

New
Technology
Brings Clearer
View of Life
(and Death)
In the Womb

Two Recent Films
Show Both . . .

"Everyday Miracle: Birth"

A BBC-TV Documentary, narrated by David Attenborough, "Everyday Miracle: Birth" is an award winning film showing intrauterine life through stunning microphotography and ultrasound.

"The Silent Scream"

Abortion from the victim's point of view. "The Silent Scream" uses ultrasound to show a suction aspiration abortion of a 12 week unborn child. Segments of this film have been seen by millions on network TV news. Latest focus in the abortion debate.



The National Right to Life Educational Trust Fund promotes positive, compassionate alternatives to difficult problems such as crisis pregnancy, abortion, infanticide and euthanasia. By educating the public on these and other vital right to life topics, NRL helps to rally support for those innocent persons whose lives are in jeopardy. Through its affiliations with various kinds of social services, NRL encourages care and support for the unplanned, the unwanted and the imperfect of all ages.

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Dear Reader,

This issue of Life Cycle focuses on advances in technology which are giving us an expanded and clearer view of the incredible wonder and beauty of life before birth.

Ultrasound, fetoscopy and microphotography are just some of the technologies which we now use to learn more about developing life and which give us the opportunity to medically and even surgically treat the child before birth. The unborn child is now clearly viewed by modern medicine as a patient to be treated and cared for.

In "The Silent Scream," this same technology, specifically ultrasound, was used by a former abortionist, Dr. Bernard Nathanson, to show not a life-enhancing therapy for the tiny patient but just the opposite: the dismemberment of its body by suction aspiration abortion.

Segments of "The Silent Scream" were seen by millions of Americans earlier this year on national TV news programs, and it was recently shown in its entirety on public TV (PBS). This exposure has served to heighten interest in the abortion issue.

Critics who challenge the scientific accuracy of "The Silent Scream" need only view the incredibly clear ultrasound and microphotography of the BBC-TV documentary, "Everyday Miracle: Birth," to confirm Dr. Nathanson's viewpoint: the unborn child even in the early stages of pregnancy is a vibrant, active member of the human race and is merely going through one stage of development which all of us have passed through already. As our scientific and technological capacities increase, we shall come to know more about what each one of us was once like.

Undoubtedly, medical science will continue its progress in medical and surgical treatment of the mother and her unborn child. How will we use these new techniques? Will we choose to use them for death dealing or for life enhancement?

> Dan zeidler Dan Zeidler Editor, Life Cycle

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Microphotography Shows the Inside Story in "Everyday Miracle: Birth"

Human fetus at first trimester, about the size of a thumb.

"[At 12 weeks]... a miniature child already performing astoundingly delicate movements."

BBC Film Wins Awards

Produced by Andrew Neal for the British Broadcasting Corporation, "Everyday Miracle: Birth," has received several film awards including the Silver Medal Award of the British Medical Association Medical Film competition, and the Red Ribbon Award at the American Film Festival.

Science Books and Films, Nov./Dec., 1982 said, "This film is typical of the high quality of BBC Productions ... candid, complete and in good taste . . . a film of exceptional educational value." Booklist, Sept., 1982 called it a "Remarkable look at the development of a fetus." Stephanie Irwin, Media Specialist for Staff Education at Kettering Medical Center, Kettering, Ohio, describes "Everyday Miracle: Birth" as, "An awesome film in which we are able to see things we were never able to see before. This is one of the most exceptional films we have ever seen. I cannot imagine anyone being disinterested in it — medical people will be as fascinated as lay viewers.'

"Everyday Miracle: Birth" is recommended for ages 15-adult and is especially suited for the following subject areas: Biology, Health, Medicine, Science, Technology.

Information on film purchase can be obtained from Films Incorporated, 733 Green Bay Road, Wilmette, Illinois 60091. Toll free 1-800-323-4222.

How many expectant mothers throughout the world have wondered what is happening to the baby inside their womb during their nine-month pregnancy? "Everyday Miracle: Birth" is a unique BBC documentary which follows the development of an unborn child. It has been described as the finest and most comprehensive record of a baby's first few months of life inside the womb.

Advanced techniques in microphotography were used by an American gynecologist, Dr. John Marlow of Washington. He visited London to make special sequences for the program, which is narrated by David Attenborough.

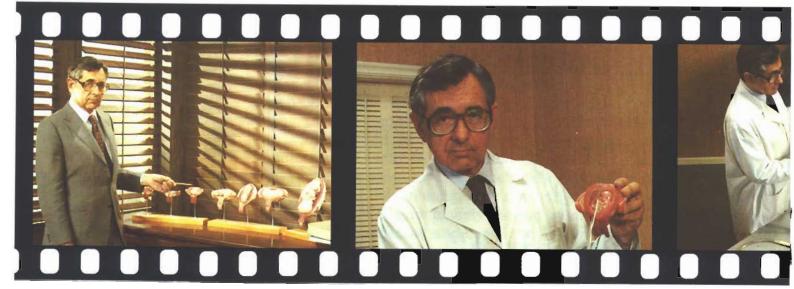
"Everyday Miracle: Birth" follows the excitement of the first pregnancy of a typical young couple, Tessa and Peter, as they eagerly await the arrival of their baby. Tessa is 12 weeks pregnant when she makes her first visit to the hospital. With the aid of ultrasound equipment—high frequency sound waves directed into the body, the echoes of which are picked up and converted into an electronic picture— Tessa sees her unborn baby. Already she can identify its spinal cord, the development of arms and legs. She listens incredulously to her child's heartbeat which will strengthen daily. She is

carrying a miniature child already performing astoundingly delicate movements

The mysteries of the beginning of life itself are graphically traced with the egg leaving the ovary and travelling inside the fallopian tube to the womb. As it meets the sperm the egg is fertilized and continues on its journey, dividing itself into two cells, then four, eight, 16 and so on until a few days later a ball of cells reaches the womb and attaches itself to the wall. Within only four weeks the embryo has a recognizable head and trunk, paddle-shaped hands and a tiny beating heart. The arms, legs and spinal cord start developing.

The embryo, now the size of an adult's thumbnail, is fed from the placenta. The arteries and veins join to form the major vessels of the umbilical cord, the lifeline between mother and child. At just eight weeks after conception this new life has taken on an unmistakably human appearance. Fingernails begin to grow and the eyelids join over the eyes. At 10 weeks, looking more and more like a fully formed baby, it is still no bigger than the palm of a hand.

From the original BBC film description.



Dr. Bernard N. Nathanson, narrator of "The Silent Scream"

Ultrasound Film Shows Abortion From The Victim's Point of View

"The Silent Scream," segments of which have been seen by millions of network TV viewers, has become the latest focus in the abortion battle.

Through the newly-developed technique of real-time ultrasound, the film reveals the actual responses of a 12-week baby being destroyed by a suction abortion. The procedure is explained in scientific detail by Dr. Bernard Nathanson, who once ran the world's largest abortion clinic. Now ardently pro-life, Dr. Nathanson is dedicated to exposing the truth about abortion on demand.

Nathanson says that for many years he failed to recognize the humanity of the child in the womb, which was very evident to others. The advent of the science of fetology, the study of the baby before birth, in the 1970s changed his perspective dramatically. New technologies like ultrasound imaging, electronic fetal heart monitoring, hysteroscopy and a host of others have afforded physicians—and mothers and fathers—their first view of the baby in the womb.

In the procedure used to visualize this tiny abortion victim, sound waves are bounced off the womb and its contents and echo back, and they are then collated by computer into a recognizable image. The resolution is so high that even the tiny valves can be seen opening and closing inside the child's heart, which has been beating since the end of the first month after conception.

"Beyond question," Nathanson says, "the unborn child is a member of the human community, indistinguishable in every way from any of us."

"For the first time," he says, "we have the technology to see abortion from the victim's vantage point. Ultrasound imaging has allowed us to watch the child torn apart, dismembered, disarticulated, crushed and destroyed by the unfeeling steel instruments of the abortionist."

These are strong words, but they describe a strong image — one which has the power to persuade in a way that mere diagrams or still photos never could. Nathanson recounts that the doctor performing the abortion being monitored previously had done some 10,000 similar procedures. But when he was invited to assist at an editing session, he could not view the film in its entirety and had to leave the room. According to Nathanson, this doctor has not done an abortion since.

Similarly, an ultrasound technician, whom Nathanson described as a feminist with strong pro-abortion leanings, was so moved by the film that she now refuses to discuss the issue.

After demonstrating the normal development of the child before birth with anatomically accurate fetal models, Nathanson explains the abortion procedure and shows the actual instruments used.

He then narrates the film of a 12-week

"Ultrasound imaging ha the child torn apart... unfeeling steel instrum

baby "moving quietly in its sanctuary," thumb in mouth, unaware of the coming danger.

As the tip of the suction apparatus is seen to invade the womb, the child undergoes violent, agitated movements, heart rate increasing dramatically, in a "pathetic attempt to escape the inexorable instruments the abortionist is using to extinguish its life." As the tip moves closer, the child's mouth opens in what Nathanson describes as a silent scream.

The viewer sees the baby being torn limb from limb by the powerful suction and drawn from the womb, piece by piece, until all that remains is the head, too large to be pulled out in one piece. The abortionist then employs a special forceps to grab the head, crush it and remove it piecemeal.

Now what remains is merely "shards, broken fragments and pieces of tissue," the only evidence "that once there was a defenseless human being here."

Nathanson then recites some statistics on the vast numbers of abortions that have resulted from the Supreme Court rulings. In 1963, he points out, there were approximately 100,000 illegal abortions done in the United States and very few legal ones. In 1973, the first year abortion was legal nationwide, the number rose to 750,000. By 1983 the death toll had grown to 1,500,000 per year,

"New technologies . . . have afforded physicians — and mothers and fathers — their first view of the baby in the womb."



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- Dr. Bernard N. Nathanson

with no sign of a decrease in sight.

As Nathanson explains that abortion is a \$5-6 billion industry, pictures of aborted infants flash on the screen. He says 90 percent of the money lands in the pockets of abortionists, while the remainder goes to the people who run the clinics. Abortion facilities have even been franchised in some parts of the country, like fast food operations.

Nathanson points out that the child is not the only victim of abortion and that women themselves have not been told the true nature of the "procedure" or warned of the dangers it involves.

"I accuse the National Abortion Rights Action League, Planned Parenthood and all their co-conspirators in the abortion industry of a conspiracy of silence to keep women in the dark," Nathanson says. "And I challenge the providers of abortion to show this film or one like it to women before they submit to abortion."

The film ends with Nathanson's plea for a common effort to find a solution to the abortion problem composed of "love, compassion, and a decent regard for the overriding value of life." He says it's impossible to believe that a nation which sent a man to the moon can't devise a better solution than resorting to violence against the most defenseless. "Let's all, for humanity's sake, here and now, stop the killing," he pleads.

Dr. lan Donald, Professor of Obstetrics at the University of Glasgow, an internationally known researcher and inventor of ultrasound technology, testified to the accuracy of Dr. Nathanson's description of ultrasound in the sworn statement at right.

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I, the undersigned Ian Donald of the above address and formerly Regius professor of Midwifery at Clasgow University from 1934 until 1976 and thereafter Honorary Obstetrician at the Vestern Ceneral Hospital Edinburgh until 1981 and Honorary Rosearch Consultant at the National Maternity Hospital Cublin, having hos experience in the development and exploitation of thagnostic Ultrasound, particularly in Obstetrics from 1955 onwards until 1981, the last four years of which were much taken up with filming fetal activity at various stages of pregnancy, particularly the first half thereof, have now studied Dr Mathanson's video-tape fills entitled "The Cilent Screen" not less than four times and affirm that Iam of the opinion that the fetal activities depicted by ultrasonic real-tune scanning in this film are not faked nor the result of artefact intentional or otherwise

2)rd February 1985.

lin Donald, C.B.S., M.D., D.Sc., F.R.C.O.G., F.R.C.S.(Class) Hon F.A.C.O.G.

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Criticism of "The Silent Scream" Falls Apart Under Scrutiny by Richard D. Glasow, Ph.D.

by Richard D. Glasow, Ph.D. Since the dramatic natio

Since the dramatic nationwide unveiling of the film "The Silent Scream" in January 1985, pro-abortion critics have attacked the authenticity of the presentation and the credibility of the narrator, Dr. Bernard Nathanson. Close examination of the pro-abortion critiques demonstrates that, without exception, the criticisms are a tempest in a teapot; they sound impressive until one examines the charges point by point.

Columnist Stephen Chapman Defends the Film

A nationally syndicated columnist for the Chicago Tribune, Stephen Chapman, wrote one of the most insightful articles about the validity of "The Silent Scream" in March 1985 and came down solidly in favor of its point of view.

Chapman first briefly examined some leading critics' assertions that the fetus is incapable of experiencing pain and of making purposeful movement. In rebuttal on the fetal pain issue, Chapman finds that compelling scientific evidence lies more on Nathanson's side than on his critics. For example, the columnist supports his point of view by quoting from a textbook on brain development by Reinis and Goldman which states that "at 11 weeks, the face and all parts of the lower extremities are sensitive to touch. By 13.5 to 14 weeks, the entire body surface, except for the back and top of the head, is sensitive to pain."

Chapman also found sound scientific

evidence to support Nathanson's assertion that the fetus showed purposeful movement in avoiding the abortionist's instrument. "We don't know exactly," acknowledged Chapman, "what the fetus feels because it can't tell us." Nevertheless, he believes in judging by the unborn baby's actions because the "perceptions of comatose people are similarly obscure, but no one takes that to excuse physical cruelty against them."

Finally, while not completely comfortable with the manner of Nathanson's presentation, Chapman stresses that the film forces "the viewer to confront what a fetus is — and what abortion does to it." "The ultrasound images make it hard to deny that a human life, however rudimentary its development, is being violently ended," asserts the columnist.

In a memorable concluding remark that encapsulates well the impact of film on the American public, Chapman states that "The Silent Scream' does for the abortion issue what television news did for the Vietnam War: it brings the killing home."

For a more detailed explanation of the scientific accuracy of the film, send for a free copy of the "Silent Scream" Booklet, Item #412. NRL Educational Trust Fund, 419-7th Street, N.W., Washington, D.C. 20004. (202) 626-8800.

Smothering "The Silent Scream" — Abortion Groups React

Upset by the impact developing technology is having on the abortion debate, pro-abortion groups such as Planned Parenthood and the National Abortion Rights Action League (N.A.R.A.L.) have mounted a campaign entitled, "Silent No More." In reaction to the public attention the film "The Silent Scream" has received, the Silent No More Campaign focuses on stories of women who have had abortions. In public "Speak-outs," letters were read from women who had been asked to explain their abortion experiences.

The strategy of this Planned Parenthood campaign aims to divert attention from the increasing body of scientific knowledge and medical expertise which clearly demonstrates the unmistakable humanity of the child and acknowledges the pre-born child as a patient to be cared for. Planned Parenthood hopes to shift the abortion debate away from the child and emphasize the particular circumstances which contributed to individual women resorting to abortion.

Planned Parenthood wants to convince people that although abortion is killing, it should still be legal. Planned Parenthood, the most organized and powerful of the groups lobbying for abortion, took out a series of full page ads in May, 1985 in many of the major U.S. daily newspapers, such as The New York Times, The Washington Post, The Chicago Tribune, etc., to make precisely this point. The ads recalled the times of "back alley" abortion deaths and repeated their desire to keep it all "safe and legal."

Dr. Bernard Nathanson, a former abortionist, dismisses the "back alley/safe and legal" arguments and figures as grossly inflated and misleading. In his book Aborting America, Dr. Nathanson, one of the founders of the National Abortion Rights Action League, admitted that ... "In N.A.R.A.L., we generally empha-

"Abortion solves nothing for women; it only wreaks havoc with our bodies, our minds and our emotions."

- Linda Parise

sized the drama of the individual case, not the mass statistics. But when we spoke of the latter, it was always 5,000 to 10,000 deaths a year. I confess that I knew the figures were totally false. ..."

According to a report from the U.S. Senate Committee on the Judiciary, (June 8, 1982) the actual deaths from illegal abortion had been decreasing tremendously since 1941, attributable "largely to improvements in medicine in general (e.g., the development of antibiotics) as well as improvements in maternal care in particular." Official government statistics show that annual abortion deaths declined from approximately 1400 in 1941 to about 200 in 1950. By the time the first states legalized abortion in 1967, the rate had gone down to 140.

Abortion researchers Hilgers and O'Hare in New Perspectives on Human Abortion concluded that the legalization of abortion did not impact on the already downward trend in abortion deaths. In fact, the number of deaths from abortion may have increased since abortion was legalized. The U.S. Senate Committee on the Judiciary states that "deaths from legal abortion may be seriously underrecorded in official statistics." The discovery of twelve unreported abortion-related deaths from only four facilities in Chicago in 1978 provides the most notable case in point. Litigation by pro-abortion organizations voided laws that would have required accurate reporting.

While legal abortion continues to

claim women's lives, there is in addition, a growing body of literature about the adverse psychological aspects of abortion on women. Dr. Vincent Rue testified to the Senate Judiciary Committee about 34 different studies that he collected showing that "the negative potential reactions span anxiety and depression to psychosis and suicide." Dr. Rue maintains that these reactions may be suppressed at first, only to rise to the surface later.

While Planned Parenthood and N.A.R.A.L. were organizing abortion speak-outs, Women Exploited By Abortion, a group of women who have had abortions and who now feel abortion is detrimental to women, countered with press conferences to tell their own stories.

Typical of these stories is that of Linda Parise of Wausau, Wisconsin. Parise, who had two abortions, helped lead a picket against the Wisconsin Chapter of the National Organization of Women (NOW) which had come together to recommit themselves to abortion "rights" at their state conference entitled "Until Justice is Done." Parise challenged the NOW pro-abortion position "as being inconsistent with true justice and as a degradation and betrayal of women."

"Besides ignoring the life of the child destroyed by abortion," said Parise, "Planned Parenthood fails to understand that abortion also destroys women. It doesn't make our lives a little easier or a little more bearable. Abortion solves nothing for women; it only wreaks havoc with our bodies, our minds and our emotions. Women have special nurturing qualities which are destroyed by abortion. We need to get about the business of understanding true feminist values which are life affirming."

"Women have special nurturing qualities which are destroyed by abortion."

— Linda Parise

The Unborn Child as a Patient

(Compiled by Jeanne Dalton)



Photo © 1982 Dr. Rainer Jonas. Used with permission

Great progress has been made in treating the child while still in the womb. The following examples of this kind of treatment have been reported over the past few years.

When Britton Glaser, Michael Skinner, Andrew Percival and Emily Pinion were born in 1981, they had a tremendously important common interest — they had conquered disability or death through the efforts of pioneers entering the new world of fetal surgery.

Draining a fetal cyst to prevent kidney damage

Patricia Glaser, during her sixth month of pregnancy, inexplicably gained 15 pounds in three weeks. Concerned about her weight, her obstetrician ordered an ultrasound examination. When the fetus's image appeared on the screen, a dark mass could be seen where the abdomen was. The Glaser baby had a large fluid-filled cyst that took up nearly its whole abdominal cavity and was obstructing a fetal kidney. It had also caused an abnormal accumulation of amniotic fluid in Patricia's uterus, causing her weight gain.

Dr. Fay Redwine and Dr. Robert Petres, of the Medical College of Virginia, inserted a tiny catheter attached to an amniocentesis needle into the cyst and drained about 6 oz. of fetal urine. Patricia watched the half-hour procedure on the ultrasound screen. In an article in The New York Times Magazine, Patricia was quoted as saying, "We became so intimate with the child through the ultrasound, we saw the hollows of his eyes and the incline of his nose. I knew it was a male and picked out the name Britton. But I still had to prepare myself for something being wrong."

Britton Glaser arrived three weeks early "screaming and he looked plump and beautiful." One kidney had been destroyed by the cyst but the other functioned well.

Saving a fetal twin

Rosa Skinner was carrying twins when her son was diagnosed with ultrasound to

have a uninary-tract obstruction. Without treatment the accumulating urine would ruin the baby's kidneys and damage his lungs and he probably would not survive, but the prenatal surgery necessary to save his life would endanger the life of his sister.

The medical team from the University of California at San Francisco waited until Rosa was in her seventh month, so the female twin could survive in an intensive-care unit should the surgery cause premature delivery. The medical team inserted a hastily produced catheter of a different design when an earlier one would not remain in position.

Michael and Mary Skinner were born on Mother's Day, 1981. Michael underwent surgery the day after birth to remove the catheter and begin the process of reconstructing his damaged urinary tract and repairing his distended abdomen. He continued to have surgery through his first year, but he has no kidney or lung damage.

Treating hydrocephalus before birth

Jeannette Percival was told in her sixth month her baby had hydrocephalus, a condition in which the fluid-filled regions of the brain expand and push so hard on the brain itself that nerve cells fail to develop. Dr. Richard Depp, an obstetrician at Northwestern University Medical School in Chicago, agreed to help with a team of doctors from Denver who had already tried the technique needed to drain the fluid with a catheter called a "prenatal

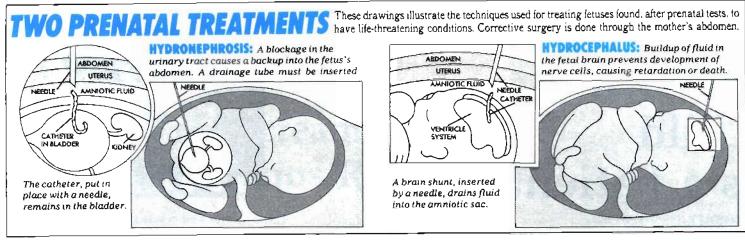
brain shunt." Dr. Depp had already had 10 years experience transfusing fetuses with severe anemia.

Dr. Depp inserted the needle containing the shunt into the uterus, then handed it to Dr. Brown, the neurosurgeon who pushed it through the bony skull of the baby and into the enlarged ventricle. The catheter was left in place in the brain, and the needle removed.

Andrew was born on Dec. 9, 1981, weighed 8 lbs. and by all appearances was a normal newborn.

Surgery Prevents Lung Damage

In her last month of pregnancy, Deborah Pinion discovered she was carrying a baby with two collapsed lungs and a huge accumulation of fluid in the chest. The same Dr. Redwine as in the Glaser case inserted a needle on the right side to avoid the chance of piercing the heart, and withdrew the excess fluid to see whether there had been permanent lung damage. Dramatically, the lung expanded, but two days later, ultrasound showed that the lung had collapsed. Again there was fluid buildup. With the knowledge that at least one lung was healthy, they waited until Mrs. Pinion went into labor. When the baby was about to descend into the birth canal, the physicians again withdrew a large amount of fluid from the baby's chest. Baby Emily Pinion was born within three hours - screaming. The doctors inserted a tube into her left lung to help inflate it, and a week later Emily went home with two functioning lungs.



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Science and Surgery Change Perception of Fetal Life

(Compiled by Jeanne Dalton)

Dr. Michael Harrison, from the University of California, San Francisco fetal treatment program, entered the field of fetal surgery out of frustration as a pediatric surgeon trying to treat newborns already too damaged to survive. He was asked in an article in *The New York Times Magazine* if the treatment was likely to do any good. "I never wonder about that. Once you see a kid with a diaphragmatic hernia die in his mother's arms on his first day of life, you never have any questions about whether to treat these problems as early as you can."

"Increasingly, as medical technology makes the fetus more and more accessible to pediatric surgeons, perceptions of the fetus may well change," says the Rev. Richard McCormick of the Kennedy Institute of Ethics at Georgetown University. "Already I hear the doctors involved in this refer to the fetus as their patient. The fetus now begins to make serious claim for a right to nutrition, to protection, to therapy. How can tolerance of abortion be morally reconciled with those claims?"

Gary D. Hodgen, a reproductive biologist at the National Institute of Child Health and Human Development in Bethesda, Md., stated in an article in Family Circle magazine, "Now we're thinking of the fetus as a patient." Hodgen and others claim that drugs like ritodrine, which inhibits labor, have contributed to progress in prenatal surgery. Cutting the uterus without starting premature labor which was impossible before, can now be controlled.

Dr. John Fletcher, a bioethicist at the National Institutes of Health, applauds the dawn of fetal surgery but sees an ethical quagmire. In an editorial in the *Journal of the American Medical Association*, he recognized that, "Improvements in fetal therapy will establish a stronger ground to protect the affected fetus's right to life," and he said it will collide with current abortion practices.

Examples of the technologies that have enhanced fetal surgery are described below:

ULTRASOUND, OR SONOGRAPHY — is a diagnostic method which relies on the use of high frequency sound waves passing through the body and giving off echoes as the sound waves hit various tissues of different densities. The echoes are collected by a very sensitive device called a transducer (from which the sound waves originally emanated) and the echoes are then arranged by a computer into a black and white pattern which forms a recognizable picture of the tissue being examined.

ELECTRONIC FETAL HEART MONITOR — uses ultrasound and computer to calculate instantly fetal heart rate — monitor indicates fetal heart rate changes from moment to moment to detect illness or stress in the preborn infant and during birth.

FETOSCOPE — an exquisitely fine optical instrument, about a foot long, and about one-twelfth of an inch in diameter. There is a light at the far end and an eyepiece at the observer's end. The fetoscope is inserted through the abdominal wall and the wall of the uterus, carefully avoiding the placenta, and allows the observer to look directly at the unborn child.

HYSTEROSCOPE — similar to the fetoscope, but instead of going through the abdominal wall later on in the pregnancy, the hysteroscope is inserted through the cervix in early pregnancy at four, five, or six weeks to observe the developing child.

AMNIOCENTESIS — a fine needle is inserted into the amniotic sac and a sample of the amniotic fluid is taken for analysis. The amniotic fluid which surrounds the baby is a source of much information about the unborn child and his or her uterine environment.

As a life-saving technique, amniocentesis is useful in many ways, including identifying babies severely affected with RH disease and either transfusing them with blood while still in utero or else delivering them in a timely manner.

Amniocentesis is also misused in "search and destroy" missions to identify possible genetic handicaps in babies, who are then aborted.

