truly put the college in the past that it is equally well and truly present in them: an oracular saying which I am certain will have some immediate meaning for most of you, and of which I want to say more later.

But the feelings with which these encounters leave us, from disturbed regret to a sense that the deliberate benevolance we felt towards you in your student days—good teachers are never "close" to their students—is about to turn into life-long friendship, are not my present point. That point is that alumni are in a more than metaphorical sense returning home, and have a right to be received in that spirit.

Those, then, are the continuing relations of the alumni with the college as a home community, made up of officers and two campuses and one faculty. Now I come to the after-life of alumni on their own. How does the college continue with them? It is by far the more problematic topic and a better subject for reflection.

Of course, it too has a practical and organizable part. The alumni organizations are, as it were, independent extensions of the college. In bringing former students together in the kind of event which is characteristic of St. John's, in seminars and lectures legitimated by discussion, they propagate the life of the college and provide members with the means for continuing to live it at their leisure. For us to hear that a city has a lively alumni group is to have a sense of having friends in the world, and to come to such a city, for example, to San Francisco, is a little like the experience of the shipwrecked Greek who, being cast up on a wild coast, saw scratched in a rock the diagram of Eucid I, 47 and said: "Here too are humans."

(Let me hasten to add that this feeling is absurd. Humans, that is to say, people to talk to, are everywhere. And yet, absurd as it is, it is also humanly sensible, for it is humanly sensible to feel relieved at finding one's own.)

This external, organized continuation of college life away from the campuses is, of course, only the expression of any inner individual continuity. Let me again begin at the easy end by giving some plain and practical tutors' answers to the questions about alumni life.

Alumni should continue reading. I imagine that most of you read quite a bit in the ordinary course of your lives. Much of that reading is in so called "papers"—newspapers, position papers, official papers—everything I call to myself "instrumental junk." Many of you probably also read reams of poetry and of novels—my own favorite genre—of that mean range of excellence which goes down easily and yet nourishes the imagination. Many of you will have emerged from the program hungry for history written to that same standard. I have often thought that the much-bemoaned heavy tread of our program readings has in the best event this happy side effect—that it leaves students with a great appetite—some of you may recall that the Greeks called it *boulimia*, "oxfamine"—for miscellaneous reading. But this kind of reading, which we share with the rest of the literate world, is not what I have in mind.

I am thinking of a very deliberate effort. It involves first of all letting the time ripen, by keeping the thought in mind without pressing on to the execution. But then, when you are ready, pick up the program list. Readiness may be that the new ways of life which you have, in a healthy zest for contrast, thrown yourselves into have begun to fail you. It may mean that some specific question has returned to preoccupy you, or that you see its true shape for the first time. It may mean simply that you feel the wave of activity floating you away from the isle of contemplation.

Pick up the list and choose a text. Then read it. Read it as experienced grown-ups reread the books of their youth: with a twinge of nostalgia for the circumstances of its first reading and with some wry admiration for the lordly consumption of metaphysics of which you were once capable, but after that with the critical discernment which comes from a well-digested, that is to say, half-forgotten education. That is my small but precise recommendation for doing alumni-deeds.

But now the moment has come for matters of larger scope. Let me work my way into them by dwelling on a dilemma often discussed or displayed by visiting alumni, a dilemma at once highly specific to this college and of the widest human importance.

Alumni sometimes arrive with a shamefaced and apologetic air about them. How have they sinned? They are respected at their work and loved at home, but now they have come to the place of account-giving, and they feel wanting. The matter is this: they are not living the philosophic life.

Now that is a difficulty that I can only imagine a St. Johnnie as being oppressed by. Other students might be anxious before their teachers for having failed in the world or even for having lost their soul, but they would not usually know much about or honor the philosophic life. I am always charmed by our students' anxiety because it shows on their part a willingness to take root in a deep and wise tradition concerning the good life. But I am also, in turn, anxious.

Let me backtrack for a moment to be more accurate. Sometimes there really is something amiss in these uneasy visitors. They may have become enmeshed in what I will simply denominate here by its all too instantiable formula, "the hassles of contemporary living". Or they are absorbed in the mild miseries of forgetfulness and can't come to. But more often their account of their life is full of shy ardor and quiet intelligence. Then I ask myself: what on earth does he or she, what do we all mean by the philosophical life?

So the matter needs to be thought out. Let me give you some of my thoughts, some long in coming, some thought out for the occasion.

When the ancient philosophers speak of the philosophical life, the *bios philosophi-*

kós, one thing is immediately clear. It is a life and not a profession they are speaking of. Professors of philosophy have certain real disabilities in living the philosophical life. For as professors they have a position to maintain in the world, and work, not leisure, is their element. It is just the same with returning graduate students in philosophy. Sometimes they are full of interesting reflections on their activity, but sometimes they are so lost in their profession that it makes one's heart sink.

Not that tutors are altogether different. To be sure, one incident that did much to win my heart for the college was a salary report prepared now almost a quarter century ago by Winfree Smith.

Its preamble declared that although tutors were paid to live, they were not paid *for* their work because that was invaluable. It was invaluable both in being a pleasure and the need of their soul to perform and because its value was incapable of being quantitatively fixed. But while it is an inner truth that tutors do not work for wages, it is an external fact that we are the employees of a demanding institution, who converse by appointment, teach on schedule, and study according to a program—and to miss any of these official obligations without a reason is highly unacceptable behavior.

It follows that we too are professionals, and not free to live a daily life of absorbed contemplation. But perhaps if no one we know lives a philosophical life by reason of even the best loved profession, it is still true that that life is compatible with any work, and any work can be done in a philosophical spirit. Let me pursue that.

The life of philosophy seems to me to have one external condition, leisure, and one reason for being, the search for truth. That leisure is not exhausted "time off" from work, but the free time for the sake of which the other times of one's life are spent. Of the search for truth let me say only that it is not only a possibility but a necessity for most human beings. In whose life have there not been moments when all considerations have waned but the desire, the exigent desire, to know the truth?

The long and short of it is, I think, that like all fundamental human modes the philosophical life comes in graduated versions which are continuous and even complementary, and those who come nearest to living it in some pure form hold its shape in trust for those who, from duty or preference, do the world's business.

For in spite of what I said before, there are protected environments for that life, and the college is the best place I know for study and reflection. Its program and its schedules are, after all, intended to be the ladder and the handholds in the reflective climb; most of us certainly I, myself, need such prescribed paths, since a life wholly free of stimulants and constraints leaves us more melancholy than illumined. The business of our college *is* in the service of leisure; it is a true school, if I may recall to you the old chestnut, that that word itself comes from *scholé*, Greek for "leisure."

Of course, it is for that very reason not the so-called real world. No one knows that better than its long-term inhabitants, particularly since they also live out of it, as neighbors, consumers, taxpayers, voters, and world-watchers. To be sure, in large academic conglomerations theoretical megalomania and practical impotence come together in that Lilliputian preoccupation known as academic politics. But the atmosphere of smaller schools is usually no more strained than that of an intensely close family, while the tutors of St. John's, because of the common allegiance to a program with integrity, form a remarkable community of friends, willing to talk to and to trust in each other.

Not only is the philosophical life best carried on in a special place, it is even most apt to be carried on by distinctive people. That distinction seems to me to be less one of nature or kind than of circumstance and predeliction. For example, our students approach the leading of such a life by reason of their being in leisured circumstances, and most of us tutors come near it more through our inclination than capacity for intellection. I know that in saying all this I can be accused of showing myself a child of my time and of depreciating the philosophical life. Those would be heavy charges, but perhaps I must face them in the question period.

How then is this special life, the life of philosophy, related to the life of action, if they are not in principle discontinuous? I used to think that the movement back and forth between them was entirely possible. In particular it seemed to me that someone who had thought deeply about the world should be able to act wisely in it. I was never such a fool as to think that academics or intellectuals would cope particularly well with ruling responsibility, but I was thinking of philosophers, people whose thought is not divorced from the nature of things. The notion of a philosopher king—or queen, for that matter—did not seem impossible to me. I have not totally recanted, but the facts of life loom larger now. I honor experience more, though that is an argument against the activity of the young as much as of the philosopher. What matters more is that the rhythm and the requirements of the two lives seem to me more irreconcilably different. From the point of view of the life of reflection, the other life seems unbearable for the continual curtailment of thought and its incessantly instrumental use, for the lack of long legatos of development and the hurried forestalling of spontaneous insight it brings with it. From the point of view of the life of action, the inability to reach conclusions without going back to the primal ameba (as Elliott Zuckerman likes to say), the obstruction of progress on mere principle, the lack of feel for possibilities, the sheer impotence of those who represent the other life, must be repellent. I conclude that with whatever freedom we may begin, at some time we become habituated to one or the other of the lives, and we will settle into our profession and our setting accordingly.

But there is nothing at all in this against frequent cross-overs. On the contrary, just as those who make reflection the center of their life must keep their worldly wits about them to have anything to reflect on, so those who do the world's business can and ought to philosophize, either as a steady accompaniment of their work, or intermittently, in their times of leisure—whichever fits the economy of their life. I think our alumni often live just that way. Would that they knew how close to us they seem when they do it!

That is what I wanted to say about the relations between the college as an institution and its alumni.

Now I would like to conclude by considering how alumni might cope with the college insofar as it is a place and a time in their lives. I would like to entitle this section: "How rightly to forget the college."

By forgetting I mean, to begin with, a phenomenon well known to theorists of learning—and of course, to learners. Most

learning begins in proud but hesitant self-consciousness and later subsides into a latent, yet ever active, condition. Such learning informs the soul as a second nature—it reshapes it with good nourishment and right exercise. It is in the hope that something of that sort has happened that alumni are called alumni. I think much of that inner shaping, that passage into the past by which what was once a *time* in your life becomes a permanent *possession*, actually takes place in the decade after you have left the place itself, and takes a considerable digestive effort.

Let me tell you what seem to me the signs that the passage has taken place. My recital will be illustrative rather than exhaustive, because I am not much enchanted by analytic check lists of the liberal skills and attitudes, and those are, of course, what I am talking about. If you like, we can talk more about these in the question period. And my examples will be given pell-mell, mixing the sublime and the trivial—always remembering though, that "trivial" originally meant: belonging to the trivium, the triple arts of language, grammar, rhetoric, logic. Here, then, are some of the features of that second, that alumni-nature, which we always recognize with deep satisfaction:

1. An unpretentious, companionable closeness to some deep and difficult books.
2. A fairly wide factual learning of the sort that is absorbed incidentally, in the course of trying to understand some matter.
3. A resourceful recalcitrance toward all translation, be it from Greek into latinate English, from common language into technical jargon, from book onto screen, from original text to popular paraphrase.
4. A long perspective on our modern tradition which avoids either kvetchy cavilling or easy riding, because it is based on some knowledge of our roots and our revolutions.
5. Knowing that the plural of *eīdos* is *eīde*.
6. A carefully cherished ignorance that texts of mathematical symbols and of musical notes might be anything but essentially accessible expressions of the human soul.
7. A determinedly naive faith in the possibility of principled political action, supported by a shrewd and ever-evolving theory of human nature which will neither buckle under the weight of the world's wickedness nor invite more of it.
8. A love for the illuminations of the studies of motion and of life, that is, physics and biology, and no disposition at all to be taken in by them.
9. As a precipitate of many etymologies studied and many meanings discussed, a constitutional inability to use even the most current words without taking thought for their origin and the accumulated burden of sense they bear.
10. A disposition toward that marriage of radical reason with reverent respect which was when you were there, and always will be, the best mood of the college.

Let me finish by telling the second way in which the college might pass into a recollection. This way has to do with the fact that it is the place of your youth. It seems to me likely that you never had been, nor ever will be, so young again. Such places of quintessential youth tend to leave a powerful after-image. McDowell Hall and Peterson Student Center become temples through which float diaphanous figures swathed in love and logos. Sometimes when you return, this image may suddenly fit itself onto the reality—the result will be pure romance. However, let me try to be sober about this phenomenon, for it is, I think, an indispensible instrument in the shaping of a good life—but only if the college has become a true object of recollection. By that I mean that you have allowed life to carry you cheerfully away from its temporal and spatial coordinates, until the after-image has in it neither regret nor nostalgia and has become a mere vision.

When those conditions are met, the inner image can and should serve as a source —*a* source, not *the* source—of shapes for a good life. Then it may provide a paradigm —*a* paradigm, not *the* paradigm—of that earthly paradise I imagine our alumni as forever trying to prepare for themselves: a community of friends held together by a love of learning. Then you will have put the college well and truly behind you.

EVA BRANN

FIRST READINGS

Philosophy and Public Policy, by Sidney Hook, Southern Illinois Press, Carbondale & Edwardsville, 1980.

Philosophy and politics have enjoyed a strangely intimate and uneasy relationship in Western civilization. This curious entanglement, which began no later than the time of Socrates, remains today at least as difficult to understand as it ever was. The historical fact of the relationship should move every student of politics to inquire about the influence of philosophy on public policy. But the complexity of the controversies among the great philosophers of the past should caution us not to expect easy answers to the questions that are raised by such an inquiry. *Philosophy and Public Policy* is a collection of twenty-one essays that Professor Sidney Hook has selected from his work over the past thirty-five years and edited for publication as a book. Nowhere in this book does the author give more than passing attention to the important disputes among the great philosophers. Instead, he offers one admiring essay about John Dewey and one introductory essay of his own on the general theme of "philosophy and public policy."

Early in this introductory essay, the author summarizes the results of his historical studies: "The most comprehensive as well as the most adequate conception of philosophy that emerges from the history of philosophy is that it is *the normative consideration of human values.*" This definition, though the author gives Dewey credit for it in another essay, is somewhat reminiscent of Socrates' exhorting us to think

about the pre-suppositions of our ordinary opinions and activities. Such exhortations may help move certain people to begin seeking wisdom, but the definition does not by itself enable us to distinguish philosophy from ordinary moral reasoning. When the author tries to provide this distinction, he encounters difficulties that he does not surmount. He concedes that philosophic inquiry is not always about moral phenomena and is not always "morally motivated" in the usual sense of that term. But he avoids pursuing the difficulties in the relationship between morality and philosophy by saying that "[t]he relationships among the various philosophical disciplines is a metaphilosophical problem, and still open." At the end of the essay he seems to return to his original position by saying that "[t]he philosopher is uniquely a moral seer...." But nowhere does he say precisely what a moral seer is, how he comes to be, why he does what he does, or what he is good for.

In place of an adequate account of philosophy, the author attempts to distinguish the philosopher by the special skills and outlook that he might bring to the discussion of public affairs. But the outlook and skills he describes are available to any thoughtful man. What Professor Hook offers is very little more than the uncontroversial standard according to which philosophers' speech, like everyone's, should be reasonable. That standard is a good one, however, and I shall try to apply it to the other essays in this volume, most of which concern specific political issues.

Perhaps partly because he has not undertaken a thorough examination of the Western philosophic tradition, Professor Hook is an extreme liberal, or as he calls himself in one essay, a "social democrat." Though he stays well within the boundaries of modern liberal principles, he is not as crippled by that limitation as many other contemporary writers are. The cause of this, I suspect, is that he has the great gift of common sense. But whatever the cause, he writes very well when attacking Communists, who subscribe to one of the most poisonous liberal heresies, and when criticizing liberal fools, whom he calls "ritualistic liberals." Common sense operates best when dealing with narrow issues, and on such issues Professor Hook often steps resolutely aside from the sad coffle of liberal opinion. Confronted with the little tyrannies brought to us by recently fashionable forms of racism and feminism, he provides a careful and devastating liberal critique of what is so euphemistically called "reverse discrimination." In the same spirit, he shows that William O. Douglas's confused and intemperate defenses of political violence are incompatible with the principles of liberal democracy. And Professor Hook reminds us that to be a liberal one need not substitute a fetish about the free speech clause of the First Amendment for an intelligent interpretation of the Constitution.

But when he takes up topics that are very general or remote from specific events, Professor Hook is apt to become confused and unilluminating. The volume's longest essay, which is devoted to "human rights," displays this shortcoming vividly. In the fashion of contemporary academic philosophy, the author is much concerned with defining his terms and defending his definitions. His discussion tends to revolve around the following statement:

> A human right is a morally justifiable claim made in behalf of all men to the enjoyment and exercise of those basic freedoms, goods, and services which are considered necessary to achieve the human estate. On this definition human rights do not correspond to anything an individual literally possesses as an attribute, whether physical or mental. Morally justifiable claims are *proposals* to treat human beings in certain ways. Human rights are not names of anything. They specify procedures—courses of action—to be followed by agencies of the government and community with respect to a series of liberties, goods, and services.

If we follow ordinary usage, in which the term "right" means something justifiable, the first sentence appears to be little more than a tautology. Later in the essay, the author uses the terms "rights" and "freedoms" interchangably; while this would eliminate the tautology, it would leave us to wonder how a freedom can be a claim to a freedom.

Much of the essay is devoted to criticizing other definitions of human rights; these others are worse, and most of his criticisms are appropriate. But not once does he mention the notion of "natural rights," which is the best known—and I believe also the best—alternative to his own conception. That he means to reject that notion is evident from his claim in the quotation above that human rights are not names of anything and are not attributes of human beings; and his rejection of it is implied even more clearly when he later asserts that human rights "are not derived from the reason of things or the reason in God, Nature, or Man." The closest he comes to offering any evidence against such a derivation is to point out that bills of rights are altered and re-interpreted as time passes. But this fact does not even begin to prove that the truth about rights has ever changed or ever will.

Despite its lack of any arguments against the concept of natural rights, Professor Hook's essay does contain hints of at least three grounds upon which that concept might be discarded. Perhaps an appeal to natural rights would be rhetorically ineffective in our time because of the power of cultural relativism among our most literate and influential citizens; or perhaps "nature" is a term so broad that it induces us to pay insufficient attention to the particular political conditions within which all human rights are enjoyed and circumscribed; or perhaps we should rely on human progress rather than reason, nature, or God to tell us what the limits of human claims and freedoms should be. There may be some merit in one or more of these suggestions, but Professor Hook does not defend them adequately. His own rhetoric in this essay is so convoluted and academic that even such old-fashioned writers as Jefferson and Lincoln still sound strong and timely by comparison. And despite the author's frequent insistence on the need to understand rights in their historical context, he offers some strained interpretations of history; with perfect seriousness, for example, he treats the Bible's injunction to observe the Sabbath as a recognition of "the right to rest and leisure." In general, Professor Hook tries to talk about rights without specifying their limits, apparently in the hope that this will contribute to the expansion of human rights and human happiness. But this leads him to substitute a rather hazy optimism about human possibilities for a definite statement about human nature and enduring human needs. One result is that he pays too little attention to the practical constraints on the expansion of human rights. He defends the United Nations Universal Declaration of Human Rights without showing that it can ever be more than a pious fantasy; and he acquiesces in Justice Douglas's fabrication of a constitutional right to privacy without so much as mentioning the grave political consequences that this doctrine has had through the Court's abortion decisions. Before we forsake the notion of "natural rights," which has been such a central element in our political life, we should wait for a more solid substitute than the one Professor Hook offers in this essay.

On occasion, Professor Hook's weak grasp of general issues leads him to make statements that are simply astonishing.

One example occurs in an essay on the rights of victims of crime:

> I am prepared to weaken the guarantees and privileges to which I am entitled as a potential criminal or as a defendant in order to strengthen my rights and safeguards as a potential victim. Purely on the basis of probabilities, I am convinced that I run a greater danger of suffering disaster as a potential victim than as a potential criminal or defendant. It is these probabilities, that shift from one historical period to another, that must be the guide to wise, prudent, and just administration of the law.

The crude egoistic utilitarianism of this statement appears nowhere else in the essay or in the rest of the book. One can easily advocate a firmer enforcement of the criminal laws without elevating fear for one's own safety into a principle of justice, and elsewhere in the essay Professor Hook does just that. But through this one careless formulation of the principle upon which the rights of defendants should be circumscribed, he allows his otherwise reasonable and public-spirited arguments to seem motivated by a selfish calculation of his own advantage.

Another example of the author's clumsiness with general formulations occurs at the end of an essay on political heroism:

> The democratic republic that was born in this hemisphere some two hundred years ago is the only political alternative ever devised to mediate, in Lincoln's phrase, "between anarchy, on the one hand, and despotism on the other."

The patriotism of this statement is touching, but the claim is preposterous. The United States is not the first, let alone the only, nation to escape the evils of anarchy and despotism; and an Englishman could remind us that our republic is not even the oldest existing alternative to those evils. Abraham Lincoln, in whose works I have not been able to find the quotation offered above, would certainly protest that his position has been distorted. In the First Inaugural Address, Lincoln does say that the majority principle, rightly understood, must be maintained lest the country fall victim to anarchy or to some form of despotism. But Lincoln's whole argument is directed to the controversies about secession that were burning in America in 1861. He does not claim that the Union is the first or only legitimate polity in history, nor even that it is the best; he says nothing about other countries, nor about the forms of government that might be suitable to them.

Not all the disagreeable statements in the book result merely from the author's carelessness in formulating his positions. In one essay, Professor Hook very sensibly argues that the Cold War has been the best mean between suicidal appeasement and the terrible dangers that are now inherent in military warfare between the great powers. But a little later in the same essay, he makes this remark:

> In the past, President Eisenhower, whose charming and vacuous smile matched his knowledge of international affairs, and who confessed himself stumped by General Zhukov's questions as to what ideals inspired the West, repeatedly warned us against the dangers of "atheistic communism" as if a communism that was not atheistic would be any less objectionable.

The language at the beginning of the sentence lacks precision, but the meaning is clear: President Eisenhower was a buffoon. It is unfortunate that Eisenhower became perplexed in the encounter with Zhukov, but that does not justify this casual and premeditated display of disrespect; and the injustice is especially striking since it comes at the expense of the man who presided over the execution of policies that Professor Hook has just spent several pages defending. At the very least, Professor Hook should explain to us how this buffoon managed to lead our nation through eight years during which Communist imperialism was successfully contained and during which prosperity at home grew almost without interruption. But the main point of the author's sneering remark concerns President Eisenhower's opposition to "atheistic communism." Does Professor Hook consider all communism, whatever its form, equally evil? Was the Oneida Community as objectionable as the Soviet Union? Is life in the Israeli religious *kibbutzim* comparable to life in Cambodia? The insistent atheism in Marxist-Leninist doctrine is certainly not the only source of its errors; and the atheism of Communist regimes is certainly not the sole cause of the horrors that they bring about. But one has to ask why Professor Hook refuses even to consider the possibility that atheism might be *one* of the sources of Communism's evils.

The explanation probably lies in the author's own manifest, though unacknowledged, atheism. For reasons that are not made clear in the book, he fails to state his position forthrightly. But that position becomes visible when he calls himself a "militant secularist." And it becomes transparent when he makes, almost in passing, the following theological pronouncement: "It is only because human beings build gods in their own moral image that they can reasonably hope that the divine commandments can serve as a guideline in human experience."

Professor Hook has included in this volume Jacques Maritain's graceful and powerful critique of Hook's secular humanism. The heart of Maritain's position lies in three propositions: "no society can live without a basic common inspiration and a basic common faith"; this faith must include "convictions . . . which deal with the very substance and meaning of human life"; and for this purpose no decent substitute for religion has been found. Professor Hook tries to refute this view by pointing out the weakness of the *logical* link between religious faith and allegiance to democracy. This weakness is obvious, and it should remind us that tolerance of atheists is not necessarily incompatible with preserving a decent polity; it should also remind us that strong religion does not guarantee good politics. But Maritain never denies the weakness of the logical link: his claim is that religion, and religion alone, can provide a society with the durable common morality that is *one* necessary precondition of political democracy. Professor Hook, who maintains that the "validity [of moral principles] rests upon their fruits in human experience," offers not a single example of a society that has given up religion without degenerating into savagery. Nor does he offer any evidence to show that such a society can be brought into being; indeed, the poverty of his own anti-religious faith is manifest in the last paragraph of the book: "How to inspire, extend, and strengthen faith in democracy, and build a mass movement of men and women personally dedicated to it, is a difficult problem which cannot be treated here."

Despite its weaknesses, *Philosophy and Public Policy* contains much that is sound. The strengths of the book appear most clearly in the section on "Heroes and Anti-Heroes." The section begins with a loose and unimpressive general essay on the place of leadership in democracies. But when he turns to criticizing the Communists, liberal fools, and leading hypocrites of our time, Professor Hook emerges as a powerful and sometimes brilliant polemicist. In a review of a biography of Trotsky, he shows why even large men cannot be

truly great if they cling to Lenin's doctrines. In a discussion of Bertrand Russell's political ravings, he shows quite clearly why America's involvement in Viet Nam may have been moral without necessarily also being prudent. In an essay on the Hiss case, he vividly reminds us that this country has indeed recently been threatened by at least one genuine and dangerous conspiracy. And in the volume's best piece, Professor Hook destroys Lillian Hellman. He is brave enough to call her "an eager but unaccomplished liar"; he is well informed enough to convict her of act after act of "political obscenity"; and he is generous enough to distinguish her from Dashiell Hammett, who kept his integrity despite his colossal political misjudgments. Because *Philosophy and Public Policy* displays so much common sense and anti-Communist passion, it could be good medicine for contemporary liberalism. And because the author accepts most of the liberals' leading assumptions, there is no good reason for them to refuse him a hearing.

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THE MINGLING OF PEOPLES

A Bend in the River, by V. S. Naipaul, 278 pp., New York: Alfred A. Knopf, Inc., 1979, $8.95

V. S. Naipaul's novel, *A Bend in the River*, never names the city and country in which the narrative takes place. Its true setting, however, is clearly Kisangani (formerly Stanleyville), the second-largest city of Zaire (formerly the Belian Congo); and the mysterious Big Man, the unnamed country's ruler, is Sese Mobotu, Zaire's dictator for the past fifteen years. Though Mobotu's Zaire is a poor and ill-governed Third World country, Naipaul does not take the stance of an expert trying to diagnose and cure the 'disease' of underdevelopment. The principal danger he foresees is anarchy and nihilism, more often cause than result from the impoverishment that preoccupies the experts.

The disorder and despair which permeate the novel result primarily from the haphazard coming together of different religious, ethnic, and cultural groups. Naipaul's protagonist, Salim—an Indian brought up in an Arab-dominated section of East Africa, educated in British schools, who now lives in a newly-independent black African state—embodies Africa's contradictions. The book's great theme is the disaster this mingling of peoples brings to Indians, Africans, and perhaps to Europeans as well.

Europe has been the catalyst; it provides the possibility of self-understanding for Africans and Indians alike. Salim says: "All that I know of our history and the history of the Indian Ocean I have got from books written by Europeans...without Europeans, I feel, all our past would have been washed away, like the scuff marks of fishermen on the beach outside our town." The ability to detach oneself, to form a distinct self-image of one's past, present and especially future condition—the source of history and progress—makes for the power of Europe. But Europe also brings corruption: "It was Europe, I feel, that also introduced us to the lie...we were people who simply did what we did. But the Europeans could do one thing and say something quite different...It was their great advantage over us." Salim discovers that a line supposedly from the *Aeneid* on a Belgian monument commemorating the founding of the city has been altered. It reads: "He approves of the mingling of peoples and their bonds of union"; but in the original the gods warned Aeneas not to marry Dido, not to mingle Europe and Africa. "Rome was Rome. What was this place? To carve the words on a monument beside this African river was surely to invite the destruction of the town."

The self-deluded Europeans are now gone, driven out by their former subjects, but their example remains in all its ambiguity. The Africans imitate European institutions, buy European goods, and, increasingly, look on Europe itself as a place of refuge. As his mentor and fellow Indian Nazruddin explains to Salim on a visit to London, "All over the world money is in flight. People have scraped the world clean, as clean as an African scrapes his yard, and now they want to run from the dreadful places where they've made their money and find some nice safe country." In London, foreigners from all corners of the Commonwealth threaten to undermine unquestioned European values. With a mixture of irony and dismay, Salim observes that the Arabs in London have brought with them their black slaves; Britain now tolerates at home the slave trade it had once stamped out in East Africa. "In the old days they made a lot of fuss if they caught you sending a couple of fellows to Arabia in a dhow. Today they have their passports and visas like everybody else, and nobody gives a damn."

The escape to Europe is possible only for a handful, but the pressures of modern African life—the insecurity of rapid and random change—foster escapism throughout the population. Salim realizes that even in the city "when you get away from the chiefs and the politicians there is a simple democracy about Africa; everyone is a villager." In times of trouble the city empties as people return to their villages and the simple life of the bush, to re-emerge when things quite down. A new generation of young Africans, however, without ties to the bush, who know nothing except the empty and imitative life of the cities, has no place to retreat. At the same time the country's leader opens up the countryside to bring the previously inaccessible rural population under his control.

The dilemma of the "new African" is symbolized by Ferdinand, a young man whom Salim befriends. Born in the bush, Ferdinand goes to school at the European-run lycee, is trained at the Domain (the Big Man's school for future leaders), and eventually becomes the local district commissioner. Ferdinand is trapped by his own modern upbringing, and by the precarious nature of political life, where every official is at the mercy of the Big Man, who rules through a talent for playing his enemies off against one another. At first, Ferdinand is confused, his mind "a jumble, full of all kinds of junk." But in the end he achieves a terrible clarity: "Nobody's going anywhere. We're all going to hell and every man knows this in his bones...Everyone wants to make his money and run away. But where? That is what is driving people mad. They feel they're losing the place they can run back to..."

The political stratagems of the Big Man produce temporary peace and prosperity, but in the end serve only to break down traditional restraints. When they fail to quell a rural uprising, the soldiers of a tradi-

tional warrior tribe are treacherously disarmed and dispersed by an imported force of white mercenaries. Unable to adopt commercial or agricultural ways, they form the nucleus of a new and deadlier rebellion. Official corruption, fostered by the pervasive insecurity, makes a mockery of the regime's motto, "Discipline Avant Tout." The opposition turns by degrees to unqualified hatred: "When they've finished nobody will know there was a place like this here. They're going to kill and kill. They say it's the only way, to go back to the beginning before it's too late."

Salim too seeks safety, a place of retreat. He and the other Indian expatriates fight an ongoing battle with nostalgia and regret, with the temptation to find refuge in the past, in the memory of their lost East African birth place. Unlike his friends who become rich by acquiring the town's "Big Boy" franchise, Salim does not forget himself in the successes of commerce. At the end his property is nationalized, and he becomes a homeless refugee. He finds his safety in the personal equilibrium, detached and clear-sighted, that shows itself in the book's opening sentence: "The world is what it is; men who are nothing, who allow themselves to become nothing, have no place in it."

Salim's hard-won balance does not depend on condemning those who are incapable of such accomodation. He does not explain away the Big Man's machinations as 'necessary' or 'progressive'; he appreciates success but rejects the ruthlessness and the denial of the past which so often accompany it. Naipaul/Salim understands that Africa's lost balance may be impossible to regain, and that while the losses are certain, the gains may be illusory. On hearing of the revolution which cuts him off from his coastal homeland, he is astonished at the optimism of some of the foreign papers: "It was exraordinary to me that some of the newspapers could have found good words for the butchery on the coast. But people are like that about places in which they aren't really interested and where they don't have to live. Some papers spoke of the end of feudalism and the dawn of a new age. But what had happened was not new. People who had grown feeble had been physically destroyed. That, in Africa, was not new; it was the oldest law of the land." Unlike the manipulative coldbloodedness of the development theorist or ideological reformer, Salim's detachment comes from experience of the perennial laws of the human condition and of the ties between personal and historical experience.

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