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1993 MCGIVNEY LECTURE SERIES
SPONSORED BY THE KNIGHTS OF COLUMBUS
AND THE JOHN PAUL II INSTITUTE FOR STUDIES
ON MARRIAGE AND FAMILY

LECTURE FOUR:
"BIOLOGICAL HAPPENING OR A FUTURE FOR MANKIND?"

The biological happening I wanted to discuss with you this evening is a very remarkable fact that what we call animation is in fact an alienation of the matter. Suddenly, the matter do not behave like ordinary matter but is forced to behave as information tells to the matter what it should do. And then in the true sense of the term life is, so to speak, an alienation of the matter. It begins on a very peculiar surrounding. If we look at the history of life, it seems that life has begun inside the waters. At least that is what is taught in the Bible and what is taught also in the books about evolution. We begin also in a very curious medium. Now, in the bottom of the sea, you can recognize easily that this is seaweed. But in fact it is not seaweed; it is "sheweed." That is the lining of the uterus with electronic microscope at the time that it is ripe to receive the first implantation, and it is remarkable that to the human eye it looks like seaweed and nobody can make a mistake about the diagnosis. The beginning of life is a very rapid phenomenon, which I have just made a little drawing about it. But after the entry of the sperm inside the zona pellucida,

which is a kind of plastic bag which is in fact the wall of the private life of the early embryo as soon as the head has gone through the membrane. Here we see it is not human; it is a mice, as you can recognize by the long thing. The head of the sperm is now coming to the zona pellucida and with that it will drill a hole and now it is going inside and half of the head is now inside the zona pellucida. What you should remark that there is already a change in the molecular structure of the surface which has suddenly changed at the moment the hole has been drilled for the first time and which now is totally changing and the whole head will go inside. As soon as the whole head is inside, the zona pellucida becomes absolutely non-perforable by another sperm so that the door is definitely closed and all the information necessary and sufficient is now inside and no information will come in during the whole life of the new individual. Then conception is really what happens at the beginning of life. And here we touch a very simple and moving conjunction between science and common language. At the very beginning when the information carried by the sperm has made the entry inside the egg and the whole information necessary and sufficient is now inside this little sphere of one millimeter and half, we know that everything necessary is spelled out, and it is remarkable that we use the same word to define an idea coming in our mind and a new individual coming to

life. We speak about conception. We have a conceptus, a concept of an idea; we conceive an idea, and when a baby is conceived, we call him a conceptus. That is not a poverty of the vocabulary but it is in fact an extremely precise definition of the beginning of life because there is a moment at which the language of nature has been so miniaturized as I told you previously that now we do not make the difference between information and matter, between spirit and body. We use one word, conception, to define the start of both of them because they are tightly united at this very moment. With the progression of the complexity, the new being has to manifest all the information it contains, and because he is bound to become a very big system compared to one cell, he begins to divide feverishly. But you have to remember that after the sperm has got in and that the first cell begin to split in two it is still inside the plastic bag, inside the zona pellucida, and all the beginning of the embryonic development is totally protected from mother activity. It is totally independent. That's the reason why in vitro fertilization is at all possible because in nature the egg is free in the liquid which is around here, and the sperm are swimming in it for reaching that egg so that the egg being protected by its little shell so to speak, he is really independent of the mother for quite a while, for five days. Then it divide first in two cells, and what was a surprise of

the old embryologists (and it is described in most of the books but not any longer now; I don't know why but it is still true) that one of the cell split in two but the other remain unsplit. And at the very beginning there is a stage of three cell, which was a great surprise because you are supposing it divide in two, then four, eight, sixteen, but that is not true. It begins by three. The interest is very great and I will come back to that in a moment. Then this one divide and this one which was late will progressively build the envelopes, and the one who was early will build the body. Then we come to four. Then each of them divide, and we come to eight and then we come to sixteen, and what happens then, it is a compaction and the cells begin to hook to each other, and the little mass inside the plastic bag becomes now smaller than the plastic bag so that there is water around and it has contracted. Let's show you a picture of that so you have an impression of what it looks like because a drawing is easier to define. But here you have to remember that it is not natural because the plastic bag has been removed. Nobody would, you would not see that because it's mice, but the plastic bag has been removed so that you see the cells, and suddenly they compact. The result of that compaction is that the cells which are inside get compressed by those who are outside. Let's come back to where we were. When you have sixteen cells, it's like having in a big sphere sixteen marbles.

How could you put them inside? It is very easy. You have to put three in the middle and thirteen around. That is seven at the equator, three on top, three underneath and three in the middle. Now, the result is that the three in the middle would get compressed suddenly decide that they will work together and build the body. Now, the surrounding ones which will now expand that way will build the membranes and later they will build the placenta. Membrane and the placenta are just as important as the initiation of the embryo itself because it makes a kind of space capsule in which this tiny cosmonaut will begin its own life and which we could not live at all if he was producing himself its own capsule. So so speak, it is like an astronaut who would be building around himself the shuttle entirely. At the end of another division, one of the cells shift its metabolism and it is producing a stuff, maybe that cells, which is digesting the shell and the whole thing goes out exactly as if it was already an animal. The way it goes out is like an animal going out; it hatch. The hatching happens at around the sixth day because the division occurs every 24 hours. That is very important because if the hatching is too early then the individual would go out inside the tube because the tube is what carries the egg from the ovary to the uterus. And if it was hooking on the tube, it would be a great danger because the tube cannot expand enough as the uterus and the extra-uterine

pregnancy give rise to rupture, to bleeding, and they must be operated. I'll come back in a moment to that particular question because Professor May brought to my attention very interesting publication and I think it is important we come back to that. But not complicate too much, let's continue. We have started the divisions, and then we look at the fourth division. We have six in cell, three in the middle. Now, you have to realize that in experiment it is possible with an egg which has divided up to eight cells or to sixteen cells to remove some cells and to put other cells coming from another embryo. That is easy with mice. It has been made, and the result is extremely interesting. You take an embryo of mouse which is bound to be a black mouse. You take another one which is bound to be a white mouse because you know the progenitors and it is easy to say, "This one is a white mouse and this one is a black mouse." Now, you take part of the white and you put it inside the black one after removing the cells so the number of cells remain the same. In most of the case, it dies because it is a rather complicated intervention, but in many cases it survives, and what comes out is a tiny little mouse, perfectly healthy, but on the fur you will see a kind of chessboard with parts that are dark and parts that are white, and you see that two lines of cells have combined to build the organism. Experimentalists are never happy with one experiment, so they tried now to take three

different strains - one black, one white and one khaki - and in that case you get rare mice who have this chessboard with three different colors. We, not me but the specialists, they have tried to put four different lines, and they never get a baby mice with four different colors. The top number is three. You can put four, five different cells lines and only three are to be found in the mouse because at the beginning the mouse is telling itself at the three-cell stage "We are not a population of cells; we are bound to be a mouse." Now if you manipulate it, they lose that information because you have removed some cells and put other cells. But when they compress themselves, they compact themselves again, you have three cells in the middle, and you cannot have more than three lines in the resulting mice so those experiment have show definitely that first the individuality was a kind of trinary system. We need to have three cells talking to each other to decide "I am one individual," and you cannot use more than three cells to define one individual. Now, this very peculiar system allow us to understand what are the twins. Twins are just an error of calculation of the number of division so that you reach the time at which you should trigger compaction. Look what happens at the fourth division - we have sixteen cells, we get compaction, we have one baby. Now, if this compaction does not occur here but you have another division, then you will have 32 cells, and

inside the sphere of 32 cells, you will have in the middle three plus three and 26 around, and you will have twins, identical twins. Now, if you have another mistake and you continue to divide, then you will go to triplets. That is very interesting because it tells us that there is a calculating machine in this tiny embryo which is counting the number of division. "I divide one, two, three, four; then I compact." Sometimes the ? does not ^{occur} cure immediately. Then it divide another time, and you get twins. So that there is an extraordinary property that even arithmetic is already acting during the first cell cleavage. There is a counter somewhere. We don't know how it is, but it is probably very simple. It must be exchange between cells and chemical message and that would be related with the necessity of having an odd number. Because there is an odd number, the actions cannot be equal so you have a system to count the number that you have got. What is now the reason of this presentation is that we know now that twins are carrying the same nature, and in fact a set of identical twins it is two persons sharing the same nature. That for us is not very complicated to understand but it is most curious that some people can really feel it. I remember it was in the Academy of Moral and Sociological Science in Paris I was giving a talk about the early embryo and one of my colleague came after the talk and he told me "While I did not want to say that in public, but you know ..." He was an old

professor of law. He was nearly 85 or 90 at that time. I don't remember exactly. He told me, "I was a twin. My brother died a few times ago in an accident, and we had exactly the same career. He was a professor of law like I am." And he told me, "You have said that twins were one nature splitted in two persons. Now, I must tell you, Doctor, that for my brother and I the question of the Trinity was never to be discussed because we felt it was possible." I was very much impressed by this kind of confession. He was a very learned man, and really you have to be identical twins to understand that the idea of one nature splitted in two person can be felt. Most of us have been made one by one. Nature is very kind with this, and she takes the trouble of not doing a series of us. We cannot feel those things, but twins do. But we know the contrary, and little mice with the chessboard I was talking about is the contrary because in that case we have united two nature in one individual and that is known also in man. It happens sometime that at the moment of fecundation when there are probably an error in the splitting of the egg so that the egg is splitted in two cells and one sperm comes inside it and and one sperm inside the other and then individual which will come out is a compound of two genetic makeup. This has to occur at the very beginning, at the conception, because if it occur later it would be prevented by the closing of the zona pellucida. But if it has occurred just

at the moment of conception, you can have hermaphrodite and its individuals having the sexual appendage of Hermes, the male, and of Aphrodite, as female, and they are abnormal indeed, but if you look at their cells, you will find that they have together, XX, as a woman, and XY, as a male, compounded in one individual. Those chimeric hermaphrodites are really two nature united in one person. That's taken together tell us that the beginning of the individual, that the beginning of our personal life, has to arise at the moment of conception and at the latest time at the splitting in three cells. Then when people are discussing when does occur the individual, when does occur the unity we can answer we know it occurs at conception and if there are some mistake, maybe few hours after conception but no later than that. Well, let's suppose that we agree because science tell us that what is a human being? A human being is a member of our species, and then if we ask science what is a person, it is a human being alive. And science has no other answer. Then if we agree that the personality as far as biology is concerned is there at conception can we make a cross examination? That is, have we the possibility to say "Well, you have seen that but are you sure that there are no situation in which the contrary could occur?" Well, we have this possibility because it has been made possible in mice to change the rules. That is, to build the mice in which no male cell is used but all the chromosomes are

derived from female cells. And that is not an individual; it is not a being; it is a tumor. It does not give a little mice. It gives a teratoma of the ovary, and what is interesting is that it exist in our species sometimes what we call a dermoid cyst occur in virgins and we see a tumor growing on the ovary of a little girl and inside that tumor you would find a horrible mixture of different tissue. There is teeth, bones, hairs, nails, nerves, but all of that in a full disorder. There is no building whatsoever of a body. It is only a bag of spare parts. You can do the contrary and the contrary is to build a mice in which you have removed the pronucleus coming from the mother so that you have only the chromosomes marked in the ways the father is marking the chromosome, and in that case it is not a being either. It is also a tumor. But in that case, the tumor is very different. The tumor is made of vesicles, and it looks like the placenta or the amnios which are around the baby so that it makes what is called a molar degeneration. This exists in our species, and it had been demonstrated around 10 years ago or 15 years ago that in molar degeneration there were no chromosome from mother. All the chromosomes were coming from father. It was a great surprise and nobody understood really what was meant by nature that we could find a kind of pregnancy in which there were no baby but there were tissue looking like vesicles and only carrying male chromosomes. Now we have the

answer, especially after the discoveries of Surani. Surani discovered to the great surprise of geneticists, nobody had prophesized that, that not only we receive half of our chromosome from mother and half from father but that all the women are marking their DNA by a system we call methylation at certain places and all the women put the methylation at the same place of the DNA but all the males are marking different places and all the males are marking the same places but it is different from the one marked by the mother. So what happens is a very curious result that on the first fertilized egg which has received the mother chromosome and the father chromosome now it has not only all the information written in the DNA but all the underlined paragraphs that it should read first and then it will read the rest later. In a sense, the beginning of life remembers very much a student trying to prepare their exam. You know he has the book and then he underline what he have to know tomorrow and he cross what he has maybe to learn later. We do the same, and at the beginning of life we have underlined exactly what we must read immediately mother-wise and what we must read immediately father-wise. Now, the surprise come when we realize what father was telling us to do and what mother was telling us to do. Mother is telling how to build the spare pieces. Hence, the possibility of the tumor I was speaking of before. Father is telling us how to get the food and to be

protected, so how to build the placenta, how to build the membrane. So that we find written inside the chromosome of the first cell one millimeter and half we have epitomized the difference of task between the two sexes. That man has to build the hut and go hunting and mother has to carry about the baby. And it was a great consolation to the geneticist to see that even at the level of the first cell those things were precisely inscribed. That has very important consequence. That is that the first cell knows all. The first cell knows how to build a human being. Now, when it divides, progressively it changes those mesylations so that in the cells of a grown up the little paragraphs which are underlined are still underlined some of them in the mother way and in the father way, but most of them have been changed during the growing of the individual so that the cells have differentiated in a very curious way that we are able to make from one first cell liver, bones, and brain and build the individual and that cannot be reversed. It stays like that until you erase some of the mesylation and you mesylate some specific place in the ovary to build a ripe of ovum and you do the same at the different place inside the testicle. That implies that it is not possible to reproduce without two different sexes because you need two different sexes to have more information in the first cell. That is simple addition. It is not only complementary. It tells the same thing as far as

the time of fusing those things is written in. Just for us many consequences. The first is that it allow us to understand how from a cell apparently undifferentiated you get the whole individual. It is very simple. You erase some methylation; you change some of them and progressively you forget. That is, the cell which is able to in my body to make a nail has forgotten all the rest, but she remembers how to make an egg. So we pretend that this cell has specialized, but she has just lost part of its information. And in that case, really, the development of an individual looks very much like the teaching of students medicine because when they have got their teaching they are supposed to know everything, and if they have become generalists, they will know a lot of things about many things. The more they grow in their generalist way, the less they know about more things. At the very end, they know very little about a lot of things. But the specialist do the contrary. He learn more and more on less and less. At the very end, he knows everything about nothing. It is exactly what the cells are doing. The first cell knows everything, and progressively by forgetting, the cells do specialize and express what was written in the first cell. Then the conclusion is, that may be a scoop for some of you, a consoling scoop, that the gay nightmare will not be realized. It is not possible to take two different sperm, to put them inside an egg, to remove the female

pronucleus, to have a progeny of two males. That will be a tumor but not a human being. In the same way, the pretension of the lesbians to have by genetic manipulation a child between two female with no intervention of a male cell is totally out of order; it will never occur. It is not that it is forbidden by the law; it is forbidden by nature. Even the cloning (that is, a production of a new individual from a nucleus of any part of its body) is not possible because it will not have inside it this mesylation at the appropriate place, and then the speculation of the billionaire to transmit at the same time its financial interest and its genetic capital will not be realized. This speculation is totally devaluated by new genetics. Which is interesting that it was not foreseen 10 years ago, and it is only the discovery in the last five years which have allowed us to be sure that those things are really like that. But remains a curious question. Can it be possible that a man can be so much reduced to be the tiny ? of one millimeter and a half? That it is possible that it is the most simple formula. The algebrist like to reduce a formula to its simplest form and is it is possible that the formula of man can be reduced in that way? Well, the fact that is that it is not only possible but that it is right, and we know it it is because we can stop the process of manifestation of life. That can be made by lowering the temperature. In Latin and in French and also a little in

English, we use the same word to define the heat that we measure with a thermometer and the duration that we measure with a pendulum with a clock. In French we say temps and temperature. In English you can say tempo and temperature. In Latin it is the same word, and that again is not a poverty of the vocabulary but it is a definition of something that was very difficult to understand before we knew the particulate nature and the bone and movement that what we call heat, what we call temperature, is just the speed of the molecule measured with the thermometer with a number of heat. And what we call time is in fact the flux of this energy through this movement so that if we slow down this movement what we do by lowering the temperature is slow down the time inside this cell. That explains why we can use cryopreservation. We can make congelation of living cells, and once they are in liquid nitrogen they don't move, they have no metabolism, and apparently they are entirely dead. But no one of use would pretend that they are entirely dead because we know that if we give them back the temperature, the normal temperature, then they will manifest their lives again. Then we are obliged to know when we make congelation what we are congelating is not the cell, it is not the life, it is the time. We are freezing the time. And when the cell is kept in this frozen time, then there is no change occurring. There is no aging if the frost is very deep. It has to be as deep as

possible. Liquid nitrogen is not deep enough, but we use liquid nitrogen in biology because it does not cost too much and it does not explode. Liquid hydrogen is much lower in temperature and would produce a much better preservation for long time, but nevertheless, liquid nitrogen is rather cool and it allows to keep the cell not moving, not breathing, not doing anything for years. And the embryos are just as resistant as ordinary cells so that embryo can be frozen, but curiously an egg before fecundation cannot be frozen. It can be frozen in the sense of being refrigerated, but it will not survive when it comes back to normal temperature, and we do not know really why the fact that the entry of sperm so much changes the physical structure of the egg that now it resists the congelation and it can be frozen, although if it was before fecundation that you had congelated the egg it would not survive. That proves again that the change at the moment of conception is physically irreversible and makes a total difference between an egg and a new individual. That was the introduction of what I wanted to discuss now. I have been long, but science is very patient to try to see around to gather information. Because what I would like to discuss now is what can we do to convince people that life and human life is so precious that it should be preserved with the utmost care. I would just propose to you a broad review of what we can use as arguments, and to try to make some

order, I will follow the Spirit; that is, use the seven gifts of the Spirit to do that. The first gift is wisdom, and I would propose that the best wisdom would be the popular wisdom, the one which our generation has made -- sexual education of all the babies of the world. Not only the grannies in the English-speaking countries but the great mother everywhere on the globe. There is one story which has been told to every children in the world. It's the story of very tiny human beings living inside a sheltered, underground world in which wonders are happening to them. The story of Tom Thumb, of the little man smaller than a thumb, has been spelled in every language since the beginning of humanity for a very simple reason that the grannies had the wisdom to tell to the next generation that they had been a tiny Tom Thumb in the womb of their mother, and it is still true today, and still you can tell to the children this story and they will understand it, and even grown up, if you tell it with details, would be interested about it because it remembers them of something of which the memory is very poor but which has been so deeply imprinted when they were not thinking at all but they were feeling that they still have what I would call an unconscious memory. Well, probably you do not believe me, but I would show you one wonder which is not yet achieved but which already exists and which is related to the curious ectopic pregnancy I was talking previously. You remember that the

little cosmonaut is building his space capsule, and he has a capsule with three envelopes - one is the amnios, and he is inside it. I think you can just notice the feet, the hand, the head here. Around it is the chorionic system and around it all those hairs that you see are in fact the villi of the chorion. They have been made by the baby. Now, this baby has been removed, and it has been opened so that you see together inside and outside, but at that time if you were looking at a healthy baby you would see that this big one all around and you would not see the baby at all inside. When you look closer, you would see that in fact those villi are not loose but they are hooked to each other by a membrane which makes another cavity. This cavity is the inner-velocity cavity and has enormous significance because here are the vessels of the mother and the placenta is not yet made so that what exudate is a kind of edema coming out of the vessel of the mother goes inside here--those vessels are the vessels of the baby--so that the baby is getting its fluids and its oxygen by an exchange system of fluid with not any connection with the blood of the mother. It needs only some exudates surrounding the whole thing. Now it seems very likely that if an ectopic pregnancy was removed with great care and put back inside the uterus with enough of tubal fluid it would survive and it would implant in the uterus. There are all the reason to believe that it is possible. There are two

publications which Professor May brought to my attention, but unfortunately they are old and they are not very precise, but probably in our time of graft, the idea of grafting the early baby that is a Tom Thumb before three months of age is still a possibility. After three months, after he has built the placenta, the blood of the mother circulate inside the placenta, the removal and the implantation would have a time of maybe many hours in which a baby will be without nurture and it would die anyway. But earlier than the second month, probably this transplantation will be feasible, and without being a prophet I would guess that one day you would read in the newspaper as a headline that the transplantation of a tubal pregnancy has been a success and is now achieved and now when the pregnancy is out of the uterus we can transfer it. By all likelihood, nature is ready for us to help her to do that. I am coming back to the possibility of convincing the people, and we have to help their understanding because understanding is the second gift of the Spirit. And how to make them understand that they really have been a Tom Thumb? You can propose to them a very simple experiment. They have to go inside a discotheque. A discotheque is a very curious place. Generally, you go in by a narrow entrance and you come in a vaulted shelter where is a very dim red light. The temperature is hot. The atmosphere is very damp, and the smell is strong. There are bodies slowly

moving or jolting very rapidly, and there is a terrible noise, an enormous noise which is made by the counter bass and which make your chest moving at each beat of the counter bass, and there is another rhythm which is much more rapid. That is the maracas, which make your head much more vibrating. And apparently people do like it. Why? It is just because they remember there was a time in which they were in a vaulted shelter in which it was damp, hot and smelly and which they were dancing and in which there was a terrible noise. It was the heart of mother which was hammering the future at 60 per minute which is the rhythm of the counter bass, and there was a heart running at 150 which is the rhythm of the maracas and it is not by chance that the symphony of those two rhythms have to be found in any popular music. It is always 60 and 140, 150. Why? It is because it is the earliest music that any human ear has heard, that every human ear has heard. Indeed, it is a very primitive symphony and you are entirely entitled as a grown up to prefer Mozart; but nevertheless, there was a time when you enjoyed it, this symphony between two hearts, which is the one in which you have grown at your very beginning. Well, if understanding is not sufficient, we could use counsel to tell them how to be prudent; how not to run all the future of the humanity in jeopardy. You are not going to tell them that there was a time in which human beings were killing other human beings

because they were not the right genes or the right population constitution. You are not going to tell them that there is a mistake in every dictionary because euthanasia should not be written like that. Euthanasia has to be written ? Nazi. It's the way it has been written in bold letter in history. Now, you have to discuss this thing. Just tell them an old story which is the story of Sparta. In Sparta, they had a very severe control of the newborn, and if they were considering that the newborn was too weak to become a soldier or if she was too weak to carry future soldier then they were putting the baby in the upper gate of the mountain so that they could be eaten by the wild beast. But curiously, the Spartan are the only Greek among those people who were most gifted of the world, of the whole history, they are the only one which have not given anything to humanity - not a statue, not a poem, even not a ruin - in the plain of ? nothing is left. Now, for the geneticist it is an extraordinary question. Is it possible that because they were killing their children when they felt they were too fragile, maybe they were killing their future artists, their future poets, their future legislators? That's a possibility. It is possible that it's because they were already very dull that they were killing their own children. I guess the real answer is that both facts were probably causative in the fact that nothing is left from Sparta. Now, you have to resist and you have to

tell the people to resist to an extraordinarily convincing reasoning and for that they need fortitude, which is the next gift of the Spirit. And the fortitude is to resist to a ? the later use reasoning which is diversion, inversion, perversion. The diversion is very simple. They will tell you, "Don't look at the one who is to disappear but look at what it costs; what the parent would suffer; what the family would suffer; what the society would pay for it, so don't look at the victim, but look at the mother." Then immediately will come the inversion. They will tell you, "Look, with all the money, with all the dedication we would have spent on that one, look at all the good we will do. We will build new highways. We will reduce the difficulty in the hospital. And we will even sometime give something to somebody somewhere very far away in the world." Then comes the perversion. The conclusion is we should discard the innocent. That they will repeat it, not only for abortion but for euthanasia and for any rejection of those not fitting the rules which are politically correct nowadays. This reasoning, we know where it comes from. It has been used once. There was a time at which there was a very precious perfume which was used on the feet of the innocent, and there was a man who said, "We should have sold that perfume, and look at all the good I would have done for the poor." It is this one who was going to sell his master for 30 pieces of money. Remember,

every time you will hear this reasoning of diversion, inversion, perversion, and they have no other discourse possible they are just telling you what Judas did. Remains the gift of science. Science cannot tell you all the morality but it can help you. I remember when, thanks to my friend Martin Palmer, I went to a little town of Maryville in the case of seven frozen embryos. The judge was listening to science. The story was extraordinary, and sometimes truth invent analogies that writers would not dare to try. The woman was called Mary. The town was called Maryville. The lawyer of the mother was Christenberry. The judge who had to tell the truth about the earliest human being possible was named Young, and myself, I carry the same name but in French. It was an extraordinary moment when I was asked if I had something more to tell to the judge that would have summarized on those four talks here and if I had some counsel to give and I said "No, but I have one hope; that at that time Mr. Justice will be on the same side as Solomon" because what he had to judge was who was the parent to whom the children should be given to custody. And there was a father who was saying that he wanted them frozen forever and there was a mother proposing her own body to give them the shelter so that they could reach the fresh air later. This had been judged 3,000 years before when the king had said to the soldier "Cut this child in two parts and give half of it to those two women."

And then one woman said "I better give him to the other but don't kill him" and then the king had said, "This one is the true mother." That is the reasoning of the Judge Young, and he used *parens patriae* law telling that the state becomes the parent so that he has to give to the child the best custody he can, and obviously the best custody was to the parent that wanted the child to live and not the custody by the parent who wanted the children frozen forever. Unfortunately, science has not been recognized by the Supreme Court of Tennessee, who decided that the baby should be destroyed if the father did not want them. And the supreme injustice was made by the Supreme Court of United States when it refused to hear the supplication of the mother few months ago asking "But give me them." It is a very important step that has not been noticed by the newsmen, but the first time in this country that innocents, of which innocence have been established by the justice, were sentenced to death by the Supreme Court of this country; the first time that innocent have been executed according to an order of the Supreme Court. I don't know if you remember what said one of the advocates at Nuremberg when he said that all it began when you killed the first innocent. Unfortunately, you have to know that it has occurred for the first time very recently in this country after a complete justice decision. Remains two gifts of the Spirit. One is the piety and the other is the fear of the

Lord. Piety is a respect of the law for the respect of the Creator. And probably it is our duty on the day to come to use this piety toward our own nations. We have to tell to our own nations. I don't speak especially about United States. I speak about any nations. We have to tell to our nations that the law of life are superior to the law that man can adopt. Obviously, you will be told and you will be repeated that in a real democracy you Catholics, you are not allowed to impose your morals upon others. That's exceedingly interesting because those who tell you that are not democratic. What is democracy? It is the power of the people. That's what it means. Now, what is the duty of the people is to try to enter in to the law of their country what they suppose, what they consider is the best for their country so that the very essence of democracy is by your vote to impose your moral upon others. Those who do not accept that definition of democracy are totalitists, are terrorists, are practicing political correctness but they are not doing democracy. And I think that it is our duty to realize that. Fear of the Lord is probably the most important. It is lost politically but it is not lost on the heart of the people. There was a phrase in Latin that we were learning when I was young. It was telling "Have fear of the Lord and nothing else." That is the true liberty, and this liberty will allow us for the future of mankind to choose, and we have to choose and very soon

between two possibility and the choice is between Faust and Jesus. There is no other choice left. Have you thought about why it was so exceedingly interesting to speak about baby in vitro, the test tube babies? Why this artificial fertilization, this fecundation was so interesting for the newspaper? Why they are still publishing about that? There is one man who has told us the whole story 150 years ago. When Goethe wrote the first Faust, you know the story, Margaret got pregnant, she killed the baby and she get condemned and sentenced to death, and the damnation of Dr. Faust is really the abortion of love. But the second Faust, the one that probably you have not read, it's more possibly modern than you could believe. After the death of Margaret, Faust come back in the old house he had and he found his previous student, Wagner, and he is working in his old laboratory and Wagner is manufacturing an homunculus in a bottle, an in vitro baby, and the poet sees the future. The tiny little creature goes out of the alchemic fields and it flees around the head of Faust and Faust is following this dream baby and it is following it in the past and he found the ghost of Helen of Troy. He get in love with her. He has a fancy baby which he calls Euphorion, which means the pleasure and which falls down from the sky like Icarus, and finally when Faust has built an extraordinary empire through the magic of Mephistopheles, he gives the two last orders to the devil. He

tells him "You have to silence this tiny bell which is still ringing because there is one church left in this enormous empire" and he said "You have to move this little cabin in which are still living Philemon and Baucis, who are the parents of human love so that we could increase the channels through which the wealth is flowing." When Mephisto come back, that he has burned the little church, that he has burned the little cabin with the lovers inside, when he has destroyed the two last marks of the divine love and of human love, that is the moment at which the sorrow comes inside the soul of the doctor. That is the end of the tragedy. Poets do not make science, but they see it coming from very far. What Faust has described to us is the sum up of the pride. Manufacturing a human being in a vessel so that we can say "This has been made at my own similarity" so he has not been made in the image of God, that is supreme temptation of pride. Then what are we going to do? Because we are becoming everyday more and more powerful every day, we will be tempted to use this Faustian power. For example, if a baby is affected by mistake of the chromosomes, by a bad gene, why not discard him if we have been made to know this early? Why not to get rid of those patients who cost to the parents, to the society? The reason not to kill them is very simple. Because they will cost a great price in dedication, in suffering to the parents, in suffering maybe to themselves, but this price we

know exactly the amount. It's a price which has to be paid to remain human. If we refuse to pay it, we will lose what makes us really human. If you don't believe it, I'll tell you a true story which have been told to me by a great friend who was coming to this country just before the last war. It was here in America, and we had a meeting about testing, about prenatal diagnosis and killing the babies. It was 20 years ago. After the meeting, he told me "I have to tell you a story." He was a professor of embryology, an old man at that time. He told me, "My father was doctor in the little town in Austria, and he told me that one night in this little town two babies were born on the same night in two different families. In one family, it was a little boy. He was a strong a boy and everything okay. The other family, it was a little girl with a very low cry. She was Down's Syndrome girl." He said "My father told me that they had a very different destiny, those two children. The girl, when her mother had a stroke she was 30, and for four years this Down's Syndrome girl was helping her mother and giving her the food, and those last four years of that mother were as good as possible thanks to the dedication of her feeble-minded daughter." He said "I don't remember the name of the girl, but the name of the boy, have never forget it. His name was Adolph Hitler." This story is not invented. It is really true. It summarizes that we cannot judge among human life, and we cannot

condemn innocents. I would go further. I would reverse the story. Let's suppose by an impossible prediction that it was known that this baby would be Adolph Hitler. No doctor would have been allowed to kill that baby but maybe we could have educated him. Then we have to choose. Because we have to rely on some touchstone in which we can be faithful to know that "that we could do" and "that we should not do" we have to have something what would tell us what is good and what is evil. There is one phrase that everybody of us know which could -- and it is the only one which could do -- that tell us without any technicalities, in every case what to do. If the politicians remember it, they can make honest laws. If the technicians do not forget it, technology will remain the honest servant of humanity. But if both of them do not remember it, then you would have to deal with a denatured biology and there would be a very dim future for mankind. This phrase is, you know it, it judges everything and forever. It just says, "What you done to the smallest of Mine, you have done it unto Me."