

Minds on Trial

IN THIS, OUR CHRISTMAS issue, we offer our readers a historical allegory: the tale of two trials of the mind in which two men were condemned as security risks by the authorities who had jurisdiction over them. The allegory deals with two historic cases, with two of the literally countless men who have been punished for holding and espousing ideas that no clearance could make safe. Every established order that history knows about has had such trials, where men have been punished because their mode of thinking and believing was considered un-Jewish or un-Athenian or un-Catholic or un-American. The most fateful security trial mankind has ever known was that of a Jew born 1957 years ago.

Trials of the mind, of men accused of undermining the existing order because of the potentialities of future action which is inherent in their beliefs, are standard operating procedure in certain societies and can be the basis of their strength. The Communist rule over one-third of mankind would not even be conceivable without unrelenting thought control. Only a fanatic civil libertarian could maintain that the systematic policing of the mind leads inevitably to the destruction of the order it is meant to defend. It all depends on the nature, on the purposes, of each order. Soviet Russia disciplines with the same meticulous thoroughness the productivity of its citizens, no matter whether the products are theory, steel, or meat. Soviet Russia claims to be a revolutionary society on the march. But can a society like ours afford such trials of the mind as that of J. Robert Oppenheimer?

The Catholic Church did not gain anything from the trial of Galileo, yet could well survive it. Its function is to minister to the believers' souls, and to prepare them for the other life, since according to the Church, the time men serve on earth conditions their timeless destiny. Because of Galileo, the notion of outer space and of our earth in relation to it has changed, but this has not affected the believers' toiling on this earth to earn their reward in an outer world. Actually, while every religion at some time or other has been antagonistic to science, science has not deprived man of a sense of infinity or of the need to pray.

In Soviet Russia, thinking about social problems or

man's destiny is out of bounds, and as a substitute for it there are all the stereotypes of Marxist-Leninist orthodoxy. The recent Moscow declaration, laboriously produced by the world's Communist leaders, is such an astonishing collection of trite commonplaces that it is hard to understand how anybody bothered to write it. Yet, this state-imposed atrophy of political or moral ideas may well be one of the causes of the spectacular progress of Russian science. The most vigorous brains find shelter—perhaps a measure of privacy—in the intricacies of mathematics and of technology. Indeed, the greater the intricacies, the safer the shelter for the men barricaded behind abstractions and able to prove their worth to the régime with their scientific and technological achievements.

Shrewd operators like Khrushchev must be aware of what they stand to gain by granting to scientists and technicians freedom of inventiveness and huge rewards. This freedom is not likely to be contagious as long as the régime succeeds in keeping scientists and technicians a race apart. True, the régime may become too dependent on them. But as long as there is a large supply of them and a close watch is kept on their extracurricular activities, Khrushchev probably has no great cause for worry. Ultimately, the wall between moral thinking, which is stifled, and technological thinking, which is fostered, may crumble. For the time being, Sputniks, intercontinental missiles, and other wonders of Soviet technology may well be the result of the secluded freedom granted by the Soviet government to its physical scientists.

On Whom Could They Lean?

In our country, too, it happened that a group of physical scientists—the best we had—became, in a very short time, burdened with a crushing load of knowledge. Unlike their Russian colleagues, our scientists-turned-weaponers could not help searching beyond the weapons they had produced, worrying about the alternatives these weapons had created, their impact on our strategy and on our diplomacy. It was difficult for our scientists not to ask these and many more questions, considering that the government, on many an occasion, had de-

manded that they, the scientists, suggest some answers.

These men needed assistance—all the assistance that the spiritual values on which our society is supposed to be founded could give them. But where were such spiritual values to be found, and in whose hands? From every loudspeaker in the country they could hear all about the sacredness of the human person and its inalienable rights. But these men needed something more than singsong. They needed to be reassured that the system of weapons they themselves had devised could become one of the instruments—but by no means the only one—of a wise diplomacy. In an age when technology is irresistibly leading to automation in so many fields of production, there is certainly a risk that the ever-increasing production of nuclear weapons may lead to an automation of death.

One could not say that the churches were particularly active in coming to the rescue of those few men aching under the Godlike power of sheer destruction that they themselves had brought into being. Spiritual leadership of the type sometimes represented by philosophers and poets was not available, since this commodity for a long time had been in scarce demand. Political leaders could only tell our atomic scientists to sit tight on their secrets and keep quiet.

Left largely to their own devices, our scientists did as well as they could, and managed to develop their own ideas on the nation's interests, strategy, and diplomacy. They were greatly concerned with tactical atomic weapons, limited warfare, need for a strong continental defense, and the network of our alliances. There was nothing particularly novel—not to say seditious—in their thinking, and it is indeed amazing how haltingly and modestly they made their ideas known to the public. Among all men having to do with weapons, those responsible for the atomic bomb were the most inept in public relations. Separately and together they tried to give themselves a sort of homemade philosophy; but the dream of ever becoming philosopher-kings did not even remotely enter their minds.

The Muzzle and the Leash

And then Oppenheimer was brought to trial. His urging that ways be found to bring war back to the battlefield was considered preposterous if not treasonable. The scientists were warned, and in the most categorical terms, that they could serve only one master, the government, and that they must not only do as they were told but do it enthusiastically. At the same time they must be emotionally uninvolved with the crisis of the nation, abide by the security system, and like it. They must also manage to protect the strongest offensive military interest of the country. There was something quite sinister in a scientist who concerned himself with defense as Oppenheimer did. A scientist who works for the government and does not want to be considered a security risk is

well advised if he drops the habit of taking counsel with his conscience.

Yet our society is based precisely on the principle that every man is the servant of two masters: the one for whom he works and his conscience, the outward and the inward. The objects of both allegiances can have many different names and, in fact, be different, but the duality is essential. This duality is not a compulsory schizophrenia, but rather a system of reciprocal checks without which there is no freedom. Yet the very men who needed freedom the most, for their responsibility was the most crushing, were told that they must serve only one master—enthusiastically.

The tragedy of the two Oppenheimer decisions is exactly here: they are utterly inconsistent with the system of values which is supposed to be ours. They cannot be called infamous for there is always an element of deliberate evil in infamy and, sometimes, of greatness. Rather, they are pitiful. The men responsible for these decisions could not possibly have known their import.

One of the major causes for alarm about the condition of our country today is that too many irreparable decisions are reached thoughtlessly. The security apparatus was built and is kept running for its own sake. No one ever thought of establishing a segregated servitude for our scientists as a counterpart of the segregated freedom that the Russian scientists enjoy. Yet things have drifted very much that way.

In our defense establishment men have been working hard, and money has been spent profusely, in a series of disjointed, unrelated efforts, each tied to some group of interests, or to a special conception of warfare. There are no devilish villains on our national scene. Rather, there are too many smug men, each one of whom might have done well in more limited fields. Intellectual sluggishness, perhaps, has been our greatest curse.

EVERYBODY is a slave in Soviet Russia but the scientists.

Here, everybody is free and only the scientists are kept on the leash. The Oppenheimer decisions have muzzled them. No wonder that in mathematics or in technology the Russians are getting ahead of us.

A free society has its test not in the way it succeeds in moving toward a chimerical conception of history, but in the here and now. It has been proved that we have fallen short of our standards in many a field—and not only in the production of gadgets. But there is something else to be done here and now aside from catching up with Soviet technology or giving a better foundation in mathematics to our children. We need a greater respect for ideas among the largest possible number of our citizens. The realm of the intellectuals is as essential to the survival of the nation as the realms of business or of labor. It must become strong, responsible, self-governing. There is no greater or more urgent need in America today.

Galileo

And J. Robert Oppenheimer

GIORGIO DE SANTILLANA

WHEN Galileo Galilei was brought before the Tribunal of the Inquisition in Rome in 1633, Pope Urban VIII was determined to break once and for all what to him was the incomprehensible arrogance of the scientific mind. Even after the culprit was found guilty, he was not treated harshly. He was never refused access to the sacraments, and he was allowed to pursue his scientific studies provided he kept away from astronomy. Yet special pains were taken that he should die under imposed penitence, and thus be refused burial in hallowed ground as still and forever *vehementer suspectus*.

The Inquisitional trial *de vehementi*—that is, a trial for vehement suspicion of disloyalty, or of heresy as they called it in those days—began with a firm assumption of guilt, or at least of bad judgment, that could not be dispelled by any facts brought in evidence. Under our law, legal proceedings are supposed to begin with an assumption of the defendant's innocence unless or until guilt is proved. Yet many marks of a trial *de vehementi* are to be found in the hearings of J. Robert Oppenheimer before the Atomic Energy Commission's Personnel Security Board in Washington in 1954.

IN BOTH TRIALS the accused could not defend himself against the fundamental accusation that was never brought up at the trial. Galileo had no advocates in court, nor was there any discussion of the Copernican theories as such. Galileo was not allowed to defend his scientific work: the only question was, Had he disobeyed the Church or not? Oppenheimer was allowed to have lawyers, but they had no clearance,

and security considerations ruled out any adequate discussion of the facts relating to Oppenheimer's controversial views—which were, after all, the basis of the whole trial.

In each case the scientist was shown a good deal of official consideration, although in the public consciousness he was clearly branded as one who was either too clever or too scared to commit himself to the major infamy but whose intentions were sinister from the start. In each case the purpose of the proceedings was to inflict social dishonor on the accused in order to deter others from certain kinds of action that the authorities feared.

'New Science Casts All in Doubt'

There are, of course, many differences between the two cases. In the history of science Galileo is by far the greater figure. Despite all the innuendoes that have been made about him since 1633, his reputation as a "second Archimedes" could not be taken away from him. His ideas were accepted with excitement by the educated public of his times. But in our day the discovery of dreadful powers, for which mankind may not yet be ready, has enveloped science in a climate of fear and even guilt—a fact that no doubt contributed to paralyze Oppenheimer in his defense.

It is permissible to speculate about what would have happened if Oppenheimer, together with Fermi, Bethe, and two or three other authorities in theoretical physics, had stated in 1942, as Heisenberg did in Germany, that the atom bomb was not feasible. No one could have really known except them. On the other hand, supposing the bomb could be made, there was also the

troublesome possibility that it might trigger the explosion of our whole planet. Theoretically, it looked all right, but what man of sound practical judgment will trust himself wholly to theory in a matter utterly without precedent, a jump in the dark?

Heisenberg was certainly a patriotic German and a very great physicist, yet, after extensive exploratory work with his colleagues, he gave up—and not even Hitler could say anything.

THERE is another important difference between the cases to be considered: the Galileo trial concludes with a solemn abjuration; the American trial does not. Rome proceeded on established orthodoxies, hence the final abjuration was in order. But our society is based on the dignity of the individual, and the defendant was permitted to give his recantations right at the beginning as a sort of spontaneous admission. This is what Oppenheimer's pitiful apology in his letter of March 4, 1954, actually amounted to.

Galileo ends up on his knees, but people forget that he started out by challenging his judges, in the name of the law, to tell him what was wrong with his book. Oppenheimer is on his knees at the start—as his legal advisers told him he must be—pouring out in public a tale of his past personal attachments and private beliefs, recounting his insignificant indiscretions, protesting that he has learned his lesson, that he can still be useful. There is, of course, the same ludicrous contrast in both cases—two men with enormous capacities to learn pretending that they had learned their lessons from judges who were by nature "im-