MY NAME is Paul Ramsey. I am the Harrington Spear Paine Professor of Religion at Princeton University. My field of scholarly specialization is ethics and social philosophy — in particular, though not exclusively, Christian ethics. My credentials for submitting this testimony are the fact that as long ago as 1972 I wrote a two-part article on in vitro fertilization published in the Journal of the American Medical Association,¹ that for the past fifteen years I have written extensively in the area of medical ethics,² that I am a member of the Institute of Medicine of the National Academy of Sciences, and a founding Fellow and member of the Board of Directors of the Institute of Society, Ethics and the Life Sciences, and was once awarded an honorary doctorate of science by the Worcester Polytechnic Institute (of which I am inordinately proud).

To state my considered judgment in advance of the reasons for it: in vitro fertilization and embryo transfer should not be allowed by medical policy or public policy in the United States — not now, not ever. I venture no comment on whether sufficient “animal work” has been done, by scientific standards, for this technology safely to be applied within general practice or in trials on human beings. That question and such like questions you will explore with scientific experts. I limit myself to basic ethical and policy considerations that any knowledgeable citizen can understand; and it is in this capacity that I submit this written testimony.

It is my conviction that the Ethics Advisory Board, the Department of Health, Education and Welfare, the National Institutes of Health and the Congress of the United States — and, in absence of action from these Federal sources, the medical profession itself if it has any remaining power to enforce standards or the legislatures of the several States — should take appropriate action to the extent of their jurisdictions to stop embryo manipulation as a form of human genesis.

I am not unmindful of the gift of a child this procedure promises to women with oviduct blockage — a promise now once delivered, with possibly more soon to come in Great Britain. Still there are, I judge,
conclusive reasons for not continuing these experimental trials and for not allowing the procedure to become standard practice in the United States.

I offer four reasons in support of this verdict: 1) the need to avoid bringing further trauma upon this nation that is already deeply divided on the matter of the morality of abortion, and about when the killing of a human being (at tax expense) can occur; 2) the irremovable possibility that this manner of human genesis may produce a damaged human being; 3) the immediate and not unintended assault this procedure brings against marriage and the family, the immediate possibility of the exploitation of women as surrogate mothers with wombs-for-hire, and the immediate and not unintended prospect of beginning right now to "design" our descendents; and 4) the remote — but still very near — prospect of substituting laboratory generation from first to last for human procreation. We ought not to choose — step by step — a world in which extracorporal gestation is a possibility. Since I wish to testify to things distinctively characteristic of embryo manipulation, reasons 2, 3, and 4 are more significant, in my opinion.

Nevertheless, the abortion issue cannot simply be passed by. Millions of U.S. citizens who oppose abortion will bring the same moral objection against in vitro fertilization because of the numerous "discards" the procedure requires.

Let me be clear about this first point. I am not speaking of traditional Roman Catholics only. I refer also to the growing number of "evangelical" Protestants whose voice in Washington is the Christian Action Council. I also have in mind the hundreds of thousands of our fellow citizens in the "mainline" Protestant churches who conscientiously oppose abortion despite their leaders. I also have in mind Orthodox Jews and many Conservative Jews and all Mormons, and for all I know many humanists as well, who agree in this common opposition. We are a pluralistic society, like none other in the world.

I do not here open the question of the morality of abortion. Instead, I mean only to call attention to the additional trauma that will be brought upon a nation morally divided on this issue if any Federal funding by the Department of Health, Education and Welfare or the National Institute of Health goes to support in vitro fertilization as a form of human genesis, or to support any research tending in that direction. Millions and millions of our fellow citizens do not want their pockets picked by the Internal Revenue Service if
any portion of their income taxes goes to support what they sincerely believe to be repeated abortions.

The Supreme Court has declared that public policy in regard to funding abortion is not a question of constitutional right, but rather a matter to be determined by the democratic process of Federal, State, and even municipal legislation. The Ethics Advisory Board will play a crucial role in determining public policy by “administrative law,” not by legislation. Your hearings on in vitro fertilization may eventuate, or may not eventuate, in a policy that uses citizens’ taxes for purposes to which vast millions are conscientiously opposed. I urge you to consider that constitutionally, on this point alone, you have the legal authority to make whatever “value judgment” or public policy judgment you wish to make. It is within your power of recommendation to encourage or discourage, to allow or to prohibit, the funding of the number of “discards” that are required in the course of in vitro fertilization as a new form of human genesis.

To this first point I add the following. To me, at least, it would be significant to find out if Dr. Robert G. Edwards or Dr. Patrick C. Steptoe could be called to testify — how many, if any, of their monitored trials (from 60 to 200 “failures” have been estimated) have required abortion after the embryo had become, technically, a fetus; and how many, if any, monitored trials required abortion at a stage after viability, which the Supreme Court in Wade declared the States could go as far as to prohibit.

Whatever policy the EAB-HEW (or the Congress) promulgates, it is clear that the several States can constitutionally prohibit in vitro fertilization in their jurisdictions, as many have done in the case of fetal research. I would prefer a national solution flowing from the recommendation of the Ethics Advisory Board or by Congressional legislation. My plea is that the consciences of millions of our fellow citizens ought not to be additionally burdened by forced cooperation, through funding, in believed evil. You would not want any one of these millions of people to be your friends or neighbors if they thought it right to kill 60 or 200 human lives in order to give birth to one. You would want them to resist, instead of tacitly consenting to, such a spectacular increase of “elective abortions.” So my first point is that a prudent medical and public policy on this matter should not, for the sake of so few for whom there are other alternatives including improved oviduct reconstruction, further exacerbate our “civil war” over the morality of abortion.

As a matter of national public policy, I ask you to consider the result of allowing embryo manipulation to become first a trial and
then standard medical practice. Already it is the case that Federal and State “conscience clauses” allowing freedom from participation in elective abortions for individuals and medical institutions are not working. For them to be effective would require “affirmative action” such as is now devoted to racial and women’s rights. Already there is a lawsuit soon to be brought to court on behalf of Georgetown University against the requirement in Health Maintenance Organizations that abortion and sterilization be provided as medical services. So I ask: if the Ethics Advisory Board and HEW approves, and if then the Congress negligently approves (or lets research continue on) embryo manipulation and discard, what obstacles will this raise against the adoption of a national health plan in which these procedures could become standard medical practice?

A judicious approach would surely be to exclude such procedures from among the medical procedures claiming public support or general approval. If any American supports a comprehensive national health plan, he or she should exclude in vitro fertilization, and other deeply divisive proposals, from such a plan. For the same reasons, we ought not to ask our conscientiously-opposed fellow citizens to support elective abortions with their taxes. I see no other practical compromise that will not increase the polarization and tear further asunder the fragile moral fabric of our nation.

It may be objected that my argument from believed “moral contamination by taxation” does not hold because it would make every person’s conscience his own government, and therefore would frustrate public policy on almost every matter. Here, I think, sound judgment requires us to distinguish between policies and funding that are overriding in the national interest and those that are not. A person may believe, for example, that suicide is morally wrong and yet oppose any law against suicide. Since no one any longer believes that suicide is wrong because, among other things, it “deprives the king of a subject,” the death of a person by self-willed destruction may not always be a matter of overriding national interest. Two authors (conservative Catholics, as it happens) have used this consideration to argue that decisions to live or to die could well be left to be settled between a patient and his or her physician by legislation making the tort of treating a person against his or her will (whatever it is, and however for these authors immorally suicidal) survive the deceased. Such tort legislation would privatize a possibly immoral decision involving no third party: that is to be preferred to the States’ and its peoples’ involvement in “living wills” or “right to die” legislation. I judge that these authors feel deeply that the former policy is much to be preferred to believed moral contamination by
euthanasia or near-euthanasia legislation brought upon the public at large.

I use this only as an analogy. The freely chosen death of an individual by (believably) immoral means or circumstances need not be regarded as a matter of national interest or public policy concern. Neither is enabling a woman to have a baby in the overriding national interest, unless one believes that hereby “the king” gains a needed “subject.”

For another comparison, foreign policy and even bad wars are matters that require coercive taxation. Persons who during the Vietnam war withheld their taxes were doubtless to be admired for this form of “witnessing” protest, provided they were willing to bear the consequences of their action. “Curing” infertility in particular cases is an entirely different question, as are individual choices no longer to live by medical means. We are born and we die; the people of the United States go on, with little or no consequence from those personal events.

I am not suggesting that such outcomes are anything other than profoundly important personally, and morally. But I do suggest that neither should be entwined with public policy. I urge the Ethical Advisory Board to consider that any funds to learn how to do in vitro fertilization in the United States across numerous “discards” is 1) profoundly conscientiously objectionable to millions and millions of our fellow citizens and 2) can in no way be deemed to be an overriding national interest worth making “tax objectors” of them.

I add also that any member of the Board who can wish this to become a “standard medical practice” must want both our present health care delivery system (which is largely funded) and any future national health plan to be profoundly oppressive to consciences. The argument will be — will it not? — that since rich women can afford this service, “distributive justice” requires us to provide it to poverty women as well, through Medicaid. Heretofore that argument — in the matter of abortion — has had behind it the fiscal consideration that otherwise it will cost more to care for children born in poverty. In future, the “distributive justice” argument will stand alone, no matter what the cost of perfecting and delivering this service, or the cost of having done so in supporting the children so produced. I don’t suppose that in years to come we are going to prohibit women on welfare from overcoming oviduct blockage, or refuse to fund this medical service, simply because of the cost in ADC payments. Of course, conscientious objectors to funding abortion or funding petri dish discarding do not think highly of this argument, since for them it is meaningless to speak of fairness in justly distributing an immoral...
practice. But I do urge its weight upon members of the Ethics Advisory Board who are charged with recommending the future direction which national medical practice should take.

Perhaps I have prolonged my reply to the objection too far. My main appeal is to ask the Ethical Advisory Board to consider the suppression and alienation from the community of this nation of the consciences of millions and millions of our fellow citizens if your approval and any tax funds are put into in vitro fertilization, embryo transfer — and embryo discard. I ask you to consider — with no prejudice in favor of “science” — whether approval of Vanderbilt’s professor of Ob-Gyn, Dr. Pierre Soupart’s application for funds is really worth the other moral and social costs that will surely be imposed upon this nation.

II

My final three points do not touch upon the issue of the morality of abortion, or Federal funding of it. The distinctive arguments I submit to you are, first, the irremovable possibility that this manner of human genesis may produce a damaged child and that this constitutes a conclusive argument against allowing such attempts to be made in the human community, in the United States or any other society.

One “successful” case does not settle the issue I am raising. Besides, who now knows that Louise Brown was a scientific success? Physical characteristics are not enough to show this.

Here I detour beyond my depth to invoke an analogy with amniocentesis. This procedure has been judged by medical authorities to be safe, no longer experimental. That verdict seems to be concentrated on the mother’s safety, and on the unlikelihood that the procedure would induce spontaneous abortion. Incidentally, one percent chance of “false positive” diagnosis for the unborn child, i.e. one in one hundred, does not seem to me to be a negligible risk for the child.

My point here, however, goes beyond the physical destruction of normal unborns instead of physically defective fetuses because of mistaken diagnosis. The point is rather whether the procedure of amniocentesis does or does not induce unknown and unknowable psychological damage to the children who are saved from genetic abortion. Henry Nadler, M.D., wrote that, while amniocentesis detects gross anomalies, “There is no way, with present studies, our own included, of establishing, ten or fifteen years from now, if these children [the children saved from genetic abortion] lose 5 or 10 I.Q. points”; “The risks of ‘induced’ congenital malformations are difficult to determine and the subtle damage in terms of loss of intelligence is almost impossible to evaluate.”6
The comparison with human genesis by embryo manipulation should be clear. No one knows the future of these children. We ought not to try to discover these truths by human experimentation upon them. But there is no other way to find out. The argument is conclusive, unless as a people we mean to make technical medical advances by creating our progeny at risk of unknown and unknowable damage from the procedure itself.

This would violate the primary principle of medical ethics, "Do no harm." To understand that this is the case, we have to distinguish clearly between the procedure in question and medical treatments given the "maternal-fetal unit" when both mother and fetus are actual patients. Sometimes procedures are necessary that are hazardous to the fetus (e.g. intrauterine blood transfusions), but the life that is exposed to hazard stands also to be benefited. In such treatments, possible harm may be risked. Embryo manipulation is quite different: here the mother seeks a benefit; this benefit can be delivered only at some risk of grave injury to the future possible child. Oviduct reconstruction (now a much improved art) is by contrast a treatment that can be undertaken at no risk to another life than the one who elects the operation — since no other life has yet been conceived or will be manipulated.

In his series of articles in The New York Times, Walter Sullivan brought up another possibly deleterious outcome that is impossible to remove. Notably, he was quoting the British scientists. The eggs after superovulation of the female may not be those that would mature normally. The sperm that in natural reproduction reach their goal are "a highly selective sample," Dr. Edwards noted, "relatively free from genetic defects." There is no such "screening" in in vitro fertilization. The "screen" may be the opposite. Such subtle effects, Sullivan correctly concluded, "may not be evident until babies born by the Steptoe-Edwards method reach maturity." No woman should have wanted a baby under these stated conditions, nor should a (tax exempt) American Foundation have funded the Steptoe-Edwards trials, nor should any such thing ever be approved by the Ethical Advisory Board. Only an unexamined preference for human design over nature can support any other conclusion.

No answer to the foregoing objection can be found in more time for trying in vitro fertilization in the sub-human primates, or the proposal that medical and public policy be to delay permission for applying this procedure to human beings until more "animal work" has been done. In other connections — when scientists need normal volunteers to place themselves at risk — the stress is always correctly
PAUL RAMSEY

placed on the unknown risk involved in moving from animals to the human.

In a 1974 scientific article one member of the winning team, Dr. Robert G. Edwards of Cambridge University, asserted, "If there is no undue risk of deformity additional to those of natural conception, and publicity is avoided, the children should grow up and develop normally and be no more misfits than other children born today after some form of medical help." Here Edwards raised two points: how we are to estimate "undue" additional risks of deformity (whether any such risks should be imposed) and the psychological damage that may result because publicity was not avoided in the case of Louise Brown.

On the first point, Dr. Edwards argues for 15 pages that there is no risk of deformity from the procedure. I understand why the risks are very low. The developing life (the blastocyst, not yet called an embryo) that is manipulated is a cluster of cleaving cells. These cells have "toti-potency." None is as yet on its way to becoming, say, blood, or has "clicked-off" its potency for becoming, say, a liver cell or a bone. At this point in human development the individual can renew itself even if momentarily injured (like an earthworm). After differentiation into various tissues and organs, the embryo and fetus are more vulnerable to irreversible damage. For example, by thalidomide taken by the mother during pregnancy.

Still there is risk of procedurally induced injury, however small. The question of "undue" additional risk remains at the heart of the moral question whether human genesis should ever be attempted in this way. Having carefully built the case for no undue risk, Dr. Edwards — to my amazement — then spends four pages warning all participants in this procedure that they are liable to "wrongful life" suits for tort compensation. As defendants, all the participants would have to prove that any manifest damage did not result from manipulating the blastocyst.

I was stunned by this contradiction in a single article by an eminent scientist because I heretofore supposed that only theologians were reputed to "fudge" in their arguments. In any case, knowing that one may induce injury, though not foreseen injury, cannot be excluded. This seems to me to be significant in a conclusive moral argument against the experiments that have gone on for more than a decade. Moreover, even if longitudinal studies of in vitro children for the next five or ten years determine that they are in every respect normal, this will prove only that this kind of human genesis is at that point in time and for the future not to be condemned for this reason. Such successes will not show that all the past trials at irremovable possible
risk (including Louise Brown's) were for that period of time excusable. Two decades of morally unacceptable human experimentation, by rough reckoning: one decade to perfect the technology; another to prove it was safe.

I once expressed the "macabre 'hope'" that the first child by laboratory fertilization would prove to be a bad result — and that it be well advertised, not hidden from view. That might halt the practice! Dr. Edwards missed my irony, failing to note what else I said: "I do not actually believe that the good to come from public revulsion in such an event would justify the impairment of that child. But then for the same reasons, neither is the manipulation of embryos a procedure that can possibly be morally justified" — even if the result happens to be a Mahalia Jackson. A small risk of grave induced injury is still a morally unacceptable risk.

Concerning the second source of possible grave damage — publicity — I do not know whether or why Dr. Edwards changed his mind. Perhaps there was only a breakdown of communication between him and Dr. Steptoe, the gynecologist who advised that the next Brown be capitalized from birth. "Checkbook publicity," the British press calls it. One can speculate, however, as follows concerning the dilemma the winning team faced. They needed to prove their accomplishment to the scientific community and to the world at large. Already a British doctor had announced that there were one or more babies already born in Europe by this procedure. He offered no proof, and was disbelieved. Nobody wins a Nobel prize for science that way.

If the Steptoe-Edwards team wanted both to advance science and/or their scientific reputations and to protect the next Brown from damaging publicity, they should have tried to create a new "institution" for doing both. The British Medical Association could have been asked to appoint a monitor who could now certify the team's achievement while at the same time avoiding publicity focused upon the subjects (the Browns) with whom the scientist-physician team have achieved their success.

In the absence of this anticipatory solution, there was no other recourse than to try to control the publicity and to enable Louise Brown to garner the revenues. She will be hailed or stigmatized all her life as the first laboratory fertilized progeny to be birthed in all human history. Think of the enormity of that reputation! "Brown" is an ordinary name; the father is a railway worker. Louise Brown can in no way have a natural human life. If she is not psychologically damaged from her beginning, socio-psychological ruin seems invited. If she is Britain's best tennis player at Wimbledon or if she becomes a
juvenile delinquent, the outcome will be explained or excused by the child's unique genesis. Mahalia Jackson had a more obscure and normal passage into maturity. So also did the parents of Brown, and Drs. Steptoe and Edwards. What now have they visited upon this child?

Perhaps Dr. Edwards' warnings about "wrongful life" suits could be taken up, and used to advantage. Such suits (for having been born illegitimate, or in poverty) have not succeeded in American courts. Judges have reasoned that the plaintiff would not be there to sue if he or she had never been born. The plaintiff can have no legal standing to sue, because that depends upon the wrongful life he complains of. This seems to me to be the sound legal decision.\(^\text{10}\)

*In vitro* fertilization and embryo manipulation, however, introduce quite different considerations. This form of human genesis *reaches back* to before the beginning. If tort damage results, there were human agents who did it — knowing the possibility could not be excluded. They should be liable. I do not say liable to punishment or to pay damages; but liable to suits that will determine their accountability. It can, therefore, be recommended that our several State legislatures create a special category of "wrongful life" cases limited to torts occurring in this, and coming, new forms of human genesis. Then perhaps the practice can be stopped while there is still time.

III

Among the parties liable and warned by Dr. Edwards in his 1974 article\(^\text{11}\) was the "semen donor," not only the husband. This demonstrates that one member of the winning team does not intend the procedure to be used only to the good end of overcoming a married woman's oviduct blockage.\(^\text{12}\) This brings me to my third point, which brings into view the immediate and not unintended assault this procedure brings against marriage and the family, the immediate (not remote and not unintended) spectre that we are going right now to begin to "design" our descendants up to the limit that is scientifically possible.

We are told that this sort of “assisted pregnancy” is a “far cry” from Aldous Huxley's *Brave New World*. This is true for the moment. Women with fallopian tube blockage now will be able with their husbands to have children. That is all.

Still there is more to be said about medical and public policy than that a woman's infertility can be “cured.” This medical technology is another “long step for mankind” (to quote from the moon landing) toward Aldous Huxley's womb-free paradise. Host “mothers” with
wombs-for-hire are immediately possible. Nothing technically limits the fertilization to the husband’s sperm. We already have sperm banks. Egg banks will be next. People will go to either to select. No loved-woman need bear the child. This can be arranged by contract, and financial payment. The consequences to come from the opening of the human uterus to medical technological control are not likely to contribute to the emancipation of women.\textsuperscript{13}

There is still more. We are not limited to human progeny growing with their own natural genetic endowments. We are not limited to the child the Browns wanted. Gene splicing soon can be done before the blastocyst or embryo is transferred to the womb of the woman—\textit{any} woman. “The procedures leading to replacement and implantation,” Edwards and D. J. Sharpe wrote in a 1971 scientific article,\textsuperscript{14} “\textit{open the way} to further work on human embryos in the laboratory.” The authors do not mean only benign attempts to correct genetic defects. They also mention cloning and the creation of “chimeras” by importing cells from other blastocysts (perhaps from other species). These creations also now need women to carry them through pregnancy. Noting that the first principle of medical ethics, “Do no harm,” permits the alleviation of infertility, and that this “\textit{has been stretched} to cover destruction of fetuses with hereditary defects,” Edwards and Sharpe ask rhetorically whether the first principle of medical ethics can be stretched to justify “the more remote techniques of modifying embryos?”

Even more ominous is the announced claim that scientists have the “right” to “exercise their professional activities \textit{to the limit that is tolerable by society} . . . as lay attitudes \textit{struggle to catch up} with what scientists can do.” Publics must be “helped to keep pace.” In short, science does not operate within the ethics of a wider human community. It is a scientific ethics, or whatever \textit{can} be done, that should shape our public philosophy. Let laggards beware.

True, in his 1974 article,\textsuperscript{15} Dr. Edwards stated that there is “hardly any point in making chimeras until some clinical advantage can be shown to accrue from the method.” But he also speaks of “sexing blastocysts” before transfer. His remedy for the problems this will lead to is: “Imbalance of the sexes could probably be prevented by recording the sex of newborn children, and adjusting the choice open to parents.” Scientist-kings will manage everything. Concerning the use of “surrogate mothers,” his only reservation is that this should be avoided \textit{at the present time} until more is known about the interlocking psychological relationships among the parties. Edwards does not say how we can acquire such knowledge without (on his own
terms) doing unethical experimentation now in order to find out whether we ought to do it or not.

IV

I have not yet mentioned the remote — but still very near — prospect of substituting laboratory generation from first to last for human procreation.

Pope Pius XII once warned against reducing the cohabitation of married persons to the transmission of germ life. This would, he said, “convert the domestic hearth, sanctuary of the family, into nothing more than a biological laboratory.”\(^\text{16}\) That quaint language was spoken about artificial insemination. The Pontiff feared the nemesis of humanity under the fluorescent light of laboratories. He warned of this in 1951 — ages ago in technological time. To the fluorescent light of the laboratory has been added the glare of media protection and copyrighted publicity.

The first book to be printed entitled \textit{Test Tube Babies} was published in 1934\(^\text{17}\) — again ages ago in technological time. Its subject matter was not at all what we mean by this expression. The book's subtitle was “A History of the Artificial Impregnation of Human Beings, Including a Detailed Account of its Technique, together with Personal Experiences, Clinical Cases, A Review of its Literature, and the Medical and Legal Aspects Involved.”

Clearly ours is an age of galloping biomedical technology. Aldous Huxley and C. S. Lewis had the prescience to see already the future that comes ever closer. Not the abuse of political power by Hitler nor of nuclear power but the unchecked employment of powers the biological revolution places in human hands was for these authors the final threat to the “abolition of man.”

The human womb is a half-way technology. It is replaceable by more “perfect” artifices.\(^\text{18}\) Human life has been maintained in petri dishes for two weeks; and our National Commission for the Protection of Human Subjects used 20-24 weeks as its definition of a “possibly viable” infant. Only about 18 to 22 weeks remain to be conquered in which the human female must necessarily participate in procreation, except as the source of the ovum. Then “reproduction” can replace procreation, and we will come to Huxley’s Hatcherries. His was a vision of society in which everyone was quite happy. The way there is also a happy one, and we go along that way always motivated by good ends, such as the relief of women’s infertility and salvaging “premies” earlier and earlier.

For all the motherhood intended at present, the truth is that (as C.
THE HUMAN LIFE REVIEW

S. Lewis once wrote1): "We should not do to minerals and vegetables what modern science threatens to do to man himself."

Members of the Ethical Advisory Board may wish to perform the following experiment on themselves. Turn off the tube. Don't pick up the newspaper for two days. Instead, read the third of C. S. Lewis' space-science trilogy, That Hideous Strength. The final assault upon humanity is gathering in Edgestow, a fictional British college town. The forces of technology, limited no more by the Christian ages, are trying to combine with pre-Christian forces, represented by Merlin the Magician whose body is buried on the Bracton College grounds. Only the philologist Ransom can save humankind from the powers of the present age concentrated in the National Institute for Coordinated Experimentation (acronym NICE).

It is NICE that the Browns have a wonderful baby girl; her middle name is Joy. Lewis need not have thought of his fictional college, Bracton. Cambridge University is NICE too. So is Vanderbilt. To give couples a baby sexed to their desires will be NICE. Every other step taken will certainly be NICE. Finally, Brave New World is entirely NICE. For everyone is happy in Huxley's pharmacological, genetic and womb-free paradise. Only there is no poetry there. Nor does a baby have the right to be a surprise.

NOTES

2. In addition to numerous articles, the titles of four volumes perhaps deserve mention (all published by the Yale University Press): The Patient as Person: Explorations of Medical Ethics. The Lyman Beecher Lectures delivered at Yale Medical and Divinity Schools (1970); Fabricated Man: The Ethics of Genetic Control (1970); The Ethics of Fetal Research (1975); and Ethics at the Edges of Life: Medical and Legal Intersections. The Hampton Lectures in America, Columbia University (1978).
4. See my Ethics at the Edges of Life, op. cit., Chapter Two.
11. See note 8, supra.

29
PAUL RAMSEY

12. Testifying before the Sub-Committee on Health and the Environment, U.S. House of Representatives, on August 4, 1978, Dr. James C. Gaither, Chairman of the Ethics Advisory Board, offered the opinion not only that implantation of human fertilized ova should not be done until the safety of the procedure is demonstrated as far as possible in subhuman primates. He also testified that it was the opinion of some 20 experts in ethics and the life sciences convened by HEW that such a procedure should await definition of the responsibilities of the donor, recipient "parents," and of the research institution. Walter J. Wadlington, professor of law at the University of Virginia Law School, urged that Congress propose model legislation for use by the States in coping with such problems as legitimacy and parental responsibility if in vitro fertilization becomes widespread. The New York Times, August 5, 1978.

13. Here I quote from a striking letter to The New York Times (August 6, 1978) by Judith Lorber, Department of Sociology, Brooklyn College:

I am thankful that the first child born from laboratory fertilization is a girl. At least now there are two female principals in the drama, instead of one lonely woman surrounded by powerful and prestigious male doctors, male scientists, male legal, ethical and religious experts, male newspapermen, and so on and on.

Men now have the ability to freeze their sperm, fertilize eggs in vitro and deliver the children surgically, and the potential ability for freezing embryos and transplanting them in women other than the egg producers. Fortunately, a woman's body is still needed to carry the fetus to term.

But women of the future had better get more than a toehold in the bastions of power. Otherwise, when male-dominated technological reproduction develops artificial wombs, too, women, except for a few egg producers, may end up totally superfluous.


15. See note 8, supra.


17. Dr. Hermann Rohleder, Test Tube Babies (New York: The Panurge Press, 1934). Can we use "panurge" as a symbol for the basic problem of modern times, since Bacon unfurled the flag for "the relief of the human estate" of disease, suffering, death, and any other deficit?

18. If I were a reproductive biologist in need of funds and reputation, and anyway a sincere believer in progress by science, I would begin now to search for an animal species whose gestation is close enough to the human for it to be not impossible to use its females as hosts for human embryos. After all, "herds" of prime cattle in embryo have been flown across the Atlantic within rabbits, thereafter transferred again to scrub cows to bear them. So my idea is not a fanciful one (if we ought to treat the human embryo like cattle). If I can secure funds for my trials I may gain Senator Proxmire's "golden fleece" award, even if I do not gain an honored place in the moral history of humankind.