

December 4, 1953

Professor Albert Einstein  
112 Mercer Street  
Princeton, New Jersey

Dear Professor Einstein:—

I spoke to Mrs. Dukas over the phone this afternoon and she suggested I write you a letter.

Briefly, I am the author of *LAMP AT MIDNIGHT*, a play about Galileo. This play was produced by New Stages in December, 1947 and published by Dramatists Play Service in 1948.

When produced, the play received superb critical notices, as the enclosed reviews will testify. When published, the edition was soon sold out.

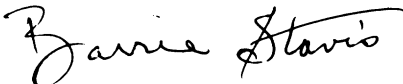
Now, with the play out of print for a considerable time, Dramatists Play Service proposes another edition. I have long set my heart on asking you to write an introduction for this new edition.

I must tell you, my dear Professor Einstein, that when the first edition was scheduled to be published, I had planned to ask if you would honor me, and the play, by writing the introduction. A certain timidity prevailed — and so, I never approached you. But now, with the passage of five years, I think it would be wrong for me not to approach you at this juncture in history. During these five years especially, we have witnessed the rampant growth of Inquisitorial committees, the ever-increasing destruction of civil liberties and academic freedom. The mind of man is being entered, investigated and inquisited by thought police. The parallels to Galileo's time are tragically apparent: you will see them expressed in the play.

I am further encouraged to write you because only recently I saw the Stillman Drake translation of "The Dialogues" with your excellent foreword. . . . Galileo's work, his triumphant achievement, his inquisitorial ordeal, his ability to rise above the shame of his recantation and move on to his great work on the laws of motion — all this, I know, is as close to your heart as it is to mine. Few things can so aptly symbolize our mutual love of this man, Galileo, as a foreword from you in my new edition of *LAMP AT MIDNIGHT*.

Dear Professor, may I hear from you soon?

Cordially,



Barrie Stavis

December 9, 1953

Mr. Barrie Stavis  
333 East 53. Str.  
New York 22, N.Y.

Dear Mr. Stavis:

I have been quite impressed by your play "Lamp at Midnight". It is a powerful representation of the conflict of two antagonistic views on life. I believe, however, as far as I can see from Galileo's books that there was no inner conflict in Galileo himself. He represents the position of tradition and authority everywhere in a ridiculizing manner. His Simplicio, the defender of petrified aristotelian doctrine is depicted as narrow-minded and moderately stupid and the very choice of the name "Simplicio" cannot be attributed to chance. I am convinced that truth was Galileo's only God and that his attitude was that Man has to face the truth squarely.

I have also the feeling that in the play Galileo is described rather as a one-sided positivist or empirist whereas he was powerful also as a rationalist.

It seems to me that Galileo's attempt to win over the Church authorities cannot be attributed to his reverence for the institution of the Church but rather to his inveterate inclination for a "good fight".

So you will understand that despite my honest admiration for your play as such I feel unable to write something in its favor.

Yours sincerely,

*A. Einstein*  
Albert Einstein.

P.S. the clippings you sent me will be returned under separate cover.

December 17, 1963

Professor Albert Einstein  
112 Mercer Street  
Princeton, New Jersey

Dear Professor Einstein:—

Thank you for your letter of December 9th; (though I am terribly disappointed that you will not be writing a preface for the new edition of LAMP AT MIDNIGHT).

I have received the clippings. Thank you for their return.

I would like to discuss two statements in your letter with which I do not agree. I broach this with hesitation because of the profound respect I have for you. But discussion of the two points should be fruitful, and, therefore, I proceed.

You write: "I am convinced that truth was Galileo's only God and that his attitude was that man has to face the truth squarely". If your statement is correct, how explain his recantation? In his recantation, Galileo denied absolutely the truth of his scientific findings — (and Kepler had already proved mathematically Galileo's telescopic observations). In his recantation, which for the sake of the play I have condensed and somewhat paraphrased, Galileo says:

"And now since I am suspected of heresy, having falsely held that the sun is the center of the universe, and also that the earth is not the center, and that it moves, I am anxious to remove from the minds of my judges and from the minds of all faithful Christians this ugly suspicion so reasonably entertained against me. Therefore with a sincere heart I now abjure, detest and curse these errors and heresies."

He even places restrictions on the future actions of both his pen and his tongue:

"I swear in the future I will never say or write anything which may raise similar suspicions against me."

He even agrees to become an informer, to denounce to the Inquisition anyone who holds to these opinions; such denunciation would perforce include his own students and disciples:

"I swear that if I know any heretic, or anyone suspected of heresy, I will denounce him to the Inquisitions."

If, as you say, "Truth was Galileo's only God and that his attitude was that man has to face the truth squarely" how can we understand, how can we explain, Galileo's shameful conduct before the Inquisition? My question has double pertinence in that Galileo knew that his recantation would be read aloud in many churches and before the student and faculty body of many universities and seats

of learning under the domination of the Church of Rome; and that the public reading of his recantation would gravely injure the forward movement of the new science which he had been so instrumental in introducing.

To my mind there are two possible explanations for the recantation. The first: he was so terrified of physical harm that, in order to escape physical torture, he was ready to betray the scientific truth which he (and Kepler, Brahe and others) had fought for all his life. I am sure you will agree with me that we can readily dismiss this explanation. There is a wealth of evidence that he was no coward. In addition, he was then seventy years old, racked with illness, enfeebled by years of arduous labor, afflicted with failing eyesight. Surely, life as such was no great boon to him anymore. Further, the Church never intended to harm him physically. To have done so would have been a terrible defeat. Karl Von Gebler in his "Galileo Galilei and the Roman Church", Stuttgart, 1876, shows both in text and by diagram, that for the few days Galileo was in the Inquisitorial Place, he was lodged in, and given the exclusive use of, the commodious apartment of the Commissary General of the Inquisition. Galileo's servant was allowed to sleep in the very next room; nor did Galileo eat prison food, for the Tuscan ambassador supplied his table. Physically, Galileo was afforded every courtesy. As I shall show, his recantation had to be won not by means of physical force — indeed, *could not* be won by such means — but by means of spiritual persuasion.

There is yet a second explanation, which I believe reaches close to truth. It is this: Galileo believed in his Church; he had Catholic faith; he accepted the authority of the Church; and he was concerned that his Catholic soul remain whole before God. . . . (If you have not already done so, may I respectfully recommend that you read, "The Private Life of Galileo" published by McMillan, London, 1870. When his daughter, Polissena, became a nun, she was given the name of Sister Maria Celeste. She resided in the Convent of St. Matthew in Arcetri, close to Florence. Galileo frequently visited his daughter; in addition, they carried on a devoted correspondence over many years. The volume is, essentially, a compilation of his daughter's letters and of his sayings and doings. This volume gives many instances of Galileo's faith.)

Nor did Galileo consider his Catholic faith and his scientific knowledge a contradiction of each other. "Let Man penetrate the secrets of Nature. Each new law of Nature learned by man will be additional proof of the infinite greatness and infinite wisdom of God." And again: "The day will yet come when the scientific understanding of Nature will be the highest demonstration of the glory of God."

In his 1613 letter to the Abbe Castelli, and in his amplification of this letter addressed to Christina, the Grand Duchess of Tuscany, he expounds on the relationship of Scripture and the new astronomy: "Scripture is the word of God; Nature is the deed of God. Now Nature is immutable, with no variation of any

kind. But the word of God is written in allegory; subject to many interpretations. Since there are many interpretations of the word, and only one to the deed, and since both are part of the same truth and cannot contradict each other, should not the word be made to conform to the deed?" And further, he pleads that the Church should not burden itself with conclusions which may later be proven false, for, quoting the witty Cardinal Buronius, he says: "Scripture tells us how to go to heaven, but not how the heavens go."

The fact is, that he was at one and the same time a great scientist and a devout Catholic possessed of Catholic faith. Accepting this fact, we can arrive at an understanding of Galileo's recantation.

With these two powerful forces at work within the man, his Catholic faith and his scientific understanding, is it not conceivable that Father Firenzuola, Chief Inquisitor, wily and brilliant, could trick and trap Galileo into an acceptance of the bitter concept that if Galileo truly loved his Church, believed in God, and was concerned that his Catholic soul remain whole before God, then Galileo had to recant? . . . Shortly before Galileo was scheduled to appear before the inquisition, the Inquisitor then in office, reputed to be a man of little force, and with even less comprehension of the fundamental requirements of his office, was replaced by father Vincensio Maccolini de Firenzuola, a man of strength and intellectual prowess, well versed in the art of Jesuitical thinking. The issues were placed before Galileo by Firenzuola. Galileo, torn between the ferocious necessity of choosing between his science and his Church, chose his Church. At a latter time in life he was to say: "If a man takes away reason to make way for revelation, he puts out the light of both," but at this juncture in his life, prodded by the wily insistence of Firenzuola, he was to do precisely this terrible thing, namely, take away reason to make room for revelation.

What were the issues as Father Firenzuola presented them to Galileo? I have stated them, and I put them down for your convenience. These speeches are based on the classical fundamentalist approach to Scripture as expressed in the contemporary literature.

"There are questions of far greater importance than those propounded in mathematics. There are questions relating to ethics, to our relation to God, to our future. It is irrelevant to me whether Jupiter has four planets or none —there is something more important than that. If our soul is to perish, whether in eighty or eighty million years, this period of time is only an executioner's grace. Besides our material world there is a spiritual world, infinitely richer than the one in which we live, a world of which we are to become a part.

"The world trembles on the edge of ruin. Only the unity of Christendom can hold mankind together. But this

unity stands on a series of beliefs about the relationship of God, man and the world. The man who threatens this unity threatens the world.

"You are that man, Galileo. You are destroying the unity of the world. You have become a man of chaos.

"You say you are innocent. By what standard? By your own mind! And if it is wrong? And if the Prince of Darkness has fastened himself upon you and at this very moment you are his servant, performing his work? Is there no doubt at all in your mind? Somewhere, deep, deep, there *is* the shadow of doubt. Think, Galileo, think! The unity of the Church rests in your hands. If there is the shadow of a shadow of doubt in your mind, and you smother that doubt, then all the villains of the world, Luther, Calvin, and the rest, will be as saints compared to you. They left the Church and attacked her from without: But you will destroy what you claim to love. Think: Dare you assume this awful responsibility? What of your soul? Forever the fires of hell will rage and consume your soul, and consume it, and consume it, and yet never consume it — eternally there for the fire.

"Galileo, man is a spiritual being with a supernatural destiny; his destiny is the only thing that matters supremely. Do not let it slip away from you: I will plead with you and I will pray with you until you realize the indwelling presence of God through the surrender of your will to His."

This approach, and only this approach, could get Galileo to recant. Not threat of physical torture, not fear of death; but that he was destroying the unity of the world; that he was a man of chaos; that perhaps the Prince of Darkness had fastened himself upon Galileo and was working his will to destroy the Church through Galileo; that for his part in the destruction of the Church, his soul would burn forever in the fires of hell. Father Firenzuola understood all this well, understood it deeply and imaginatively. And first he implanted this shadow of a shadow of a doubt in Galileo's mind, and then he fed the doubt until, finally, he accomplished his purpose — Galileo's recantation.

This, to my mind, is the only possible valid explanation for Galileo's recantation: that he was both scientist and devout Catholic. This combination, in the hands of Firenzuola, proved his undoing.

Now we come to the second statement with which I disagree. (Some of the points I make will naturally tie in with points I have made concerning the first statement.) You write: "It seems to me that Galileo's attempt to win over the Church authorities cannot be attributed to his reverence for the institutions of

the Church but rather to his inveterate inclination for a 'good fight'".

First, I would like to make the general observation that in the practice of life a man does not lightly indulge his inclination for a good fight with an antagonistic force so powerful that he can be quickly destroyed. Such an opponent is never fought for superficial reasons, but only on a principled basis where fundamental moral and ethical beliefs are at stake. One enters into combat with such an opponent, soberly, aware of what is at stake, and, with equal sobriety, aware that this may prove a life and death battle. . . . The Church of Rome was all-powerful. In an earlier period, Pope Gregory VII summoned Emperor Henry IV who had displeased him, to appear before him at Canossa; the Emperor stood for three days barefoot in the snow, as a symbol of utter submission, before Pope Gregory VII would grant him an audience. Later, in 1600, Giordano Bruno was burned at the stake in the Flower Market Square in Rome. True, he was burned ostensibly on theological grounds, but he was an advocate of the teachings of Copernicus, and was well known for his use of the inductive method in his work. Galileo was 36, a lecturer on mathematics in the University of Padua when Giordano Bruno was consumed by Inquisitorial flames. The smoke of the fire reached his nostrils in Padua, even though Padua belonged to the free Venetian State. Even were Galileo so inclined, he would not have rushed lightly into a fight with so powerful a force. But more important, as I believe I have shown earlier, Galileo loved his Church and did not wish to enter into combat with it.

It is true that Galileo never shunned a fight, and that when he fought, he fought brilliantly, wittily and with gusto. But when he fought, he did so because he had to in order to defend a principle, to try to establish a truth learned from his experiments. Since his research and experiments upset dogma after dogma, it was inevitable that he would be involved in battles with dogmatists, deductivists, Aristotelians. But they were battles to establish a truth; they were not initially taken on for the pleasure of a good fight.

However, his attitude toward his Church was entirely different. Though he had ample opportunity to quarrel with the Church, he would not do so; though he had ample opportunity to remove himself from Church domination, he would not avail himself of the chance. We must remember that Galileo went to Rome in 1611 to introduce his telescope and advance his astronomical discoveries. His success was sensational. The letters, diaries and journals of that time abundantly testify to this. He was eagerly sought for as the honored guest of the evening in the castles of prelates and dukes, princes and cardinals. He held forth before large throngs of men of the highest rank in both the Church and government. The journals and letters testify to his triumph of 1611. He went to Rome again in 1615 to silence his enemies who were plotting to have him brought before the Inquisition, and to win Church authorities over, finally, to his astronomical findings.

He succeeded on the first count. In fact, in March 1616, Galileo had the honor of an audience with Pope Paul V of about an hour's duration. It seemed likely that he would succeed on the second count too, that he would win the Church to his astronomy. His scientific papers were widely acclaimed. They made enemies, that was natural; but more important his work was gradually and steadily gaining ground, winning fresh disciples all the time. He was an honored member of the Academy of the Lynx since 1611. Four scientists in the Roman College, Fathers Clavius, Griemberger, Malcotio and Lembo, concurred in Galileo's telescopic observations. The Tuscan Ambassador, Niccolini, over the years had himself talked and had his emissaries talk with many cardinals, princes and prelates on Galileo's astronomy and had conditioned them favorably.

All of the above, and more, was designed to prepare a climate of opinion so that Galileo's astronomy would be accepted easily, without recourse to a fight within the Church about it. And it would have been accepted were it not primarily for the decisive movement of Cardinal Bellarmin of the Inquisition, Jesuit, a man of enormous intellectual capacity, and eminent jurist, rated in the Church as equal to St. Thomas Aquinas. His theological writings are considered to have more influence on modern Catholic thought than almost any other work, giving, for the Catholic, lucid exposition of Catholic doctrine. (In 1923, Pope Pius XI beatified him.) He could have had the Papacy for the asking, the vote was unanimous, but he refused it. He preferred, rather, to serve as the Commissary General of the Inquisition, standing guard over Christian truth, as he and his camp interpreted it, standing guard over Christian souls to insure their upward journey to heaven. It was this man who comprehended the danger to his interpretation of Christian truth, if the astronomy of Copernicus and Galileo were to be accepted as fact. As early as 1611, during the exact period when Galileo was enjoying his greatest triumphs in Rome, Cardinal Bellarmin started a file on Galileo, in the Inquisition! And in 1616, he acted with force and decision against Galileo.

I do not here mean to imply that the Church was an institution of one-man fiat. No. It was a vast religious, economic, social and military organization, with authority resting in many individual hands, and with an ascending hierarchy resting finally in the hands of the Pope. But within this institution two major contradictory forces were at play. There was a liberal element which maintained, that both in its interpretation and its social practice, Scripture should not remain rigid and dogmatic. This element wished to liberalize and humanize the Church; (I give expression to this element through the character of Cardinal Francesco Barberini, the Pope's Cardinal nephew. I have him say — and again, his speeches are based on expressions in the contemporary literature: "If you refuse Galileo's ideas you will turn our glorious Church into an inflexible institution, unable to grow as a man grows, unable to embrace new truths as man develops them. . . . Where will man turn with his new ideas? He will knock at the hard shell of our rigid dogmas and take his new truth elsewhere. And in



self-protection we will find ourselves at war against the truth...") Joined with this liberal element was the new group of city merchants whose wealth rested in trade and commerce in contradistinction to the feudal lords whose wealth rested in land. They, and the newly risen group of bankers who served them, were anxious to do away with restrictive measures against business. They were anxious to trade with all of Europe, especially the Protestant countries. And, of course, there were scientists and philosophers, many of whom were Galileo's own pupils and disciples, who had a commonality of interest with this group.... Arrayed against this side were the scholasticists; the Peripatetics; the feudal lords who looked with extreme suspicion upon the growing merchant class and bankers; those who for sundry reasons insisted on a strict and literal interpretation of Scripture; and there were the nepotists within the Church hierarchy who wanted to maintain the extremely profitable status quo. The power of this latter group should not be underestimated. Extreme forms of nepotism reached from the bottom to the top of the hierarchy. Leopold Von Ranke in his three-volume study "The Ecclesiastical and Political History of the Popes of Rome" gives many startling instances of extreme nepotism.

Cardinal Bellarmine, as I have said, understood the theological implications of the new astronomy and why there must continue to be a strict literal interpretation of Scripture. In Act 1, Cardinal Bellarmine expresses the inherent danger of the new astronomy. I give these lines to you herewith for your convenience.

"No, Galileo, I offer you no hope. The Church cannot allow your new astronomy. Roman Catholicism is committed to the system of Aristotle.

"As Christianity developed, it became urgent to adopt a single official system of the universe. The Fathers of the Church found Aristotle's system most in accord with the spirit of Scripture. For hundreds of years the astronomy of Aristotle and the heavens of Christian theology have been as one: Now you come forward and say, 'The old celestial hierarchy is false: I will introduce the true system!'

"But the truth or falsity of your system is not my concern: I must ask only one question: *What will happen to Christian teaching if our system of the heavens were to be torn down and your system set up in its place?* And the answer is: *Christian truth would be destroyed!*

"You would transform the Church of the entire universe into the church of one insignificant clod of dirt lost in space.

"What will happen to the masses of men who have been nurtured in the belief that the world was created for

man, and that he is God's especial concern? They would feel cheated, belittled, denigrated. They would turn in revulsion. Herey, apostasy, atheism would be the order of the day. You would create a spiritual revolution — and the Church cannot tolerate such change.

"Aristotle's heavens and the Christian heaven — the destruction of one would injure the other. This we cannot allow.

"For better or worse, the Church Fathers have committed us to Aristotle's astronomy. Were we to change now, the evil would be too great! Therefore there can be no change."

For these reasons, Cardinal Bellarmin, though he was a personal admirer of Galileo, in the all-important injunction of 1616, interdicted the Copernican system of astronomy, allowing it to be advanced only as hypothesis, but not as fact.

Now here again we have proof that Galileo would not join in battle with his Church, but was concerned always with receiving its official sanction and working through the instrument of the Church. Galileo, and a host of allies, had worked for many years to establish a climate of opinion; their success seemed most probable; then there was a sharp reversal; and they failed. Here was Galileo, at the age of 52, no longer a young man, failing in health, with a bitter pill to swallow. Why did he not leave for free Venice, or England or Holland? Venice in 1606 had banished all Jesuits from Venetian territory; they would have welcomed Galileo back and cherished him and protected him. They had made a drastic error, which they now realized, in giving up Giordano Bruno to Rome. They would not make the same error with Galileo. In England he would have been protected by the state and would have been able to work in absolute freedom. As for maritime Holland, she would have embraced Galileo with open arms. Her merchant fleet had urgent need of the practical applications of Galileo's work. Dutch ships, so they thought, would have an advantage over all competitors with Galileo working for the Dutch. There is only one answer to Galileo's refusal to leave for these free countries, namely, that he was intent upon working through the organization of his Church.

It was upon the death of Gregory XV and the ascension to St. Peter's Throne in 1623 of his old friend Cardinal Barberini, a member of the Academy of the Lynx, a profound personal admirer of Galileo, a man who had written poetry in honor of Galileo and his telescopic discoveries, that the chance for the full acceptance of the Copernican system became realizable once more. (Galileo dedicated his "The Assayer" to Pope Urban VIII in 1623.) However, when Cardinal Barberini, now Pope Urban VIII, upheld the injunction of 1616, Galileo, still seeking to avoid a fight, yet anxious to achieve wide dissemination of his

book, cast his great work on the two chief systems of the world in the form of an hypothetical dialogue. His own position is obviously indicated in the satiric preface and when he gave the weak Aristotelian arguments to Simplicio, but he did keep strictly within the injunction. . . . Incidentally, while Simplicio has its obvious connotation, John Eliot Drinkwater in his "The Life of Galileo", published in London in the 1830's, comments on the fact that there was a Simplicio, a well-known follower of Aristotle, living in the seventeenth century.

The work, as we know, was finished in 1630. Due to the untimely death of Federigo Cesi, president of the Academy of the Lynx, who was to publish the book in Rome with its imprint, Galileo found it necessary to publish in Florence. Two long years were spent in correspondence between Florence and Rome — Galileo in Florence; and Father Riccardi, Chief Censor of the Press, and Monsignor Ciampoli, Papal Secretary of the State, in Rome. And during these two years of protracted negotiations, Galileo, his health failing, worn out by years of rheumatism and overwork, consumed with impatience to hold his book in his hand, remembering only too well how Copernicus finally held his book in his hands only on his death-bed, still complied with all requests made of him about the book. And later, when the Duke of Tuscany through his ambassador in Rome officially protested the seizure of the book, he described all that was necessary to get the license to publish the book by saying: ". . . . The book was amended, altered, added or removed. . . . It was subject to examination. . . . Which was finally licensed here (Florence) and there (Rome)." Surely, all these are the actions of a man who wishes to comply with an authority — and not quarrel with it.

There was perhaps one time in all of Galileo's long life when by force of circumstance he could not have fled, had he wished to do so. And this was after his recantation and short banishment. Back in Arcetri, and then later when he was allowed to go to Florence for medical care, he was a virtual prisoner of the Inquisition. Old, broken, growing blind, this was the one time in all of his life when the initiative was wrested from his hands.

Forgive me for the length of this letter. I know the multitude of your work and its paramount importance. But once I undertook to disagree with you, equally, I had to undertake to prove my points fully.

I am anxious to hear your thoughts on these matters and look forward to your reply.

Cordially,



Barrie Stavis

December 30, 1953

Mr. Barrie Stavis  
333 East 53. Str.  
New York 22, N.Y.

Dear Mr. Stavis:

Many thanks for your elaborate letter of December 17th. You are trying to convince me of your Galileo and are bringing as witnesses a number of distinguished authorities. If I am not quite convinced it is due to the fact that I am a kind of close relative of Galileo. What I can read between the lines of Galileo's writings is for me more convincing than the testimony of authorities who are, after all, strangers to him and to his spirit.

With kind wishes,

*A. Einstein.*

Albert Einstein.