

{ } = word or expression can't be understood

{word} = hard to understand, might be this

...from the old school of Paris. He becomes a teacher there, and studies there, and competes for the highest honors there, and the archbishop has -- can't see why this turbulent new method of -- should be used in a local school, because it brings up a fight against the local traditions. { } then he -- he goes out and starts something radically new, this monastery { } spirit, something unheard-of. And never before had a house of God been allowed to be called after one name of the Trinity. I told you that the Church either has been called in honor of the Trinity, of the living God as we really experience Him, or as the Church of Christ, as -- the impersonation of God on this earth. But the Holy Spirit, we said, is vague, if it is only -- because then it can become just the idea of one genius. The Holy Spirit, however, always ties together two times. And in the Trinity this is clearly expressed by using the terms -- Father and Son. It always means two generations at least. Or it means the whole time of antiquity against the whole Christian era. It always means the tremendous relation of times, before Christ -- Christ and after Christ, would be one relation of father and son. Or the Old Testament and the New Testament. The law and grace.

Now we -- then we came back to Paris, and I said that at the end of his life, he did teach in these schools on the Left Bank of the river, in a -- as a free-lance teacher. And out of this {comes} this clash: the faculty of Paris arose, as a true university faculty. And we said that in a higher school of learning can only exist where the appointments are not made from the outside, but where the group that is already in the situation can co-opt, co-elect, you see, and include into its membership the newcomers, because only then can the standards be developed {from} actual teaching.

This is a very acute problem today, gentlemen. A -- a friend of mine is going to start a world university somewhere in Europe. And he naively thinks that when he invites Germany, and France, and Italy, and England to contribute to such a world university, he will have a world university. He will then hire a German, and a Frenchman, and an American, and an Englishman, and all -- {hold and be- -- lo}, there is a world university.

That's the idea on which children go about their business today in the world of affairs. And that's why the spirit today is dead as a dodo. You can't found a new institution in this silly manner, that somebody else appoints teachers and then say, "You are members of a world university," because the people who go there, before have just been an Americans, and Frenchmen, and -- and

Englishmen, you see. And they haven't changed.

You have to divest yourself first of your old allegiances by an act of your own life, in your own life, and in your own thinking, before you can -- before you can become the nucleus of something new. And I tried to show you that Abelard, by divesting himself of his membership in the cathedral school of Paris, by first going in exile, by first going into this -- monastery of the Holy Spirit, separated himself from the old way, and lived his new method, and suffered for it. And then you can be the -- perhaps the -- the seed of a new type of man, and li- -- way of life.

Today, gentlemen, nobody ever wants to suffer for the new way of life.

He doesn't want to divest himself in hard, daily practice of one way of thinking.

So if this man, this friend of mine, will succeed in getting his world university, it will be just sham and fiction, because every member there they -- will be just what he has been before. He gets -- he hasn't done anything under his own steam to become a member of world thinking. That isn't so simple as you think.

And that's why nothing happens today in the world. You have this UNESCO.

That's a better joke, with Mr. Huxley at the top. These are -- he's an Englishman, if ever there was one. Now he travels around and appears in other places. But that doesn't change him being an Englishman. He has never done anything for ceasing his thoughts of being an Englishman, before he was appointed. You must appoint a man for what he has done.

That is, gentlemen, in the realm of thought, the thinker must deliver the goods before he's paid for, and then later you can appoint him for what he has done, and say, "That's the man; he did it." But you always try the other way around. You cannot take any old warhorse and say, "Now do something new." He'll remain the old warhorse.

And nobody knows this here. You think for money you can get anything; you can buy anything. Ye- -- you can always buy something what is there, but you cannot produce new people. New people, the founders, gentlemen, are people who take a first step at a time when nobody else knows of this -- step. Somebody has to do it first. But you always think there is somebody outside who can, so to speak, pay a man, and then he will be new. Gentlemen, nobody becomes new for -- for money. It's impossible. First, a man must deliver the goods; and then the world, after a while, recognizes that there is a new man. First of course, they slander him; they persecute him; and gradually they take to him, and say, "That's very nice." Columbus had to discover first America. There was nobody else in -- who could say, "Go and discover America." Silly. Can you

see this? But you all think it can be done that way.

Every one in this world today--by the way, the world has always been this way--tries to live by caricatures, by votes, by substitutes, by second-rate living. There would be no founder, gentlemen, if somebody else could take it upon himself to tell him, "Now act in a new capacity." Then the man who would say so would already have to have lived this new thing. If something is really new, gentlemen, it is at one time not yet existent. Jesus was not existent before He had lived. Nobody could tell Him, "Become Jesus." He had to say it to Himself. A very dangerous performance. People thought therefore He was crazy. His mother thought so. And He was crazy, because anybody who is something first is in the eyes of the rest of the world insane. Abélard seemed to his contemporaries therefore crazy, a madman, to be condemned. The same is true of our friend Paracelsus.

And I think in order to stimulate your thinking, gentlemen, as to the founding of the University of Paris, I -- will wish now immediately to confront you with the process of founding the social sciences, and founding the academic sciences, the natural sciences. I -- you have read the pamphlet on Paracelsus, I take it. And I now wish to bring out the points which Paracelsus had to live in order to be able to become the first teacher -- the first founder of a new method of observing the facts of nature. That's exactly parallel to the founding of a university, gentlemen. A university, we said, was founded on the principle that two schools of thought at the same time on -- at the same place teach the same people, the same student, opposite points of view on the same topic. You remember? The academic science, gentlemen, the natural sciences consist of a constant conflict between teaching and research. The conflict bet- -- in the natural sciences is not that -- and the sa- -- at the same place two opposite ideas on geology are held. We don't have to have here two professors of geology: one teaching the volcanic, and the other the neptunic line of thought, you see. It is enough, gentlemen, that the geology professor here at Dartmouth is constantly aware that what he teaches today may have to be revised tomorrow, and therefore impresses on his students the situation in which his teaching is, that it is only true so far, you see, and may be superseded by another expedition to Alaska tomorrow.

So gentlemen, the contradiction in the natural sciences is between teaching one thing and searching for another. That isn't the same as in -- and -- as in theology. In theology you have St. Augustine teaching one thing, and St. Ambrosius teaching another, and equalizing the two, you see. But the great authorities then are already all there.

We are how- -- theology only arose when the contradictions all had been fully stated. In natural science, it's the other way. There is a tradition about our knowledge of the globe, in 1500. It's in the classical books of the ancient scientists of Greece. And Paracelsus comes and brushes it aside and says, "You have to walk over the whole globe, and you have to -- send in all the experiences and observations from everywhere, and you have to be ready to overthrow your teaching." And therefore the students must be told that what they hear is doubtful.

Gentlemen, any teaching in the natural sciences is conditioned on: tomorrow it will be different. In theology that is not so. On God, gentlemen, we determine the -- expectation is not that it will be different, you see, but that we have to concord the terrible contradiction that God is charitable, and severe, that He punishes { } third and fourth generation, and yet is merciful forever, and forever, and forever. It's a terrible task for every generation: why is there a world war, you see, and why is God merciful? And the -- the question of evil, and of eternity, and the question of -- and the question of sin are eternal questions.

Gentlemen, in the medieval science, there is no -- not the same research to be done as in the natural sciences. What has to be done is concurring. The concurring of the ultimate contradictions, which are already all known. They are all in, so to speak. That the world is abstruse and absurd, you see, that people knew in 1100 just as well as they know it today, you see. But they showed ways of reconciling this, you see. And {then} can choose between various ways of reconciling it. And you have to {gain} in every student this heavy weight on his heart, that it has to be reconciled.

In o- -- gent- -- in other words, gentlemen, in the medieval science, in a university, the whole problem is the load on the teacher's heart to make the heart of the student equally heavy, equally interested. Because if the next generation does not again find that the problem of evil weighs heavy on his heart, he will not enter upon the solution. And so the next generation and the future of mankind will be without any sense of importance -- of what is important. In the academic sciences, gentlemen, the situation is different. The data are not all in. We don't know yet how contradictory our observations of the far, distant stars are to our ideas about the solar system, you see. These are contradictions. Yet we observe more and more every day.

So gentlemen, the contradictions in the aca- -- natural sciences are between different things as in the -- in the scholastic sciences. The question of an

unjust law, and the right to resist it, is an eternal question. Since Cain, and Adam, and Abel, and Abraham, and Noah, there have always been the same question, that there have been tyrants and unjust laws. Your ancestors believed in the right of resistance. You don't. So, why? Because for a hundred years, you haven't been told the importance of resistance. Therefore, the -- the right of resistance is dying in this country.

I asked in the other course the other day whether -- how the -- the students in class would react if the FBI came and wanted to arrest a friend who just spent the night at his house, and to whom he had offered hospitality. And they unanimously said that their first reaction would be to give him over to the FBI. Now a hundred years ago, the first reaction in this country would have been to hide him from the FBI.

In other words, gentlemen, the religious aspect of hospitality has disappeared from your hearts. Your heart is no longer caught and gripped by the sacredness of your hospitality, that you are the host, and he is the guest. And he's at your mercy, and therefore you have to be merciful as God is. You are no longer God to your ho- -- guest, but you are just a little human being who trembles when the FBI comes in and says, "Please, take him over. I wash my hands of him."

This is not only in the -- the case of houses, so. You see it in the case of college presidents, who jettison their teachers if they are -- considered red, and so on. That is, the weightfulness of hospitality and protection, you see, by you, given to somebody else, your divine quality of -- being able to protect other men's lives has fast disappeared from your hearts. We haven't made it important. It doesn't weigh on you. Therefore, this eternal question of unjust laws, you see, of tyranny, of hospitality, of protection, of self-defense, you see, {is} at this moment not in you. It isn't important for you. You -- the right of resistance is -- disappearing fast from this country. Your generation is a regimented generation, by and large. It's -- you may rebel individually against it, but you will not deny that the mass of your colleagues in this college want -- just want to have their peace, and want to be left alone, even if Mr. { } is killed.

That's very serious, gentlemen. It will give you an example --.

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How do you pronounce it? Not { }.

{ }.)

Well, gentlemen, there you see the -- can you grasp the difference between a legal or theological question and an academic question? The question of -- of -- after an oak tree or a mammoth, you see, can only be solved if you bring in new bones of another mammoth, you see, from another region. Then everything we said about the mammoth may have to be revised. Ja?

So academic questions, gentlemen, are based on new observations. Before, they cannot be finally answered. But legal questions and theological questions are based on our sense of -- of what is important in this question. You say, "If the FBI comes, it is important that I shouldn't be disturbed in my way of life. So I wash my hands of every disturbance. I wish to conform. Just leave me alone. Otherwise I couldn't go to a picnic tomorrow. It c- -- would cost my time." Think, if you have to defend your friend -- conceal your friend from the FBI, it may take you to strange lands; you may miss your appointment tomorrow. It always is a very -- you can only give your time to something important, because otherwise you get off schedule.

Gentlemen, the question of importance always involves a distinction between eternal values and immediate values. You have always to pause if you wish to give importance to a legal question.

You are slandered, gentlemen. Take this question. You are slandered.

Now you know the laws of this country make it very difficult to accuse a slanderer in court. You usually don't get anything out of it, you see. And -- it's a very costly affair, and the slanderer gets away, you see. You know that. Therefore most people in this country just know, even if they are slandered, that they won't do anything against it. There may, however, come a point where you have to sue the man, you see, because he has slandered your wife. Obviously you can only do this if the honor, you see, of your name is more important than everything you have to do during the next six months. Because it will cost you at least six months--and much more, perhaps--until you have brought the case to court and you fought it through to the Supreme Court.

Therefore, gentlemen, "importance" always means that you have to pause, and make the distinction between the eternal and the temporary. Any legal or theological question means just this, that you know what is eternally important and what therefore has to take second seat in comparison to it. Otherwise you can never go to court, for example, because any court action interrupts -- Mr. {Medina's} -- life. The poor man is -- at this moment sacrificed for the United

States, this Judge {Medina}.

He -- the -- a friend of mine said yesterday to me, "Every day the papers should print the headline on the {Medina} case," because it is in -- in the court, in New York, that today the Constitution of the United States is defended against Communism. It's a great case. And probably Mr. {Medina} will crack. There -- I wouldn't be surprised if he wouldn't try any other case in the future, anymore, this poor man. But you have -- you perhaps read it with curiosity, gentlemen, but do you read it with the trembling in your heart that this is your case? That the right of jury and court are on trial there today? That if Mr. {Dennis} and company succeed in breaking Mr. {Medina}'s health, and spine, and nerves, that there will have been cast a tremendous prejudice on the underdog?

In this country, everybody has always sided with the defendant. Everybody who hasn't pleaded guilty was innocent. Every court was sacred for the accused. After this trial, that won't be the case. Since the accused have been able to start a whole conspiracy against the functioning of the court in the United States, you see, these accused--it's very strange that they should call themselves "Communists"--will have deleted the privileges of the underdog, because in the future, the pub- -- be very suspicious when a man {seems} to fight in court for his life. They'll be annoyed, and they'll say, "He's just a nuisance. We know that." That has never happened before in the United States, gentlemen. The {Medina} case is the first onslaught on the Constitution of the United States. It is very strange. The -- the accused, gentlemen, in -- are tried for usi- -- for saying that they want to use violence in the United States -- against the government of the United States--you know this; that's the whole case--and the naive reader of this accusation thinks that this violence would be applied in the streets, in the barracks, in the battleships, in the factories, you see, to blow up the U- -- government of the United States. Instead, the -- government of the United States is now blown up in the courtroom. It's the only place where the Communists in this country have a faint chance of using their dynamite. We don't have to fear Communism in factories. We don't have to fear it in {force}. We don't have to fear it in any other place. But with the -- in the judiciary, they are at this moment using violence against the government of the United States. You see the paradox? That they are tried, and that this case itself is now turning out to be the only violence they can successfully use. Isn't this a strange story?

Now gentlemen, if you would really still be identical with the -- Constitution of the United States, if you would identify yourself with it as a real American citizen, you would demand from your newspaper to read a full, stenographic

report, and you would tremble -- tremble for the health and survival of Judge {Medina}. And you would write him letters of comfort and send him a bottle of champagne. I mean it. That's at this moment the focal point of the attack of Russia on this country. But how is it treated? Just as a sideshow. And on the other hand, because this is not treated as it should be, there are all these -- witch-huntings outside, quite insignificant, trying to find whether a union of footwe- -- -carriers is perhaps -- contains perhaps a Communist. The violence against the United States can be brought against the judiciary, against the legislative branch, or against the executive branch. And by this strange turn of events, our judiciary is found open to attack.

I can't of course understand that these lawyers are not debarred, and {debunked}, that we allow them -- it's the lawyers there, who terrify me more than the accused. That these lawyers are allowed to function in this court is just beyond my understanding. Because the danger is, you see, as I said, that the next underdog will not have the same graceful hearing from the court.

{{ }.)

Well, you are a very {good boy}? Don't you see that -- that there is -- you see, of course this country has never believed that quantity isn't quality. You always think bigger is better. But I don't think a longer trial is a better trial.

{{ } another alternative { }.)

I feel not. I -- I mean, I read this very carefully, and I feel that they -- the abuse is so obvious by the -- by the defendants that -- that this cannot go on. { } it is only -- I mean, in England, it would- -- just -- wouldn't happen. That's the same {judicial system}. Couldn't -- it couldn't have hap- -- couldn't happen { } in England { }.

You see, we have -- I tell you the reason. It is the same reason why we have no successful proceedings against slander. In England, as you know, there is a very strict rule of contempt of court. And contempt of court is -- is not used here by Judge {Medina}. But that's a very serious business, you see. Contempt of court is exactly this act which makes the functioning of -- of the -- of the judiciary, you see, impossible. And we have, as with slander, you see, where in England, a man gets \$500,000 in -- indemnity, here he gets \$1 and has to defray the costs of the trial himself. If a man accuses you of slander, he {is ruined}. In England, the man who -- who has slandered is ruined.

No, no. This democracy has simply given rein to -- an affection for the underdog, which now has to be corrected, in a reasonable way, you see. The sympathy for the underdog is -- what has { }, but it's open { }. How long is this trial now going on? Does anybody happen to know when it started?

({ }.)

What I mean to say is, gentlemen, the case may bring home to you the fact that it is not research which is the question of the medieval university, but conflict of two possible judgments on the matter. If you take the side of the defendant always, you get into this situation as today: the underdog is always, you see, right. You can take another point of view in which you say the judge must be protected, you see. And you can take a third point of view and say that the -- the prosecuting attorney has to be protected, I mean. You have three possible solutions of this -- of this situation. You can side with the person injured, whose child has been kidnapped; you can chide with -- side with Bruno Hauptmann, you see, who kidnaped the child; or you can protect the jury and the judge, as they do in England. In -- in France and Germany, the sympathy would be with the man injured, with the man who has lost his cow by a thief, or his child by a kidnaper, you see. But in this country, the sympathy is with the man who was bold enough to commit a crime, and hasn't been able -- has not yet been able to be convicted. So gentlemen, in legal, and religious, and theological questions--take this down--the research is not what moves the science on, but the necessity of bringing to the next generation again the eternal question in such a way that it will weigh heavily on their hearts, that it will become important. The old -- old sciences of law and theology faced the problem of making the same question newly important. The academic question, however, depends on the possibility of bringing in new facts.

You see, your -- since you believe that the only science is natural science, you cannot be surprised that we have neither a reputable theology nor a reputable jurisprudence in this country at this moment. Because these two sciences depend exclusively on importance, and not on new facts, you see. They depend on interest, on -- on zest, on a new generation again wishing to conquer the concordance, the -- of opposite points of view. Whereas today, you sit back and say, "Oh, we send an expedition to the Arctic, and they'll find out about the magnetic pole." And that's all what your curiosity has to do: spend some money on some scientist who is sent there. And then we'll know.

Modern science, gentlemen, ca- -- is suspended between teaching of the

tradition, and research in new facts. And therefore, gentlemen, the academic science is -- originates in a conflict between the existing school and exploration, re-research, discovery. The discovery of America, the observations of the rotations of the -- Mars and Venus in the sky led to the new picture of the earth and of astronomy. The -- new observations of the bones in anatomy led to the new picture of medical -- in medical science by the famous anatomist, Vesalius. All this happens in 15- -- since -- after 1500, gentlemen. New observations overthrow old teachings.

You may put down, gentlemen, on one side, the words "tradition," "teaching," "doctrine," "stock of knowledge"; and on the other, you may put the words "discovery," "research," "explorations," "observation," "information." There you have the antagonism, the polarity. You can use any of these two words -- two -- these -- pairs of words, you see, to express the -- the situation.

Now gentlemen, any doctrine, any science, any tradition which is taught to children before he's in school with the--pardon me?--with the qualification, "This is only true so far," is a new type of doctrine. The newness of the Renaissance scientist, gentlemen, about nature--what we call the academic sciences--are then...

[tape interruption]

...they said that of course, when the secret police came to a German house, that the -- he -- they should have hidden the Jews, and the Social Democrats, and the nationalists, these conservatives. And it is a shame; every German was guilty because he didn't become a hero and protect his friends against Hitler.

Now I have a colleague who told me that he has offered to the FBI to inform against us, on this faculty. He -- { }. So you see how difficult it is to measure with the same measure the -- the people in a foreign country and your own country. Nobody wants to be a martyr at this moment in this country. And why then were the Germans so terribly wicked when they didn't?

So in -- in 10 years, we have run the gamut from demanding once more the -- the duty to resist tyranny. They want something far away. And now saying, "But we of course have no duty to -- to resist the secret police. Do you think the FBI is anything but a Gestapo? What's the difference? Both put in by executive order without any legal foundation, outside the Constitution of the United States. What's the difference? It's just an executive order. It has absolutely

nothing to do with your civil rights, or { }. Yet everybody's rushing in to help the FBI.

Now I don't say that you shouldn't, gentlemen. But be careful that you don't measure with two standards. You have condemned these very things in other people's -- in other countries, and other people's lives. And you have acted accordingly. The -- Germans, on the basis of this have a t this moment no state--and they will never have one, probably--on the basis of your moralizing on this fact. And -- so perhaps you should have no government, either.

These are very serious questions, and only show, gentlemen, that I have to talk to you about Bologna, and about the conflict of imperial and canon law, and its great fruit, the right of resistance. And the same with marriage law. The difference between imperial marriage laws and personal marriage laws, because both are in this moment vanishing. The Russians have made this strange law that you can't marry anybody who is not a Russian citizen. That's an interference of the imperial law with the church law, you see. And the right of resistance is here given up immediately if anybody comes to your house and asks for information about some -- anybody else. Gossip has suddenly been dogmatized as a -- in a wonderful { }. Mere gossip, which the FBI collects. Called "testimony."

"Oh, I had heard, yes, yes." I -- the -- the last thing I heard was -- a -- a man was investigated, and a -- a woman hurried, of course, to the wonderful opportunity, and said, "Yes, he went to a pink school." You see, a pink school. That was the accusation, you see, which she was eager to furnish.

"He went to a pink school," whatever that may mean. Very -- it was just a high school even, not a college.

Ja?

(Is that the reward for resistance, { } resistance?)

Pardon me?

(Is that the reward for resistance, { } injustice?)

It's always {is, Sir}. The essence of the right of resistance is that you may be killed in the process. If -- there is no "if," Sir. You may be sure, gentlemen, that if anybody resists a state, he's apt to be shot in the process. The -- your "if" -- only shows how far removed you are from reality. You don't even know what the

"right of resistance" means. Because you ask "if." But that's the essence of it, gentlemen, that there is in -- a situation which is preferable to be shot dead on the ground than to survive tyranny. Do you think any tyranny would ever have been laid and ambushed if this wasn't so? Do you think the farmers at Lexington and Concord had any "if"? Was there -- what was -- else was it, but the right to resist? And what was their reward? To be shot dead. Have you ever been to Con- -- to the bridge there? Well, it -- was very easy to fire, both ways. Probably the British soldier could have -- could have fired, too, but they preferred to run. My dear man, your "if" just shows that you are here in an academic situation, that I haven't been able to impose on your heart the heaviness of this question. and that you are only at this moment in the ci- -- cycle of natural scientific thinking, and therefore think, "How silly to die for it. How impossible. How can anybody be asked to do this?"

The medieval man began with the following statement: "Since our Lord died on the Cross, there must be many cases in which it is preferable to die -- than to live." The thing has been summed up very neatly in *Pierre*, by Herman Melville. At the end of this -- who has read it? Oh, Herman Melville is an American writer. Not a Russian. You -- you are still allowed to read him. Heavens! Who has read *Pierre*, by Melville? I thought he was the best American writer.

What have you read by Herman Melville?

[in chorus] (*Moby-Dick*.)

Really, have you read it? Most of you have, the title page. I have yet to find a student who has read *Moby-Dick* from the -- cover to cover. Who has? From cover to cover, and everything that's in between? I doubt it, to tell you the truth. I still have to find the man who hasn't skimmed over various pages in it. But the -- *Pierre* is with -- without *Pierre*, you don't understand *Moby-Dick*, and without *Moby-Dick*, you don't understand *Pierre*, by the way. The book ends on this terrible note, "It's speechless sweet to kill thee."

Now that's the climax of the scientific circle of your question, Sir. The answer of the medieval -- cycle would have been "It's speechless sweet to be killed." It is speechless sweet to be killed in a good, just cause. And if you don't know that such a case exists, you don't belong into the cycle which deals with

eternity. You only belong into a cycle that deals with temporal knowledge. Knowledge of changing facts. And that's what you all do. But anybody who is -- is willing to don a uniform must also know that he can be shot in the process of wearing this uniform. It is more sweet, gentlemen, to resist a tyrant than to fight in a battle for your country. Because it is much more difficult. The tyrant, you see, wears the uniform of your own country. And the enemy, you see, everybody applauds if you resist him. That's the -- the -- { } the same. Why could all the Germans resist the Russians, and the French, and the British, you see, and kill them, but not Hitler? That's a very profound question. But it wasn't the question that they wouldn't fight for anything. But there was -- the question of danger of life was in both cases exactly the same. If you are a soldier in the United States army, you see, you have the -- your -- it is solved for you, is it not? No gentlemen. You have just shifted the importance. Any man who doesn't fi- -- resist unjust laws will of course have to resist the enemy from outdoors who attacks an unjust state in which you happen to belong. Nobody -- you see, the questions of eternity are not questions which you can escape from. The same people who resisted in this country tyranny were peaceful people, when it came to the foreign policy of their country, didn't want to go to war. Ja? Because they still wanted to resist at home.

You can say, gentlemen, that eternal things are always with us. If you, however, deny that they are eternal, they -- will come to you in an indirect fashion. If 190 million Americans say, "I personally cannot do this, because I may die -- be killed in the process," there will be a world war, and all the 190 million people will run the risk of being killed, you see, because not one of them wanted to be killed with some greater degree of danger. There is a scale. Can you -- have you -- any graphic genius here who could put this on a scale? You can say that the more a man takes it upon himself to resist, the less will he be caught indirectly in a mass resistance. But the -- eternal has always to be defended against the temporal. In -- marriage, for example, you see. This law in Russia has to be destroyed. It's an unjust law. It is unjust. And the lynching in the South is unjust. Now if one man in the South, one sheriff acts really, and resists the mob--boldly, you see--he is in great danger, you see. But the law will be in force, and the lynching will die. If, however, no sheriff in the South will protect the Negro against lynching, you have to have a mar- -- a militia marching into the South; a whole regiment may have to be mobilized, a whole division, a whole army corps, you see. There is much more loss of life perhaps involved. But no individual will think that he directly is in danger of life. The whole peace of the United States will be -- in jeopardy, as in the Civil War.

And so your choice, gentlemen, in defending eternal values is always in a sliding scale from person to mass. Any non-resistance against corruption in Tammany Hall, or in city government, makes it more complicated to clean out the Augean stable. First, the first policeman is bribed, then the second, then the 10th, then hundred, you see. Finally, you have to get, you see, a real landslide to clean out that stable, you see. It's much more costly. If the first had resisted, it would have been much more dangerous for him, much more difficult to resist the pressure, you see; but it would have been much more -- cheap -- much more -- less expensive.

So gentlemen, all eternal values are protected on a gliding scale. The more personality invested in the defense of the eternal, the less expensive the defense. You can -- that's an absolute rule. All the American boys today who are willing to enter the army under the draft, but say, "The FBI, that's too much for me; I can't resist her -- them," simply have chosen mass existence to personal existence. I assure you, any person who resists has an infinitely greater influence than 200,000 people who are mobilized to march against the Communists. And if you mobilize 200,000 people, much more havoc is done; much more money, time, blood, and tears is spent, of course; many more families are broken up, as in -- if 10 -- one man did this. But you can't just make this choice, that you are to be drafted, but you won't resist.

The "if" -- can you see that your question is wrongly asked? The "if" only shifts in direct application to your person. The less you become a person, you see, the more you are exposing great numbers to the same danger of losing your life. Every war can be avoided, gentlemen, if there are enough people. If President Roosevelt had resigned in 1938, and -- and stumped the country for air power, he could have prevented the Third World War, but it would have cost him his office. Now since nobody in this country will renounce anything voluntarily, it couldn't be done. He had to be president. But it -- there is always a way out. Always. If he had given his whole name to this cause, you see, for example, I mean--I'm exaggerating, now, this. But I'm quite sure that it would have had tremendous effect if the president of the United States would have said, "I always wanted to be president, but the peace of the world is more important than the presidency." Instead, he said, "The presidency of the United States is so important, that I even wish to go to war for it." That's -- was the president, his policy, you see, in order to -- "Since I am president, I have to do everything to remain president." But he could have said, "Peace is so important that I must cease to be president."

You have always the other choice, you see. Now that would have been his

political death, you see. And that's more painful sometimes than to be killed physically. But you can do it, can you not?

The "if" is always there. Can you see this, that your question was wrongly asked?

(Well, you don't think that peace was more important than the last war, do you?)

Oh. The war is after all only -- an abortion of peace. Aren't -- what is better, war or --?

(What was price -- what was the price of the last war? That's what I mean. Why would { } Roosevelt -- commit political suicide so that we could have peace? Chamberlain { } war.)

He didn't sacrifice his prime ministry, did he? He wanted to remain prime minister.

(Why didn't -- why did Hitler sacrifice himself?)

He didn't { }. Don't you see it? He didn't sacrifice anything. He wanted to have it both ways. No sacrifice and peace, of course; you can't have that. I don't think you can catch me this way.

(Why -- did Roosevelt { } the country know that he knew that { } the country's firepower was a { }.)

I don't know. Perhaps he didn't. He wouldn't have { }. And it may be, you see. The terrible thing about any resistance is that you never know the success. Your question -- this -- what's your name, please? Pardon me for not knowing it.

(Horowitz.)

Wie?

(Horowitz.)

Oh yes, I should -- Horowitz' question is a very good question, because all -- in every American boy's mind. You always exclude danger from your calcula-

tions. You will always say, "It must be riskless." But gentlemen, to -- any defense of the eternal against the temporal is always unpredictable as to its consequences. Always. Marriage. If the father and the mother tell the girl whom to marry, that's safe. They know at least that the neighboring estate will be adjacent to their land. And the money-bag will marry money-bag, you see. And you can predict what happens. If the girl is allowed to say "no" to -- you see, when she is engaged, there's a risk involved. She may never find the right husband. She may never get married, because girls are not, you see -- very -- on very safe ground with boys, if left alone.

So gentlemen, the defense of any value--law or religion--by resistance or by any decision is always risky. You can never make a sacrifice or resist in the sense of concurring if you don't give your heart to -- something. Now gentlemen, a person who invests his own heart into any act is always apt to hear from the clever people of the brain, "Why do you expose your heart to getting hurt?" If you invest a heart -- your heart into anything, it is -- unarmed, undefended. If you tell a girl that you love her, she can hurt you. So you'd better spar with her and fence with her, that she can't hurt you.

Don't you see, gentlemen, that the very problem of concurring is that you invest your heart, and this means that you don't know the answer, the response of the other side. Nobody who loves his neighbor as himself knows whether the neighbor is going to love him. And of course, therefore you are told by the world, and your parents, and your friend, "Don't do it. It's silly." All right. If it is silly, then -- then the world must end in misery, and no- -- nothing -- no {real} peace can be established, you see. Then it is better to give -- what's going to happen, gentlemen, when the girls don't want to have any conflict? They'll go to the eugenicist, the psychoanalyst, and he'll tell you whom to marry. That's coming. I -- it's already on -- on the -- on the march, that the psychoanalyst decides whether a love is to be pursued or not. Fear of freedom, as Mr. Fromm has called it, I mean. They're running away from freedom. The people today -- you want to be told by the psychologist that this is the right girl. I have told a -- psychologist tell another -- a boy, "Marry -- marry your cousin. Marry your coed. Marry some person with the same habits. Marry somebody who also like -- likes Keats." It's terrible. The most boring performance, but "no conflict, no conflict." You see. That is, no power to concur.

Concordance, gentlemen, is the power of the heart to overcome conflict.

You are told instead, "Don't have any conflict." So you can't live. But it is true, what Mr. Horowitz said. You won't die, either. You take this down, gentlemen: only he can die who has lived. And most people today prefer to this reality of

living and dying a situation in which they neither live nor die. Most of you cannot die, because they are- -- you aren't alive. Things cannot die. Dead things cannot die. You can formulate it this simple way. Dead things cannot die. And dead people cannot die. There are several people in this country, quite famous, who are dead for 30 years. But they don't know it.

You can be dead with all the essential parts of your utterances and your thoughts, and still go in -- on eating and sleeping, gentlemen. That's not the whole life of you, if you are in power, if you are the secretary of the American Medical Association. After all, the country is only interested in the fact that he is a secretary of the American Medical Association. Whether he eats, or drinks, and breathes, these are very minor matters of life. Any -- any jellyfish can do that. But the pro- -- problem is that a man in any position in life, gentlemen, it's important that he's alive to this position. And this nobody can do without exposing his heart to conflict. And this is what you won't hear, because the whole medieval cycle of scientific endeavor has died in you. And you are out of it. The only thing you believe is science in the sense of the science of facts.

So let's now go to Paracelsus. Paracelsus is a queer guy. He's a doctor of the body, gentlemen, and he is at the same time a serum in the body politic. That is, here is a physician who is, at the same time, inside the medical profession a blood -- a drop of blood of a new quality, and creating a tremendous disturbance. The question -- the -- the case of Paracelsus is such a great case, gentlemen, because you think that physician is--don't you?--he's the highest, scientific position of a man. I know many social workers who think that social scientists should be doctors of society. I think I have already told you that this is impossible.

Inside society, you can only be a {lupuscle} or a red drop- -- corpuscle. I cannot cure society as a physician, you see. I can only be somebody different inside society, and thereby change society, you see. By -- because I change its constitution, its -- its compound. You remember? We have talked about this -- before.

Now I come back to this in Paracelsus' case, gentlemen. You have here the paradox that a doctor who -- on whom you look as somebody who's able to cure a patient, to cure a case, is in his whole life a new quality in the compound of the medical profession. And much more so a new -- a new element inside the whole professional group of people dealing with things of this earth. From the plumber to the artist, and from the engineer to the doctor, through Paracelsus, the body --

social body who carries on the dealing with machines, with cures, with facts ha-- has become a different quality, has earned a different label. The label "academic." The academic, gentlemen, in 1500 is in a crying conflict against the universities. So our friend Paracelsus was chased from Basel. It's exactly what happened to Abélard in the local cathedral school. Paracelsus is in -- in a university based on the principles of the Middle Ages. The university allowed to teach Ara-- Arabian medicine, and Greeks' medicine, and Latin medicine. Avicenna and Galenus, the Latin and the Greek, as they { } in Salerno, where you had the -- the two schools of thought, the oriental thought, you see, and the Latin thought, fought out in the great hospital of the Crusades.

Now in Basel, the medical school was based on the same assumption: every student had to read up on his Arabian text, translate it into Latin; and on his Latin and Greek texts. And -- in comes Paracelsus and says, "I'm neither going to speak Latin nor Greek; I'm going to speak German, my own native tongue. But I will bring in the facts from all my travels. I will bring the whole world of new fact into this classroom, and will bring on the conflict between new facts and old tradition."

And if you read -- my pamphlet, I have quoted there his great description of the new principle that before a -- a disease has not been investigated on the whole globe, in any part of the globe we will never know what the disease is. That -- first of all, we must have met this disease, you see, in any place in -- before we can know what it is.

Therefore, gentlemen, the academic is ubiquitous. The academic spirit is ubiquitous; the university spirit is local. From vier- -- 1500, gentlemen, to 1650, the academic spirit is still outside the universities. The universities resist. If I can get you to understand wha- -- that the university and the academic are two different things, you will be highly educated people. In this country, you see, this has been really forgotten. You think that we are in the academic world, and that there are universities, and that's, you see, exactly the same. It's the opposite. In universities, there is disputation; there is conflict of ideas. In the academic world, there is conflict of new information and old theory. You see the difference?

The academic then, gentlemen, is based on correspondence all over the globe, on -- information on a global sphere. To give you some examples, gentlemen. Let me -- I -- I have made -- committed the crime of keeping you without a break. But please allow me to -- it makes no sense to have a break right now. Let me dictate you some points, which you can do, even though you are tired.

The principle of the academic world is the bring- -- gathering of information outside the local site of the academy. Therefore the -- the principle of the academic world is the bringing-in of new information from outside the -- the site -- s-i-t-e, the place of the acad- -- where the academy is located. The academic spirit also fights the local school, as Paris did. But the academic, the spirit fights the local tradition, and the local spirit with a different instrument. The tool of the university is the confrontation of opposite opinion. The tool of the academic spirit is the confrontation of theory and fact...

[tape interruption; end]

{ } = word or expression can't be understood

{word} = hard to understand, might be this

(May 11th, 1949, Philosophy 10.)

...to the impact of the new sciences. In this preparatory period, they close themselves to the impact of the new sciences.

(Did you say the universities { }...)

The -- universities mu- -- what -- which I have called universities. The academy and university, from 1500 to 1600, are in conflict. Academy and university from 1500 to 1600 are in conflict. Universities at that time are places for teaching. Academies don't teach. They are groups of adults, either in literature or in research.

To this day, the term "academy" in Europe does not imply teaching.

Example: Paracelsus lives from 1493 to 1541. He's expelled from the university and lives as a migratory explorer for another 15 years. That's the example, gentlemen. It's a very -- you see, his life is so great, because in the life of the greatest man, the life itself is law. That is, if you read Newman's life--as one of you told me, "You have learned the ten commandments of education out of Newman's life." Of course I have. The life of Jesus is a standard of life. The life of the Church is a standard for political development, you see. The life of Newman is it- -- is it- -- itself a fountain of teaching us. We don't -- we don't sit -- can't sit in judgment over a life really lived; the empirical life is much more demonstrative than what we think about life.

Now the same is true in Paracelsus' case, gentlemen. Fifteen years of errancy -- 15 years of errancy; 40 years of waiting after his death; his works published in 1586; 1610, he enters the university. How was it done? His -- .

({ }.)

1586. It's a tremendous story of tragedy and suffering. Forty years of faithful waiting of his friends and searching for his manuscripts went by until his great -- the great edition of his works appeared, in 1586. And then he only existed -- people couldn't read what he had printed, you see. It was all scattered, or it was suppressed. You have read this in my pamphlet how he was treated. In 1610, he entered the universities in the person of van Helmont. The -- to this day, the -- the textbooks give the -- the honor to Helmont, which is due to Paracelsus. Van

Helmont is the first professor to quote Paracelsus from the chair. Van Helmont -- L- -- H-e-l-m-o-n-t. And he's the first to decline the oath on the books of Galenus, the old classical doctor. He's the first to decline to take the oath in the --. In other words, he's the first who shakes off the medieval yoke of authority in medicine, as against experience.

Now you see how you take an oath on the Constitution any day it is asked you, whether you are willing to observe it or not. In -- in the state of -- in D.C., in the District of Columbia, the Congress has passed a very poor law. An employee of the federal government is there required to take an oath of the Constitution every first of the month when he draws a salary. Now that's just inviting perjury. And it is of course -- there is nothing more blasphemous than to ask a man to take an oath whenever he -- a loyalty oath to the Constitution of the United States every month.

Chil- -- not chil- -- childish, gentlemen, but childishness in serious affairs begets of course destruction. It's one of these nihilistic moods in which the country finds itself, you see. If you -- if you start shooting with heavy guns at -- at mosquitoes, you see, you get atomic warfare. -- There is very little left of the spirit of a country. And this law of the Congress is one of the most pernicious, nefarious measures. Was passed during the war, I -- as far as I know. An employee of the federal government has to take an oath every month. And nobody protests. These employees do it. This is the shameful thing, in their fear.

It took the doctors of all Europe so long, gentlemen, to say in 1610 -- -10, in the person of one single, heroic man, "No, this oath"--of a doctor of the Middle Ages, that -- "I will read the books of Galenus," you see--"shall not bind me." The simplest things, you see, gentlemen, are very often delayed beyond belief. Paracelsus was the first professor to teach German, and it cost him his office. Helmont, his grandson, so to speak, was the first man to decline the oath. And they had to accept him as a professor just the same. They -- they did. He broke the precedent. That's 1610. That's the fulfillment of Paracelsus' postulate, you see, that experience comes before classical tradition. Research before literature -- { } before letters. That's new. Can you see the reversal of the order, you see? Before, letters came before research, you see. And with Helmont, the university accepted this, and he -- is therefore Paracelsus entering the university.

Now you see, 120 years. Gentlemen, 120 years is an important period. It's always four generations, four times 30 years. Each time you find that, after 120 years, a new, great start is made in the human -- by the human soul. You get the French Revolution in 1789, and you get the World War, 1914; 120 years. A

hundred and twenty years through all of history is an important period. I -- in 120 years, the memory of one state of affairs goes, and people are then ready to -- you see, to make -- give it a new start.

This story of Paracelsus is a tremendous story, because the early death of a man -- he dies in his 48th year, because he uses mercury in his experiments, and obviously that has killed him. You see, nobody -- or lead. Something of this kind of poisoning must have happened to him. And so he dies.

The curve of his life, gentlemen, goes on just untouched. If he had lived to 90, as Cardinal Newman, they might have crowned him, you see. But he dies at 48; that doesn't mean that his -- the start of his beginning hasn't to be pursued. The works appear not before and not later than 1586, you see. And that's by and large 90 year -- after 90 years, you see; the same way in which, so to speak, Newman reached his performance. You cannot alter the workings of the spirit. That's a very lawful order. Whether a man dies young or a man dies old, gentlemen, if he is in the grace of God, the efficiency, the fruit of his work takes the same amount of seed, and growth, and tillage, and weeding, and harvest in one case or the other. And if you know this, gentlemen, you -- your peace of mind may grow. That's why a soldier who dies in battle has not died in vain. You don't believe it, gentlemen, but this is much truer than your own lives, which are wasted so often. If you don't invest by an act of faith in the history of your country, you will not bear fruit, and -- if you become 150 years old. But a soldier who dies for a good cause, he will bear fruit after 30 years, or after 50 years, because he has a -- there is a real action.

This you can learn from this life of Paracelsus, gentlemen. He dies in exile, persecuted, forgotten. Nobody even knows what he has written, because he couldn't print it, you see. It was all hidden and persecuted. In 1541, he has just disappeared. And in 1586, he is back. And in 1610, he is there in the place of his -- which had expelled him, in the university. From 18 -- 1610, gentlemen, to 1780, the universities get ready to embrace research. And -- oh, by -- I -- shall say -- by 1800 -- and by 1800, the universities establish their first laboratories. In the laboratory, the academy -- the academy and the university are reconciled. You can see this. The academy did not begin with a laboratory, but with correspondence of travelers. In the laboratory you have a compromise: a local place, but experiments, you see, and research going on.

So it's a very wonderful story, gentlemen: from -- till 1600, complete enmity between the teaching school and the place of research and correspondence. Can you see this now? Somebody here asked about the relation of academe-

mies and universities, and you were doubtful. Here, wasn't it you? Who was it?

Somebody here. { }. Well, is it -- { }, yes.

Well, you see it now. University and academy have nothing to do till 1600.

Then Mr. Helmont comes, and the university listens to research, but doesn't do any research itself. They don't organize it. In 1800, the universities begin to appropriate laboratories. The colleges only follow in the end -- at the end of the 19th century. Dartmouth College had a so-called "philosophical apparatus" instead of laboratory, down to 1890. President Tucker is -- was the first man to build a laboratory in this college. Now you think a college consists of laboratories. It's only 50 years old -- 50 years old. Fifty years is nothing in the history of the mind. That's a very short story. It's very belated, gentlemen, that the American college has laboratories. The university has it a hundred years longer. The academy has it a hundred years before, again, you see. And before, the founders had their little workshops, you see. The academies didn't have it.

So gentlemen, you can put it this way: Paracelsus has a laboratory; the Royal Society has a laboratory, which was founded in 1665 only, you see; after 1800, universities have laboratories; and after 1900, colleges and prep schools get laboratories. So the laboratory goes from founder, you see, to scientific institution, to university, and finally down to commonplace. And today every man has a workshop and a laboratory in his own home.

So you have in the form of the modern research room, what we call "laboratory," you see, you have again the history from idea to commonplace. First phase, one man dares to have a laboratory. Second phase, scientific institutions of research have laboratories. Third phase, universities have laboratories, you see, educational institutions. And fourth phase, everybody has a -- can have a laboratory. See it?

Now let's stop here in the survey of the academies in their growth. The next chapter, gentlemen, deals with the means by which the sciences are developed in the Middle Ages and in modern times. So perhaps -- let me make a -- one remark as an appendix to the academic survey. The next form of research will be neither laboratory nor the chapel in -- of the Middle Ages, or where the monks who -- concord and make peace. It will probably be camps. We today are preparing the next form of research in the social sciences. That will be not done in laboratory. If you have a -- today sociological laboratories, that's the confusion of methods. That's an attempt to -- to investigate society with natural methods. You can't do that. The camping institutions, camps of all kinds--work camps, service camps, exploration camps--are places where you can study human nature. I only

hint at this to show you that the academies and the laboratories are certainly not the last form of scientific development. Each period, gentlemen--the theological period, the academic period, and the future social period--will have their own means.

Now comes the second, this next chapter. In the Middle Ages, concurring is the higher form of logic. And on logic and concurring, the whole order of thought is proceeding. The process of the Middle Ages is logic on the lower level, and concurring on the higher level. Concurring is done where two logical arguments clash. We said -- the concurring is done where two minds think differently, but in unity of heart overcome their discord.

The method of the Middle Ages then is a higher logic, which today is completely forgotten. You always talk of logic, but the Middle Ages knew already that mere logic is nonsense, valueless; it's for children. Syllogisms. You can't prove anything in -- between real people by mere logic. Nobody believes you. You know everybody rationalizes. Logic is -- is a harlot, sells out to anybody. But higher logic, gentlemen, is the medieval principle of dialectical concurring. In contrast, the academic progress moves on two levels: of arithmetic and geometry at the lower level, and higher mathematics on the upper. Higher mathematics is algebra and calculus. The difference between geometry and -- between arithmetic and higher mathematics is the introduction of the term "infinity," and "zero." Mere arithmetic doesn't know what minus-3 is. It doesn't know what an -- what an imaginary figure is. It doesn't know what infinity is. But -- the multiplication table knows nothing. Lower -- there is in mathematics a distinct necessity for you to distinguish between higher mathematics and simple arithmetic. These are two worlds. Higher mathematics didn't exist in Europe before 1500. Higher mathematics is the creation of the last 400 years. That's always forgotten by you. There didn't -- didn't exist this higher mathematics. And higher mathematics depends on the introduction of zero and infinity as new determinants for the proceedings, you see. You can read today -- count down from zero, as you know--with minus, you see--as much as we count up. They couldn't do this before 1500. They didn't, at least. And then we have the infinity, which allows us calculus, which is called the computation of infinitesimal, small things, you see. "Infinitesimal" means, you see, to -- recognize the concept of infinity.

The future, gentlemen, will also have two sciences. Grammar and higher grammar, which I call--and perhaps may be called in the future, we can't decide this, yet--liturgical thinking. Liturgical thinking. Grammar or higher -- and

higher grammar.

So we have logic and concurring. We have arithmetic and mathematics, or higher mathematics. We have grammar and lit- -- liturgical thinking, in -- put in parenthesis, higher grammar.

Now gentlemen, this course is an example in higher grammar. What you have learned is that a man is a child, an artist. He is a man and a fighter. And he is an elder, a -- a priest. Now gentlemen, in the first phase, he is a "thou," because his parents, and his teachers, and the world create him. They allow him to play. He is entrusted to others. He listens. Now "I listen, because you tell me to listen to me": "Listen." He is "thou." As a fighter, he's "I." And as a priest, he's "we." And that's grammar.

And so my praise is not wanton at all. Higher grammar takes man in his own declination, in his own conjugation through the various persons. You are alternately "thou" and "I." At this moment, when you can't listen to me, you are "thou," because you listen. And I can fill your ear. If you -- give me an answer or if you ask me a question, you become "I." And in this freedom, our humanity rests. If we cannot alternate, if any one of you tries to be either "thou," he remains childish or "I"; he goes insane. In all the insane asylums, you find people who have lost their capacity of turning into "we" and "thou." They are all fix- -- have a fixation, that they always must say "I." And therefore they no longer can adjust themselves to their -- the way they appear to other people.

So -- only to show you in a short way that higher grammar is as real as higher mathematics. If you look at all the life stories which I have given you, I have tried to show you that although John Quincy Adams was president, he still appeared to the other people as "thou," a member of the -- of the Adams clan, a child of the family. And only when he became congressman, you see, was he "I," "Honest John Quincy." Before, he thought -- thought he was "I," but they didn't take him as { }; they couldn't { }.

So gentlemen, liturgical -- liturgy or higher grammar is the science of the future. And it will take 3- or 400 years to get it as highly developed as modern mathematics.

(-- Excuse me. Won't it, when you reached the "we," won't there be a -- a relationship between the process by which you reach that and the -- { } process { }.)

Well, let me embrace you. Certainly. Wonderful. All these things. I try to show you that in every one sentence all the three sciences are really connected. Just allow me now to go into this. {But} you have understood it {fully}. { }. A scientist who says, "This is true," of course, believes in God, you see, because the truth is divine. So there also is a scholastic element in an academic subject, you see. You can't get out of this. Any one statement, I remember -- I told you, is a question of your conscience, because you don't wish to lie; it's a question of your consciousness, because we say, "This is brown," you see; that -- and this is a -- it's a -- question of your self-consciousness, because if you are shy, you won't say it.

So the power to make any statement always in- -- you see, comprehends a theological aspect, which is your relation to the truth. A material aspect, which is the content of your sentence, you see, the statement which you have before your consciousness. You see, this is a brown chair, ja? And your power to speak to me at all, to make the statement, is a social {aspect}. Ja? That's in society, because somebody prods you, and you say it. Or you are silent. You don't have the power to speak.

So you see, in this one sentence, "The chair is -- is brown," you have -- you are one-third a theologian, one-third a scientist, and one-third a -- social --. (By telling you that.)

By telling me that. Or by writing it, or by printing it, or by teaching it, you see, or by learning it. However, in the sentence, "The chair is brown," our interest is -- completely concentrated on the material aspect. We would -- you s- -- it's called, a s- -- you see, a sta- -- a statement of fact. So we are only interested in the fact, you see. If you wish to have a sentence which is more clearly one-sided theologically, you will say, "God does not exist," you see, because then you will provoke all the other people to praise God, you see. Certainly it will happen outside the realm of this chair, outside the realm of mere facts. But "The chair is brown" has as much religion in it, if you think it is true, you see. Then any { } only it is hidden. Most people think only, "That's a fact," that the chair is brown, you see. And they don't know that a speaker must believe his sentence to be true or he must believe it is a lie, you see. And he must also have the courage to say it. Gentlemen, now comes the -- no, my time is up. Sorry. So next time, I wish to develop a little further the relation of logic, mathematics, and grammar.

{ } = word or expression can't be understood

{word} = hard to understand, might be this

(Philosophy 10, May 16th, 1949.)

...past, because what has happened during the last 400 years, gentlemen, is right here in the organization of this college, and is quite well known to you: the coming-into-existence of laboratories, we said. That is the main result of the academic world. That was Point 1. Externally today, any school is a school of natural sci- -- which is in touch with the natural sciences if it contains, and while it contains, and because it contains a laboratory. And we saw, gentlemen, that a -- the thing has come from the secret laboratory of -- of -- a man like Paracelsus, who just used the blacksmithy for his experiments. It has come down to every man having his own little lab in the cellar of his house, and blowing his hou- -- his own house up.

Today laboratories are commonplace. I wish to- -- -day to implement a little bit this story of the coming of the laboratory by telling you that Vesalius, the great anatomist, who was the -- the physician of the Emperor Charles V, when he drew his famous, beautiful drawings of the anatomy of the human body, in the '30s of the 16th century--I think the first edition was 1539--that he had to do this at his torchlight at night, in the basement of the -- the palace of the emperor. The emperor was all for it, but the clergymen was not so -- were not so much for it.

The emperor--by the way, a Roman Catholic emperor, Charles V--was the great friend of the new sciences. And you must not think, gentlemen, that in the 16th century, there was any better supporter of modern science than Catholics. The Protestants were all against natural science. They wanted to save the world by better religion. The Catholics had not much to offer in -- in the form of better religion, you see. So they thought they could save the world by better science. In the -- from the--take this down, gentlemen--from 1500 bis 15- -- 1650, the favors and the -- the -- the sponsors of science in the modern sense were throughout Catholics and not Protestants. The Protestant princes were much more hostile to modern science than the Catholics.

Charles V, for example, had the famous book of Copernicus on the -- revolutions of the stars in which he proclaimed the -- the new idea of the solar system. He had it sent to him right away from the publisher, as a best- -- as the newest -- publication, you see. So eager was the emperor who fought Luther tooth and nail, at the same time to pro- -- propagate the new natural science.

So please will you kindly cure yourself of the idea that from the very beginning natural science and Catholic Church are the antagonists. From 15 -- 1450, you may say, from the Florentine Academy, in -- in honor of Plato's memory, down to 1650, the -- the Catholics were favorable to the new science. And the Protestants were very unfavorable, because Protestantism meant once more an attempt to cure, to go forward on the path of religion. And as I said, the Catholics had at that time only the idea in religion that everything was as it should be, and therefore had to open up new avenues.

For example, gentlemen, the Jesuits were the first schoolteachers in Europe to introduce the new sciences into their teaching. In the Jesuit schools, from 16 -- 1540--when the order was founded--to 1640, there was better instruction in the natural sciences than in any other school in Europe. Because again the Protestant schools wanted people to read the Bible in Greek and in Hebrew. That was their interest, you see. The Catholics wanted to -- take their mind into the miracles of the wide world. And therefore taught mathematics, and botany, and chemistry, mu- -- long before it was ever taught in a Protestant school.

All this is unknown to you, because you all live through the glasses of the French Revolution of 1789. And these are very short-sighted glasses, gentlemen. Everything that was true in 1789 you believe as Gospel, to this day. But what was true in 1789 wasn't even true in 1640. And it isn't true today. Today and in 1640, gentlemen, the fronts are not science and Catholic Church. But they were in 1789. And this {casual front} you have to tear down, because that's just a temporary idea.

Therefore, you see, what I'm trying to do today is to introduce you into the fronts of the natural science to the previously existing world. We have seen the Ca- -- the -- the medieval cycle. And I now have try -- to try to show you how the academic sciences stand within your and our community. You know very well that at this moment, there are only two official pillars of day and night: Communism and the Catholic Church. And that's a very strange arrangement. In this very moment, you see suddenly all scientists taking refuge behind the -- behind the -- the--well, I won't say what--the spirits of the Church, clergy. I mean, two of the atomic scientists, when they discovered what they had done, became monks. Well, they may. That is, they went backward, gentlemen. You will -- you can very simply say, this is 1500; this is 1100; then we have this period, 1500 to today. And today the question is: do we go forward into a third phase, or do we go backward? Now the atomic scientists, most of them try to make their peace with the medieval period. There is a tremendous nostalgia

today, as you know, for going Catholic, for reading Thomas Aquinas, as they do in Chicago. These are all attempts to go backward to the scholastic cycle, and to escape from the dire consequences, gentlemen, of the commonplace situation of the natural sciences.

And this has to do with the enmity into which the -- humanism of the natural sciences from 1789 to this day has brought itself against everything -- else. The hu- -- you see, the -- the crime of the humanistic cycle, in which you move all, of liberalism, is that they have considered themselves the crown of creation, and not -- and denied everything else. They have denied that the sciences are a fruit of Christianity. They have denied that the natural sciences were only possible after the medieval -- Middle Ages. They have said the Middle Ages were dark. They have said that the u- -- there were no universities before themselves, the academic sciences. They have denied their own -- the own tree out of which they have grown.

And therefore a liberal today is the most unhealthy creature in the world.

He has a background of only a hundred years; and that's too short for any mind to be healthy. And he -- they are completely cut off from the roots of our civilization. And therefore they have no hope to go on. You cannot be in 1980 a liberal. That's just obsolete. Because you have cut your roots as a -- in the sense in which "liberalism" is used at least in this country, gentlemen -- which go back before the French Revolution. Liberalism, gentlemen, in this country means that a liberal can be without the conservatives. Now that's impossible.

There was a man in Boston, who sent -- was famous as an atheist and Free Thinker. And one day, a friend of mine who is a Congregational minister, received a visit of this gentleman with his son: "Would you kindly -- take my son and give him religious instruction?"

And the minister was taken aback and said, "But Sir, is this a joke? You have attacked us left and right. What's the matter?"

He said, "No, believe me. I have come to understand that you have to have something to liberalize upon. I want to give my son now a conservative education so that -- later he can be -- progress from there, and liberalize upon." So that's the tragedy of the modern liberal, as you find them today. Now they don't know what to do. They'll try to send their children to Sunday School. You can't do this if you go to -- go to no church yourself. It's ridiculous. It's insincere. All of a sudden, all the liberals in this country think that the pope is a

niceman, and he's a nice man than Mr. Stalin. Now I don't know. All the people -- all the liberals think they must side with Mr. Stalin so they have lost either the future or the past, because the future is a yawning abyss of all their freedoms, I mean, all the "fellow travelers" here.

And for the last 20 years--you can take this down, gentlemen--for the last 20 years, the American liberals have actually thought that the choice was: if they went forward, only between Stalin and Trotsky. That is, they had two tyrannical -- tyrannical ideas. I -- I can really bear the -- witness to this, gentlemen. I have been persecuted by these people, and still am, because they cannot understand a man who has never been tempted either by Mr. Stalin or by Mr. Trotsky. I'm not interested in either one of them. And I think I'm going forward. But as a liberal in this country, the choice is between going Catholic, like Mr. Hutchins in Chicago--at least in a formal sense, by teaching everybody Thomas Aquinas--or as the intellectuals in New York by being "left," or "pink," or "fellow traveler," or something like this. Why? Because in this country, gentlemen, the mind has been merely imitating Europe. And now the first time the wind is blowing from Mr. Hitler and Mr. Stalin, so there was never any question in anybody's mind that this wasn't the wave of the future.

You may know that Mrs. Lindbergh, the wife of the famous flyer who wrote this fantastic book, *The Wave of the Future*, in which she sided with Hitler, and said, "That's irresistible." That was in the '30s. Have you still heard of this book? It's very -- very important to know, because now 10 years later her husband has cautiously come out with a statement that he's back to Christianity. So they balance each other, which is good for flying. And --.

So, gentlemen, this is all practical stuff. You have to know that the mind has moved from 1500 to 1900 to giving everybody his laboratory. And this practically means that today most people consider even marriage and war as experiments. Because to have a laboratory means to consider everything as experimental. We have an experimental theater. We have an experimental war. We have an experimental -- the First World War was "just an experiment." That we went home and said, "Didn't come off nicely; won't do it again," you see. So the Second World War comes, and that was very serious. Much more serious than the First.

People in this country live by experiment, gentlemen. That is, experimental -- the method of the natural science has today become commonplace. Whenever anything has become commonplace, gentlemen, it has lost all value for the renovation of human life. It is like -- a pendulum has run down in a clock, you have to wind it up again. Commonplace has no {slow}. If anything is commonplace, it

means that you can't move anybody to extraordinary efforts to do it, because that what is commonplace can be done by anybody in his leisure time as an avocation, of { }.

We saw, gentlemen, that the difference between idea and commonplace is very small and very decisive. If the thing is your -- dominating idea, you give your whole life. If it is your scientific purpose, you give your career, your profession, you see. If it is your education, you give some years. And if it is your commonplace, you give an hour a day.

So you can be -- we learn that to -- commonplace is simply a question of no longer investing anything serious into something. If -- you aren't serious today in war or in marriage, so you get a divorce. And if you want to be married really, gentlemen, it must be an infinite effort. -- If you make however marriage commonplace, under psychological supervision, and statistical -- Kinsey Report, you make -- must make it abortive, because, gentlemen, nothing what we plan as a finite effort can ever prevail on our own life. If you say, "To be married costs me \$2 a day, and two hours at night," you will -- must -- that's nothing. That's prostitution, because it is below your human standard. Gentlemen, nothing in life can be achieved without infinite devotion. The result is always finite, but the investment must be infinite.

Or to put it another way, gentlemen. If we will to -- you wish to build up the new sciences, and the house for the social sciences, we will have to make an infinite effort for finite results. Faith, love, and hope, gentlemen, are all dead and killed at the very moment that you measure them, that you say "It's a commensurate effort. I will put in three days or three hours of practice every day; and then I become a great violinist." You won't. It must -- pursue you day and night. You never can tell if you have real faith in your career as a violinist where it will take you. You have -- may have to go to Capetown because they have the -- the best violins at this moment -- in space. And you may have to -- have to...

[tape interruption]

...but that's how people have reformed -- re-educated Europe, too, during the last ten -- five years or four years, you see, by trips, by airplane. No infinite effort. Always knowing ahead of time when the return ticket was.

Will you kindly take this down, gentlemen: that among human beings, or in any act of newness, nothing can ever be achieved without an infinite investment. Because the three powers, gentlemen, by which we create--love, faith, and

hope--diewhenthey are treated as parts of space and time. Love, faith, and hope are the creators of new spaces and new times. And therefore, since they are creative forces, they are absolutely out, they are murdered the very minute you tell -- say to somebody, "I have faith to the extent of \$5,000," or "I have time to the extent of three hours, 20 minutes," or "Reading time: 9 seconds and-a-half, on our article in Liberty." This reading time shows you to what -- to what end the world has come. It's one of the most fantastic ideas. How can anybody know how long he should read something? Perhaps he has to read it 10 times. And we develop today -- out of slow readers, who have the chance of understanding what they read, fast readers; out of lip-readers, which is the a normal way of saying -- eye-readers, as you know. But if we destroy the last remnants of the group that might understand something of the intellect. That's done here, and it's done everywhere in America, and people are proud of this destruction of the human intellect.

Because gentlemen, if you go at something, the chance is, if it is difficult, you will settle down and say, "I have to work -- as hard -- until I have gotten it." But if they tell you beforehand "It's easy, it only takes an hour," you probably will never learn it. Because it is strange enough but it is simply--take it down, gentlemen--it is a condition of the higher life of the human species: anything creative must -- can only be received by an infinite effort. It's like infinity in mathematics. Nobody can understand calculus if he doesn't understand what infinity is. And you cannot -- gain any access to the secrets of the -- of the universe if you have not the notion of infinity. Now the same is true about your own effort.

And therefore, gentlemen, anything -- why do I say this? At this moment, infinity is abolished officially in a commonplace civilization. Anybody who says, "This takes infinite effort," is laughed at, and ridiculed. And says, "Well, if you don't tell me how much it costs, and who -- how many people are going to buy it, and -- then it's nothing."

Mr. Firestone, great patriot, is willing to pay any million -- amount of million of dollars to spread good things: Christianity and rubber tires in this moment in this country. And -- but one condition is attached: it must go over the radio. Now gentlemen, nothing that begins can ever start with mass program. The mass is always the last. So Mr. Firestone will waste millions on some hucksters, but -- nothing will happen, except that perhaps Firestone will sell more rubber tires. That may be. But he's quite honest. He doesn't want to sell more rubber tires. And he has sell -- sold too many. The income tax, you see, has to be

beaten, so he wants to spend it. But the death that you have to spend something valuable is -- in such a manner that it lives on the fourth level of commonplace, just means, you see, that over the radio everybody can get it without effort. If he can get it without effort, it can't bear fruit. It's impossible, you see, because he neither gives time, nor seriousness, nor devotion, nor the fear of the Lord, nor anything, you see. He doesn't defy anybody by -- by listening to Mr. Firestone. Now if a man has no infinite -- no relation of infinite value to something new, it cannot come into existence. It cannot. This is the first thing, gentlemen, you have to know, because this is the condition for the -- giving birth to the social sciences, which we really need if we don't want all to be destroyed and eaten up. But you cannot by -- buying primers on -- on -- on science, Mathematics for the Millions. That's a commonplace book. But if somebody comes to you and says, "Listen. I'm to tell you something privately. But it's very dangerous. The FBI would be after us. And nobody -- our parents won't like it, and the college will separate you," then it's perhaps worthwhile listening. I don't know. It isn't proven because something is -- is -- is a secret, or a beginning, or dangerous, that it is good. But I would say, gentlemen, if anything is good, it must be dangerous. There is nothing without risk in this world. And you know it.

And nobody tells you these things. So we have today, gentlemen, the commonplace situation, and the laboratory, I want to tell you, today is such commonplace that we have to -- how -- tear out of the hands of this natural scientific method of commonplace all the things that are not experimental. Human society, gentlemen, consists of those processes which cannot be experimented with, that's human life and death, that's peace and war, that's marriage and having children, that's patriotism, that's truth, that's growth.

I heard a terrible story -- a Jung -- a young woman was ruined, because the nurse was present at the delivery of their baby, and the doctor was {slated to come}, the obstetrician. It's such a gruesome story that I still can't -- can hardly tell it; I only was told it a few days ago. And this nurse, in her in- -- insipidity was only conscious of the command: the doctor must be present at the delivery. So she pushed the -- the baby back, when it was out, and forced therefore the poor mother to contain the baby until the doctor was there. It was a real crime. And the mother has been invalidated -- an invalid through this event.

So you see what limit -- you see, what -- what lack of faith, love, and hope does to a nurse. She had only the technical routine: the doctor had to be present.

So the -- the child -- the process of growth met with no respect. But you know that we do this in all our schools today, that we hold the children back and don't let them grow? We make them happy. And -- take away from them the feeling of importance, and newness, and expectation by intoxicating them with -- with being nice to all other children? I know several children in Hanover who have been seriously ruined, and -- because they -- they were kept back in their natural growth. Don't dance out of the -- outside, you see, outside the -- I mean, conform. Such spirit of conformity is upon us, and conformity is hostile to growth. I mean, you take a lawn mower, and you make the whole -- all the grass even; you can level everything off. But I don't -- wouldn't say that this is conducive to the growth of -- of a special flower. I know this, because with my lawn mower, I went into the flower bed the other day in my -- and my wife hasn't yet forgiven me.

Growth, gentlemen, is something that commands respect and that cannot be experimented with. And all modern science in this country is a pseudo-science. It's just as funny as witch-hunting in the 6- -- 15th century -- witch-burning. What the natural sciences do today, they call themselves "sociology" and "psychology," and they experiment with human beings. And therefore they -- commit the crime of crimes: the crime against growth. Growth is something you cannot experiment with. You can only experiment, gentlemen, with dead things, which are moved from the outside. Growth is the one process, gentlemen, where the movement is inside that which grows. You can test a man when he falls -- how long it takes to fall down a -- a scaffold, because that's only gravity, you see. He is not moved himself -- his own mover. But where man is his own prime mover, you must never experiment with him.

Now all living plants, animals, and men grow. And growth is a movement which has its center inside itself. Therefore, anything growing is inaccessible to the methods of the laboratory. And wherever a man wants to use microscopes and measurements for growth, try to have him executed. He's murder -- a murderer.

And you must learn, gentlemen, that today there are more crimes committed in -- against growth in the world than any crimes against -- the existence of life. Although we have concentration camps, and we have brutality, and we have wars, I think more souls today are crushed and prevented from growing than bodies are killed, in all these terrible processes. Growth is more despised in an experimental society, you see, today than just human life. The disregard for growth is greater, I think, than disregard for human life. Even today, with all the many murders committed.

Once your eyes are open to this, gentlemen, you will understand what the sin against the Holy Spirit means, which cannot be forgiven. It's exactly this, you see, which is committed today officially by every college and every institution in this country.

Now why do I say all these things, gentlemen? To show you that the laboratory of the last 400 years was at first called into being by heroic action, by these great founders. As long as these founders were individuals, the Catholic Church--though perhaps impeding the individual founder, because of his confusion--was still perfectly willing to find the miracles of God in the world. The Lutherans were not. Luther was against the worldly sciences. The Catholics were not. From 1650, gentlemen, to -- 1789, the academies were institutionalized, as you know. That is, they took up the research, and there developed the antagonism between the Church and the natural sciences, which you now think is hereditary. The reason was: because these academies were indifferent to the denomination and religion of their members. Even to 1789, the Catholic Church was not hostile to research. But they couldn't stomach the toleration of scientists, you see, who were not Catholics.

And so, the funny thing is this -- the reason of -- the first reason of the hostility of the Catholic Church to science is a sociological--and not an intellectual--reason. The mixing of Catholics and non-Catholics -- what you see today again in the Church with their -- with their segregation, you see--you must have a Catholic tennis club, and a Catholic fishmonger club, et cetera--it is this segregational aspect, gentlemen, that the heretic should not be socially met, which develops at first the hostility. I told you that in 1635, the great cardinal Richelieu asked Protestants, Huguenots, to join the -- his academy. He, being half a politician of the state, and half a member of -- only formally, a member -- a cardinal of the Church, saw that the new science, the new approach had to be carried on by everybody who could use his wits, that there was no reason why a non-Catholic should not be a member of the academy. But the Catholic Church, you see, deeply hurt by the religious wars of the previous -- century, decided to say that Catholics should not side, and sit, and eat, and meet with Protestants.

So gentlemen, it's a sociological reason, the founding of these academies which brought about the rift -- on the rift between Catholics and Protestants in matters of science. I think that's very important for you to know. With whom you are not on speaking terms, gentlemen, he becomes your enemy. And the Catholics from 1640 to 1789 tried to avoid whenever they could for their faithful the -- the social amenities. You see, they exclu- -- I mean, no intermarriages they could have it, and no social intercourse. And the Royal Society, for example, in 1665,

when it was founded, was atypical modern society -- society in which neither could a member be asked what he believed, or what denomination he was, nor could the word "religion" of course be mentioned in any one of its dealings, and its transactions. The Royal Society pushed the new -- worldliness and the religious neutrality of the academic spirit to its limits.

It went so far, gentlemen, that any systematic remark was excluded for the last 20 -- first 20 years of the transactions from the society. If you read the transaction of the Royal Society today, you think you are in a madhouse, because only empirical statements of fact were admitted. No order could be put into it. No general rules could be -- could be derived at. They were so anxious to live only with -- reports, you see, and assertion of facts from the world. And they hated all system, hated all order. Goethe -- Goethe, the German poet whose anniversary we celebrate this year, has written a very charming essay on the transactions of the British Royal Society, in which he says it's just unbelievable to what -- to what ultimate -- really ridiculous atomism human intellect can go, from a fear of falling into the scholastic trap of system.

And so, gentlemen, the rift between science and the Church came from the new republic of scholars, from the new fellowship which the academic -- demies represented, A fellowship, you see, not dependent on religious fellowship. A weekday fellowship, so to speak, without regard to where you go to church on Sunday.

And gentlemen, human relations precede mental relations. If you break away from a fellow, then you suspect what he thinks, because you don't meet him anymore. If you meet a man, he can have the most abstruse ideas, you still can trust him, you see. He -- you say he has very interesting ideas. I don't approve of it. But if you don't meet a man on principle, and say, "I never meet him," then of course you begin to think that he is -- has strange ideas, and terrible ideas. I think it's a little bit the case with the Russians at this moment. We have made up our minds that we won't mix with the Russians, so we credit them with the most -- incredible ideas. And then we are very surprised, when in a special case, they are just normal, and -- and fall in love with a woman, et cetera. From 1789, gentlemen, to 1914, or -- 19 -- to this day--it makes no difference whenever you date this--science and Catholic Church carried the animosity further, because after 1789, the liberals held dogmatically that everything that was needed for the education of a human being was science, that they were self-supporting, that liberalism could pull itself out by its own bootstraps, and that science was a primary source of human illumination, of human enlighten-

ment. From 1789, science became in its own mind sovereign. It denied the sequence of the first and the second intellectual cycle, which had never been done before. Only in 1789, gentlemen, did the academies enter the universities and say, "Your university training has to be changed."

I told you that in Dartmouth only in 1890, did this third period enter. In -- up to 1890, President Bartlett here would give a course to every senior, in place of this G-I course, "Universal History of Mankind," instead of -- and that was a real introduction of every member of the cla- -- of the senior class to his place in the universe. It was an historical course, not a geographical, or economic, or political course. And the second thing was that down to 1890, there was no laboratory in -- on this campus. The thing that came nearest to a laboratory was called the "philosophical apparatus." You may take this down, gentlemen. That's a medieval expression. "Philosophical apparatus" was still used for the globe, and the few maps they had, and the ruler, and such things in this college, down to 1890. "Philosophical apparatus" is a medieval expression, because philosophy is the wisdom of this world, of the natural world, and -- in comparison to -- to the divine knowledge, you see, and the law, theology and law; the philosophical apparatus was just for the prep school, was just for the minor things of the world.

So gentlemen, can you find the technique in your notebook, you make it clear that the word "philosophical apparatus," although used in 1889, is still a medieval expression, something that had -- has still hung on in this country from before 1500. You see, nobody in his five senses could today call the map of the world "philosophical apparatus," because the word "philosophy" has exploded in all the -- the many natural sciences, you see. Before 1500, the word "philosophy" covered all na- -- knowledge of nature, all knowledge of the world. "Philosophy" meant wisdom of this world. "Theology" meant wisdom of the other world.

So in -- 1890 in this college, there was still the conflict between medieval nomenclature and modern {knowledge, gentlemen}. Because there was philosophical apparatus, which will -- made only sense for monks and priests, you see, who had to know a little astronomy, but just on the side. It wasn't their real study, you see. It wasn't -- wasn't good enough for a university. It was only good for -- like arithmetic, for preparing yourself for the real stuff. Then in 1890, the laboratory takes over, which means that it is for adults, that it is a real science, that it is something better than theology and law, more real science, you see, more scientific.

So gentlemen, "philosophical apparatus" meant recognition, gentlemen,

that philosophy is secondary to religion and law. "Laboratory" means that the form of scientific research dominates, and that the research man can do without religion and law -- law; without, that is, state and Church, that he is his own master, and he is himself the mastermind, and the philosopher, you see, { }. This damned word, "I am the captain of my soul," which leads everybody in Waterbury -- lends -- leads everybody to Waterbury or Bellevue --. Nobody is captain of his soul, gentlemen, or he has no soul. Soul is your part in God. And how can you be the captain of your soul, the one thing with which you are not yourself, but better than yourself? It's a fantastic notion. That's a typical 19th-century notion of a liberal. This sentence, "You are the captain"--or "I am the captain of my --" or what is it? "You are the captain of your soul"--wie?--"He is the captain of his soul" -- what?

("I am the captain of my soul.")

Yes, yes. And then he gets married, and it's all over.

In this sentence, gentlemen, you can recognize the arrogance of the liberal of the 19th century. "I am the captain of my soul." You can be a captain of a ship. You can be captain of a thing, you see, which you direct by your mind. But if the soul is anything, it is your captain. If there is a -- has -- if there -- man has a soul, then certainly nothing else is your captain, but your soul. So if the sentence then makes any sense, it would have to read, "The soul is my captain." That makes sense. But to say, "I am the captain of my soul" means the execution of this soul. It means exactly that the -- it can't grow. It means exactly that I -- I, with my will, my purpose, my aim, my plan, my master plan, my science, that I plan my soul. And get birth control.

That's what we have today. It is a fantastic sentence. When you begin to think of this, you don't -- wonder why people are today all crazy, and lunatics. "I am the captain of my soul" condemns a man not only to a -- to loneliness and isolation, but it condemns him even to supervise his only growing point, his soul, from the point of his -- point of his mind, of his mastermind, of his -- probably the last book by Mr. Freud: tells him how to treat your soul. That's what he does. Freud is -- is the -- the -- of course the incarnation of this devilry. Telling you how to treat your soul, instead of allowing your soul to tell you off. Who is master in the house? The devil of your mind or the soul?

Now gentlemen, you have to decide this. Today it is decided in this country in favor of commonplace psychology, commonplace science, commonplace methods of mathematics. You actually think it would be better if you couldn't be

mathematically tested and-- and-- and stated. Mathematics is a human invention. So what about it? My mind can never contain me. I'm more than my mind. Tomorrow I'll have a different mind. I'll have a change of mind. Gentlemen, the decision is whether the mind, which is fixed, shall govern growth, or whether it shall not.

Now the old Renaissance thinkers, gentlemen, who established laboratories, never said before 1789 that man was the captain of his soul. They let the -- left the soul alone. And that's why the hostility with the Catholic Church has only reached its danger point during the last 150 years. From 1789 to 6- -- 1940, you may say, the two were irreconcilable, because the scientist said that he needed no soul, that the mind was enough to entertain him and to misdirect him. It is enough to entertain you and to misdirect you, and to produce atomic bombs and liquor.

For this -- purposes, gentlemen, of play and destruction, the mind is perfectly sufficient. The mind is insufficient for making peace and for begetting children. You can't beget children by the mind, you see, because the mind makes you impotent. And you can't beget--what was the other?--make peace with the mind, because your mind stands in the way with -- making peace with any other fellow who is of a different mind. The condition of peace, gentlemen, is that the mind is not sovereign. And the condition of children is that the mind is not sovereign. That's why France has -- doesn't multiply anymore; it's sterile. { } the country of this last revolution, because the French have held this wisdom that the mind is God. Liberalism thinks that the mind is God.

So from 1789 to 1940, pea- -- Church and science are in this strange contradiction. And now we come perhaps to the closest formula, why? Because in -- after 1789 only is the real story of the western mind forgotten and repressed. It seems in 1789 for the first time that the universities only had to serve the natural sciences. It is forgotten that there were 400 years of universities, you see, in which human freedom, the right of resistance, human contradictions, marriage, all this had been developed. The processes which the universities in the Middle Ages had developed had become such commonplace in 1789, that the people thought they could take them for granted, and that the institutions by which these -- these insights had been developed, you see, therefore could now be taken over by the academicians.

So it's a strange story, gentlemen. The academies are not the same as the universities, down to 1789. The very moment the first laboratory appears in the university, and these universities give up to -- to persecute the academicians, and

say, "No, we will learn from you," the academicians go the whole hog and say, "Out you go: everything that has been before in these universities." And what was the last thing, gentlemen, which showed that the u- -- the college is older than a laboratory? Which on this campus is the one institution which has faded and is only there as a derelict? Chapel, ja.

What time is it, please?

(Quarter after.)

Let us have a break here.

[tape interruption]

...advancing -- advancing from 15- -- 1450 or 1500 to 1940. When Mr. Einstein wrote this notorious letter about the atomic bomb to Mr. Roosevelt, the sovereignty of the -- scientists broke down. It was impossible after 1940--and it should be impossible for you--to say that science is without conditions, that natural science stands on its own. It doesn't. There are several conditions, gentlemen, under which natural science has been allowed to advance from 1500 to 18- -- to 1940.

And if you discover this, gentlemen, you understand why the enmity between Christianity and natural science is very short-lived. It is a sociological enmity from 1640 to 1789. Ta- --perhaps you take this down. There are two enmities between -- Christianity and science. Or thr- -- let's put it three; then we include the Protestants. Three enmities. The first enmity: from 1500 to 1640, the Protestants say, "We must have -- the way of salvation is purer religion." The scientists say, "The increase is through the discovery of the world." That is, two ideas about progress. Luther says, "Purge the Church." The scientists say, "Purify your mind, in things of the world, new observations, new research." If you read Paracelsus--that's all brought out -- brought out in my pamphlet very clearly--that Paracelsus was neither a Protestant nor -- nor a Catholic, you see. But he was -- he was not interested in this antagonism. Paracelsus was a Christian who wanted to take the next step in the history of the human mind, and that was from theology to natural science. -- By suddenly -- no longer disputing about { } sources, in writing, but by going out in to the world and comparing research with conditions.

So gentlemen, from 1500 to 1640, the enmity -- comes from the Protestants against the scientists. From 1640 to 1789, the Catholics fear the mixing of Protes-

tant and Catholic in matters of research. They fear the social mixing of the two. They don't want to let their sheep lie with the wolves.

From 1789 to 1940, the liberal mind of the scientist wants to subjugate the soul. He wants to subjugate the soul. The liberal mind wants to subjugate the soul. "I am the captain of my soul." In this moment, the soul is lowered -- below the mind. There can be no soul, but -- only a psyche. The expression of this domination of the souls of men by mind is that they cease to be called "souls." How are they called today? What's the Greek term? "Psyche," you see. Psyche. Psyche is that soul which is no longer real, but is dominated by my own mind. That's, of course, no -- worth nothing. It's a stump, so to speak; it's an unreal soul. Psyche -- wherever you meet the word "psyche," "psychosis" -- a man who has a psychosis is sick; a man who goes to the psychiatrist is sick. And a man who goes to the psychoanalyst has -- is like a dead tooth. His psyche is something that can be analyzed. Gentlemen, anything that can be analyzed cannot grow. Analysis is -- excludes growth. Perhaps you take this down. Analysis excludes growth. You can go to the analyst if you wish to -- erase, to eradicate your tooth, your stump of -- of a soul, which you call psyche. But as long as you are healthy, gentlemen. You can embrace your psychoanalyst; you can love him; or you can run away with him; or you can hit him; or you can kill him. But certainly, gentlemen, as long as there is an ounce of soul left in you, you cannot enter upon a relationship with your psychiatrist of analysis, because it just means that you have given up yourself. { }. That's why the analyst has to put up with the love affair with their patients, because they just found that these people had still some remnants of life in them. And life consists and grows of hate and love. And so as you know in all psychoanalytic literature, it is always -- they speak of transference. Now -- in good Anglo-Saxon English, it just means that this -- the man hates or loves the doctor. But it has to be "transference," so that it seems something, so to speak, of a scientific nature. Our hate or love are perfectly unscientific. They are just utterances of the human soul. Analysis, gentlemen, and growth are mutually exclusive, just as much as experimenting is. Whenever you analyze, you give up growth. You may have to give up growth, wild growth--weeds, you see, have to be analyzed, pulled out, you see. But it's -- a condition of psychoanalysis is that the doctor knows that this is { } growth, that this is rotten, that it is good to destroy it. It's a -- it's a surgical operation on the soul for that part of it which isn't soul, which is just psyche, which therefore can come under the scrutiny of the human mind.

It's very simple, gentlemen. Put analysis and experiment on one side, and put growth on the other--and passions--and then you see what you can do with analysis. You can do with analysis whatever you can do with laboratory -- in

laboratories. And you can do in laboratories anything that can be experimented with. You cannot analyze the attack of the Japanese on Pearl Harbor. Unfortunately you have to declare war. That's not an analysis of them -- what they do -- have been doing, but it's an answer. You have to respond, you see, if you wish to be -- keep alive to such an attack. And -- the idea that you can analyze an act which goes to the center of your being -- is just nonsense.

Now gentlemen, once more then: from 1789 to 1940, the liberals believed that they could do with experimental mind. And that the people whom they -- that they themselves, the founders of science, the scientists of science, the teachers of science, and the popularizers of science, that all these vier -- four groups of people--the founders; the research people in science; the educators; and the popularizers, the writers of bestsellers and Books-of-the-Month Club books--that all four could derive their authority from science exclusively, that if you said, "Doctor of Psychology," somebody would buy the book because they would say, "Hmm, any doctor in psychology knows his stuff."

In 1940, gentlemen, with the atomic bomb, science split up its conditions.

Now which were these conditions, gentlemen, of which the people in the 19th century--the liberals--didn't want to know? First was the brotherhood of all scholars all over the globe. Number 1 tenet: the brotherhood of all scholars. Second, the right of all men to benefit by the findings of this brotherhood. Third, that progress in science meant progress in life; that progress in science meant progress in society. And fourth, that the public would sacrifice for science, for truth. That the public--that's the general public--would always be willing to -- make sacrifices for truth.

({ }.)

Certainly. Number 1, that the process of scientific research unites all men in a brotherhood of scientists, in a republic of scholars: that all scholars are -- wherever they live, are a brotherhood. That's been exploded by the atomic bomb. Number 2, that all mankind will benefit from every one discovery in science. But if you invent the telephone, you cannot hold it away from anybody, you see. It will become commonplace. All technical -- you can put -- add this: all technical inventions down to 1940 have been made accessible to everybody. Everybody in this country has a car. That's a tremendous {thing to say.} So you -- this is not understood as a -- this is a tremendous tenet of faith. You see, you could have a society -- in China, if an invention was made, it was reserved for the emperor and the court. And therefore, many of the things were lost again. The same in -- in Greece, by the way. Science in an -- in -- outside the Christian world, gentle-

men, has not flourished, because the inventor kept his science to himself, or his potentate.

I'll tell you a -- sad story from Germany -- to this effect. An American businessman invented a special musical whistle -- whistle for cars in the beginning of the horn, blowing the horn. It played a little melody: ta-tee-ta-tah. And he went to Germany and thought it was a wonderful thing, and went immediately to the emperor, and was well received. And the emperor paid him a nice sum, and he bought it. And my man was very happy. But then, he of course went on to try to sell this horn to others. And they said, "Nothing doing. It's a monopoly for His Majesty. His Ma- -- Majesty wants to be known wherever he goes by his horn."

Well, it was a complete sell-out, as you can see. The man -- the poor man had sold, you see, for one horn his whole invention. If he hadn't gone to the emperor first, he might have sold a hundred thousand. But he -- by beginning at the top, he enabled a -- a feudal society, in which the emperor had this right to tell the chief of police, "You won't admit any whistle that's like mine," you see, he excluded the whole market from this man. And there he was, and had to return. He -- he sold one whistle in all {Germany}.

Now that's anti- -- pre-scientific, you see, behavior. Science rests on the -- it's a good story, because it may show you -- the -- you see, the -- the contrast. This attitude of the German emperor clearly violates the tenet of scientific progress, you see, where all technological things based on science are made accessible to everybody. You take this for granted, gentlemen. but { }. It is perfectly possible that certain things become the reservation of the FBI very soon. Perhaps they say, "We only can have wiretapping and television, and nobody else can, because we want to be in on everything, but nobody else must."

You can imagine such a -- such a state of affairs. I'm sure in Russia they have things accessible to the -- to the leading group which the masses just never see, like caviar and champagne.

So gentlemen, technological progress assumes the constant spread to everybody of its benefits. Third, the progressive steps are assuredly beneficial to society. Progress is beneficial. And fourth, the support of this progress in the direction of more truth, or more facts, will always be supported by the people. I've reformulated the four, but it's exactly the same thing, these four laws, you see. This is the minimum tenet of every modern scientist, gentlemen, and it is no longer valid. Progress in science is no longer -- no fool can say that it is beneficial

to society under all circumstances. Why is genocide-- genocide beneficial? It isn't. It's just -- it's ambiguous, you see. You can't tell. Progress -- scientific progress, gentlemen, is void of any direction. It can be beneficial, and it can be non-beneficial. We don't know. Certainly I don't say -- it is wrong to say that it is identified -- to be identified with beneficial. It isn't. It is just what it is. It's change, but never can we know -- say, "But it's change for the better." We don't know. It all depends on the human beings who handle it, whether it is to the -- the better. Number 2, it is not true that there -- there's a solidarity between scholars is {growing}. It is not true that the solidarity between the scholars is growing. Quite the contrary. They are split up.

Third, it is not sure that everyone will be allowed to participate. You can have monopolies, like the atomic bomb. Whole nations there are excluded from any access to their use.

And Number 4, the masses don't like the truth. Up and down, neither the rich or the poor. Wherever you get any crowd or mob, you cannot assume that they are interested in truth. They aren't. They will not make sacrifices for the truth. They will far prefer their legends -- legends, and their myths, and their -- their fairy tales. They won't. I mean, you can't -- tell the truth about -- the -- the War between the States in South Carolina to this day. You just can't. The last man who tried committed suicide.

So gentlemen, the four tenets -- why could they be believed by the academics, gentlemen? Because the universities existed, the universities developed these four tenets. That is, the four tenets on which natural science has been based were all created between 1100 and 1500.

To give you a little example, gentlemen, how this was done: it was done in chapel. The chapel of the Middle Ages, gentlemen, out of which every scholar in the Middle Ages came, has of course these four tenets. First, in chapel you believe in the solidarity of the human race. Second, you believe that in God the government in the Christian era, progress is possible. Jesus left the world that the Spirit would show better things to His disciples, better than He even could tell them. And so progress is based on this unity of our era. Third, peace is the destiny of man; therefore the third tenet, the progress will be beneficial. In chapel, that is -- makes sense. And fourth, the clergy and the laity are identical in their purposes. The scientist today, you see, if he is paid well by the government, may exclude the Russians from the atomic bomb. A clergyman of the Universal Church can never think of himself as any other relation as to the laity, to the

people, because he comes from the people and belongs to the people, and he doesn't belong to the state, certainly. He doesn't belong to the American government.

Gentlemen, in chapel, the four tenets all make clear sense. They don't make sense in the laboratory. They have made sense for the last 400 years, because every scientist, gentlemen--take this down--every scientist got these four tenets, because he had to rival with the Church. The rivalry of science with Christianity -- with the Church, made the scientists behave. They all tried to be as good as gold, so to speak. They tried to be as good as a Christian. What did a scientist say? "I can be a Christian, without being a member of the Church." That the idea was always, you see, that the Church was -- didn't do -- contribute anything to being good, or to being progressive, so "Let's be as good as a Christian." You know all these people, whom you--perhaps you are one of you -- of them yourself--used to say, "Well, how can the -- the Church, it's just not doing its part, and it's obsolete, and Christianity is a good thing, but the Church testifies against Christianity; if I -- if the Christians were only better, I could believe in Christianity," that's a typical scientific idea. It always presupposes, gentlemen, that the scientist understands Christianity without belonging to it. And appreciates it, and in his own life realizes it.

And so, gentlemen, the modern scientist, for the last 400 years, competed with the Church. He competed with the Church. He tried to be as good as them in his truthfulness, in his brotherhood with all people all over the globe, in his -- in his obs- -- willingness to let everybody benefit from his inventions, you see, and in his fervent service of the pro- -- for the progress of mankind.

All these ten- -- tenets, gentlemen, a pre-natural, and they are supernatural, and they come from chapel. All medieval thinkers, gentlemen, were educated in chapel, the way all college students were, down to 1921, I think, in this college. That had a tremendous effect, of course, because in chapel you absorb these four items, gentlemen: that all men are one in one spirit; that the specialist has to serve the people--the clergyman, the laity -- the export is -- is all, that knowledge is service, that knowledge is not power. Now today, unfortunately, as you know, that's turning; knowledge is power. The Marxians say so and the -- the government says so. And it buys these scientists, as -- as brainpower, as brain trust. Without chapel, gentlemen, science belongs to the pigsty, or how do you say? Science without the prerequisite that the scientist must be a good Christian in his heart is impossible, because science is based on the assumption that its direction is beneficial to the whole of mankind, to the whole of human history, to

the whole of all strata of society, and that man who is not a scientist is eager to support it, the masses, you see, that they have the light of reason, even if they don't have it themselves, in high regard; that they respect it.

So you have four conditions there, you see, gentlemen. The four conditions of chapel are: first, the -- mankind is one; second, history is one; third, the direction of history is the same for the man in power and the people led by them, the directed people, you see; and that the masses will respect the sacrifices made for them, you see, and that the people who -- who lead will respect the masses. That's a very -- these are four very difficult human principles, gentlemen, of which you can completely lose sight, if you are uneducated { }. Then you get Mr. Hitler's doctors who experiment with inmates in concentration camps, because they say it's very interesting to find out how human beings behave, you see.

What does this mean? They had no solidarity for the whole of mankind, you see. See the difference? This happens everywhere today. You get it with euthanasia. The society today doesn't want to be bothered with old people or suffering people. So why -- not do away with them? They finally agree, themselves. It's an impatience to deal with human beings, if they live too long, or they live in unhealthy conditions, for example.

Gentlemen, today you have to decide--this is a tremendously exciting moment--whether you recognize the -- the in- -- mutual dependency of the chapel and the laboratory, or whether you don't, that will signify your stand in the new era. The new parties, gentlemen, therefore of the future are the -- the ones who isolate the laboratory. Whether you call yourself a capitalist, or a Communist, or a scientist, or a Bolshevik, gentlemen, makes no difference. Mr. {Hocking} is just as much a Bolshevik as a -- as Bolshevik is Mr. {Hocking}. Mr. {Hocking} believes that the mind is the captain of the soul, for example. He is a good Hegelian. Hegel is the philosopher of this domination of the mind over the human soul. And I come from a country, my dear -- my dear friends, where I had to fight hard to rid myself of this prejudice. I know what I'm talking about because Hegel is the philosopher of this very sentence. And Marx is -- as you know, is the disciple of this man. And they both teach that man is the captain of his soul.

So gentlemen, the chapel develops four qualities. And -- how -- what time is it? {Does} it say one minute left? Wie? I'd like to give you a little example how simple the progress of the human race is. In 1100, a book was written which may give you an insight into what the -- all the schoolmen of the Middle Ages went

through before they began to unite -- concord the law or theology.

There was a handbook for the father confessor in Church, a manual for the confessions. And -- it's a very great book, and was read all over -- Europe in the Middle Ages. It's just called On True and False Penitence. That's the title. The title of this manual perhaps --. We don't know the author. It was in existence by -- by 1100. Now to give you an example of how the solidarity of the human race had to be created, I quote you one item there. It says that in secular -- in the world, the judge judges the criminal according to the law of the city, of the land: "He has murdered -- commits murder." But he says, in church, in chapel, when you hear a man's confession, the first thing the judge has to say to himself is, "I did this, committed the sin myself."

That is, the first condition for a father confessor, gentlemen, is the opposite from a secular judge. The first attitude must be, "I committed this sin myself." Judge and sinner are identical. Now you always think of the solidarity of the human race too far-fetched: Negro and white, and -- and -- and Chinese and American. That's -- when you think of the "brotherhood of man." Gentlemen, the first solidarity of the human race consists about the people -- between people who judge each other. If you say, "That's a wicked deed," of somebody else, you see, you break your solidarity. The first attempt must be, "Would I have done it, too? Or perhaps I wouldn't," you see. In this moment, you create the real solidarity of the human race.

Now put it -- this down, gentlemen: chapel doesn't look for the solidarity of the human race between distant people in space, in far-distant spaces. The real problem is, gentlemen, in the solidarity of the human race is your neighbor. Which is much more difficult to achieve, as you know. Just go to an apartment house in New York, and study the -- the degree of solidarity between tenants on the same floor there. Every one of these people is much nicer to the next Chinese -- or Chinaman in -- in Shanghai than he is to his neighbor there, because he doesn't know of his neighbor there, you see. But he reads the papers about the {plight} in Shanghai. There is no greater stranger today, as you well know, as neighbors in an apartment house, in these big tenement houses, I mean. Nobody is a man more alone than in a big city, obviously, you see. He has much more solidarity with -- with the Basuto Negro in South Africa. He can send him a parcel. But he can't ring up your neighbor in an apartment house and say, "Hello, Buddy," you see. { }.

The solidarity of the human race, gentlemen, today is completely lost between neighbors. The judge in the Middle Ages was pulled down to the level

of the judged. Everyday in the educational process of chapel. You take this for granted. But you must now know that before 1100, no Judge -- {Medina}, and not -- no Judge Cardozo, or no Judge Learned Hand has any use for saying, "I would have done this myself." He judged the criminal as somebody different; that was the pagan tradition, which still was enforced at that time. In church, yes, we mix; but not in the world. But from 1100 { } every man who went to study theology and law, it was driven in, day after day, that the judge and the judged were the same man. So you see the tremendous, creative force in this. It's a -- every father confessor in the western world sat in his -- sits today in his confessional with the deep feeling: "There is no violation of the Ten Commandments which I couldn't have committed myself," you see. Therefore you -- that's why you can confess your sins to this man, obviously.

I think you are good heirs of this tradition, gentlemen. In your heart of hearts, you have this solidarity. Any American boy has this openness, that he knows the other fellow is just in the same boat. But please treasure it, and know where -- whence it comes. It doesn't come from science, you see. But it comes from a much simpler attitude of the unity of the human race, that sins are -- we all have in common, our deficiencies, and that nobody who comes to you with a crime can be told to you that you wouldn't have done it, you see. There is nothing so black, because -- also there is nothing so white, which is not in every one of us. Isn't that true?

So gentlemen, the -- I want -- give you this example to insist that chapel is at the root of modern science. There is no laboratory which we can permit without chapel, because otherwise you get the concentration camp. You get the conc- -- the experimentation with human life. You get wars of aggression. You get the uprooting of whole populations. You get the killing of all the kulaks, just because they have some land, you see, and they have to give way to modern { }. You get the censorship of Mr. Shostakovich, or any other composer if he doesn't follow the party line. Growth is not admitted, you see. But they are all captains of men's souls, these Bolsheviks. Any Platonist is, any philosopher-king. Wherever you hear a man say, "Let the philosopher be king," run away, because when the philosopher is king, the mind rules the soul. And the mind is then master of growth. And the nurse can push back the child into the body of the mother, and reverse the process of living life, of growth, because the mind has made the rule and regulation that the doctor should be present. So reality cannot happen, so to speak, because the mind is not satisfied. It's not according to science.

Thank you.

{ } = word or expression can't be understood

{word} = hard to understand, might be this

(Philosophy 10, May 18th, 1949.)

[tape interruption]

...which we have -- of which you have heard as a myth in the Old Testament, perhaps, that man has eaten from the tree of knowledge, after all, is not at all a myth. But you all try to bear the fruits of this tree of knowledge. You are inside yourself, as far as you are a mental being, some organic being, a plant. What is missing at this moment in your own consciousness is that you are yourself an organic substance, a tree that bears fruit in and out of season. That's the content of the first Psalm, that a man shall be planted like a tree standing at the rivers of water, bearing fruit day and night, and talking the law of the Lord. That's not myth, gentlemen.

The discovery of the third cycle, of the non-academic and of the non-scholastic sciences, obviously will be the question of the creative and organic forces of the human mind. Not his conscience, gentlemen, and not his consciousness; not chapel, and not laboratory -- but the attempt of bearing fruit. A teacher, gentlemen, a ruler, and a man who can have heirs is a fruitful person. His thought bears fruit in others.

The first four attempts, gentlemen, of the Middle Age -- medieval cycle, of the season of theology and law is to prune man's mind, to prune it, so that those four tenets which I dictated you last time will be assured: that man will, as a scientist, love in all other minds -- his brother -- this brotherhood of the scientist; that he will only think what is beneficial for society, that society can progress, that all what this brotherhood of scientists thinks will benefit everybody; and Number 4, that everybody will look up to the scientist as his authority. Will, that is, bear with the scientist, although the scientific truth is inconvenient, and doesn't flatter the mob.

We -- I tried to show you that the scientist has gone haywire today, because he -- they have stripped themselves of the connection with these four dogmatic truths. And at this moment, gentlemen, in 1949, your problem is -- your whole generation's problem is to be very clear on the dogma which underlies the existence of science. The dogmas that underlie the existence of science have nothing to do with the content of science. Dogma, gentlemen, is that which enables man to know. It is the pruning process under which the tree of life is not

leading you out using it for mutual destruction.

I -- to give you a small example, gentlemen, that science needs dogma. In 1650 in Paris, there was a real epidemic of poisoning. All -- in all families, there were a tremendous fear -- it was a tremendous fear that any member, any day might be poisoned, because people had discovered arsenic. You know Arsenic and Lase. And with arsenic, you can, with a very small dose--as with strychnine--you can eliminate a person and no trace is easily found. Just a tiny bit of -- of arsenic.

So in 1650, there was still a struggle in Europe, or in the world, between the private knowledge of poison and its scientific use, as we have it today with the pharmacist and the drugstore, where you have to have a prescription before you can get arsenic, you see, and where the doctor certifies that it will only do good, and no harm.

You overlook all these con- -- the connotations, all the implications of science, completely. You think everybody wants to know. No, gentlemen. The dogma underlying the knowledge of poison is that nobody who can handle poison will abuse it for his private prof- -- private benefit. In 1650, however, in Paris, they did poison the man who stood between his rich uncle, and his own -- becoming the heir of this man, you see. If you had an older cousin who was closer to the uncle, you just gave him arsenic, and you got the money.

Well, you laugh about -- of these things, gentlemen, but here you come to those unwritten, and yet central, dogmas of any society, gentlemen: knowledge, devoid of charity and love, is poison. Knowledge, devoid of charity and love, is poison. And the example of arsenic is a very simple example. You can enlarge it on anything. Take a doctor who suddenly comes to a patient -- the patient in good faith tells him all his secrets about his -- his past, that he had a venereal disease. And the doctor goes and tells anybody in the next club that this man had syphilis. And he just is an out- -- becomes an outcast of society. He's indiscreet, the doctor. How can such a -- I take a very mild case of indiscretion. I don't even take the case where the doctor says, "I'm just experimenting now, and I want to find out about this illness that we give this man some drug. It may kill him, you see, but I learn something." That's a stronger case. Of this you hear very often. But don't you know that any secret you entrust a scientist with is power in his hands, if it is devoid of respect for your personality, and your rights? Unless, gentlemen, charity rules the use of knowledge, the tree of life is not pruned.

That's very serious, gentlemen, chapel prunes the tree of knowledge. The four dogmas, gentlemen, which underlie science are unrelentingly and inexorably conditions of the people -- for the people of any country to support science. Gentlemen, the masses today will not support science if they are not sure that the science is applied to -- for their own benefit. And they will very soon--you see it already--the masses are indifferent to truth. We all are indifferent to truth. At a Dartmouth football game, when you are a mob howling -- you are indifferent to truth. You hit the umpire, if he tells the truth. It takes education; it takes sportsmanship; it takes tremendous renunciation and discipline not to hit the umpire. You should know this, gentlemen. Yet, as you well know, gentlemen, today's -- the sad state of affairs in the world is that the scientist sneers at dogma. And -- that he says, "We" -- "I am without dogma. I am without prejudice. I am only finding out facts." Nonsense! That's the greatest lie. The condition of science is dogmatic, pre-existing; before there can be any organized science, the scientists all must have renounced their egotism.

Dogma, gentlemen, conditions science, because through dogma, and I -- again--you have it all written down, I understand, these four tenets of last time. Has everybody gotten this? Who hasn't? These four tenets, gentlemen, you simply believe. But if I say that there is gospel truth in them, you say, "No. Science is undogmatic." Science is the most dogmatically prejudiced thing in the world. All knowledge, gentlemen, wants to know whether the man who receives this knowledge, who is an apprentice in physics, who is a -- a Guggenheim Fellow, whether he follows the laws under which science is universal. And the law under which any knowledge can become universal are very severe. He must share his knowledge with all others who want to have it. He must enjoy the respect of the community for which he has it, because otherwise, it doesn't help anybody, you see, if he is not held in respect, because they won't listen. They won't read his -- his monograph. And it must be in the direction of the destiny of man. It must have direction. And it must not exclude anybody "regardless of color, race, or creed," from the benefit of this knowledge.

This is dogmatic truth. And gentlemen, what does dogma? The dogma makes its believer out of a poor, isolated individual into that "I," ego, under whose name scientific progress can be registered.

It is -- there is a complete confusion today, gentlemen, in this cycle from Paracelsus and Vesalius, down to the man in the street today who says, "I know all about mathematics, and mathematics -- what isn't mathematical isn't true." This poor idiot down here says also, "I know." The educated Dartmouth boy also

says, "I know." Mr. Einstein says, "I know." And Mr. Paracelsus says, "I know." But if you look at the "I," gentlemen, each time, you will discover a remarkable distinction. It isn't the same person in idea and commonplace who does the talking. The "I," gentlemen, who -- in the founder, the George Washington who says, "I am an American," was risking his life. He could have -- if had the things gotten wrong, and he had been captured by the English, he would have been executed for high treason. There was no war. It was just a rebellion. See? So gentlemen, the founder of an idea, of a new idea is always sticking his neck out, and his head can be chopped off. In other words, gentlemen, this "I" talks and speaks at the risk of his life.

On the second stage, gentlemen, when Mr. Einstein says something, or Mr. Planck, or Mr. Condon, or Mr. Comstock, or Mr. -- Ru- -- Rutherford, they s- -- talked at the risk of their reputation. They talk at the risk of their -- reputation. If they are not -- saying something which they haven't observed, which their research really doesn't warrant, you see, they are not losing their life, but they are losing their career. They are losing their reputation. That's the second risk. This "I" then is still under duress, under pressure. The atmospheric pressure is less.

When you are a Dartmouth graduate, gentlemen, and you say that you have such-and-such a conviction, people will say, "He is an educated man. He ought to know." So there you risk your class. You risk your edu- -- your -- your reputation--not as a scientist, not your career--but you risk your background, your background obliges you to a certain extent, and will cast you out, if you become a quack, or a liar, or a slanderer, because a -- gentleman just doesn't slander, and doesn't lie. If you come to the commonplace man, gentlemen, his "I" is the mass. Irresponsible. I say this; he says this; she says this; and what she says, goes.

So gentlemen, the atmospheric pressure on the "I" decreases here in geometrical progression. The "I" who speaks on the Cross, "My God -- hast thou forsaken me- ..."

[tape interruption]

...only people who are -- whose knowledge is so pruned, so ennobled, so cultivated that they will bear the brunt of slander, of false appearances, of misunderstanding.

Gentlemen, I once printed a sentence which had a funny echo. I printed the sentence, "A man who has never been misunderstood has never said anything important." Perhaps must take this down. A man who has never been misunderstood has never said anything important. I got a reply from Chicago that if I could convince any American that this was true, I really was a great man. That's the difference between your generation and the story of science in the last 800 years. You are outside this cycle, because you believe in two things. First, that everybody has the same personality, the same "I"-ness, the same ego -- ego -- which is not true, because the degree of -- in which you are "I" depends on your -- the pressure, the atmospheric pressure on your speech. If you have to say something against all odds, you are, as a fish immersed in the water. If you are a mass man buying a book, Mathematics for the Million, you are like a fish out of water. You don't swim. You just look at things. You don't count. The man -- the mass man, gentlemen, doesn't count for history. He can smash things. He can destroy things. But what he says is just so much hot air. Most of us spend 23 hours a day in hot air. Very rarely are we in the element in which we swim. The same surgeon, gentlemen, who is "I" when he makes a -- performs this operation and who says under this operation, "I did it," when he comes home and talks about socialized medicine, he's perfectly irresponsible. You see, he just talks through his hat, as we say. It is very difficult for you to understand, gentlemen, that we all are only at our best in our work. The modern fiction is, gentlemen, that man at leisure is better than man at work. That's the opposite, however, observable by everybody. You are best in danger. You are second-best at work. You are third-best in -- in -- with friends. And you are fourth-best alone, without anything to do. That's terrible. You are just like a fish out of water. You then take to the whiskey bottle, or to girl- -- women, or to anything, just because you can't stand to be out of context, out of life. It's terrible. So gentlemen -- ja? The ego which enters science must be prepared for the four tenets that he shall only say and sign with his name that which he is willing to share with every scientist; that which he wants to be benefited -- to benefit with every human being; that which commands the respect can in the end command the respect of the mob, you see; and that which is in the direction of the history of mankind. These are four terribly dogmatic standards {to perform}, you see. Before, you cannot really say "I," because it isn't worth it. Therefore, Jesus, as you know, escaped many occasions of saying "I," and

just ran away from danger, because He hadn't found the situation in which people really could respect His statement as coming from His full person. When He decided to say, "I am the Messiah," He was. But before, you can't talk about it in a -- in a parlor, you see, at a cocktail party. So when he was invited and sat with the sinners, and dined and wined, He contained Himself. He didn't say these important things, you see, because there was no risk involved. You don't say serious things in unseemly situations. It makes no sense.

You must always think, gentlemen, that Jesus begins in the childish situation of the -- of the man on the street, carpenter, commonplace, child in the cradle, son of -- of Joseph and Mary. And therefore has to build up for Himself the founder situation in which people realize that He talks at the full risk of His reputation, His life, His friends, everything. As long as He hasn't reached this position of Number 1 here--you remember we put all this -- His {cycle} { }--He wouldn't do this.

Why do I say all this, gentlemen? To emphasize once more the connection between science and religion. Science is based on dogmatic truth. The fifth dogma, gentlemen, on which all science is based is very simple, and it's always overlooked. Every scientist works under the command, or the imperative, or the ethics of "Let there be science. Science itself is good." That's a dogma. I -- can hardly understand that you are so prone to believe it. There has been whole civilizations who said, "Science is wicked; we shouldn't know so much." In the Old Testament, there is a very wise statement, gentlemen, which is dearly needed for us today, where it says, "Don't have statistics. Statistics destroy the future of Israel. And the king who made a census -- took a census is punished by God." Now I think it is high time that we in this country wake up to this truth, that to take a census of everything is to destroy this thing, the growth of the thing. Census and statistics have their limitations, gentlemen. You must not take statistics on "Whom do you love more, you father or your mother?" and then work it out with the punch -- machinery -- machine, how many people love their father more and how many love their mother more.

Why is that wrong, gentlemen? Why is this question--which is a quite notorious question, asked in many -- in many departments today, an innocent student--why this question wrong? Can you tell me? {Metz}. We have talked about this before.

{{ }.)

{ }.)

Ja. Well, it isn't quite -- people will say, "This isn't experimenting-with; it's just a question." Yes?

(Well, you can't break the family into two parts, father and mother, and { }.)

Yes, you remember the {unio prolium}, of which we talked, in the Middle Ages, the union of the {proles}, of the offspring in the medieval marriage. You remember? In matrimony, where the children of -- from three different wives would have the same economic status? This question does away with any possibility of even having parents. Because the essence of parents, gentlemen, is that it is one flesh with two heads, but one heart. They were one heart and one soul: that's the condition of any marriage. And any child that receives orders from his father or his mother must take them as orders coming from his parents, or he has no parents.

As soon as therefore you say, "Whom do you love more, your father and your mother?" you have broken the marriage of your parents. You have committed adultery. Funny, that children can do it, but they do today. They are even invited by the Freudian analysts to commit adultery. They break the marriage of their parents. This question is an adulterous question. Ja. It leads to the breaking of the marriage of the parents in the heart of the chil- -- child. Now since the child lives with the parents, that's the beginning of a rift between the parents, too, because if the child divides, the parents are divided, too.

This is an action, gentlemen: statistics do something to the world. They -- they enumerate. This is what you ought to know, gentlemen. Census-taking is an action in politics. It is nothing, what you call scientific. It's unpruned science. It's curiosity. It's wicked.

Gentlemen, in natural science in Europe--not in this country, which is behind 30 years in natural science, I'm afraid to say, in biology--in biology everybody in Europe knows that any observation of any living body, plant or animal, changes the observed creature. Observation itself, that I see you does something to you. Why shouldn't it? These are rays going out between my eyes and you. How can you for one moment think that it doesn't change? Even if you only isolate the thing so that I can see it under the microscope, I have changed the object. It is a different thing. Well, if you go into -- to our poor zoos where we have these wild animals, and we say, "We look at a lion," do you see a lion in a

zoo? You don't. That's not a lion, you see. It has been a lion. It's a dying lion, you see. It's not a live lion.

Can you see this? No, you can't. And that's your blindness, gentlemen.

You are thinking not in wholes, but you are thinking in particles; you are thinking in atoms. You really believe that God created a lion, but God created creation, gentlemen, in which a lion is one stream, and man is another, and water is another, and trees are a third. If you deviate the course of this lion into the zoo, he has ceased to be that which God created him for. He has missed his destiny.

So gentlemen, the lion as failure, you can observe in the zoo. But not the lion as God wanted him. It is a different lion. And as long as you haven't understood this, gentlemen, all what I have said hasn't penetrated. Because what I have tried to teach you here is that thinking itself does something to the things thought. The circulation of thought, gentlemen, means that you take sides. If you listen to somebody, you make him into your father. If you read a book, you make the thing you read about into the world. If you play, you make the world into a plaything. If you doubt, you make it into something you war against. If you suffer, you make it into something you accept. If you rule, you make it into something you love.

Every mental act, gentlemen, does something to the thing acted upon. To think means to do something in the world, and something very radical. The child that's -- is asked, "Whom do you love more, your mother or your father?" does something to his father and mother if he allows this question really to enter his mind -- his mind. He shouldn't. He should answer, "I won't answer this question." I had a -- one valedictorian of this college send back the questions, and I -- he wouldn't answer it. Which is right.

So gentlemen, at this moment, there are these two confusions. First, that any question shall be answered. Half of the questions you are asked today you must not answer. They are obscene questions. And second, that the "I" that answers all these questions is the same if it is a scientist, or a mob, or a -- a bored individual at leisure, or a man who has his reputation at stake, or an inventor who comes with something new out for the first time and everybody says, "He's a fool. Put -- let's put him into an insane asylum."

Ego is in confusion today, gentlemen, and thought. They -- you don't know that to ask something is already dogmatically only permissible if by the question, you don't destroy growth, you don't destroy the tenets of science. And

tenets of science are that you must hold the respect of the lower for the higher, the mob for the scientist. You must hold the solidarity of the human race. You must hold line with the direction of science. And you must hold to the truth that it is good to know. It is better to know than not to know. How can you, however, say it is good to know if you aren't quite sure that this knowledge is not destructive, you see? You cannot hold to this great imperative, "Let there be science," gentlemen, if you have not the other imperative, "Let this science fulfill its task in the history of mankind." Can you see the connection? Is this perfectly clear or not? Science is either, in its proper place, gentlemen, or it cannot be tolerated. This all, gentlemen, has been developed in the Middle Ages, before 1500. The -- from 1100 to 1500, gentlemen, we have the exploration of the foundations of all knowledge, the conditions under which knowledge can be universal, and can be followed. The medieval mind, gentlemen, from 11- to 1500, developed the intricacies of these four tenets which I have dictated to you. And in 1500, it was written out for the second cycle: "Let there be science." That the -- this sentence, "Let there be science," gentlemen, is, so to speak, surrounded with its four conditions. In other words, gentlemen, the -- the new sentence of the Renaissance, from 1500, under which you naively live--you think science is good -- good thing--is conditioned un- -- on -- by these four tenets. In other words, gentlemen, science is an activity inside the Christian era. It is a -- an activity which can only go on within the tradition of Christianity. Because only in Christianity is the complete solidarity of all men, you see, the underground. It's the basis of all processes of any undertaking. Also this interplay, gentlemen, between laity and clergy. Today this is forgotten, gentlemen, but you can see that the scientist still naively believes that the uneducated person will look up to him. Now you just go with a truck driver through New Hampshire -- for -- for -- and -- for some ride. And you will see that this is fast disappearing. The mob has no respect for colleges or universities in this country. They hate it. They make better money, too. And they say, "Why should we be hampered or restrained by any such things?" You naively still live on the faith that everybody in the land loves science, you see. You will be much surprised. The witch-hunting today is a -- a way of turning against any intellectual activity which -- which makes people different from anyb- -- everybody else. A friend of mine traveled on such a truck { }--that's why I'm quoting this--from Manchester here to -- to Hanover. And he came into my room, pale, and said, "For the first time, I've met with a real mass man." An adherent of Mr. Curley. And -- oh, if these people, as they feel now after the Truman election,

say, "We can do without the intelligentsia, because all the educated people, you see, never -- thought that Truman never could be elected," the intellectuals are counted out. Not only the Republicans, but all the people in the higher brackets of -- you see, of the intellect. And these people there, they just coerce science. Look at this howl that went up because this man got a scholarship for studying physics, the other day, you remember? Just studying -- physics, because he said he was a Communist. The mass just says -- goes into a -- the worst kind of inquisition. They say, "No science," you see. They -- they'll -- you see, every tenet is -- is there -- is there destroyed. This man will go into production of atom -- of -- of -- atomic fission, you see. He just wants to study theoretically. So the -- the mob turned against him and said, "No solidarity of all people," you see. "Not everybody can know." Making science into a secret thing again, with which you poison your neighbor. And no respect for the scientific process, as something that would in itself ennoble the spirit and thereby lift this man probably above partisanship, you see.

Every -- every tenet of these four tenets today is certainly abandoned in this country. Within five minutes it has happened. Everything has happened with -- with such rapidity, that I have to warn you, gentlemen: we could know that this was happening in Europe for a long time; you have lived in a -- very naively in the faith of your forefathers in 1870 with the optimism that everything was going fine. Going to the best. But we saw what the arrogance of the scientist did to the people. In -- in Europe, there is a hatred of all the ethical premises of science, because they are nihilists. They are atheists. They really think that science is power.

I lost my job as the founder of the Academy of Labor in -- in Frankfurt on this very real tenet. I had to educate labor leaders with a university education. It was a new experiment. And I said, "Knowledge is given under these conditions." The labor leader -- the Marxian man however said, from their point, quite rightly, "Knowledge is power; science is power. And we want to give our labor leaders power," you see.

And I said, "I'm not interested in power. The mind has an ennobling quality, you see, but I don't care whether it gives them power."

They didn't understand this, of course. And so there was a real issue for one year--there was tremendous struggle on--on this very real distinction, you see, between a science that is pruned and a science that is private. You have to choose, gentlemen, between science as power against which all societies and all peoples must rebel. If science is power, then everybody will say, "Why should

you get the power?" you see. "You-- I make you more powerful than myself. I weaken myself."

That's what happens today when you give your children into the hands of experts. Here, five mothers in New York, in a suburb, got together and had a kindergarten--or seven mothers; I don't know the number--and took turns and educated in this kindergarten the nursery their children twice a week. And they were very happy.

But one of them read psychology. So they invited an expert, and the expert scolded these mothers, and gave them a terrible rubbing, and said -- drubbing, and said, "You have to hire a trained psychologist for this kindergarten, because a mother is either partisan to her children, or she's partisan to the other children. Only the psychologist can be objective."

And these dear mothers, with tears in their eyes, hired an expert, they wasted their money, enslaved their children, objectified these poor guinea pigs, and gave them to a psychologist--I don't know who she was; either she was a normal person, then she was partisan, because every human being likes some people more than others; or if she was objective, to hell with her, you see. She shouldn't have been in a nur- -- in a kindergarten. And they believed it, too. That's so incredible. These poor mothers, against what they had achieved, this was running very smoothly. They sit at home now, and took a secretarial job, or something else equally silly, or typed, instead of educating their children, because somebody had wanted power.

What did the psychology want? Power. Nothing else. Of course, psychoanalysts today, psychologists, sociologists all want power. They want an important place in society. The army at this moment is beleaguered by these -- by these people. They want power. They tell them they can do things which the officers can't do. In every administration, any factory, beleaguered by these -- by these people, and they say, "Give us an office," you see. "Pay us well. Power. Power." They never ask, "Couldn't the thing be done by the normally by -- by anybody?" you see. A good doctor makes himself superfluous. A good teacher -- I tell you, gentlemen, frankly: your parents should teach you what I tell you. It's a pity that I have to teach you this. You listen to me much less avidly, but your parents just don't do it, so I'm only substituting for your parents. But I know that it would be a much healthier society if I hadn't to teach {the students}.

That is, gentlemen, a decent man in the circulation of thought always tries to make himself superfluous. A good scientist is a man who says, "It would be

better if everybody knew." Then we wouldn't have to have an expert. And an indecent scientist will always say, "Only I know. You don't. You have to hire me." There you get to -- back to the four tenets. You see, this is a flow -- a constant flow. Any good scientist says, "Well, I'm sorry. Really, you all should know." And so he shouts from the hilltops, "This is true!" and makes everybody, you see, acquainted with it as fast as possible. But the power seeker says, "You can't know. You have to hire me, you see. It's a secret. It's a -- takes expert knowledge."

In every one of you and me, gentlemen, there is this constant battle between devil and God, the angel and the demon. Every one of us wants to hold onto his truth and say, "Nobody else knows." And the better part in us says, "Everybody should know." Can you see this?

Gentlemen, the -- the clear division between the wrong scientist and the right scientist is always very easily found out. If the scientist says, "I should make myself superfluous," he is in the right direction, you see. If he says, "I am -- I shall remain indispensable; we want to have a society run by experts," look -- watch out. He has not the right relation to his own truth. He thinks he has this truth; it's his property, you see. Whereas real science, gentlemen, says, "I'm only starting the circulation of thought through society." Yes?

Now we come to the last renewal, gentlemen, of the concept of ego. That ego can say "ego," or "I," which knows that he is only one moment in the -- one phase in the circulation of thought. The painter who creates a new {taste} in his picture, and says, "{Pinxit -- pinxi}; I have painted it," you see, wants you to enjoy it not only, but to share his views, to get his eyes. Fifty years later, everybody will see the blue of Picasso, which { } painted there in the picture yesterday in the exhibition. Today it is still a rare thing to see a person in blue. Have you seen the picture? Well, you'd better go to the exhibition.

And -- in other words, gentlemen, the ego which is sanctified by the scientific and the artistic achievement is the ego which wants to be a link in the -- or a -- the eye of the needle--or how do you call the point in the -- in the -- where the sand runs down? you have this -- the hourglass -- in the hourglass, you see. "I" is a necessary evil. All "I's," when they speak, when they think, when they doubt, when they suffer, when they rule, when they teach, when they play, they all know that the sins have just come upon them, you see, because nobody else does it. That it should -- would be better if you could distribute the load on everybody. "I" is always sanctified when it takes itself as a temporary state in the circulation of thought. It must go on from "I" to "we."

So gentlemen, that's why the mass man's "I" is no "I." He wants to have it all, forever. He has property. He's a taxpayer. He has it all deeded to him. He has it. He owns it, you see. "My idea." The scientist, however, is only that man who says, "At this moment, I am the first to say it," you see. "Then I want some to know, and then they must carry it on that many can know it, and then all." You see the difference between this "I"?

"I" is within context, gentlemen. The moral "I" is an "I" that sighs and suffers under its necessity of saying, "I." It says it reluctantly. It says it only because nobody else will say it. The ego then, gentlemen, is not an egotist to --. If the artist says, "I," and then -- when Jesus says, "But I tell you," He says it in an emergency, because the old Israel is dead, and the new Church has to be founded, and in His generation, He is the only one who says it. So He becomes the seed. Gentlemen, the ego is the fruit of the old, and the seed of the new. And it takes the form of the "I" in the same sense in which a seed is between an old apple tree and the next apple tree.

Can you see this? Therefore, gentlemen, that hardest part of us, the ego, is the most organic; it's the most fruit-bearing. If you really are only using the term "ego," you see, when you represent the truth in its met- -- transformation, in its moment where nobody else will say it, you are in the great stream of -- you see, of before and after. You represent only this moment in which the truth is only vested in you. But the condition of its being vested in you is that before it was -- belonged to many, and afterwards it belongs to many.

The ego then, gentlemen, is always a social phenomenon. Ego in science is not somebody, as an individual, cut off from the rest of society. Ego is -- quite to the contrary, the most implanted, the most rooted person. He is not an intellectual as they -- call themselves in -- in New York, now. An intellectual and a scientist are as far apart, gentlemen, as a louse is from a cornfield.

Never become intellectuals, gentlemen, but become egos who, in an emergency in your city or so, say what nobody else wants to say, you see. But say, "I have to tell you that you are corrupt." That's not intellectual, you see, but that is taking upon yourself in a personal expression, you see, what before you thought everybody knew, and which has now been forgotten, and which you now have to bring back into circulation. Yes? The ego then, gentlemen, is the transformer of thought. When thought has died out of the body politic, the ego is the re-initiation, or the re-ignition of a spirit in a community.

So please begin to de- -- understand, gentlemen, that the fall of man has --

that has occurred in 1900, and that -- kills your spirit, gentlemen, is that you think that everybody is an ego. But you know already from the circulation of thought that it takes four stages before you -- anybody becomes an ego. Before he can doubt, he must have listened, read, learned, played. You remember? Therefore the real ego, gentlemen, is the social functionary. Let me have a stop here.

[tape interruption]

...problem, the whole tree of knowledge already stood clearly conceived, St. Augustine. You remember that we talked of St. Augustine before. The relation of chapel and laboratory, the relation of dogma and natural science, the relation of the condition of pruning the ego into a social functionary and then the workings of the ego in the field of research, was understood by Augustine. And he also set the pattern for the future. And I wish to devote today our -- this -- the remaining time to attempt to show you that it is possible in 420- -- -20 of our era, to foresee the next 1500 years, and to s- -- to proclaim what should be done. And that's very important, gentlemen, because we can know today what we have to do --. If we take this whole picture in, may we begin to believe, gentlemen, that you and I have to become organic substance, bearing our fruit, becoming "I's" in season, thinking when we should think, saying "I" when we should say "I," and saying "we" when it is ripe. This is -- once you treat your own brain, gentlemen, as organic substance, you will feel a new feeling of sanctification, if I may use -- or consecration.

Today I received a letter from Switzerland -- offering me to write a -- a variety of articles. All little -- themes for freshmen, for practice, so to speak. I had offered this man an article which grew out of my life, of my -- the -- of the -- from the point which I'm holding out today. Certain things even mentioned here -- treated here in class. He doesn't understand this, so I have to write him back, "I'm not a journalist. I cannot write for payment. If you want to pay me for that which grows on my tree, in season, I'm very happy, if it just so fits. But you cannot order articles from me at random for 15 francs a page. That's ridiculous. I'm not a man who sells his apples, because I have first to grow them. The people who can sell apples are people who steal them from me."

That is done amply. Most people today are imitators. They think other people's thoughts and wrap them in a nice paper, and sell it as a short story to the Saturday Evening Post. All right. Nobody takes this very seriously. They

have a good life in this world, but not in the life hereafter.

But gentlemen, as long as you really think that people like Vincent {Sheehan} or such journalists are the salt of the earth, you don't know what salt is, you don't know what mind is, you don't know what life is, you don't know what the circulation of thought is, you don't know how mankind is kept together. Mankind is kept together by people who grow in season, and bring forth their fruits. Whether they are liked or not; they wait until somebody says, "That's a good red apple. May we taste of it?"

It is incredible, this idea which you have, that you can put the mind to order; you see, you can deliver the goods, because somebody gives you a thousand dollars. I think I told you the story of this man who wanted to found the Peace of Society on the fund of \$50 million, put in the middle of the world somewhere, and then given to the big minds so that they would just jump like dogs at this fat bone, and -- in order to get \$10,000 from this fund, they would do miracles. { }. That isn't the way miracles are done. The miracle in -- in creation is man. And the miracle of man is that he grows. And the miracle of man is that he grows in season, when the time has come in his life. And if you try to make a child prodigy out of him, you ruin him. And that's what is done here in this country. Everybody says, "Oh, I pay you for this; write a poem." They do; they write poems. But what poems, you see.

It's like the undertaker who says, "If you pay me \$50, -- the blessed one looks like an angel. If you pay me 20, he looks like a devil." And they do it, too. Gentlemen, this is more important than everything I can tell you, this problem of man as a tree. The tree of life, gentlemen, of the Bible takes -- is redeemed -- is real if you and I are bearing fruit in season. If you follow these Ten Commandments of education in your life, and if mankind as a whole goes in his appointed way. If -- as soon as the tree of life becomes something to manipulate, outside of you and me, by will, by mere will, you see, by mere planning, mankind is in an atrocious way. As soon as you -- this -- do this, you get concentration camps, you get war, you get capitalistic exploitation, you get soil erosion, because it isn't organic what you are doing. Your mind is working feverishly outside the organic life of your whole being, gentlemen. When is the mind organic? When the whole man--your genitals just as much as your heart, and your shoulders, and your hands--are in this mental process. And the safest thing is, when a man speaks in the face of death, and danger, you may be inclined to give him more of a hearing than if he says it just in an after-dinner remark, you see, remark.

Cultivate, gentlemen, the organic substance which you yourself are. Don't treat yourself as will and reason. Treat yourself as soil, and you will recover. You will not have a nervous breakdown.

Now St. Augustine said this very simply, and very { }. And he said, "Man must love four -- in four different ways. He must love above himself, he must love himself, he must love that which -- those who are like himself, and he must love below himself." There are four ways of loving, gentlemen: above; below; ourselves; well, neighbors, our neighbors, perhaps. It's a dangerous word, "neighbor." Most people have strange ideas about neighbors. Perhaps we'd better transcribe it: he didn't say "neighbors." He said, "That -- those who are on one level with us." "Our equals" perhaps is better -- better.

Now gentlemen, the four tenets which I have given you--as the -- dogma pre- -- preceding science, basic to science--are nothing but the transcription of St. Augustine's four. Why? You see, the scientist always omits the one tenet, the one dogma without which no scientist can exist for a minute, no academy of science, no laboratory can { }. That the -- the {mere} man in us will look up to the scientist with longing and yearning and say, "This is what I would love to do." The respect in which the scientist is held, you see, which the scientist always ignores as a tremendous social creation, the respect for truth, this willingness of the laity to hear new things which are truer than the old, you see, and not { }. So gentlemen, we -- I made this tenet Number 4. St. Augustine's first tenet, "Look up to higher truth, and love it," something that goes against your interest, you see, must be loved. Otherwise science has no place in society. Most of you cannot understand this, gentlemen. You all think science is something by itself. But no scientist would have leisure if he had to be a factory worker. So the factory worker must be willing to pay taxes in order that the Smithsonian Institute can go on. Don't you see that the worker first must believe in the importance of truth, you see, before there can be research. If there wasn't -- if you have no respect for such { }, so there is no science today in { }, or in -- in { }, you see. There just isn't. They have no respect for research. Everything is proclaimed by Allah -- by Mo- -- by Mohammed; what is in the Koran is good, and what is not in the Koran is bad; so why research? Can you see this?

It is not true, gentlemen, that the first dogma--that man must love those things that are above him--are natural things. They have to be drilled into every newborn man, because by himself he doesn't have this love. The love of God, gentlemen, is not in man.

And therefore, gentlemen, the whole Middle Ages are concerned with drilling into man these two things: the love of neighbor, here; and love of the above. And I'll give you the reason. St. Augustine said, "This is the first thing you had to do, to make it as normal for a person to love truth for its own sake, and his neighbor as himself"--he adds a wonderful sentence. Perhaps you take this down. St. Augustine said, "We have to live in four -- love in four ways: above, below, equal, and self." Equal and above has to be taught. Self and below is natural. Every man loves possessions; every man loves gold; everyone loves power. That's all below man, the needs. You all love gadgets. That's natural. Nobody has to be taught. Every child wants to have an airplane. The love of lower things is normal. We all want to have things, and love -- we love them. We strut.

So, gentlemen, St. Augustine thought that these two loves would have first to be added to the quadrilateral of the full humanity of a man. Man is man if he has these four affections. You can take this down. Man is man if he has these four affections: affection for that which is higher, affection for that which is lower, affection for himself, and affection for his equal or neighbor.

Now gentlemen, from 1100 to 1500, the additional educational process has been perpetrated, so that in 1500, people could imagine that everybody love in these four ways. As soon as this was completed, that 1 and 3 were seen as normal for a Christian as 2 and 4, you had a new start of the second cycle. Man, the scientist, came to the fore. That is, man who had these four forces in balance, you see, and therefore who could now explore -- what? Four. The below. The exploration of nature, the exploration of the natural sciences--of the academic way, of research--is based on the love of the lower. It's an attempt to show that the lower already is the higher. It's an attempt to show that the cell is already the whole body, that the snake is already the ape, you see. It explains the higher by the lower, which comes from an un- -- you may say exaggerated love of the lower. This love became, however, perfectly reasonable after the scientist seemed to have learned that he himself had to have the love of these four things. Love of truth, higher than my -- my own interest in myself, you see. Love of all neighbors, you see. Love of -- true love of your real self--we come to this in a minute. And love of the lower, the atoms, the stars, the dead things, too.

So gentlemen, St. Augustine said -- still thought that this has to be taught.

One and 3 -- in 1500, 1 and 3 have been taught so successfully, that now the exploration of the lower could be reinstated, you see. under the condition that every scientist would keep the equilibrium of 1, 2, 3, and 4--that's the condition of natural science. Can you see this perhaps now? That the exploration of the

lower, gentlemen, is predicated on the co-existence and the equilibrium of all the four affections. One -- what do we see today, gentlemen? The love of self has disappeared. People commit suicide. Hitler did commit suicide. Whole na- -- I mean, thousands of Jews have committed suicide in or- -- to escape from Hitler's torture chamber. Can you blame them? We have schizophrenia. We have disintegration of personality. What is it? No love of self, you see.

True self has now to be discovered in the next phase, in society. The true love of self, gentlemen, depends on this poor self being re-implanted as a functional "I" in society, as an organic substance. The self otherwise disintegrates. The next phase of St. Augustine's great prophecy of the four affections of mankind--of which some have to be taught and some have to be -- can be premised--is today that man has so much lost his nature, that he doesn't love self. Most people are unable to love themselves, gentlemen. That's what is wrong with you. You are pathetically uninterested, because you don't love yourself enough, in the true sense of this word. You have no ambitions. You don't want to become president of the United States anymore. You are uninteresting. Who is uninteresting, gentlemen? Uninteresting is a man who thinks he is already in existence. Interesting is a man who thinks he has never existed before today. I still think so, gentlemen. I am a great surprise to myself every morning. It is very remarkable that we should still live, and live differently from yesterday. But you think it's all known: it's all on file; your fingerprints are taken; your measurements, you see. And so you say you are all finished. Everybody knows all -- everything about you. Gentlemen, if everybody else knows you, you have ceased to live. Gentlemen, a man who is universally known has ceased to live. And he can't love himself anymore. Love is based on secret. You can't love yourself if you have no secret. A man who is kno- -- universally known, universally planned, universally begotten, universally measured, universally standardized is a man who cannot love himself. Because he is looked into from somebody ex- -- from outside, you see. And -- light destroys growth. Light destroys growth. Enlightenment destroys growth of your humanity. Man can only be interesting as long as he thinks he is the head of his environment and says, "I know something which the other people don't know about myself. I'm going to show you." The only interesting people are those who still don't know who they are. And have a deep feeling of shame, and embarrassment, and bashfulness because it will be revealed tomorrow, who they really are. They haven't yet heard what's coming. Most of you, gentlemen, could have this quality; if you would only believe it.

For -- gentlemen, St. Augustine also said the second wonderful thing

about this love of self: the love of self is like peace. And peace and self-love have two qualities--the right self-love. Two strange -- have a one -- one strange quality, gentlemen. Whereas in any other ambition or desire, that which you wish is, when you wish it, far away. The -- love of self and the wish for peace enters you because you -- the wish for peace is already the presence of peace. Any man who desires peace has it. That's a very mysterious sentence. You -- you want a million dollars. Well, you don't have it. You have this wish of getting a million dollars, but it is there, somewhere outside. You have to bring it to you. Before, you don't have it; it's nonsense. The wish and the having is -- is separate. Not so with any peace-seeking {individual, gentlemen}. He who longs for peace begins to have it. There is no other peace but that which is longed for.

So gentlemen, the last cycle of mankind has to do with peace and war, and the problem of self-love. The social sciences--of course, what else could they do?--are the { } -- as they are seen. How can man rightly love himself, you see? Under what conditions does he love himself? We have studied how we love the truth in the Middle Ages. First cycle, { } chapel. We have loved in the laboratory; how can man love that which is below, the { }, the animals, the stones, geology, I mean, the land, the stars. That's all below us.

Now gentlemen, the question of the third cycle is very simple, gentlemen.

When do we love us best? And you know already when we love us best. Oh, I'm sorry. Put it down. That's below us.

Gentlemen, when do we love ourselves, Number 4 of St. Augustine? Best.

We don't love ourselves best when we are lazy, and loafing alone with our own sex troubles and our own appetites in a room. We don't. We hate ourselves. We have no peace at that moment. We have no -- lest -- even -- peace not in -- at a cocktail party. We may drown ourselves -- we may intoxicate ourselves, and thereby have a fictitious peace through alcohol. But we really have no peace, because we are self-conscious. There are five people talking; at least I have been introduced to them, and we don't know what to say. So you eye them; you say if they -- what are they saying? You see, you try to be social, and -- and you are left out in the cold. This may -- mo- -- half of the people who go to any party are terribly self-conscious. And the rest is drunk.

We don't love ourselves in this condition, gentlemen. We love ourselves perhaps at work, when we do a good job. But gentlemen, everybody loves himself in a heroic and self-forgetful moment of -- of generous action. You love yourself in -- and you may love yourself, when you help the beggar, when you act as the Good Samaritan, when you forget yourself, when you are in battle and

lead your men across the parapet. This is the only allowed love, gentlemen, when the "I" is functioning in this creative setting in which I have tried to show you, as fruit and seed. At that moment, everybody must love himself. Jesus, and every great inventor, has to fight for his survival, if he is seed and fruit, you see. He has the right to brush aside hindrances, you see, and to do what his genius commands. You see, he has -- is not bound by the law of old. He can trespass. He can go where no other man has gone, because he is responsible for his- -- himself, for his own survival. Nobody else can show him the road.

Gentlemen, that is self-love. All self-love then is justified as to the degree of pressure that is on you and me. That self which is really functional at one moment as the -- fruit and seed of life. A mother that -- that fights for her pregnancy and for the -- the place in which she has to give birth to her child, she must steal and rob, and get her place, and her bread and butter for her child. Otherwise she wouldn't be normal. And you expect a mother to fight like a lioness for her cub. And that is for herself, too, because she must feed this child. She must give birth to the child. A mother is not selfish when she represents this -- this link in the chain of the human race. Can you see this? But this same woman, if she is just a -- a harlot and is selfish in taking money from every man to embellish herself, and to look -- use lipstick, she's terrible. She has a wrong self-love. The same woman, gentlemen, has a righteous self-love and a wrong self-love. Can you see this?

You are all brought up under this terrible tradition that man has to be altruistic, and not egotistic. I -- but I tell you this is all nonsense. Nobody is altruistic. I am not, and I don't wish to be. I am told that I shall love my neighbor as myself. The condition for this is that I must love myself. How can I love my neighbor as myself if I don't love myself?

This is the -- the secular, humanistic idiocy made out of a true Gospel statement. "Love your neighbor as yourself" is truth. "Be altruistic and not -- be not egotistic" is ridiculous. Leads always to a nervous breakdown. All these women who try to be selfless, they take it out in their family and become dragons. Generation of vipers. Beware -- protect yourself against selfless people, gentlemen. The -- the selfless people are just the people who don't let their lower viscera and genitals come into -- the consciousness of their upper mind. Up to here, they are selfless. And down there, they aren't. How can they? -- Hasn't God created you? Aren't you a creature? How can you be selfless? Terrible idea. But this is the -- little red schoolhouse. All these poor schoolteachers who teach you of course can't have self. Poor people.

You have absorbed this so deeply, gentlemen, that the future of society depends on your courage to know self-love. To love yourself, gentlemen, is the tremendous task of the future. And there are four tenets, gentlemen. First, the heroic self is lovable. Self out of context is the beast from the abyss. The opposite, Number 4; just below our self. We fall. Self out of context, you see, out of -- out of loving others, you see. The heroic self is he who is in love with others. In between there is the fellowship of -- of -- of work, and the fellowship of play. And these are moderate, modest stages. Cooperation, which is in this country at this moment considered the highest, is not the highest, gentlemen. Any sacrifice for you -- for -- your comrade is higher than this -- cooperation eight hours a day. That's only second. And cocktail party, "Get along with," "Be a nice fellow" is only third-rate. And fourth-rate is to be -- an individual; that's a dangerous man. A man who wants to -- to be -- to be alone, and thinks he's -- best at his leisure when he collects stamps. Even the president of the United States was a little boy when he collected stamps, and he ruined the whole industry by printing too many new stamps.

What time is it?

(Quarter of { }.)

Well, would you give me just a few minutes to -- to close this up? I have to strain your -- attention; I know it. But you can see the theme is overflowing all the bounds of just one term.

The addition of the above and neighborly love is the achievement of the discipline of chapel. It made, gentlemen -- the Middle Ages made the love of neighbors--think of marriage, think of the -- you see, of the treatment of the woman, there--made the love of neighbor into a reality. It became equally important that the woman should have a voice in the matter than the husband, for example. It's a very small example. That the -- the Church should have a voice as much as the state in all -- every matter.

Therefore gentlemen, the Mid- -- Middle Ages brought the love of truth and the love of neighbor into every human heart. When this has become -- had become commonplace--by 1500, you see--a new cycle starts. The first cycle, concords love of neighbor, gentlemen, and love of myself under the truth of God. "Concording" means to make love of neighbor--you remember, the process of concording, you see--and love of self equally important. That's concordance. They are one heart and one soul. It's literally this, you see: St. Augustine's way of affection: love yourself and love your neighbor. Love your equal. If you do this,

you have concorded two different truths, you see, in a super-logic.

So gentlemen, concording or super-logic is the instrument of the Middle Ages. Now gentlemen, the second--love below--is super-mathematics. It's the mathematics of the calculus which says that although the below is below, it already contains an infinitesimal item of the higher. You have an animal; it is already nearly, they say, a man. You have a cell, it is already nearly something psychological. The whole idea of natural science, gentlemen, is: infinitesimal, based on infinity, on the assumption that infinitesimal small is already the beginning of the higher. You love -- we love in natural science, gentlemen, the lowest because we see in it an infinitesimal beginning of the highest. Can you see this? Once you have gotten this, gentlemen, you will no longer idolize natural science, because you will see it's just one attitude, one tendency. Of course you can -- love the lowest. It's a wonderful thing, to love it. But you only love it because you see in it already an infinitesimal step towards the highest, for which you have to know what the highest is. The lowest cannot tell you. Can you see this? The infinitesimal itself cannot explain the highest, if you haven't experienced the highest. A man who hasn't known -- doesn't know what truth is, can never derive it from his glands, you see, because the glands are only an infinitesimal tool for perhaps getting to the truth.

But modern man is lost, because he doesn't see the connection between 1, 2, 3, and 4. Gentlemen, mathematics are really a super-mathematics, or a super-arithmetic--put it this way, super-logic, super-arithmetic--because algebra--modern algebra says that in every infinitesimal, infinitely small unit, there is already the germ of the highest, of the complete world, of everything. Super-arithmetic. Now gentlemen, what we need today is a super-grammar. The super-grammar, gentlemen, of the future, must explain self-love. There can be no society, gentlemen, except composed by people who love themselves. Otherwise the society is a mob. The difference, gentlemen, of the social sciences in the future is based on the assumption that we learn to distinguish between a mob and a people. People or society must consist of people who can love each -- themselves, you see. If you have people who hate each -- themselves, they are very dangerous, you see. Hitler hated himself, you see, so he -- so he destroyed the world. And he showed that he hated himself by committing suicide. It's very simple.

Self-hate, gentlemen, is today the dynamite of society. Therefore, you have to develop a science of which I am going to talk next time--and I'm -- these comprehensives there -- I'm quite resentful that I can't get them into this class,

because that's of course in away the key to everything I have said. Next time, we will speak of the super-grammar of self-love, gentlemen, of the next cycle.

{ } = word or expression can't be understood

{word} = hard to understand, might be this

(Philosophy 10, May 23rd, 1949.)

...I'm not reading this report so that we may concentrate--where is he?--so that your report may not confuse the issue.

We said that each of the cycles will have its own tool. Mathematics, I said, is super-arithmetic--remember?--because it deals with the infinite, and it needs the infinitesimal small in order to see in the things below us already inklings of the highest. If the modern biologist discovers gravity, or light, or movement in the atom, he thinks then that he can explain even the highest life by the lowest. But he can only do so by the conception of the infinitesimal small, because only in this way does he feign a connection between our movement up to higher things, and our looking down to the smallest. It's a tremendous gap between the atom and your own heart, your own feelings. And yet, the biologist tells you, "Oh, with the help of the concept of infinity can I - am I able to bridge this gap." He loves the small and brings it into con- — connection with everything else in our — around us, by this one conception which changes, gentlemen, the multiplication table into mathematics. In the — multiplication table, the conception of the infinite doesn't exist: 2 and 2 is 4; 5 times 5 is 25 — these are all simple operations of addition, subtraction, multiplication, and division, gentlemen.

And in all these realms, as they were — arithmetic was used before 1500, the concept of transition from the lower to the higher cannot take place, because there is no infinitesimal, you see. It is only by the concept of the infinitesimal that you can, for example, come from a point to a line, in mathematics from a line to tri- a - to a -- to an area, and from an area to a cube, you see. An infinitesimal number of points: that would give a line, isn't it true? The transition is really not logical, gentlemen. It's a jump. The concept of the infinity - of infinity, if you once come to think of it--you have never thought of it--is one of the boldest inventions of the human mind, because it is an attempt to deny -- mutually exclusive thoughts. A point and a line--or a - - an area and a body--have nothing in common. It's just - one is two-dimensional, and the other is - three-dimensional. And when you {came to life}, that's four-dimensional. Even in the context of modern mathematics, it - also begins time, the time element, you see. The transition can only be made by the conception of infinity, with which the three dimensions, and four dimensions, and two dimensions, and one dimension, and no dimension are still put into some connection. An infinit- - an infinite number of points would be a line, or you can define a "line" as consisting of an infinite

number of — ? What is a line, do you remember? It is an infinite number of points.

Ja, you don't give a damn; you say that's fiction. Wie? Well, but he's refuted; he just doesn't work. That's logic, not mathematics. A mathematician, you see -- Zeno is — was not a mathematician; that's pure logic. Logically it cannot be proven. But mathematically you figure; you go with it all the time, with the { }.

Now gentlemen, in — in Middle Ages, we had the system of concurring, as I said. And I — the concordance of the Middle Ages is a super-logic. If you take the proposition in the Middle Ages that the soul of every person must be left free, for example, to marry, and it is logical then that the Church should take over with, and rule out, the influence of the clan. But we saw that two powers existed. * The worldly power taking hold of the material side of the family; and the Church — taking over the personal. Now in mere logic, gentlemen, the area is always too small. For example, in any political compromise, the logical position of every one party is usually perfect. But it doesn't include enough of reality, you see. Logically you can prove anything by mere logic, from your own point of view, you see. But another fellow says - and say, "I see -- the whole thing different- - my logic is different." Any two people have a different logic, because they see different positions from the start.

Or, gentlemen, put it this way: logic cannot prove its first proposition. It has to accept any one proposition as a starting point, and that's arbitrary, because every one of us has a different starting point. "All men are mortal. Socrates is mortal -- Socrates is a man, therefore he is mortal." It's very nice. But how about the spirit? There is obviously something in Socrates that's - doesn't seem to have died to this day. We still mention him, you see. If mortality would include the name of Socrates and his achievement, he would be included in his — in the deadliness. It would be included in the mortality of the man.

Now we only talk of Socrates because he's not just a man. The only reason why we still talk of - Socrates is therefore that he is not mortal. But logically, you can't prove this. If you once start with the proposition all men are mortal, down he goes to hell. And he must be forgotten, because so many men have lived, and we don't know their name, and they don't affect us anymore.

Now you take such - any such logical proposition. You are - very often intoxicated by logic, gentlemen. I have never been impressed by the syllogism -by the power of the syllogism. You take any starting point, you see; you couldn't prove anything from that. Ma- -- of course, Socrates is a man. But gentlemen,

nobqdy is just a man. That's just it, you see. And you know it. You yourself are not just a man. There's something divine in you which is just not explained by your being a man. You are a man plus something else. What, I leave open at this moment, you see.

But you can say of another man, "Oh, he's just a Pole." Well, this Pole will slap you in the face and he says, "I'm — besides, I am a fighter. Besides, I am your enemy. Besides, I am a disturbance. Besides, I challenge you," you see. "I'm as good an American as you."

Perhaps you have read in the New Yorker, the article by Mr. {Remington}, where he is there accused before the loyalty board. Have you — has anybody read him? Who has? Oh, how interesting. This is -- alumnus of Dartmouth College, as you know, William {Remington}. And his case has been written up last week there, his loyalty case, in the New Yorker. It's a great study in humanity, because gentlemen, William {Remington} appears before the board and is - - examined for his loyalty, and he says, "I could have swapped with any man on the board. I could have just as well doubted his loyalty. We — I found myself in the funny position that being once accused, I am tested for my loyalty. But since the whole thing is a moral issue, any one of these men, you see, could just as well have been criticized by me for his loyalty. I might have been his judge."

I felt the same when I was investigated. Why? I just made the mistake of not attacking first, not telling that — that they were red. I could have just, with, the same reason, told everyone in this room, or anyone in the college, that they were reds as 1 { } say this, or perhaps with even more reason.

But gentlemen, once you are labeled, logically, under one category--never forget this--once you are labeled, that you are the accused, the logic is that you have to prove, you see, that what they say of you or tell of you is not true.

Therefore, gentlemen, logically, any accused is in great danger of being held to be guilty. Now as you know, we have as a remnant of the Middle Ages today still the super-logical principle that a man is not guilty unless so proved. In the loyalty board cases today, you know, the — the thing has been reversed. The man has to prove that he's innocent. And that made William {Remington} say this super-logic- - he makes this super-logical statement which is fundamental to the whole system of medieval and moral thinking, to this day, gentlemen, that although the man is already accused and suspect, you see, you have to — not logically draw the thing to the conclusion, "Oh, he hasn't proved his innocence";

therefore the label sticks. He is - "Oh, that's the man of whom they say he is a Communist," you see. We know today that this logic would - lead to disaster. The label of a man, gentlemen, must never be carried to its logical conclusion.

Now it is the great achievement of the Middle Ages, and that's my topic today-to develop a super-logic-which we have called so far "concordance." And I will give to you the fundamental discovery, which is at the beginning of this wisdom.

I don't know if I have also - -ready mentioned this. In - in the year 11- -in the 11th century, there was written a confession. Have I written — told you this story? The fundamental discovery, gentlemen, by which logic was replaced by concordance was a very simple technique. In the worldly courts, gentlemen, if a judge is entrusted with a case, he is not required to say to himself that this man and he are brothers, and my chan- -- might have to change places. But in the confession — which gave rise to the new science of theology and law in the Middle Ages, any confessor, any father...

[tape interruption]

...is only too happy that he is not suspect. In the human society, gentlemen, among grownups and I think it's the case with you in this college already; in this sense, you are grown up--your first reaction is: "This could have hap-pened to me. I might find myself in the same quandary." And of course, gentlemen, if a judge has a defendant who is accused of homicide, and his first reaction is: "I might have done this myself," what will be the effect on the -- on the -- on the judgment, on the proceedings? Instead of going, gentlemen, from the outside -. Here is the defendant, gentlemen. Take this as a circle, the periphery as which the man appears to his judge. Here the judge sits. And here is the defendant. The case is built up against him, and you can't look into this man's heart. He is shielded. He is obstinate. He says nothing. So all the means of third degree are brought against him. The prosecution says, "Look how suspicious this action," and "Look how suspicious the other action." All the evidence is focused around the label, "defendant." If the man is a defendant -- today in a loyalty {court}--every suspicion is at first true, as long as it isn't disproven.

Now take -- this is then the logic of the case, that since he is accused, all the evidence can be interpreted in his disfavor. What's the limitation for the judge? Look at all the modern dictatorial, autocratic countries, you see. Mr. Mindszenty is the cardinal of the Church, therefore suspicion is: first, there -that he already is a rebel, a traitor to a Communist government. He has a hard

time to disprove this.

Now gentlemen, take - so the judge sits there and focuses on this hard shell of the case: how it logically appears. The judge says, "Well, why should the state why should the prosecutor, why should the police have worried if this man isn't probably guilty? { } many people who are not in court I get this one man. I look at him with the idea that he probably has done something."

If the judge, gentlemen, however, uses super-logic, he suddenly starts in a - quite a different manner. He starts from here. If he searches his own heart and says "How would I have behaved in this position?" you see, he suddenly works the case up from the dark chambers of his own conscience into the periphery and say "How could it happen that I appear on the surface as the guilty one? And how can it happen to me that behind false appearances, an innocent heart is beating?"

And he will -- because he has wavered, and said, "Perhaps I'm guilty myself," also finds access to this road from the defendant to the appearance as a defendant.

The super-logic, gentlemen, of the conscience means that the man whom I am judging is inside myself. And as soon as - you have this conscience gentlemen, you have two starting points to judge any event in the world. You have the man as he appears from the outside. And you have the man as you identify yourself with him from the inside. And as soon as you have these two starting points, gentlemen, you have super-logic.

It is perfectly illogical that Judge {Medina} should think of Mr. {Dennis} as a brother. But to a certain extent you and I today expect that any modern judge does this, you see. Now no ancient judge had to do this. The ancient judge had just to be shown, you see, that something was missing, and the property was found in his - this man's - in this man's house; he was the thief. And you would have to hang him. That was logical, you see.

We still speak in this sense of "evidence," that what is evident, which can be seen You introduce Exhibit A and Exhibit B in a case, you see. These are all still pure logical proceedings. All detective stories are based on this primitive logic, you see. But a great novel, gentlemen, like *Les Misérables* by Victor Hugo, or - or *Raskolnikov*, by Dostoevsky, what do they do, gentlemen? What is the difference between Dostoevsky's *Crime and Punishment* and a detective story?

What?

(You say that you put yourself in the place-.)

That's the whole novel is written around. The whole novel is written around this difference, you see, between evidence and conscience.

So gentlemen, all super-logic introduces two points of view: one inner, one outer. Logic tells you: Socrates is a man, all men are mortal, therefore Socrates is mortal, you see. Superlogic tells you that's nonsense. It's a - it's a negligible statement. It has no value, the statement, you see, because the question, "Why you are talking of Socrates?" obviously is not finished, you see, by this logical proposition of — external evidence. Socrates has moved you and me in a special way, you see. And therefore we start from the inner Socrates, who could die with a good conscience. And that becomes our question, "How can a man, you see, die voluntarily, without minding?" And then the whole question of - of death and immortality changes completely its aspect. The whole aspect is — in Socrates is, gentlemen, that Socrates already during his life had acquired immunity against death. Whether we live or whether we die, the Bible says, makes no difference. And that is all you can wish for in your own life, gentlemen. At this moment, if you are fully in the - inspired, it doesn't make any difference to you whether you live or die. If you act right, at this moment, you would have to accept both solutions. Whether you are hit by a lightning at this moment, or whether you are spared, you see, that cannot alter the configuration and the meaning of your life, as far as it is given you, and granted you.

Death, gentlemen, has nothing to do with super-logic, but with logic it has, because -- death is something external. Take killing, take the act of — of --not of death, but of making die. There again, you can see that a man can be provoked, as a soldier, to kill a man. He can be forced to shoot at an enemy. He can have to execute, as an executor, a prisoner in the electric chair. He may have to take justice in his own hands and shoot a kidnaper who tries to kidnap his own children, you see. These acts on the outer evidence would be the same. But inside of these three men, the workings are all very different. And if you take a murderer as the first case, you see, there again somebody is slain. But would you ever mistake a man who acts in self-defense for a man who — who murders a man in cold blood? You wouldn't.

Why, gentlemen? Only from conscience, not from evidence. A human life

has been destroyed in both cases. And for the first time in the -do we find the distinction between intent and between -- accident That is gentlemen, our distinction between murder and homicide is a creation of the Middle Ages Only the new theology inspired the lawyers in Bologna to that extent that from then on there was made, you see, a distinction between homicide and murder. There was made a distinction, also, between burglary and petty larceny. If you take a piece of bread from a baker's shop to feed your child, the -medieval doc- - new doctrines taught, you do not do the same as when you steal a purse Before, gentlemen, 1100, theft was theft. And the only distinction was secret theft or burglary. If you take something by violence, then the man from whom you take it knows that you are taking it, you see. Or you are a pick-pocket, then the man doesn't know, and you try to hide, you see. So gentlemen, before 1100, the distinction in all crimes was secret crime or open crime. Perhaps you take this down. After 1100, the distinction as we have it now - inherited it, is intent, or - how would you call the other case, what s the official legal term if there is no intent? Well --.

(Un-premeditated.)

Wie? Un-premeditated, ja.

As you know, we have this case right now here in the college, where this is all -- the whole story. Unpremeditated.

In 1100, the -- this distinction was unknown. Today you take it for granted. It is the work of the medieval university, gentlemen, to have superseded logic and evidence, you see, by super-logic and conscience. Because, if the judge says, "Every crime I might have committed myself," the line from here to here becomes all-important, gentlemen. This line from the heart to the hand is the line of intent, you see. The hand acts both ways in the same manner. You see, somebody is killed. It is only in -- in the relation of the hand to the heart that you discover the real meaning of the crime. Now you can only discover intent in anybody, gentlemen, if you have the courage to identify yourself with the man. Because we don't look into another man's heart except through our own.

So it is high time, gentlemen, that you discover that this empty phrase of the "brotherhood of man" is not an empty phrase, that even our legal proceedings have incorporated it, that the "brotherhood of man" is an all-pervading principle of human existence today, and it wasn't at one time. Our modern insti-

tutions, gentlemen, have absorbed the doctrine of intent. We are today, however, backsliding. It has been weakened by appearances. We categorize people into DPs, and into Germans, and into Negroes again, and into all kind of minority groups. And in this moment, you drop intent, you see, and you go back to evidence. A man in the state department, you may have read, was fired because his cousin is a Communist. There any -- any application of medieval principles is dropped. The man is dismissed on the evidence of an evident, transparent tie with somebody who is a Communist, you see. The external lines of communication alone prevail. The inner relation of this man to his cousin cannot even be mentioned. It plays no part, you see. It's all evidence, you see, and no insight, and no intent, and no conscience.

The whole Church, gentlemen, is based on the congregational principle: con- -- that consciences meet. If you have segregation in the churches today, the churches have given up the -- the building up of their church from the inside of the human heart -- of human hearts to the outer evidence of social groupings and -- and { }.

So gentlemen, the introduction of more and more conscience is then the process or the progress of science in the Middle Ages. If you can more and more dismiss evidence and put conscience in its place, men grow more and more identified. They become more and more brothers. That's the content, gentlemen, of the march of civilization from 1100 to 1500.

May I remind you that I'm only repeating the process by which science of nature has become possible. You remember that we said a scientist must think that everybody will think the same in his place. He must think that it is -- benefits everybody. He must think that everybody will look up to science as the greater and valuable and desirable truth, you see. And he must think that all are heading in the same progressive direction by promoting science.

Now gentlemen, this kind of brotherhood, of the scientific -- fellowship, had to be prepared by the development of a highly refined conscience. I'm only repeating today--and I've delayed the identification so that you might see how -- in how many ways this can be expressed--the -- the scientific progress of the Middle Ages, gentlemen, is based on the identification of all men. And that's a slow process, a very slow process. It has taken 400 years. And in 400 years, we have nearly wasted this capital today. You have to restore it inside yourself. That's what Mr. Merton, for example, in his Seven-Storey Mountain obviously

tries to do again. There's nothing new about Mr. Merton's books. It is terribly archaic, as I think -- when I read them. There's nothing startling in them. But he can bring back to you the inner road of the human soul toward the outer world, which is completely lost. You all are back to 1100, because you all judge by evidence-- or at least you are told to judge by evidence, through all our illustrated magazines. You really think that a six-foot-four-inch tall man must be the better man.

The Bible says that it is easy to be hospitable to a rich man, but it is very difficult to be really hospitable and brotherly to a dirty man. The King James Version s- -- of course cannot stand such a -- such a statement, so it says, "to a poor man." But the Old -- New Testament is much more drastic against the evidence, and says, "a dirty man," a man who hasn't washed. It is very difficult to get him to your table, you see.

Now we have here -- you see, you see how -- how modern -- the modern Christians have escaped even the simple distinction between evidence and intent, and conscience by simply replacing the word "dirty" in the Bi- -- biblical text by "poverty." Oh, you can forgive a man his poverty. If he is -- passes through your house and doesn't ask for a loan, you see. But the Bible is much more drastic, and says, "No. The -- don't make it poor. That's after all only a long-range proposition. You don't have to pay this man -- poor man's bills, so why not be nice to him? But if he's dirty, you see, then the poverty has come to bear traces on him. He -- it is on him, this poverty, you see, as dirt, in the form of dirt, and that's much more difficult to bear."

And if you look around, gentlemen, today, you are in -- in great danger to lea- -- lose this whole process of the Middle Ages. Now of -- of this process, I'm now going to talk some -- more specifically, gentlemen.

The first concordance -- we go through the four stages. The first concordance is a super-logic that Anselm of Canterbury laid down in his famous soliloquies--Anselm of Canterbury--was the paradox: that he was a priest, he was an archbishop, he was an abbot; and he prayed every morning, and every noon, and every night to God, and that he on the other hand held the opposite proposition than in his heart of hearts, as he explains: he only knew of the absence of God. "O God, where art thou?" I read this to you before.

So there is a paradox, gentlemen, between the person who prays, and the person who thinks. And theology is based on this super-logic, gentlemen, that you and I at times act in the presence of God, and at other times only resent His

complete absence. Now logic -- ja?

(Excuse me, Sir. Would you repeat that?)

I'm glad to, yes. The whole process of theology is based on the paradox, on the contradiction that at times every human being--at least in your boyhood, you do--acts as though God was present; and in other moments, you realize that you are dismissed, forsaken from His presence. So the paradox is, gentlemen, that God is omnipresent and omni-absent.

Theology is based on the paradox, gentlemen, that when we speak of God as an object, we treat Him as dead and absent. And yet we speak of Him in the same breath as omni-present. Is God at this moment present in this room, where I do not turn to Him, but speak of Him? Obviously I treat Him as a dead object.

Therefore I deny God. Any theologian denies God during the time he talks of Him, because in God's presence, you can only kneel, or fall prostrate.

So God in His great liberty -- liberal -- liberality obviously allows His children to treat Him at times as dead. The solution, gentlemen, the concordance is in this fact. Do you know the solution? It is true that in all divinity schools, God is treated as lying on the cemetery, as dead, because you cannot speak of God if you believe in Him, as though He wasn't present to you. And the only dignified attitude of speaking of God, if you believe in Him, is to kneel before Him, or to pray to Him. I cannot here believe in God and now talk to you of Him, as though He was just another problem, like a pancake, or like a mountain. But you all do, gentlemen. That's why your bull sessions are so incredibly funny. You never -- talk of God when you talk of God, because you don't even know what a paradox you commit by debating whether there is a God or not. God just laughs. That's what He does. He has a great sense of humor.

How -- where is the solution, gentlemen? Gentlemen, our mind--as our body, our knees, or our hands who fold in prayer, or our mouth to sing the Psalms, or our heart that is religious and pious--our mind too is asked to participate in God. And so the mind is the rethinker, the reproducer of all things that exist. And therefore God is merciful enough and allows the mind gradually to reproduce His presence. For this purpose, the mind has to start with His absence, with God's absence. That is the mercy -- the remission of sins granted to the human mind, that the mind is allowed to sp- -- begin with the statement, "I don't know of God. I'm ignorant. There is no God, as my premise." In order to reach Him, the way of the mind, gentlemen, of reconquering God, is that from the farrest point away, where you turn your back on God. The conscience, gentlemen --

consciousness, is the state of mind in which our back is turned on God. How you say? "On?" Yes? Right? "Back -- on?"

But the reason why we are allowed to do so, as Anselm said, the reason is because we still remember that we must return to Him. Consciousness, gentlemen, for the clear thinker, is a phase--is a phase--is a moment in your and my life. At times, man must forget. At times, man must play. We know this already. At times, man must for- -- give up his consciousness to reconquer it. And the moment in which we dismiss God from our mind is the beginning of a rebi- -- His rebirth, of His resurrection. "God must die in order to rise" is the discovery of the medieval theologian. The super-logic is -- then is that it is true that for the living soul, man -- God is always there. But for the operating mind, God is never given.

If you get this, gentlemen, the secret--I cannot be very explicit on it--you get the fact that theology is a very bold science. It is the problem of the paradox of existence and non-existence. Just as you say of a point, it has no extension. And yet you say, "An infinite number of points adds up to a line," you see. That's a contradiction. Can you see this? In the same sense, gentlemen, and in a similar manner, theology introduces the contradiction that: on the one-hand side, God is omnipresent; and on the other hand, He is never present when we talk of Him. He's dead. He has died. He waits for His resurrection. He is present in the form of the one killed by us at this moment; assassinated, crucified.

This crucifixion, gentlemen, is not a -- historical business of putting somebody somewhere in the grave in Jerusalem at some time, or --. But it is a condition of your and my existence, gentlemen. With everything we have, we can be immersed in the divine present, except with the mind. The mind, in order to get operative, must have a goal. And the goal cannot be the starting point. Therefore you have to put atheism at the beginning of your thought, in order to come to see out a theism as the end of your thought. The one part in us, gentlemen, which is thinking, the intellect, cannot begin and end with the same content. It's impossible. Therefore, if God -- shall be the end of your thought, it cannot be -- He cannot be the beginning.

Now I think I have given you some food there. I cannot possibly go into the details of this problem. But gentlemen, I only want to say that just as infinity is the tremendous step from arithmetic to mathematics, so this tremendous admission of the partial absence of God from the mind is the -- real foundation of the super-logic of the Middle Ages.

The -- the judge, gentlemen, who has the courage to say, "I might have done this myself," what's he doing? He gives up his sanctity, he gives up his righteousness for a minute; he plunges into the hell of doubt that he perhaps is a sinner. Isn't he given up his divine {nature} at this moment, too? Certainly. What I said of the judge, that he says, "I might have done it myself," is the renunciation of his own divinity. Therefore don't be surprised that Anselm said, "God is absent. Where are You, God? Can I find You? How can I demonstrate You? I've heard of You. I pray to You every morning, night, and noon, but now I sit in my cell at my desk, and I shall prove my monks that You exist. How do it do it? I don't find you anywhere. If You don't lie -- aren't lying on the desk. I'll never seen You. Everybody is full of Your praise. But where art Thou?"

This corresponds exactly to the problem of the judge or any human being, because in saying, "I might have committed this crime myself," gentlemen, I give up the one feature, my state in grace, my -- grace, my sanctity, my righteousness, which makes me into an image of God.

So as much as in law--perhaps you take this down--in the law of a science of jurisprudence, in the law of the science of jurisprudence, the judge must give up his self-righteousness. In the science of God, God is deprived, pro tempore, of His presence, of the power of His presence.

(Can you repeat that last sentence, Sir, the last half?)

In theology, or the science of God, God is deprived, pro tempore, of the power of His presence.

Now gentlemen, if you get these three levels--God, man, world--then you will see that what the theologian does to God, the lawyer does to man, the judge, in jurisprudence, because he assumes that any human action can be explained from the inside by intent, and must not be explained by external evidence alone. In the same way, as long as our heart is open to God, we say the evidence on God, the external evidence, isn't enough. "I'm cold. I'm blasé. He hasn't spoken to me. I've never heard -- I've always heard of God, but I haven't met Him. I haven't been introduced to Him."

And so the mind is in suspense, and the judge is in suspense before judgment is passed, gentlemen. Both sciences discover a state of mental suspense. That's the discovery of the first -- the founders of theology, gentlemen, that the human mind is in a state of suspense.

Now this state of suspense deserves some better analysis, which was given to it by Thomas Aquinas and Bonaventura. We come now to the scientific state of medieval theology. And that is marked by Thomas and by Bonaventura. Now most of you have heard of Thomas, and no one has usually heard of Bonaventura. They are -- they are pals. Bonaventura's books describe the state of mind of Thomas. That is, if you read Bonaventura's books, you come to know what was operative in the creative processes of the Thomistic mind. Thomas -- Bonaventura, so to speak, has as his content: how does a divine mind like Thomas Aquinas' operate? Thomas Aquinas has a -- quite a different -- books -- he has written systematic books on the science of God. And he compares now, through his famous Summa, how the world appears to the philosopher, Aristotle, to whom only external evidence proves anything, and how it appears to the Christian to whom God has access through his heart, through his sufferings under the Crucifixion, through his love of Christ. The whole Thomistic Summa is a book of this wealth, of this length. In former courses, I had more time. I used to bring the books here to -- look for -- to you to look at it. It's a constant struggle between external evidence, gentlemen, and in-...

[tape interruption]

...a Christian will laugh at such a proof. To me the proof that the world is reasonable is not much of a proof that there is a God. It's unsatisfactory, to say the least. And certainly if this is all which we knew of God, this would be a very shoddy god. A god who is just a first cause, and then retired with a pension, and let the world run down like a clock. That's how most of you think of God, a man who -- who started a business and then let it run amok.

No, either God is omnipresent, gentlemen, or there is no God. Aristotle's God is a god from external evidence, and the external evidence on the existence of God never points to God's presence. Because your mind, your consciousness which looks for causes will never admit that at this moment you aren't God yourself. Anybody, gentlemen, who philosophizes about the causes of the universe, has put himself in God's place. You are all little gods when you philosophize. Therefore you have no room for noticing that at this moment the devil governs your thoughts. You think you are God. And anybody who thinks that he's God, and -- and makes up a theory of the universe, is of course ridden by the devil, but he doesn't know it.

God is not to be seen in our consciousness. You can only have Him in your conscience. God is not to be seen consciously. Whenever you focus atten-

tion on something, gentlemen, consciously, that word "consciously" -- wie? -- whenever you focus your attention -- your attention on something, consciously, you see, this something is beneath yourself. Now if there is a God, -- He wouldn't be beneath yourself, because He would be your creator. The mind can only grasp things that are beneath man.

You will never perceive God through the mind. That's quite impossible. If somebody smiles at you, a baby, and you say, "That's a divine smile," it doesn't -- hasn't entered your mind. But it has touched your heart to the quick, that a human being should be so innocent, and so naive, and so happy, you see. You identify yourself with this state of bliss. And in this moment, you can dismiss your consciousness. And because it is not your consciousness which dictates a judgment, you are apt to say that this is a -- a child of God, or a smile of God, and a revealing -- a revealing -- Christmas is a revealing time. The child in the cradle is really more divine than you and I. But consciously, if you focus on this baby with a microscope, and a fever thermometer, and diapers, and pablum, what is this child? Just a very dirty little brat. Nothing divine about it.

The more conscious you get of this baby, the more it approaches the state of a guinea pig. Because, gentlemen, when does this child really smile to you with a divine smile? The more you yourself put yourself into this baby. Now consciousness separates the observer, or the conscious mind, from the object. All consciousness, gentlemen, separates subject and object. All conscience identifies brother and brother. Perhaps you take this down. All consciousness drives apart--constantly extremalizes, so to speak--drives apart object and subject.

Think of the man who observes an operation in his own brain, when a tumor is removed. Theoretically thinkable. "Who is who?" is a great question: the man who -- whose tumor is -- is operated upon, or the man who looks at the tu-- at the operation? You could establish a system of mirrors by which it would be perfectly possible theoretically that the man could observe his own operation.

That's the ultimate in self-estrangement, gentlemen, because object and subject are estranged from each other. They are broken into two opposites.

Therefore gentlemen, wherever you have consciousness, you have opposition; wherever you have conscience, you have unity. Conscience makes for unity, gentlemen; consciousness makes for action, for parties, for opposition, for object and subject.

Aristotle is pure object-subject situation. Christ is pure conscience situation. Therefore Thomas is the concorder of these two approaches. -- Thomas

writes of the reconciliation of the outer evidence and the internal tension in our relation to anything that the conscience or the consciousness can grasp. Every article, gentlemen, of the Summa of Thomas is built in this manner, for any proposition. "God created the world," pro, contra. "Philosophus { } it. There are three points: in favor, against it--Aristotle says; and then comes {dicendum}. And I say as a Christian theologian." And that's how the whole Summa is built, from page to page, there are always these first two logical propositions, and then the full wisdom of the ancients: all the natural evidence, and then the Christian answer which keeps the conscience, and therefore keeps the identification with all living things created, you see. That's creed. The Apostles -- the -- the philosopher says, "That's the thing." The Christian says, "That's me." And the thing looks -- the two approaches make the look -- the thing very different to you.

The -- the crudest point, gentlemen, and which comes -- this to an issue is of course in the treatment of Jesus Himself. For Aristotle, the best man is still just the best man. The best man, Jesus, is still just -- would be still just the best man; one man, you see, among many. For Thomas, Jesus is the man.

So the in- -- decisive difference is, gentlemen: conscience can only use the indefinite pronoun. Conscience can use the definite pronoun. Conscience can say, "She is my mother." Consciousness can only say, "She is a mother." Or even more so -- about a father. Nobody can prove to you that you have a father. A father is always doubtful. You just have to believe it. You just say to one man, "He is my father," because he said so, and he acted this way, you see. But how do you know?

All fatherhood, gentlemen, all your recognition of fatherhood is based on mere faith, because the rest doesn't count; it's indifferent. With motherhood, it is different, I have to admit. It can be proven.

Aristotle and Christianity are com- -- to be compared like the -- like the introspection of physical motherhood and spiritual fatherhood. That Jesus is the son of God can never be proved by external evidence. That Jesus was a man can be proved by external evi- -- evidence.

Now gentlemen, look at this. It can be proved that Jesus was a man, but it is not important. It cannot be proved that Jesus was the Son of God, but it is important. Only conscience can decide this issue, and never anything else. You can never prove by Aristotelian reasons, you see, that Jesus was the Son of God.

Yet it's the only important question. Why should we talk about the silly carpenter in -- in Nazareth? Why not dismiss Him? He's just one man. All, gentlemen, external evidence leads only to indefinites, possibilities. All internal conscience, gentlemen, leads to definite decisions.

There are many girls, gentlemen, but only of one can you conscientiously say that you want to marry her. Once you make this decision, the external evidence doesn't count. You will find that the happiest marriages are those that are made against all the external, statistical evidences. Anybody who wants to -- to -- marry by statistics cannot. He -- he can only sleep with many girls by statistics. Promiscuity, gentlemen, is the result of external evidence. Marriage is always the result of a conscientious identification with this one soul. In other words, gentlemen, man in the medieval -- university tried to reconcile the problem that we are all one heart and one soul, and the other problem, that by external evidence, we are all different.

Bonaventura wrote now up the workings of this mastermind, Thomas--and I have to tell you one word, after the recess, on the -- on Bonaventura. Let's have five minutes.

[tape interruption]

...of you can say you have heard of this man. Bonaventura is a Franciscan monk, and Thomas is a Dominican. And in this opposition, the whole contrast between two schools of thought is given. The Dominican is a teaching order. And the Franciscan order is the order of the imitation of Christ, of following in Jesus' footsteps. That He is -- the Franciscans prize experience of the heart over all. And the Dominicans prize efficient, effective teaching. It would be the difference between a hermit and Dartmouth College. Dartmouth College would be Thomistic, because it would -- the order -- the Dominican order sets out with the idea, "I -- we must teach all these ignoramuses." The Franciscan sets out with: "How do I experience the bliss of life?" That would include teaching, too, because it is part of the bliss of man to teach, and to impart his own knowledge, you see. But St. Francis is the one great imitator of Christ, gentlemen, and the Franciscan line -- that is the line closer to Anselm, the lonely monk in his cell, who says, "God is absent, where art Thou, God?" And the Dominican line follows Abélard, the man who has thousands of students in the University of Paris, and draws them out and says, "You have to learn better things and newer things." In Thomas, gentlemen, the scholastic principle of the Middle Ages reaches its height. In Bonaventura, the experimental stage reaches his height, that man is God's holy experiment. Man -- for Bonaventura, man himself is God's holy

experiment. Gentlemen, the word "experiment" can only be used of man if God experiments with us. Never you experiment with man yourself, gentlemen. You are God's experiment, but not your own.

I'm always suspicious when a man said he's "just experimental," because then I know he isn't serious. And I don't like to have to deal with people on any subject where they aren't serious. Why should I? I wish to meet people who -- who are serious. Then it's worth talking to. But otherwise I prefer to play bridge. To talk, just for example, for play -- to speak is not a play; it's not experimental, gentlemen. It's serious. If it goes wrong, it goes wrong. But in a -- on the other hand, gentlemen, the Franciscan knows that every man is a new experiment of God to create the real man. Jesus is God's most successful experiment, up to date. Now gentlemen, Bonaventura wrote a booklet, very small, The Itinerary of the Mind to God -- The Itinerary of the Mind to God. It's a travel lore of the human mind. And he discovered the law of concordance, the law by which progress in science is possible to this day and to -- in the future. This progress of science, gentlemen, is something you have not the faintest idea of, and perhaps it may interest you to know what he discovered to be the law of progress. The law of progress in science, gentlemen, contradicts logic. In logic, a man begins with ignorance, and then goes on to knowledge. That's learning: "He" -- "I have not known yesterday, today I know; I look it up in the dictionary." The progress of science, gentlemen is always confused by you with this naive process, "We don't know, and then later we do know."

May I point out, gentlemen, that the progress of science is based on the opposite assumption. When Mr. Pasteur discovered the -- what's it called, the hydrophobia or what? -- of the dog? { }. What has the dog?

(Rabies. Rabies.)

Rabies, yes. Thank you. Every doctor in the country knew that he was wrong, because all the doctors knew what was the matter. The only man who said he didn't know, and he wanted to try something new was Mr. Pasteur. That is, gentlemen, the condition of the progress of science is to forget what is known. And the progress of science must therefore be made by a man who knows everything there can be known about a subject. And then -- he grows so dissatisfied with the ultimate, the high peak in knowledge, that he starts from scratch. He rappels and goes down into the abyss of ignorance, you see. In the progress of science, gentlemen, ignorance follows science or knowledge. In the process of primitive learning, of mere logical learning for a -- of a child, knowledge follows

ignorance. But in the process of the progress of science, ignorance must follow knowledge. That's much more difficult. Much more humble. Because it is the great scientist who suddenly wakes up one day and says, "This cannot be true, although we all think it is the highest { }." Can you see the difference?

So gentlemen, that's why in this -- in this country you have these crack-pots, fools, amateurs, dilettantes who always think, "Well, you -- you -- you participate in the progress of science, anybody can." They haven't the faintest idea of what is known, and they propose something that just runs through their head. They are a great nuisance. They have the primitive logic of the child, from ignorance to knowledge. But the progress of science, gentlemen, the orderly progress is only possible if everything that is known is held up at one moment, put to the test and if--although it is the best that has ever been known--it is found wanting. ({ } classify knowledge -- reclassify it and all of a sudden it's wrong, would you say that was knowledge? I mean, wouldn't you say -- the whole thing { } is wanting?)

Now that isn't enough. You have of course to have your -- you have to bring up the pearl from the ground, from the bottom as the next { }, you see.

{ } criticism, it's wrong, he will believe you. You have to prove { }.

(It's beyond that. I don't think I made myself quite clear to you. You say that -- that they have a certain knowledge, and then they start from the beginning again. But then they disprove { } knowledge...)

[tape interruption]

...ages about conscience, you see. Our future science of peace and society will certainly do justice to the medieval cycle, but will show that it isn't large enough. All former truth, gentlemen, is partial truth. It isn't -- never absolutely false, but it isn't enough. It isn't comprehensive enough.

Modern astronomers point out always with great care that the -- the Ptolemeic system of astronomy is not wrong, you see. It has its po- -- merits, but it isn't good enough. Copernicus is -- is better, you see.

Gentlemen, no knowledge is absolutely worthless, and no knowledge is absolutely perfect. But the important thing is, gentlemen, that the step into the next knowledge is not a straight line, as you think it. The -- a step to the next knowledge is always through a gap, through an abyss of ignorance. Man is

suddenly plunged into something --. When Mr. Planck discovered the quanta theory, that -- matter did not move in perpetuity, in infinitesimal degrees, but in real leaps and jumps, you see, when he took back this notion of infinitesimal for physics today, he thought he was crazy. He thought he wouldn't let -- allow his own student pass an examination if -- if the students would -- said such an enormity, you see. And he had to go through the abyss of -- of noxiousness, of doubt in his own sanity, you see. It took great boldness. It take -- all -- always takes great boldness to take a next step, because the next step is not a straight, logical line, but is something in another direction.

I always give this one example, gentlemen. For the last 30 years, cancer has been -- has been treated in the Pasteur ways, as an infection. A friend of mine lost his whole career, because in 2- -- 1923, he published a book in which he said that cancer and arteriosclerosis had nothing to do whatsoever with infection, or with germs, or with bacteria; but they were two constitutional deviations from the straight path of the virtue of shapeliness. And -- and arterial sclerosis was a hardening of the arteries, so cancer was, so to speak, a softening of the cells, a luxurious growth. And that only if you contemplated the human body as a rope walker, a tightrope walker, who had to straddle and had to keep a very narrow ridge of shapeliness could you understand that the body in his life -- its life could fall down on one way by a too-intense taking-shape in arterial sclerosis, that there was not enough leeway, so to speak, of formation; and could also fall down on the other side into the abyss, of too little shapeliness, you see, that these cells no longer would -- would try to conform with the duty and shape of the normal body, but would just simply -- decay. And -- not decay--how would you say?--grow, yes, but grow in a wrong -- I mean --. If I had only a --.

{{ }.)

Yes. So -- now this vision, you see, of the human -- body aiming at a certain shapeliness, aiming at a certain beauty, aiming at a certain fulfillment, you see, and falling down left and right, was in complete contradiction to the vision of Pasteur who saw a human cell fighting for life against hostile influences, from left and right--bacteria, as we say. Millions of dollars have been spent and are spent today as you know for cancer research in this country in an obsolete method. Because it was simply assumed that Mr. Pasteur's discovery had to make sense for every other disease in the world.

There you see the best men today, you see, of -- as of today believe one way, that this is the ultimate truth. The discovery of the next phase of vision, as to human health, today is -- as you know, very far from us. There is this man

with his vision of the living body, and I think he's the most advanced. And you get these psychosomatists, who have an inkling that there may be some such thing in our illnesses, that this -- the drive of man for his shapeliness, you see, may express itself in diseases in various parts of his body. You may have heard of this new branch of medicine. But certainly there is very little hope or expectation among the serious people that cancer can be--with all the millions of dollars invested in these research institutes--ever be thought in such a simplistic, logical way, as though the whole body would get out of shape because of some little bacteria introduced { } somewhere, you see.

Now what is the important thing, gentlemen? That it takes a new central vision of the whole human body before you can propose a solution for the cancer. Therefore, the over-extension of your lines of -- in one direction, you see, where you en- -- visualize everything and everything based, you see, from -- the body's, so to speak, situation on the battlefield of human -- of -- of -- of bacteria, has to be dismissed with a bang. The man who has prepared the next step into cancer simply was not a bacteriologist, in other words, and must give up being a bacteriologist, you see.

Now since in this country, bacteriology--since Martin Arrowsmith--has been deified, no foundation in this country will give this man a cent for his research. To this day, he can't get any foundation to give him anything to prove his point. He is just not scientific. In my mind, he's more scientific, but he is in the philosophical stage of science, gentlemen, where a new foundation has to be laid, where the next progress has to be made.

Now take this down, gentlemen. The progress of science is not logic. But the progress of science -- consists in the dismissal of the highest principle of the science attained at that time, and replacing it by a new principle. The progress of science consists of the dismissal of the highest principle prevailing in one science at one time, and replacing it by a new principle.

What is going on in our laboratories today is just extension service. I mean, you have -- your ride it to death, this principle today, this principle of the bacteria, you see. These are no great minds who do this. They may be very good technicians, plumbers, electricians, et cetera. But I have no great respect for them as scholars, you see. They are no -- no real -- that's not important. The man who -- who -- who makes really a -- a date, an epoch in his -- in his science is the one who has this tremendous courage, gentlemen--take this down again--of becoming ignorance -- after he has known, of becoming ignorant after he has known; the light must go out before it can be rekindled.

And this is the process of the itinerary of the mind. The process of the itinerary of the mind is from having to non-having, and then to having better. The process of primitive logic in your mind is from not-having to having. But in the great tradition of mankind, gentlemen, there is in every moment the greatest expert. Here in this moment, you are learning in many fields. But in this field there is a great man -- a man -- a great teacher who knows. Now the progress comes when this man's knowledge is superseded, not when your knowledge is superseded. Can you see this?

So progress, gentlemen, is also super-logic. Progress is a super-logic, because it reverses the logical progress from ignorance to knowledge by saying "No, Sir." You, single individual, go from ignorance to knowledge. But the whole of mankind, at the very moment that it teaches you, must go on from knowledge to ignorance. That's the -- that's the courage, the boldness of research, you see. "Re-search" means to begin once more, as though from scratch, as though nobody knew.

I think that's quite exciting, gentlemen. If you get hold of this, you will be immune against many crackpots, and many hoaxes; and on the other hand, you will have reverence for real scientific progress. You need both. It's very hard to -- both to reconcile. The child is the amateur of thinking, some bright idea, you see. The -- sci- -- process of science, gentlemen, is one that works up to great heights, and then sees a new phenomenon and says, "Because of this one phenomenon, I must sacrifice all my pride of what we have known so far, and begin from scratch." It's a humility, gentlemen, of the pro- -- scientist, which Bonaventura discovered at the bottom of it. Humility in the sense that without admitting for a while that this, you see, knowledge doesn't solve anything, you see, you cannot take the next steps. So the next step in science never is logical, gentlemen; is always anti-logical. It is logical to say, "Cancer is a bacteria -- -iological disease," you see. It is completely illogical to say, "Let's start from quite another end." Can you see the difference?

You don't like it? Make your point.

({ }. It's too much for me to swallow. { })

Ja, but that's all very -- always very doubtful. It's always over-extension of your heart. Any -- you know it in your own life, gentlemen. You have made one experience with one girl, then you say, "All girls are." In your heart of hearts, you know that's all nonsense, you see. But everybody is so proud of deduction. And if you make one experience -- we all are that way, you see; that's primitive.

Primitive logic always says, "I have made one experience, therefore that's the whole story." Well, it isn't. As long as you live, you see, you can make quite a different experience. But most people exclude this. The man in cancer today excludes a new start. We know already that Pasteur was a great man 60 years ago, therefore --. See? The one experience stands them in good stead for all other { }.

And we always have to coerce the disciples and the -- the followers. These big laboratories today are terribly handicapped, because they -- they fix mentalities, you see. Three hundred years ago, scientific progress was much easier, much more radical, because there wasn't so much invested. But today, think of all the physicists -- are paid, and all the doctors who are -- chemists, you see, who are paid in fixed institutions on certain assumptions, that certain things will -- can be done in this way.

A friend of mine--let me tell you this as a fi- -- finishing story, today, if you give me a -- this minute--I have a friend who is professor of physics at Harvard. And one summer, some years ago, he traveled to California to Berkeley, to study the cyclotro- -- -tron. And then they had to build a -- similar machine in Harvard for \$60 million.

And he said -- came back very sad, and he said, "We'll have to do it..."
[tape interruption, end]

{ } = word or expression can't be understood

{word} = hard to understand, might be this

(Philosophy 10, May 25, 1949.)

...groups of thoughts, the first on the mental process in the individual.

And we had -- divided it up in these three parts of the child, the adult, and the elder. You remember the Ten Commandments of education; and you remember also that we used examples, especially for the last three commandments, to make you see that in a human life, one phase may be more important for the observer and for the man who hears of this life than others. We all play, but only on the case of a DiMaggio or Bob Ruth is the playing really sensational. We talked then of the elders, especially, and saw that ruler -- the ruler, as in John Quincy Adams' case, rules all for a short time. We saw in the teacher's case, that he teaches forever, but only in opposition to others. You remember Plato and Aristotle. All teaching is -- creates in opposition. If I say one thing, somebody will get up and say the opposite. Can't be helped. You can't rule that way, however. The ruler must be able to give orders to the whole community. When John Quincy Adams took the chair in the House of Representatives, for this -- these few days, he was in the chair, you see. And therefore that brooked no division of the House. So gentlemen, the ruler rules for a short time, or for a certain time, all. The teacher can rule forever -- teach forever, but only always part of mankind. The rules, gentlemen, of conduct in a group, in other words, we learned, are valid for all, but the rules may have to change. For this purpose, then you have to appoint a new ruler. The truth of a teacher, gentlemen--of Platonism, for example--are true forever. That what I tell you is true, gentlemen. But there is always somebody else's truth to supplement my truth, and to stress something else in opposition to this. So my thought is not doomed the very moment I disappear from the scene. There will be somebody to teach the same thing again. But there will also be somebody, you see, to contradict. And then we saw that the man who leaves a name behind, like Newman, cannot rule in his own time, but he can rule afterwards.

So you see there is a mysterious relation to space and time in man's intellectual importance on this earth. We saw that in the fighter, in the adult stage, man himself splits. Wanting to love, he splits inside himself into a listener and a speaker. And so there you have the dualism within himself. While he doubts, he doesn't know what to do, where to turn, what -- how to conduct himself. He's in suspense. When he suffers, when he protests, he opposes, as in a teaching propo-

sition, you see. He opposes the existing rules of thought or of conduct. And then he suffers--these opposing rules prevail--and he is exposed to their injustice, perhaps, you see, for a while. He is persecuted and he's attacked; he's suspect. So again, you see, in the fighting stage, there is duality. No man, in other words, gentlemen, in the middle s- -- age, is alone again with his thought. While he doubts inside, we said he is in love with somebody. He doubts, because he wants to get out of his old family, for example, and falls in love with a girl; so has to assert himself. And he has to distinguish where he owes allegiance to his parents, and where he does allegiance to -- owes allegiance to his bride. In other words, gentlemen, the second phase also is a proof that the intellect given to you, gentlemen, is a social event. That's what I'm driving at, at this moment. The result of our contemplation of the individual intellectual process shows that it isn't this man's mind that acts in solitude, but that while you leave a name, you are placed into society. While you doubt, you are related to people. While you suffer, while you protest, while you rule, and while you teach, there is always somebody else.

Now the same is true of the child, as -- the child is listening, and if there would be nobody telling the child to -- what to listen, how to obey, or what to read, if there wasn't a world which deserved to be discovered--you see, a world of literature, and of facts, and if there wasn't security of a fire department, a police force, it couldn't play. In other words, the child too depends for the workings of its intellect on the social processes which allow it to develop its intellect. The fighter depends on the resistance of the existing intellectual order. And the ruler, the teacher, and the -- there is no name. In -- in other languages, there is a name for the man who leaves an heir, the -- the "leader," you may say, of new thought--or the "founder," we -- is perhaps the best word--the founder must suspend his own values in the air, and wait until he has gone, because in his own time, the old order must still carry him and exist. Newman had to be a cardinal of the old Catholic Church, you see, before Newmanism, before his own character later on, you see, could leave its imprint on Protestants and Catholics alike. The Church -- Christianity has changed, because today Protestants and Newman -- are interested in Newman, and Catholics, in his own days--as you well know from his biography--that wasn't so, you see. For the Protestants, he was a traitor. And they wouldn't listen to him at all, you see. They thought he was just tempting them away from their own faith.

What does this mean, gentlemen? We discovered in the first half of this course, that when we concentrate in the -- in -- in the -- on the individual, we discovered the mental processes of mankind. You cannot speak of your own

mind, gentlemen, because there is no such thing as your "own mind." The mind in -- is our participation in the social process of thinking. What you call your mind, is only the reflection of your relation to the thinking of humanity. You think as a child, and you think now as a student, because we think, too. So you say, "Well, it's in opposition to me." You say, "Well, I wish to play; this man is terribly serious; I am not so serious." But by saying that you are not so serious, you experience certainly the distinction between seriousness and play, of which otherwise your mind would be -- have been completely unaware. Because before you came to college, you thought everybody perhaps plays, you see. It isn't -- nothing is serious. Now at least you can say I am a martinet, or a pedant, or I'm -- I'm stern. But you learn that your thought is one thing, and another man's thought is another. And they only -- you can only label them in opposition, in dialectical intercourse.

So gentlemen, our mental faculties in the first half were discovered by starting from the individual as leading into society. The mind is our rooting in mankind. Your feet are not rooted in mankind. They are -- rooted on the earth, you see. You are -- your body isn't. But with our mind, we participate in society. That's something quite different from what you assume when you come -- came to this course. You think -- thought that the mind was something that pertained to your body. That is not true. The mind are the roots which society puts down in you. They are the seeds which society sows into you. And they are perhaps the fruit which you bear into society, again. Can you see this?

The child roots itself in society. The fighter has ripened in himself, you see, the fruits of the former situation, and they become seeds of the future in the elder.

So in your own individual process, gentlemen, you are this tree of knowledge, you see, with the roots first put down in the first part of your life. Then with your own tree growing up into leaves and blossom, and -- and fruit; and then, as an elder, you sow. You are sown, you can also say, you see. Your thoughts are sown into others, so that they may bear fruit in them.

So gentlemen, the most individualistic approach to thinking, which we undertook by having only the Ten Commandments of education, focusing on you, singly, alone--as you can check it--leads you into the tremendously important fact that thinking is the way in which you are to be made an organic part of the thinking of mankind. Can you see this? Now once you discover this, gentlemen, you are free people. Most people -- yes?

(Could you please repeat that?)

I don't know that I can repeat it. The best things you can never repeat.

Has anybody -- gotten it?

(I think { }.)

Ja. Through our thought, gentlemen, we become organic parts of the thinking of mankind. Through thinking, all men form one unity, one man. In as far as we think, gentlemen, because we want to think the truth--and we want to think valid things, you see--truth, gentlemen, is a social concept. There can be no truth if you and I do not participate.

[tape interruption]

...time. The mathematical case, gentlemen, is a limiting concept. In mathematics, we feign that thinking does not take living time. "2 and 2 and 4" is, so to speak, the most { } in the sense that mathematical truth--take this down, perhaps, gentlemen--is the case of truth which takes so little time that the time factor can be neglected. Mathematical truth is treated in such a manner as though it didn't take time to convey. In mathematics, people abstract from the time factor that it takes to make sense and come true. That's why mathematical truth is the most indifferent truth. It isn't important for me and you. It's only important for the things of the world. Mathematics you use to explain things for which the time factor is unimportant. Perhaps you take this -- for -- mathematics we use for those things in which the time factor plays no part.

Now gentlemen, on the other hand, religious truth or eternal truth is that truth which takes infinite time to come true. Whether Christianity is true, we will only know at the end of time, because every one of you can still destroy it. Christianity will only have been verified and come true if it triumphs now over Communism. Before, it still can be a flop. You can never prove eternal truth by what has been -- gone on before. It has still to be re-approved, and re-tested by any one who listens to this truth. If it doesn't grow into him -- in him, and get as a -- into a fruit and into a seed, then it isn't true enough, you see.

All truths, gentlemen, then have the opposite aspect. A mathematical truth takes no time to convey. "2 and 2 is 4" I can convey to you -- next -- you see, takes next to no time, you see. You remain indifferent to change. The truth which your father tells you about your character takes your own lifetime. There are greater truths, that all men are born equal, that take centuries before they can

beproven, you see, or thousands of years.

So gentlemen, truth varies: from mathematical truth, that takes practically no time to convey, to eternal truth, which takes the whole life of mankind before it is verified. You labor from the assumption that all truth must be reduced to mathematical truth, because you think that you have your own mind. Once you enter the circulation of thought, however, you see, from your own practical experience, you know very well that all more important truth waits for you. And you cannot share it before you are not prepared.

Where is this truth then, at the time? Where is it? There is something, it's true -- men -- "Follow your conviction." That's only true for people who have a conviction. So you must go into this, you see. There is no other way of dealing with this fact than to give it time. If you -- if you can't be given time, you see, and be left alone, if the -- the secret police comes and says you have now to have this conviction that Hitler is called "The Almighty," you see, it wouldn't be a conviction. The whole process of truth would be stopped, it would never be verified by you, through listening, reading, learning, doubting, protesting, and { }.

Now we said last time, if you now may remember, that the truth about God has to be conveyed in such a way that everyone himself can make his own decision on this. You remember? You -- perhaps you understand now why. The greater a truth, gentlemen, the more it takes to come true. The process of truth is not in all -- at all a thing -- that something is true--please take this down--the question of truth is not contained in the sentence, "Something is true." Everything that is true has also to come true. And it is verified only if the next, and the next, and the next human being may find it to be true himself.

Now you know the world today is riddled with this pest of -isms who think -- like--Communism, or capitalism--who think that people must believe something before they have time to have it come true in themselves. What you call "freedom," what you call "liberty," what you call "Christianity," on the other hand, admits this for the faultiness of his thought that, you see, you and I are left out of the process of the circulation of thought in this case. Communism then is said, "It is true." Therefore you have to believe it, you see. But all great truth is of such a character, gentlemen, that it can wait until it comes true.

The truth is a human affair, gentlemen, ha- -- is something organic, which waits in every man for the hour, and the day, and the year in his -- of his life, in which he can, you see, enter upon it. Truth is something every man has to enter upon. Perhaps that's a -- as good a phrase as any, you see. Truth is something

that lives by universal participation. In order to receive this universal participation, gentlemen, it has to wait until everybody is ready for it. That's why truth is to be compared to a tree. It cannot be compared to facts in books, or to -- go -- doornails, or to -- to -- to so many pounds of iron which you buy. Truth cannot be bought, gentlemen, for this very reason. Truth has to come to life. By truth, gentlemen, we enter a biological process.

A friend of mine who -- took part in this course 10 years ago always called this course a "course on mental biology." I think I mentioned this to you before. Why? Because truth is nothing in the abstract, gentlemen. Truth is your and my stage -- phase of life; that's organic substance, you see. You don't believe this, of course. It's very hard for you to believe, but try it one moment.

Take the truth out of the drawer where you keep your books and your examination papers, and put it into your own life. And then you will see that every man must have a different attitude towards truth in the different phases of his life. What is true is true enough for a playboy, if he plays with the idea. But if the playboy at 40 hasn't any conviction, then the truth has died, you see. The same thing may be played with for a certain time. But you have to become serious about it at another time. Or you have no right anymore to say that you think this is true. You may say today, "Here, in this course, good idea." Play with this, you see. "I listen to another professor, and another man, and another philosopher, and then I'm -- will find out." As long as you do this, you see, you are completely true to your present state of affairs when you are playing with something society gives you to play with.

Now if you at 30 still would say, "Oh, this is a good idea," you see, you would have missed the boat. You have -- would have not entered upon the life-stream of truth, before this mental biography. Can you see the difference? And a man at 70, who has no convictions, and thinks that everything -- everybody is right, and everything is true certainly is a sad sack. He has completely missed his own -- his own life. He has not entered upon the career of the truth inside himself. Truth -- you owe truth a career inside yourself. { } I express it in this manner. Is this clear to you, what I mean? Ja?

{{ }.)

Now gentlemen, the first half then of this course ends in a paradox. The individual has no mind, but gets a mentality implanted into him. The mental process gets hold of you and forces upon -- into you its growth. And it goes through these three stages of putting down roots; of growing up into a stately

tree, with fruits; and finally, indissolving these fruits as a seed for the next generation.

What's so difficult about it, gentlemen? Of women, everybody knows that this is the -- way of life, the physical world. The intellectual world isn't built any w- -- other. The intellect is the male way of propagation. The man speaks and begets. The wife with -- conceives and bears. But gentlemen, you and I are just as much begetters. Only we beget rules, we beget laws, we beget forms of existence through our words, through our thought, through what we say, what we repeat, what we proclaim, what we doubt. Every one of you and I is just as much born and gives birth, is sown, and bears fruit, as a child is -- that comes out it's mother's womb.

Gentlemen, the circulation of thought, the mental biology, is an exact parallel to the physical processes of the individual life in physiology. There is no distinction in its organicity, if you understand this term. That is, both have to do with living processes, yes? Not with dead matter.

Most of you -- are materialists, gentlemen. Of course, you say, "I'm not a materialist, I'm idealist." But I'm afraid the so-called idealists treat the mind as dead matter, as though your mind was something you had, you owned, was a private property, would do you -- "I can think what I please." Gentlemen, you cannot think what you please, and you know this very well. Anybody who says, "I can think as I please," drops his conscience, drops the conno- -- connotation of truth, and then he cannot think.

All thinking, gentlemen, underlies judgment. And the judgment is: will it be fruitful? Thought must be measured, gentlemen, by nothing but its fruitfulness. That which is fruitful is -- can come true. And that which can come true can add up to the truth. But if it doesn't come true, it's a dead thing. And it has nothing to do with the mental -- circulation of real thought.

So gentlemen, what I'm doing today is: I reverse the fronts. In the first half of this course, we have seemingly dealt -- apparently dealt with individual thought, you see. In fact, in the individual, there is really, you see, the whole of society {inside him}. Can you see this? And that's our glory, gentlemen. The -- these intellectuals of today have no idea of this. They have no relation to the thought other -- other than to say, "I am thinking. I am an intellectual. I have a high IQ." Well, what of it? A high IQ is a temptation to abuse the intellect. That's what it leads to in most cases.

If you have two chauffeurs, gentlemen, one with a tremendously high IQ, and one with an average IQ, and you are a president of a -- a company, and he has to drive you through the streets of New York, whom do you hire? Which of the two is more apt to get into -- trouble with the police?

(The high IQ.)

Wie? The high IQ man, of course. Born scoundrel.

({ }.)

A high IQ, gentlemen, doesn't mean that the man has any more -- better relation to the truth, you see. He is more apt to manipulate it, and to escape from the organic processes by which he has to think, in response to his real-life situation, gentlemen. Today there is a crying need to discover the organic character of thinking. We think in relation to our life situation. And you may -- I may add up to say that this is the discovery of the so-called existentialists. They only however know it in a very drab outline. An existentialist says at least, "My thinking is connected with my living." What I offered you here is the ripe fruit of St. Augustine's, and the Church's, and the philosophers' teaching over 2,000 years. Every decent thinker has been an existentialist. The modern craze for existentialism, as I said, is just a contour line. They don't -- cannot yet distinguish the ten phases of education. But they tell you at least one thing, you see: that to think is organic -- an organic process in your own life. And that's a good beginning. In this sense, gentlemen, the existentialists are the gateway to Heaven, but they certainly are not in Heaven.

Now gentlemen, that's the first half of the course. So, gentlemen, by dealing realistically, and empirically with the individual, as you and I really know him, you see, we have discovered that in as far as we think, you see, we are implanted into a field. As we say, "fields of knowledge," you see. That's a very good word, if you only take it seriously, you see. We are implanted into a process that goes through us, and that makes us into organic substance. Our mind must be organicized, you can say -- with a new term, if you want to. We must be fertilized; we must be fruitful. If you use your mind just for clever purposes of your own, there is no truth in your thought. That is just all rationalization, as you say yourself. That has nothing to do with thinking.

Gentlemen, all thinking begins where self-interest makes no difference for the result of your thinking. We all have self-interest. But if I couldn't think at this moment here about this truth with complete indifference as to what I personally

get out of it, you see, I cannot think. I haven't right to teach, certainly. Because why should you listen to anything I teach only for pleasing you?

({}?)

Yes, you can reach a state of complete indifference to your self-interest.

You cannot professionally all the time think against your self-interest. That's the error of the altruists, you know, and the selfless people, or the other people -- the materialists. You learn today the question, "Either I think for my self-interest," you see, "or I betray myself." Everybody has to follow his self-interest. And there are then certain idealists, and pacifists who can say, "I can be selfless." Neither case is true.

But you can exalt your thought to such a pitch, where it makes no difference to you, whether the result, you see, serves your self-interest or not, you see. This is something these people never consider. You can -- your mind can grow into such a situation -- don't you think that any decent scientist in -- in the physics lab -- labor -- is quite indifferent to what happens to him, when he wants to -- to investigate the secret of the atom? You see? He must go indifferent to the {result, I mean}. There always will be a result in there for your own interest; some positive, and some negative. Don't mistake them, you see. Of course our self is interested, you see. But you can say, "Well, what of it?" Any soldier does this. You expect him, too, to attack, whether he loses his life or not, you see. That doesn't mean that he is not very interested in survival, and that he hasn't diarrhea, you see. But then he gets a -- glass of whisky and gets over the diarrhea.

Gentlemen, all people are cowards, you see. But in thinking and in fighting, you have to get over your cowardice. That's all. There are no heroes, except after cowardice -- be -- admitting that they are cowards. Timidity and cowardice are with us all the time. So is courage. Thinking begins only where it makes no difference whether you feel good or bad in the -- in the matter. Gentlemen, I'm not a hero, but I have to stand up for truth many -- often in my life. I never thought I was a courageous man. That happens to you when the -- passion or the fascination of truth overcomes your trembling. I have sweated cold. Cold perspiration has run down my spine when I had to stand up. I didn't like it. Do you think anybody likes it?

I once remember -- I was asked to suppress a book I had written in favor of a -- of a priest, of a Catholic priest. And the powers that be at that time wanted to have a concordat with the Catholic Church. And so I got a telephone call from

the cabinet meeting of the ministers in Prussia that of course they expected me not to publish this book, because it would make trouble in their -- political negotiations. The people would resent any concessions to the Church if the Church would proceed against this priest, and I defended him, said he was right.

Well, it's a complicated story, but I mean to say is this: but when I then came into Berlin for the negotiations, and I said to them, "Here is the first copy of the book. It's just out," they were very much amazed. And they -- I said, "What are you going to do about it? I mean, I'm a free man."

They said, "Well, we can treat this as a *causa belli*, as a -- an act of hostility against us, and you will see the consequences for the rest of your life."

Now, I'm married, I ch- -- had a child. I wanted to get along in the world.

And I wanted an -- increase in salary. Everybody wants that. Here you are, you see, with your interest. Of course my self-interest, you see, knocked at the door, you see, and said, "Fie, what a fool," you see. This self-interest is there, you see. But if you are -- have used your thought right, there comes a point where this -- this self, you see, which carries the thought, so to speak, in this great process of all mankind, you see, is expendable. See? That's all. But it is very unpleasant, I assure you. I'll never forget the -- the -- completely { } -- what a -- at what an -- { } impasse I was, you see. Here, my career was ended. So I went to Dartmouth.

Not quite. Lest I be misunderstood, it wasn't so simple. But -- but I only mean to say: never believe that the people who die -- who deal honestly with truth are in themselves -- indifferent to danger, you see. The -- this isn't indifference, or foolhardiness, and in- -- stupidity, you see. They may do it with fear and trembling, as the Bible says. Such an act is done, you see, with cold sweat and perspiration. It's very disagreeable. Didn't like it at all. I mean, I -- there was nothing boastful about it. You see, I didn't brag about my -- my -- you see, I -- I was very sorry that I had to be brave. Ja?

(In a case like that { }.)

Pardon me?

(In a case -- in that case { }?)

I wouldn't call it "defiance." You see, defiance I think is always aggressive.

That is, the defiant man, you see, takes some pleasure in starting the bout. I

didn't. I hadn't known that I would get a telephone call. I just acted as an author and a scholar, you see, and a speaker, who used his privileges of the freedom of speech and thought. Then suddenly, upon me is brought this pressure. Now where is my defiance, you see? The question was only: could I stand the pressure, you see? That's not defiance, I would say. Wouldn't you agree?

The word "defiance" is always putting the starting point of the whole action into the individual, yes? In this case, however, I wasn't defiant. I had come to the rescue of a friend. You can't -- can hardly call it "defiant" when a man jumps into the river at a place where there is a sign, "No trespassing," to save somebody who is drowning, you see. And then the police comes, or the owner of the -- of the lot and says, "No trespassing." And he goes through the garden just the same, and goes into the river. Is he defiant?

(Well, how can he be { }.)

Well, but I started something else. The man who sees a man drown, you see, decides to save him. So he starts the act of saving. In the process, he discovers that he has to trespass on foreign land, you see, on -- on another man's land. This was not in his decision; but it's a minor, you see, incidental thing. Can you see it? So I wouldn't call it "defiance" if I go through this other man's land.

Because my intent is not to defy his property right. My intent is to save this man.

You remember what we said of intent last time. My intent is not on the act of trespassing. My intent is in the direction of -- of saving, you see, a life. Do you see the difference? Defiance means that what I'm doing I'm doing in order to invite this man's, you see, resistance. And there are boys who enjoy this very much, when they -- jump -- you see, trespass somewhere, and the landowner looks out the window and begins to -- to scold them, they say, "Wonderful we have gotten this man's bile and gallbladder." See? That's defiance. Ja?

Now gentlemen, comes part 2. In part 2, I said we have the real -- one tree of li- -- of thought, of knowledge, as it is -- has unfolded, since 1100, in these three phases: the knowledge of the eternal, through conscience; the knowledge of the world, of change, of movement, through consciousness; and the world of man through self-consciousness. And we said this is a one -- tree of knowledge, and it begins with the founding of the universities, and goes on with the addition of academies, and it is now seeking its third form. And I proposed for you the idea that it would have -- lead to forms of camps, camping mind.

The reason was that the medieval university dealt with people who had listened in chapel. The academies were institutions in which thought was nour-

ished by the facts from laboratory -- laboratories, and experimentation, and research.

So the feeding of the university comes from chapel. The mind must, so to speak, elaborate on the fact that people have { } God, but the conscience of God is gone; He is absent and He's present. You remember, we said that last time. And the second phase, the academies, man tried things. And the facts do not drive the traditions. We said research and tradition are in opposition in academies. And that's tested out in laboratories. And Number 3 today, ruling, and teaching, and creating traditions is gone out of our society. Nobody can appoint his successor today. Everybody gets them furnished from schools, for example. Take a former businessman. His son would take over his business. Today the poor man, the president of a company, must go to Tuck School and get a successor -- a potential successor for it. That is, a man who is trained by somebody else, who is not, you see, trained by himself.

So today, gentlemen, the -- the rules of eldership are threatened, and we are looking for these powers that can create the relation between one man, the seed; and the next man, the fruit. That's our problem today: how to bear fruit in other people. Most teaching, as it goes on today, is perfectly fruitless. I am very much aware of this. { } you will bear me out on this, at least. That's one truth which you cannot escape.

Fruitless talking today is so horrid. Perfectly fruitless.

Now gentlemen, this means that the tree of knowledge of the his- -- in the history of mankind is creating one great man. Man consisting of thousands and millions of people over the centuries. And yet, like cells in one body, building up this one organic thinker: man as one. For 400 years, the roots were put down in u- -- in the form of universities. And we still have universities, and will have them until the end of days. They won't be given up. We -- have then added laboratories. And I'm sure we won't forgo them, you see. And we must have now third institutions, in which even the physicists must learn what it means to govern. And you can't govern with the atomic bomb.

So the next phase is still open, this super-grammar of society, in which you -- "you" will turn into "I," and "I" will turn into "we."

So we -- in the second half, gentlemen, we have learned to personalize this vast, historical process over centuries. In the first half, we have seen that the -- your own privately owned mind in fact is your participation in the circulation

of thought through mankind. Your problem is of your putting down roots, your becoming a living tree, and your becoming the seed of your own fruits. In society, it looks terribly abstract to read up the history of universities, and to read about doctor examinations, and commencement, and departments, and academies of science. Who would think this has anything to do with you and me, you see? It has! Can you see it now? Because in all these institutions, gentlemen, of higher learning--you can put this down--in all the institutions of higher learning, man ha- -- is trying -- is trying to build himself up into one living tree which bears his fruits--year in, year out--and which is able to bear fruit for all men.

So all these many stories of Paris and Salerno, and the academies of science must become alive -- come to life in you by your -- the insight that they actually try to transform you and me -- into the cells of one thinking man -- m-a-n, in the singular. {Cowles}, can you see this?

[tape interruption]

...in the life of the western world during the last 900 years, in its creation of sciences, that I took the liberty of leading you through these various things--academies, universities, and the future--in -- not a chronological order. I wanted you to realize that whether you deal with the social science of the future, or whether you deal with theology in the Middle Ages, or natural science as of today or 1600, you are dealing with the same endeavor of man, you see, to cover the problems which the three times of his life throw up. His youth, where he must trust in something waiting for him eternally; the adult man's interest in manipulating in the world around him and mastering it; and the necessity of bearing fruit in future times when you -- we ourselves are no longer are alive, of surviving in our thought, since we cannot survive in our -- in the flesh.

Therefore gentlemen, for our course here, the -- 1200, 1500, 1800, 1900, 2200, are all equally near and equally far, you see. If you deal with one man, it is -- he is utterly indifferent whether Mr. Bonaventura said something about the itinerary of the mind in 1270, or whether Mr. Einstein says something about -- about relativity today. Can you see this? Once you accept, gentlemen, that man is in a common campaign, to create himself into one body of thinker -- thinking man, then I'm not teaching this course so that you may know some historical facts of the past, you see, but that you may keep all of the features which universities, which academies, and which future social thinking require.

Conscience, gentlemen, consciousness, and self-consciousness are all three essential for your and my cogitations. Nobody can think--we said about the natural scientist--who has not first adopted the fruits of the medieval cycle. That all thinking, you see, is universal for all; that there is always a laity and an expert, and that the expert must be respected by the laity; and on the other hand, the laity must benefit from the expert. Nobody can think, gentlemen, without some specialization, becoming some expert, some specialist. And nobody who becomes a specialist must lose sight of the fact that what he does as a specialist, you see, is meant to be generally good, generally true, generally acceptable. So gentlemen, the medieval cycle has created the premises, the roots upon which the tree of knowledge of the sciences has been es- -- could be erected. And whether this tree now becomes capable of bearing fruit and becoming seed is yet to be seen. It doesn't look like it at this moment, where people squander the energies of the globe in such an extent, because they do not think of plant succession. Who said this, "plant succession"? Yes. Because they don't conserve, you see, but they just exploit, which the fighter does, you see, which the manipulator does. But which is not the elder's way, who rules the earth, you see, so that it might go on forever.

Now gentlemen, therefore I thought it would be fitting if I concluded deliberately this class with a reading from Thomas Aquinas on -- it will teach you two things. First, the form of the medieval investigation -- scientific investigation in his -- the form of his book. And second, because the topic he deals with is conscience -- his conscience. And no scientist can have consciousness of the world if he has not a conscience as -- about the truth. It's obviously that he can only claim to be a scientist if he's very conscientious. Now where -- why should he be conscientious, can you tell me? His natural sciences offer no reason for him to be conscientious. If he is just dirt, and ashes, and so much carbon -- dioxide, why should he be conscientious, gentlemen? Can you tell me why any scientist, from the findings of his own science, could be made into being conscientious, if he's just dirt, and ashes, and urges, and sex, and glands, and nerves? The -- one thing we should allow him to be is to be arbitrary, to deal his -- to serve his own benefit, to do as he pleases. Because it can all be explained by his glands, you see, by his itch. Now you expect all the scientists to be consc- -- conscientious, to have a conscience.

Now gentlemen, the conscience of a scientist is his participation in the medieval cycle. Would you take this down? The conscience of the scientist constitutes his participation in the medieval cy- -- cycle. Through his conscience, a modern man is rooted in medieval thinking. Through a man's consciousness, he

is rooted in modern science.

({ } ?)

Through a man's -- through his -- through his conscience, a modern scientist is rooted in the medieval cycle, because how to cultivate your conscience is the topic of the medieval cycle. Through our conscience, we are rooted in the medieval cycle. Through consciousness, any man of any time participates in the struggle of the natural scientist for knowledge of the world.

And through the -- self-consciousness of sciences -- scientists, and through the -- their self-consciousness--their pride, for example, you see, or their bashfulness, or their clumsiness, or their always forgetting their umbrellas, the -- they're being distracted, the distracted professor--thereby is rooted in society, is his self-consciousness, you see. The self-consciousness of the scientific group -- of the group of scientists, places the scientist with the problem of the social science of society. Any professor, any research man, any man in physics today is rooted in the Middle Ages. He is blossoming through the grants of the scientific foundations. The question, whether he can bear fruit in society, gentlemen, depends on the development of a social science, which will give him his proper function in society. The very simple question, "Shall the atom bomb be dropped?" you see, that decides over the usefulness of science in the long run, after all, you see. Whether the whole thing was terrible, you see, or good.

Now the poor social -- the poor natural scientist depends, for the fruitfulness of his scientific endeavors, you see, not on his laboratory, as you -- you see, and not on his conscience, which only taught him to tell the truth, you see, and all -- nothing but the truth--on whom does it depend, gentlemen? On the -- responses of the rest of mankind, on the laity, on the governing bodies, you see, on the rulers. It depends therefore on his relations to his society. Can you see this? Therefore that the modern scientist suddenly realizes that he depends on the coming-true of a social science, which he cannot build up, { } incapable of; there must be other methods.

I cannot say sharply enough, gentlemen, that every living natural scientist, by his very great fear that his science will be used wrongly today, cries out for a social science which shall not be based on laboratories and on mathematics. You must recognize, gentlemen--this is the -- your main, greatest problem--you all worship still the idea that for society, there -- we find a chemical formula, or a list, or a truth which can be expressed in mathematical or so-called scientific form or logic. A decent scientist will never even for one moment wish -- he will dread

it, he will dread it, because he wants to make sure that the atom bomb as a genocide will not be used -- genocide will not be used, you see.

Now to teach people not to use something is -- is nothing -- has absolutely nothing to do with mathematics, you can see. Because -- why not, gentlemen? Because it takes time to sow such a truth. Mathematical truth is impatient, and doesn't work today. The math is just -- are indifferent to the { }.

I have a friend who was a Christian minister of high standing in this community -- community. And he told me two years ago, "We have to drop the atom bomb on Moscow, to -- tomorrow."

Why? His paper, his bonds on the stock exchange had gone down.

That's how the modern mass man--even though he may call himself a Christian minister, and he -- by the way, he introduced his sentence with the wonderful statement, "Of course, we are all Christians, but" -- "the atom bomb has to be dropped tomorrow on Moscow."

So I reminded him of Nürnberg and aggressive war. That's how modern men in this country spoke a year ago -- here. Here, we have a student on campus from Europe--I still remember sitting with him in -- in the Indian Bowl, in those days when Mr. Forestal was waging war against Russia. And he had a milkshake -- each a one -- had one. And he said, "There's war coming. I'm a Norwegian. It's terrible. I must go home."

And I said, "You'd better stay here. There will be no war."

And he thought I was mad, because the whole town said there was war, that -- that a man could not conform to this general judgment, seemed to him impossible. And -- gentlemen, the truth that this is the end of World War II and not the beginning of World War III has taken four years to seep in into the American consciousness. Any man who has gone through the First World War could know it all the time. It was not very difficult to know that the war was over. But you have been hoaxed into this feeling for the last--it's nearly forgotten now. Can you still reconstrue the feeling of last summer -- last May--can you? Well, many people--including Mr. Forestal, by the way--whose end is very tragic, but has to do with this turn of events. It has nothing to do with Mr. Walter Winchell--or at least not all.

Well, it's not to laugh. I mean, the case of Mr. Forestal is a very great case,

and I have the greatest respect for this man, and really great reverence for his fate, gentlemen. But he paid the penalty for all of you, for your hysteria -- I mean, the country's hysteria. Because he was -- represented a direction of hopeless preparation for the Third World War, when it was perhaps the only way in which this could be handled. Then he couldn't find the release of -- from this tremendous tension into a -- quite a different state of affairs, when the war is over and an era of peace is opening. That's the end of this man. And I think he has -- he is sacrificed for all of us, because this country prefers to move in these violent shifts, and have -- must have the jitters in order to digest well. The jitters here are part of the -- of the well-being of the American -- the educated people. I don't know why businessmen love jitters, but they seem to. Any -- any four months there has to be some scare, Communist scare, or Cold War, or -- some jitters. Depression, I mean. And they do not feel very well if there is not something to raise their bile. F.D.R. is dead, so they have nothing to go. So it's { }. What I mean to say is, gentlemen, if you see these people in their blindness, and in their extravaganza, you see one thing: all social truth takes immeasurably long time. You can never have the idea that this will be like "2 and 2 is 4." Any man who thinks that gov- -- society can be governed by a mathematical formula is a fool, because he does not bring into consideration his own foolishness. If you remember what you felt in May '48--it's hard for you { }; can you do it? Do you feel anything then? Probably not. It's amazing what has happened in 12 months in this country, you see. A complete change of { }. If you see this, gentlemen, then you will know that social science takes time. Mathematics don't. Mathematics deal with things in space, which are not different, as time goes on. The sun turns in cycles, and there is no difference whether you observe her practically in 1500 or in 1900. Astronomy and physics, you see, they are the same, more or less.

In other words, mathematics is that method which neglects the time element. Social science is that method which stresses the time element. Ja? I say this because all -- in mathematics there is a time element. As I told you, it takes time before you understand that 2 and 2 is 4. But it can be neglected. Ideally, it is true already or -- before the child has learned it, yes. Because we are quite sure that within one hour, we can prove it to a child, you see; and we neglect this length of time it takes to teach you the Pythagorean problem, you see. However this is not true of the social sciences. You cannot teach a child of 12 citizenship. That's nonsense. Citizenship can only be taught over a long life. All the ideas that you can anticipate the teaching of citizenship by sending people on a joyride, in a bus, through Manhattan. That's nothing. That's just a

beginning, you see. The thing has to become serious. And after 30 years, you see, then you will know whether one of these children has -- has become a good citizen. It has to be verified, you see. The examination, in other words, on citizenship, cannot be given after -- after one year in high school, you see. The real examination, the real test can only be handed out as a Pulitzer award 40 years later.

Social science, gentlemen, deals with time. Super-grammar describes how long it takes to chan- -- transform people into the bearers of different roles in society. Now the modern scientist, for the first time brought up short to his own destruction in the atomic bomb business, you see, suddenly realizes that he is a social being, and that the behavior of the governing people, the government, of the -- of generals, of aircraft people, of -- electorate of other nations have an influence on the meaning of his science. The place of science, gentlemen, is decided over by the social science. Will you take this time? The place of science in the history of mankind will be decided over by social science, because it still can lead simply to disaster and destruction--as one of you talked with me just during the recess, very rightly--or it can bear -- be made to bear fruit. People may throw away the atomic bomb and say, "That's not for us. Too good to be true."

Now gentlemen, consc- -- any scientist then needs three sciences. Only fools among the natural scientists can deal without -- do without law and theology. And only fools can do without politics. But that's what the modern scientist--very many of them--think, you see, that their science is all they need -- their -- their natural science, and their nat- -- scientific methods. The -- methods, gentlemen, of the natural sciences, cry for the two other methods. You need, if you have a super-arithmetic, called mathematics, you need at the same moment a super-grammar, and a super-logic.

How many minutes do I have?

(Four.)

Wie?

(Four.)

I'll take 10. Any social truth takes time.

This is the first volume of the Summa The- -- of Theology, the Sum of Theology by Thomas Aquinas. This is, I think, in -- in four volumes. So it would

before times the size of this -- his lifework, his main work. He has written many others. The library of Thomas forms 50 or 60 volumes. But this is his Sum of Theology. In other words, gentlemen, I told you that Abélard wrote a theology for the first time, a science of God, with the concordant principle of "yes and no," you see, of contradictions, of super-logic.

Now this is after 150 years. Abélard writes in 1125; Thomas writes, after he has finished this, it's 1275, or -- you must have it in your notes. There is already a sum of all the discussions, of all the contradictions of God. This is divided, gentlemen, into three parts. It's worth your knowing this. In three parts. But we quote it, strangely enough as First Part, Second Part, First Half; Second Half; Third -- Second -- First Part, Second Part; Third Part.

So if you read any quotation from St. Thomas, it comes this way: S Th: Summa Theologiae -- -ae at the end, that means "of theology," the genitive. And then it goes on: Paragraph I, article -- let's say, 14. Or it goes: I, 2, 1, article 14, or it might be: II, 2, article 14. That's something that comes only from the old manuscripts. I only mention it because you will read such quotations more in the future years. As you know, Thomas Aquinas is very popular today with Miss {Bentley}.

I shouldn't have said that -- article. Before the article, there comes the question. It's divided into questions; and then the -- the questions are subdivided into articles. So there would be first--who -- only to give you a problem on method--"Is conscience a power -- a power? Is conscience a potency?" literally translated. Quite interesting question. Conscience to most modern scientists officially is nothing. It's just an itch. It's a derelict. It's a -- it's an appendix. It's a der- -- it's an archaic organ which should be neglected -- be neglected.

"Is conscience a certain power?" Who -- that's article 13th, in the -- 79th question. Now under which question would he bring this up? Let us see what the whole question is called. "On the powers of the intellect." "On the various powers of the intellect." Very good. See, you think conscience is not a power of the intellect, you see. If you don't, you have no tree of knowledge. Because then the sequence is not first to develop the roots, you see, the powerful roots of questions. Then to develop the peripheral leaves and branches of knowledge, you see, and -- of science. And then to -- of consciousness of the world, and then to develop the propagating forces of fruit and seed.

So you see in this little, one question, the whole difference between the Middle Ages and modern times occur -- turn up. Thomas knew of the whole tree

of knowledge. The modern scoundrel, the modern sophist in a liberal arts college, thinks that only his own science exists. And he never asks: where does he get his scientific conscience from? How come that you all go to Dartmouth College conscientiously believing that scientific truth is something good? That comes from conscience, you see.

Now this is the question -- brought up by -- by Thomas: is conscience a power? Is it a power of the intellect? And this is discussed at great length. And you can of course go against the solution. There are always two schools of thought. Let me read it to you.

"Thirteenth Article. Let us see whether conscience is a -- a kind of power."

Now he brings up three quotations on one side, and then an experience on the other. "Origenes says that conscience is a correcting spirit and the taskmaster, which is associated to the human soul, by which the soul can be separated from evil, and can be made loyal to good. But the spirit in the soul calls her a certain power, or the mind itself." The conscience calls--"it," I should say--"calls it a certain power or the mind itself," as we read in Ephesians--that's by St. Paul. "We shall -- you shall be renewed by the spirit of your mind, or we call it imagination, or we call it an imaginative, spiritual vision," as for example by St. Augustine, who literally writes, "Conscience is a certain power."

Then, "Besides," second point: "That which is capable of sinning in us, must be a power of the soul." Now conscience certainly is the subject of sin, of crime. St. Paul says in his letter to Tit- -- Titus, "They -- their minds and their conscience have been sullied. Therefore it would seem that conscience is a power." Third point: "It is necessary that conscience is either act -- an act, or a habit, or a potency, a power." I don't know if -- yes, "potency" is perhaps the most right word. "But it is not an act, because then it would not stay al- -- then it would not stay always in a man." Any act passes, you see; it's done, it's over. "It can also not be a habit, because then would conscience not be something unified, but many different things. For in our actions, many different techniques of thinking led us on. Therefore conscience must be a power. But there is an argument against it. Conscience can be left aside." A power we either have or -- have -- you cannot do anything, a power. If you have strong muscles, you have them. Therefore conscience cannot be a power.

"Now this is my answer. We have to say that conscience, properly speaking, is not a power, but an act. And this is revealed first by reason of its name. Then also, because according to common usage of speech, we attribute certain

things to conscious -- conscience, which go with action. According to the propriety of this word, conscience always implies some kind of scientific order with regard to something. Obviously 'conscience' literally means the science -- which I have together with somebody else."

"Now such science can only be applied by an act to anything in the world.

And out of this, it would appear that conscience must be an act. Also the attributions -- the attributes of conscience point in this direction," because it can be said that our conscience testifies, my -- conscience binds me, we may say, or it instigates me to do something, or it accuses me, or it makes me -- it bites me, or it -- reproves me. "All this means that it is a knowledge for action. And we apply this knowledge in three manners..." Well, that's not -- interesting.

So you have here the system of the discussion, that first there is: what points in the direction of making conscience into a power. Then that is mentioned which points in the direction that it is not a power, because it can be shelved; it can be neglected. Then he gives his response.

And now comes then the final touch. "After he has given this response, that properly speaking, conscience consists of acts"--which I think is highly in -- interesting; we'll talk on this next time--now wait a minute, gentlemen. I have to make a proposition: anybody who is really interested in these problems, I shall be glad to meet him in an some extracurricular form next term. So if there are any interest in you to form a group or -- let me say 5 or 10, to go on with this, I would feel that my conscience would have acted rightly. Because I feel that I haven't given you enough of this. It is impossible in so short -- short a time. If anybody should be interested, I would conscientiously discharge my obligations. So perhaps one of you -- take the two who asked, if there is such interest, and we can come -- do something in the next term, privately.

What I wish to add however today here, at this moment, is the ending, that you may understand, gentlemen, that mathematics is only one method. An example of the super-grammatical method is my own course. If you ask yourself, "Which method has this man followed in his own course?" it was not mathematics. You can see this, { }. There was some concurring. There was some logic, you see. There was some factual description, as a natural science. But the main point was to lead you through these three phases, you see, of the you-man, the I-man, and the we-man. That's not grammar; that's super-grammar. Can you see this?

Now here in -- in -- in Thomas, I wish to say one word. We said he con-

cords. The schoolmen themselves said they distinguish. The end of the Thomistic -- any Thomistic question is -- are three distinctions. It is to say --. "When conscience sometimes is called the spirit," that's said improperly -- how do you say it? -- improperly. That's just a metaphor. Secondly, when we say that conscience be sullied -- and how can an act be sullied? -- it is only meant that I know in my conscience that I am sullied, not the conscience is sullied. But what is meant is that through my conscience, I know that I myself am defiled. Again, a distinction, not the conscience.

[tape interruption; end]