Byrn and Roe: The Threshold Question and Juridical Review

Peter J. Riga
INTRODUCTION

The essence of the right to privacy, which the Supreme Court made the cornerstone of its decision overturning state anti-abortion statutes, Roe v. Wade, is stated by the maxim of J.S. Mill: "[T]he only purpose for which [state] power can be rightfully exercised over any member of a civilized community . . . is to prevent harm to others." Writing for the Roe majority, Justice Blackmun cited every case supportive of this "unarticulated notion of a constitutional right to privacy." This right protects the possession of obscene materials in the privacy of one's own home; the right of parents to send their children to private schools; and, by the Supreme Court's ruling in Griswold v. Connecticut, the use of contraceptives by married couples. The Griswold holding was viewed by the Court as necessary to preserve marital privacy, a right so firmly established in the "rooted traditions" of our people. This rationale, however, was also cited as support for protection of privacy in Eisenstadt v. Baird, where the Court held that an unmarried person also had a constitutional right to use contraceptives. The Court in the latter case saw the non sequitur but never noted where in the Constitution it found such a right. The rationale of Griswold was at least logical, even if unarticulated in the Constitution, since marriage as a value was much older than the Constitution itself. Such reasoning does not apply to Eisenstadt, however, since a right to privacy among unmarried couples never existed in the "rooted traditions" of our people. As Justice Brennan stated: "If the right of pri-
privacy means anything, it is the right of the individual, married or single, to be free from unwarranted governmental intrusion into matters so fundamentally affecting a person as the decision whether to bear or beget a child. The tracings of constitutional theory have gone from the obscure but logical in Griswold to the unintelligible and illogical in Eisenstadt.

In Roe, the privacy rationale was again relied upon by the Court in establishing the right to terminate pregnancy before the twelfth week. Although both Eisenstadt and Roe were based on the right to privacy, the principled foundations of these rights were shaky at best. More particularly, the Eisenstadt holding made no principled distinction between the married and the unmarried, while the Roe Court failed to consider the fundamental issue concerning the humanness of the unborn fetus. It is with this first problem in Roe that the following pages are concerned.

**RATIONALE OF ROE**

The Roe majority studiously avoided the basic and threshold question of every abortion decision with the bland declaration that the Court “need not resolve the difficult question of when life begins,” and thus failed to reach the difficult question of constitutional law itself. Only after the Court answers this question, however well, can it begin to “balance” respective rights of the woman, the state, and the unborn child. By not answering the basic question, “is the unborn fetus human?,” can there be any intelligent and constitutionally principled answer to the question of abortion? Refusal to answer this crucial fact question rendered the Roe decision nothing more than the social and political philosophy of seven judges.

Three months before Roe was decided, a fully argued case presented the Court with an opportunity to decide this precise issue, which the Court refused to consider for want of a substantial federal question. In Byrn v. New York City Health & Hospital Corporation, the appellant, an appointed guardian ad litem for certain unborn children, and all other children similarly situated, argued before the Court that the unborn were human beings, protected by the Due Process Clause of the fourteenth amendment. The threshold question of the personhood and humanity of the unborn fetus was fully argued, briefed, and presented to the Court by

---

1. Id. at 453 (italics in original).
2. In Eisenstadt, Chief Justice Burger found this right to have “tenuous moorings to the text of the Constitution.” 405 U.S. at 472 (Burger, C. J., dissenting).
the appellant in *Byrn.* Moreover, the New York courts below had addressed the question and found that the unborn was in fact "a live human being;" that it was "a child [with] a separate life;" and that it was "a human" who is "unquestionably alive" with "autonomy of development and character."

Because *Roe* depended heavily on the historical background of the abortion question in reaching its decision, the *Byrn* case is also important from an historical point of view. Reliance on historical development is somewhat misplaced, however, since treatment of the abortion issue varied significantly from age to age, culture to culture, and religion to religion. There is no agreement as to the meaning of the unborn among the many religions, philosophies, theologies, histories, and anthropologies. Lack of consensus, however, does not permit the Court to unilaterally decide the issue without resolving the precise question on which any abortion decision turns: the rights, meaning, personhood and humanity, if any, of the unborn.

From an historical point of view are the factual errors of the Court itself most apparent. It is well known that lawyers and judges are bad historians, but, when such importance is placed on an historical perspective for grave consequences to possible human beings, at the least, it is incumbent on the Court to recite more than "law office" history. *Byrn* briefed the Court on precisely those historical cases cited as examples of anti-abortion legislation of the nineteenth century which permitted abortion only to protect the pregnant woman. The Court found that "[t]he few state courts called upon to interpret their laws in the late 19th and early 20th centuries did focus on the State's interest in protecting the woman's health rather than in preserving the embryo and fetus." Justice Blackmun cited *State v. Murphy* for this proposition, although this case was explicitly overruled in 1881 on this precise point which supported *Roe*'s historical generalization. In *State v. Gedicke,* the New Jersey Supreme Court held that, contrary to *Murphy,* the New Jersey statute was designed "to protect the life of the child also, and inflict the same punishment, in case of its death, as if the mother should die." The *Byrn* brief advised the Court of eleven other state decisions in the nineteenth and twentieth centuries which explicitly and unambiguously stated that protection of the

---

*Id.*

*Queens County Supreme Court, Jurisdictional Statement* at 68a.

*38 App. Div. 2d at 324, 329 N.Y.S.2d at 729.


*See 410 U.S. at 129-52. The lengthy historical excursus recounted by the *Roe* Court was unnecessary, however, since there was really no constitutional principle controlling the Court's ultimate decision to divide pregnancy into three parts, each subject to its own constitutional rules.

*410 U.S. at 151.


*43 N.J.L. 86 (1881).

*Id.* at 90.
life of an unborn child was at least one of the purposes of the respective state's abortion laws. The Court was also advised of nine other state decisions where this protection was implied.

It is true, of course, that the historical dimension of a legal problem does not settle eo ipso a similar problem today. In this respect Justice Brennan correctly observed that "an awareness of history and an appreciation of the aims of the Founding Fathers do not always resolve concrete problems." It would be anachronistic to expect nineteenth century decisions to answer a question which was never encountered until the twentieth century. When a claim is made on history, however, it ought to be reproduced accurately, lest the Justices leave the telltale trace of a forced reading to reach an already determined result. That Byrn fully briefed the Court on this precise matter only three months prior to Roe adds fuel to the suspicion of juridical arbitrariness.

The Roe decision has presented some difficult questions for the Court causing an ongoing debate both in the courts and among commentators. Most commentators have simply lined up behind the decision of the Court without struggling with the profound analytical problems of the decision itself. The threshold question concerning the nature and interests of the unborn fetus is never answered, leaving it to philosophers and theologians to debate. Philosophers and theologians do not have the power to decide this question however, either in practice or in theory for all persons, in particular for those who stand to lose their very existence. This is why it is crucial to return to that basic question, as did the lower and appellate courts of New York, if we are to give the abortion decisions any rational, legal standard and constitutional principle.

The eleven decisions cited were: Trent v. State, 15 Ala. App. 485, 73 So. 834 (1916); Dougherty v. People, 1 Colo. 514 (1872); Nash v. Meyer, 54 Idaho 283, 31 P.2d 273 (1934); State v. Miller, 90 Kan. 230, 133 P. 878 (1913); State v. Tippie, 89 Ohio St. 35, 105 N.E. 75 (1913); Bowlan v. Lunsford, 176 Okla. 216, 54 P.2d 66 (1936); State v. Ausplund, 86 Or. 121, 167 P. 1019 (1917), appeal dismissed, 251 U.S. 563 (1919); State v. Howard, 32 Vt. 380 (1859); State v. Fox, 197 Wash. 67, 84 P.2d 357 (1938).


As one author stated: "[T]he application of precedent, legal continuity, and balanced contemporary socio-political theory is almost certain to produce a more intelligent result than is the attempt to use a few scattered historical documents as though they possessed the qualities of Holy Writ." Kelly, Clio and the Court: An Illicit Love Affair, 1965 Sup. Ct. Rev. 119, 156-57.

The most recent variation of Roe is the Court's decision that neither the federal government nor the individual states have a constitutional obligation to fund "nontherapeutic" abortions. See Beal v. Doe, 432 U.S. 438 (1977); Maher v. Roe, 432 U.S. 464 (1977); Poelker v. Doe, 432 U.S. 519 (1977).

See notes 17-19 supra.
As previously noted, the threshold question, which the Supreme Court refused in theory to factually resolve, concerns both the nature and rights of the unborn fetus. A woman’s right of privacy invoked as the justification of abortion would be a proper ground if all that were involved were the *femme sole*. This reasoning, however constitutionally inarticulate, becomes improper when the precise threshold question raised involves the social limits necessarily placed on the individual. In this case, the social relationship between the born and the “person” or “being” of the unborn must first be resolved.

In many areas of the law, the unborn are treated as persons. Tort law, criminal law, and property law have treated the unborn as persons for many purposes, and recent decisions have tended to expand, not limit, these rights. It is therefore logical to ask why the law should treat the unborn as persons in these contexts while adopting a different position in abortion cases. Some reasoned principles of constitutional law must be brought forth to reconcile these disparities in the law. To develop a novel constitutional right of a woman’s privacy without addressing the question concerning the personhood or humanity of the unborn fetus does not sufficiently justify the *Roe* holding. If there is no historical, legal, philosophical, or theological consensus on the answer to this question, it becomes difficult to invoke reasoned constitutional principles in a doctrine of juridical review. It is common knowledge that a decision of the Court is as strong as the reasoned principles supporting that decision; otherwise the Court is imposing a solution in function of its own political preferences, a practice described by one commentator as “lochnerizing.” In other words, if this basic threshold question is not or cannot be answered by the Court, it imposes its solution through “raw juridical power.” If the Court admitted ignorance in this area, which it did, then it had no business deciding the case and should have left the question to those better able to balance the equities and respond to the will of the people, i.e., the legislatures. The Court of Appeals of New York demonstrated this ability by answering the basic question, then leaving it to the legislature to determine what rights it would grant to the unborn. The Court of Appeals in *Byrn* found that constitutionally, the unborn were not “persons” since “what is a legal person is for the law, including, of course, the Constitution, to say, which

31 See note 2 supra.
35 Ely explains “lochnerizing” as the Supreme Court’s manufacture of a constitutional right to superimpose its own view of wise social policy on those of the legislatures. See Ely, The Wages of Crying Wolf: A Comment on Roe v. Wade, 82 YALE L.J. 920, 935 (1973). Justice Stewart’s concurrence admits as much, saying that it is impossible to regard *Roe* as the product of anything else. 410 U.S. 113, 167 (Stewart, J., concurring).
36 410 U.S. at 159.
simply means that upon according legal personality to a thing the law affords it the rights and privileges of a legal person." Although this reasoning recalls the menacing Dred Scott decision, at least it was logical and left the question to the legislature to resolve. Scott also imposed a view of partial personhood, that is, for all practical purposes, of nonpersonhood, very similar to what Roe did but with infinitely less historical precedent.

If it is determined that the unborn are human beings/persons, then the reasoning of Roe becomes pointless. Blackmun's list of rationales—"distressful life and future" of the woman; psychological harm; the taxing of mental and physical health; distress caused by an unwanted child; the stigma of unwed motherhood—becomes irrelevant. If the unborn are not human beings/persons, then no reasons need be given by any woman to justify abortion since her right is one of pure privacy in the

---

38 Id. at 196, 286 N.E.2d at 889, 335 N.Y.S.2d at 392.
39 Id. at 202, 286 N.E.2d at 890, 335 N.Y.S.2d at 394. Perhaps it is the jurisprudence of the New York Court of Appeals which most closely resembles Scott: "What is a legal person is for the law, including, of course, the Constitution, to say, which simply means that upon according legal personality to a thing the law affords it the rights and privileges of a legal person." Id. at 201, 286 N.E.2d at 889, 335 N.Y.S.2d at 393. Simply put, this is a jurisprudence which finds the source of human rights in the State—a favorite locus of totalitarianism of this century. The dissent quite properly pointed this out:

Again the Appellate Division adopted the theory that the State is supreme and free to degrade the inalienable rights of human beings which were not given to them by the State and cannot be diminished nor taken away by the State. The Appellate Division and the majority agree that the "state," as in Nazi Germany, could decide what human beings are persons or nonpersons.

Id. at 211, 286 N.E.2d at 895, 335 N.Y.S.2d at 401 (Burke, J., dissenting). The Supreme Court in Roe had no occasion to address itself to this question for the simple reason that it never decided the central question whether the unborn are human beings and if they are, for what reason they are excluded from the protection of their lives by the Equal Protection Clause of the fourteenth amendment. The Court simply presumed that the unborn are not legal persons because the framers of the Constitution and of the fourteenth amendment did not intend to include the unborn in its protection. The theory that the state is the origin of all human rights is, therefore, not part of the jurisprudence of Roe. It does surface, however, in Planned Parenthood of Missouri v. Danforth, 428 U.S. 52 (1976), also involving abortion rights. In rejecting the absolute need for spousal permission for an abortion, the Court comes close to adopting Kelsen jurisprudence, see H. Kelsen, General Theory of Law and State 93-109 (1946), by stating:

We thus agree . . . that the State cannot 'delegate to a spouse a veto power which the state itself is absolutely and totally prohibited from exercising during the first trimester of pregnancy . . . .' Clearly, since the State cannot regulate or proscribe abortion during the first stage, then the physician and his patient make that decision, the State cannot delegate authority to any particular person, even the spouse, to prevent abortions during the same period.

. . . This is to misplace the source of this right of privacy older than our Bill of Rights, older than our political parties, older than our school system. Marriage is a coming together for better or for worse, hopefully enduring, and intimate to the degree of being sacred.

Griswold v. Connecticut, 381 U.S. at 486 (citation omitted).
38 For a discussion of this distinction, see notes 69-77 infra.
410 U.S. at 153.
autonomy of her own body. In the former case, one must somehow justify the killing of an innocent human being and balance that against the interests of the woman; in the latter case, however, no more is involved than in removing tonsils or having a face lift. The act becomes no one’s business but that of the woman alone since she harms no one and benefits herself.

The criteria used by the courts to determine the personhood-nonpersonhood of the fetus include wantedness, birth, and viability. If we choose one of these, what is the reasoned constitutional principle justifying such a choice? Blackmun chose an intermediate ground for this determination; he refused to choose and in refusing, he chose. He examined every place in the Constitution where the word “person” appears and concluded that whether the term was meant to include the unborn is unclear. In the words of the noted commentator Epstein:

> The Justice simply cannot strike a balance for the first trimester of pregnancy unless he has some theory of life of his own which shows that there is no “compelling” interest of the unborn child. His exhaustive history of the abortion question indicates quite clearly that there is no consensus on the question, and it is simple fiat and power that gives his position its legal effect.

In other words, the Court struck down the legislative enactments on abortion of all fifty states, which attempted for the most part to balance these delicate and volatile interests in the interest of privacy; but it avoided the truly hard question on which every abortion case—even where the life of the mother is in danger—must necessarily turn. Since Byrn v. New York City Health & Hospital Corporation faced this question squarely it would be valuable to study the arguments in that case and apply them to Roe v. Wade as a possibility for future judicial review. In re-examining the rationale of Byrn, perhaps the Court can retrace its steps and correct a very bad constitutional decision.

### Threshold and Fundamental Question

Failure to answer the question of who or what is the unborn child is failure of judicial review itself. Are the unborn human beings? If they are, why are they not persons under the Constitution? Is there any real distinction between human being and legal person, and if so, in what rational distinction does it lie? Is it enough for the Court to claim legal nonperson-

---

42 Id. at 157.
43 Epstein, supra note 3, at 182.
45 Roe v. Wade is symptomatic of the analytical poverty possible in constitutional litigation. Even in cases that do not give rise to the devilish questions of what counts as a person, the term “compelling state interest” is an analytical snare of no modest proportions. But here, where the question is not “how much” but “whose,” the phrase is but a plaything of the judges, an excuse but never a reason for a decision.
Epstein, supra note 3, at 165.
hood and decide the question by nondecision, thereby deciding? Is there more in the Constitution's notion of "person" than mere legal concept or even citizenship? Some answers to these difficult questions must be given if the issue of abortion is to be decided rationally by constitutional principle. If this question is not resolved, the unborn simply have no interests to weigh against those of the woman and of the state. By the same token, the real as well as hard question of the abortion cases is never answered.

The Court divided pregnancy into three trimesters.46 In the first trimester the decision to abort rests exclusively with the woman in consultation with her doctor;4" near the beginning of the second trimester, the state's interest in the health and well being of the woman comes into being such that legislation can be passed promoting the health of the woman; in the third trimester, the interest of the state—particularly after viability of the fetus—in protecting "potential life" is compelling enough for the state to forbid all abortions except when necessary to save the life or health of the mother.48 It should be carefully noted that the balance of interests, when balancing is necessary, occurs between the mother and the state. The basic question of the unborn's right to life is simply never considered and so no balance here is even attempted. In other words, the order of questions which the Court asks runs as follows:

1) Does the right of privacy include the right to abort?
2) Is the unborn child a person within the meaning of the fourteenth amendment?

The factual and hard question whether an abortion kills a live human being remains unresolved under this analysis.

For reasoned constitutional principles, the following should have been the logic of questions posed and answered:

1) Is the unborn child, as a matter of fact for the Court to decide, a live human being?
2) Are all human beings "persons" within the meaning of the fourteenth amendment?
3) In the light of the answers to these first two questions, has the state a compelling interest in the protection of the unborn child through and by the fourteenth amendment?

One must always return to this threshold question for a logical, consistent, and rational analysis of the abortion question. This is the substance of constitutional law. Without this approach, nothing is answered. Instead, what the Court does is "lochnerize" by imposing, as law, its own social and political philosophy.

The Court discussed "potential" human life49 in trying to escape the hard factual question. In the very term itself lies a basic assumption, never

---

46 410 U.S. at 162.
47 Id. at 163.
48 Id.
49 410 U.S. at 150.
clearly articulated, that what we are dealing with is something less than human. This is a strange analytical concept, since the English word "potential" connotes a potency or possibility from what is not yet to the possibility of being. It is not as yet, but it can be in the future. Thus, by describing unborn life as potential, and therefore, less than human, the Roe decision does not cause the destruction of a present hic et nunc human being. This reasoning begs the very question which the Court has not answered but implicitly decided by permitting the destruction of the unborn. The unborn child is afforded no protection until "actual" life begins at birth.56 It is only then that the life of the unborn becomes "meaningful,"51 a description which amounts to little more than a value term.52 The Court described its view—that the unborn possesses actual life as human persons—as "rigid,"53 but never explained who this is so.

This discussion inevitably returns to the threshold question, which the Court purportedly refused to answer: When does life begin? The fact of the matter is that no one doubts when human life begins.54 Sophisticated knowledge of biology has made it simply impossible to deny that biological, human life exists from the time of conception:

[T]he result has been a curious avoidance of the scientific fact, which everyone really knows, that human life begins at conception and is continuous whether intra or extra-uterine until death. The very considerable semantic gymnastics which are required to rationalize abortion as anything but taking a human life would be ludicrous if they were not often put forth under socially impeccable auspices.55

50 Id. at 164-65.
51 Id. at 163.
52 See note 92 infra.
53 See 410 U.S. at 156-57.
54 See notes 55-60 infra.
55 CALIFORNIA MEDICINE, September, 1970, at 68. This same issue attains to other areas as well, for example, the question of human fetal experimentation. If one is dealing with a human being, the moral question cannot be avoided by an invocation of a legal definition of the unborn. See Report of the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research (1975). An attempt to grapple with the basic moral question becomes an almost impossible task after Roe v. Wade. See Steinfeld, The National Commission and Fetal Research, Hastings Center Report (1975). The confusion was evidenced in the conclusory recommendations of the Commission's report, see id. at 6, 73-74, 77. This has led some commentators to opine that the restrictions of the National Commission and later federal regulations of 1975, patterned on the National Commission's report, 45 C.F.R. §§ 46.201-211 (1977), were therefore unconstitutional:

If it is the thesis of this Article that the question of fetal personhood cannot be resolved through rational inquiry but is a matter of faith and of religious belief. Moreover, in this society, it is a belief as to which there clearly is no consensus. The federal regulations governing fetal research give official sanction to the disputed premise of fetal personhood and thereby force nonbelievers to conform their behavior to it.

Friedman, The Federal Fetal Experimentation Regulations: An Establishment Clause Analysis, 61 Minn. L. Rev. 961, 1004 (1977). The permissible secular purposes of such restrictions, the brutalizing effect on society and the undermining of a woman's ability to change her mind are not sufficient to uphold the regulations. Id. The difficulty here, as in Roe, is
The Byrn brief cited extensive evidence of the biological similarities between the born and the unborn, which was contradicted neither by the courts below nor by the State of New York, in its own brief and motion to dismiss, and concluded:56 "[T]o say that the unborn is not a 'fully fledged' human being or that he is something less than a live human child with a separate existence is to make a judgment based, not on factual secular criteria, but on unsupported, acculturated preconceptions."57 This conclusory statement is noted not because it proves what it says—the accumulated evidence and expert testimony was quite impressive—but only to show that the Supreme Court chose to ignore what biology has indisputably demonstrated and which all the courts below, along with the appellees, accepted as true. In a constitutional scheme which seeks to balance various interests, it is astounding, to say the least, that this massive amount of evidence in support of the humanity and rights of the unborn was simply ignored.58

Instead, the Court ipso dixit resorted to a concept of "potential human life" to define the existence of the unborn and concluded that such a life must either be "meaningful" or at least born before the state can protect it.59 Any discussion of the rights of the unborn is omitted and the Court arbitrarily makes "viability" the point at which the state's interest becomes sufficiently strong to enable the state to protect a potential life.60 Even this is not certain since the state may—but is not constitutionally compelled—to protect such life. Such protection, moreover, even if invoked, is itself illusory since it may be set aside when the health or life of the mother is in danger.61 In any case, the balancing conducted by the Court was solely between the mother and the state and never between the mother and her unborn child.

In Byrn, the Court was presented with a massive amount of biological-empirical evidence which it chose to ignore, or at least not to examine. Theoretically, the Court itself must decide the issue based upon the factual situation presented. In other words, the Court has a duty to examine the

---

57 Id. at 17.
58 See 410 U.S. at 162.
59 Id. at 163.
60 Id.
61 Id. at 163-64.
facts concerning the humanity of the unborn. Legislatures will also balance opposing interests in delicate situations, but it is within the province of judicial review to examine the situation anew and to make a concrete determination concerning the matter at hand; otherwise, the Court should not decide the case at all.\(^6\) If it does decide without resolving the factual issues raised, it does so as a function of its power, and not through analytical and reasoned constitutional principles. In its refusal to investigate the facts as presented in \textit{Byrn} and decide them, the \textit{Roe} Court incorrectly formulated constitutional law because it neither asked nor solved the basic and hard question surrounding abortion cases—does abortion as a matter of fact kill a live human being?—since this is the fact upon which the constitutional issues rest.\(^3\) The Court escaped the problem by declining to pass on the factual issue of the humanity/personhood of the unborn.\(^4\) More to the point, the Court refused to pass judgment on the lives of these human beings on the ground that they failed to meet certain legal standards, which are the very part of the litigation itself, while at the same time, the Court omitted even the mention of these legal standards. Both the New York courts and the Supreme Court failed to establish the legal standards for a human being—the heart of the abortion cases.

The New York Court of Appeals claimed that it was for the legislature, limited by the Constitution, to determine who is a legal person.\(^5\) The Court, however, never explained what those limits actually are. Instead, the court of appeals found that the unborn have “the potential to become full-fledged human beings.”\(^6\) Does this mean that before that time, whenever it is, they are less than human and, therefore, can be killed as an undesired mole or wart; or, does this mean that for legal purposes, the law may treat them as less than human? This uncertainty begs the precise issue at stake, the question which cannot be escaped if the abortion decision is to be rationally, analytically, and constitutionally sound.

This reasoning is too reminiscent of the \textit{Dred Scott} rationale to justify the Court’s avoidance of the hard question by responding with a purely “legal” solution. This analysis is also suggestive of the text of the original Constitution\(^6\) where slaves were counted as three-fifths of free persons. There, too, a legal fiction was devised, resulting in the conclusion that slaves were not “full-fledged” human beings. It is well-known that such legal fiction is subterfuge from the basic obligation of any court of law in its refusal to resolve the basic issue in dispute. What is a full person?

\(^{64}\) Id. at 6.
\(^{66}\) Id. at 199, 286 N.E.2d at 888, 335 N.Y.S.2d at 392.
\(^{67}\) \textit{Dred Scott} v. Sandford, 60 U.S. (19 How.) 393 (1857).
\(^{68}\) U.S. Consr. art. 1, § 2.
What is a partial person? These are the hard questions for judicial determination which neither the courts below nor the Supreme Court faced.

HUMAN BEINGNESS-PERSONHOOD

There can be no escape from the threshold question. Either it is resolved and the issue clearly defined and thus disposed of, or we make pretense that we have not resolved the question at all, while, simultaneously, our actions betray our words. This is why the issue must be confronted head-on, a task Byrn did and Roe refused to undertake.

In reaching its ultimate decision the Roe Court continuously applied the terms "partial person," "full-fledged human being," "potential life," and "meaningful life." There is no scientific body of opinion, however, which could sustain such terminology. These are legal fictions of the first order devised by the Court as psychological rationalizations for taking the life of human beings. Otherwise, they are not needed at all, since what is killed is not considered human, and the right to abort is thus deemed the exclusive prerogative of the woman who is free to do with her body what she wishes. The Court, of course, circumvented the problem by the ipso dixit that actual human life—or meaningful human life—does not begin until live birth. The real issue before the Court was whether the Constitution forbids state protection of individuals found to be human beings. The Court itself observed this same type of reasoning when in a previous case it stated: "[T]o say that the test of equal protection should be the 'legal' rather than the biological relationship is to avoid the issue. For the Equal Protection Clause necessarily limits the authority of a State to draw such 'legal' lines as it chooses." In still another case the standard announced for determining the existence of human beings protected under the Equal Protection Clause of the fourteenth amendment was stated: "They are humans, live and have their being." If the Court is determined to draw a distinction between born and unborn and classifies the latter as "partial" personhood, or "potential" life, then we must ask, by what rational standard, consistent with constitutional adjudication, is such a line drawn. Such a rational standard is critical in the abortion cases.

---

48 This is clear from the fact that in Roe, the Court invalidated a Texas statute which protected the unborn. See Thompson v. State, 493 S.W.2d 913 (Tex. Crim. App. 1971), vacated and remanded, 410 U.S. 950 (1973) (inconsistent with Roe); notes 104-120 infra.
52 410 U.S. at 162.
A distinction between born and unborn is utterly irrational by modern, secular, biological-medical standards since the only distinction between an eight-week-old fetus, and eight-day-born child and an eighty-year-old man, is simply one of age, and age has never been seen as a rational basis or standard for determining who and what is a human being. There is no qualitative difference—biologically and scientifically—which could colorably support a "legal" line whereby one is a fourteenth amendment person protected by the Equal Protection Clause and the other is simply a nonperson. It is just as irrational to base such a fundamental distinction on age as it is on race, where, as shown in Brown v. Board of Education,77 there is no scientifically provable distinction between the races: "Whatever may have been the extent of psychological knowledge at the time of Plessy v. Ferguson, this finding is amply supported by modern authority. Any language in Plessy v. Ferguson contrary to this finding is rejected."78

Since science and sociology were very influential in this determination in Brown, why, one may ask, is not science equally as influential in Roe? The only rational difference between the above-mentioned persons is developmental, which does not amount to qualitative difference as regard to humanness. Byrn exhaustively showed every aspect of this development and comparison in the brief presented before the Court.79

What other criteria can be given for establishing some rational standard for determining the humanity/nonhumanity of the unborn? Many lower courts imposed standards having no relationship to the threshold question in the abortion: the humanity/nonpersonhood of the unborn. In 1860, for instance, a Connecticut statute was amended to delete the quickening distinction in its abortion law to afford stronger protection of unborn life.80 This amended statute was declared unconstitutional even though it

77 347 U.S. 483 (1954). In this respect, note the parallel form of reasoning in the following:
It [the Equal Protection Clause] does not require the states to treat all persons identically; the states may base their laws upon reasonable legislative classifications, which differentiate between people or groups in different circumstances. Legislative classification based upon race or color is, however, lacking in the rational basis that is necessary for such classification to be sustained. Even if we concede that there may be differences between the races, can we say that we know enough, scientifically speaking, about racial differences to conclude that classification based on race is other than irrational? If we are frank, we must admit that racial classification reflects not objective science, but racial animosity. If the equal protection clause means what it says, such irrational classification cannot mount the hurdle of the fourteenth amendment.

78 347 U.S. at 494-95.

79 See note 63 supra.

was clearly the legislative intent to protect unborn life. This was declared "insufficient" by a lower federal court in *Abele v. Markle* which then stated its own criteria of what is permissible for abortion:

The Malthusian specter, only a dim shadow in the past, has caused grave concern in recent years as the world’s population has increased beyond all previous estimates. Unimpeachable studies [referring to the report of the Presidential Commission on Population Growth and the American Future] have indicated the importance of slowing or halting population growth. . . . In short, population growth must be restricted, not enhanced, and thus the state interest in pronatalist statutes such as these is limited.\(^{81}\)

What is remarkable here is that the *ratio decidendi* had absolutely nothing to do with the humanity or nonhumanity of the unborn. It was premised on the purely extraneous consideration of overpopulation.\(^{82}\) In other words, notwithstanding the focus of Connecticut’s nineteenth century abortion law upon preservation of prenatal life, and in spite of the fact that it was reenacted in 1972, clearly intended as a protection of the life of the unborn, the law was declared unconstitutional since, “because of the population crisis, . . . the state interest in these statutes is less than when they were passed.”\(^{83}\)

The *Abele* court’s reasoning is clearly irrelevant to the central issue of the abortion cases. If the fetus is a human being then he must be protected under the Equal Protection Clause of the fourteenth amendment,\(^{84}\) and his interests in life must be clearly balanced against any right to privacy of the mother. More logical was the response of the district court in *Babbitz v. McCann*\(^{85}\) which invalidated an abortion statute designed to protect the unborn “from the time of conception”: [T]he mother’s interests are superior to that of an unquickened embryo, whether the embryo is mere protoplasm, as the plaintiff contends, or a human being, as the Wisconsin statute declares.\(^{86}\) In addition to quaint and historically misleading language such as “unquickened embryo,” the only balance attempted by the court was its *ipso dixit* that the mother’s interests are superior, even if the unborn are human beings. No effort or balance was made by the court to determine the constitutional status of the unborn because, according to the court, this question was irrelevant; *it had already determined* that even if the unborn are human beings, this would be an

\(^{82}\) This theme was followed in another abortion case where the Court stated: “Such concerns [population growth] are basic to the future of the State and in some circumstances could constitute a substantial reason for departure from a position of neutrality between abortion and childbirth.” *Maher v. Roe*, 432 U.S. 464, 478 n.11 (1977). It should be noted that the Court here is speaking about the funding of abortions (therapeutic and nontherapeutic) whereas Markle addressed the reasons why a woman may have an abortion.  
\(^{83}\) *Abele v. Markle*, 342 F. Supp. at 804.  
\(^{84}\) See notes 104-110 infra.  
\(^{86}\) 310 F. Supp. at 301.
Byrn and Roe

insufficient reason to overcome the interests of the mother in a right to abort.

Adopting a position similar to that of Roe, the Babbittz court refused to address the essential question of fact. We are told nothing of the social limits to be placed upon the mother's choice except that, seemingly, there are none. If the unborn are human beings, moreover, why is it that the protection of life guaranteed by the fourteenth amendment does not apply to them? For the decision to make judicial sense, however, there must be some principled application of a constitutional standard. This is, after all, why there exist courts of law and not for law. The role of the court is always jus dicere not jus dare; and if a court makes law when it applies law to novel or changed circumstances, it must do so by reasoned and analytical constitutional principles for juridical review. "In the case of the Supreme Court only principled grounds for decision stand between it and the charge of arbitrary decision based upon its naked political preferences."87

The questions raised and decided in Markle and Babbitz were insufficient to establish a sound constitutional standard to be followed when the legality of abortion is at issue. If the unborn are not human or human beings, there would be no problem to resolve; if they are humans, however, the court must undertake a serious balancing of rights for any reasoned and principled constitutional determination. In order to render its decision constitutionally and rationally sound, the Babbitz court was required to formulate its rationale by applying established constitutional principles to either one of these two positions. The killing of innocent human beings must somehow be resolved and not simply glossed over by the terms of legal subterfuge such as "potential" life, "meaningful" life, "full-fledged" human being, overpopulation preoccupation, etc. The main criticism against using such invocations is that they are not legal standards at all, let alone rational, but catch-words for social policy making. By employing such terms, the courts "lochnerize" a result they have already predetermined.

The Court in Roe attempted to justify its analysis by citing other criteria as legal standards:


"Our dissenting Brothers, . . . express in vivid terms their anguish over the perceived impact of today's decision on indigent pregnant women who prefer abortion to carrying the fetus to childbirth. We think our Brothers misconceive the issues before us, as well as the role of the judiciary.

. . . But we leave entirely free both the Federal Government and the States, through the normal processes of democracy, to provide the desired funding. The issues present policy decisions of the widest concern. They should be resolved by the representatives of the people, not by this Court.

Id. at 447 n.15 (citations omitted).
The detriment that the State would impose upon the pregnant woman by denying this choice altogether is apparent. Specific and direct harm medically diagnosable even in early pregnancy may be involved. Maternity, or additional offspring, may force upon the woman a distressful life and future. Psychological harm may be imminent. Mental and physical health may be taxed by child care. There is also the distress, for all concerned, associated with the unwanted child, and there is the problem of bringing a child into a family already unable, psychologically and otherwise, to care for it. In other cases, as in this one, the additional difficulties and continuing stigma of unwed motherhood may be involved. All these factors the woman and her responsible physician necessarily will consider in consultation.\(^6\)

It is uncertain whether this check list is cited as individual criteria or as cumulative. As previously discussed, the events of “quickening,” “viability,” and “birth” are irrational criteria for the simple reason that there is no scientific reason for accepting such distinctions. From a biological point of view, these terms amount to mere fictions having no recognized scientific foundation, except perhaps psychological. If the event of birth is the criterion, then one is faced with the indisputable fact that there is no qualitative difference between the born and the unborn. This error becomes clear in *Abele v. Markle*,\(^6\) where, speaking of an abortion which was unsuccessful because it resulted in a live birth, the court stated: “If a statute protected the lives of all fetuses born alive, it would be protecting persons entitled to Fourteenth Amendment rights.”\(^9\) Thus, if the fetus remains in the womb the fetus is not a fourteenth amendment person entitled to protection under law; but, if such fetus is untimely removed from the womb and is alive, fourteenth amendment personhood is immediately conferred. From a constitutional point of view this surely touches upon the realm of the irrational and unprincipled. The fetus is no less alive, no less human, before, as well as after, an abortion which results in a live birth. “How can it seriously be claimed as a matter of constitutional law that an unsuccessful attempt to kill a live human being acts as a vehicle for conferring Fourteenth Amendment personhood upon him which he would not possess if the attempt to kill him had not occurred?”\(^91\)

The concepts of “viability” and “quickening,” moreover, have their own particular problems which, in the final analysis, prove nothing and become similarly arbitrary. Justice Blackmun found “viability” controlling since it is at that point when the life of the unborn becomes “meaningful” and the state’s interest increases to such a point that it may forbid abortion altogether except to save the life and health of the mother.\(^92\)

\(^{6}\) 410 U.S. at 113.
\(^{9}\) Id. at 226.
\(^{92}\) See notes 63-68 *supra*. The life and health exception here renders even this period of life of the unborn nugatory.
The concept of viability, however, has never been held legal except in tort law and even there it has now been almost universally rejected. The concept itself is not without its own analytical difficulties. What is nonviable today may be viable in a few years. While medical science increases the possibility of survival in premature births, the logic of Roe appears to push back this point of viability. If in a few years a fifteen week fetus shall have become viable, "albeit with artificial aid," then will that totally external and extrinsic development confer what is intrinsic to the very being of the fetus itself? This consequence is absurd. What is even more disturbing is that basic constitutional standards are made to hinge on such irrationality. If a legislature had made such a determination, one could always excuse it as a basically political decision in a representative democracy, and it would be left to the people to determine the rightness or wrongness of such a social policy. Judicial review is radically different, however. It proceeds and has force by its reasoned and principled constitutional elaboration—which is totally absent from the concept of "viability."

The element of "quickening" is even more analytically and historically troublesome. This concept was introduced in law in the eighteenth century only as a crude method of determining proof in an abortion prosecution that the abortional act had been an assault on a live human being and the cause of its death. Historical studies reveal the following law on abortion at the end of the seventeenth century:

1) An abortion of a woman "quick with child" resulting in a live birth and subsequent death of the child was "murder" or a "great crime," and the proof of life and casuality was clear ab initio;
2) An abortion of a woman "quick with child" resulting in a stillbirth was a "great misprision" because there was no proof that the abortional act itself caused the death of the child;
3) An abortion of a pregnant woman, at any stage of pregnancy, which resulted in her death, was felony murder.

[97] COKE, note 97 supra.

But if a woman be with child, and any gives her a potion to destroy the child within her, and she takes it, and it works so strongly, that it kills her, this is murder, for it was not given to cure her of a disease, but unlawfully to destroy her child within her,
4) The unborn child was "a person in rerum natura" at common law, except that problems of proof often precluded such a designation in criminal abortion situations; and,
5) Abortion was considered a malum in se and was hardly viewed as a basic "freedom" of the pregnant woman.

From an historical point of view, therefore, there is little evidence sustaining Blackmun's abortion decision. What evidence there exists is diametrically opposed to the conclusions of Roe. Even if, arguendo, the common law was in fact what Roe stated it to be—and it emphatically is not—such common law principles would still be of no consolation to the Roe majority for the simple reason that the fundamental question had not been addressed or answered. Too much science and biology have proved today what the forefathers of the common law could not have guessed, so that failure to answer the threshold question in Roe becomes even more culpable as an exercise in constitutional decision making. "Viability" and "quickening" are distinctions without foundation in re and the ambiguous history of abortion will simply not suffice as a legal and constitutional standard for abortion cases.

THE FOURTEENTH AMENDMENT

There remains to be discussed the bête noir of the fourteenth amendment and the question whether its authors intended to include the unborn under its protection. It should be pointed out first and foremost that this argument is secondary to the threshold question, as pointed out earlier. No matter how this question is resolved—and Roe seems to place much importance on the result—it is above all a legal question as opposed to a factual determination of the nature of the threshold question. To attach too much importance to the fourteenth amendment when discussing the threatened lives and existence of human beings is to cover the reality of what the Court really did. Such discussion in Roe will not and cannot

and therefore he that gives a potion to this end, must take the hazard, and if it kill the mother, it is murder, and so ruled before me at the assizes at Bury in the year 1670.

The principal reason I go upon the question is, that the plaintiff was in ventre sa mere at the time of her brother's death, and consequently a person in rerum natura, so that both by the rules of the common and civil law, she was, to all intents and purposes, a child, as much as if both in the father's life-time.

102 See note 97 supra.
103 See notes 50-62 supra.
104 410 U.S. at 163.
105 NOONAN, PERSONS AND MASKS OF THE LAW xi-xii (1976), stated:
Legal history, legal philosophy, and legal education, or rather, the persons who are engaged in legal history, philosophy, and education, are or should be concerned with law not as a set of technical skills which may be put to any use but as a human activity . . . the analytic bent of most of those now so engaged leads them to reduce 'person' to a congerie of "rights" . . . Evading analytical reduction, the whole person escapes them.
help the Court in its dilemma of what must factually be faced and re-
solved. Even if, arguendo, the framers of the fourteenth amendment did
not intend to include the unborn, the basic question concerning the hu-
manity of the unborn remains, and this interpretation will not relieve the
Court of its fundamental duty to determine that question. Neither history
nor the supposed intent of the founding fathers helps to resolve the ques-
tion for the simple reason that such contemporary problems were not and
could not be anticipated until modern technology created the means to
obtain safe and reliable abortions. Current knowledge and science contrib-
ute to the Court's responsibility for resolving the abortion question to an
extent greater than any of the framers of the fourteenth amendment could
possibly have dreamt.

An analysis of the fourteenth amendment was the basis of the Court's
rationale in *Dred Scott*. Justice Curtis, in a dissenting opinion, posed the
question in a manner applicable to *Roe*:

If it is admitted that the Constitution has enabled Congress to declare what
free persons . . . shall be citizens of the United States, it must at the same
time be admitted that it is an unlimited power. If this subject is within the
control of Congress it must certainly depend wholly upon its discretion. For
certainly, no limits of that discretion can be found in the Constitution, which
is wholly silent concerning it; . . . the necessary consequence [being] that
the Federal Government may select classes of persons . . . who alone can be
entitled [to the rights of citizenship].

What might be said in defense of *Scott*, from an analytical point of view,
which would not apply to *Roe*, is that the former had a solid base in
constitutional and United States history. There were no facts or beliefs in
history similarly supportive of *Roe*. The Constitutional Convention itself
was replete with testimony of the common view that slaves were not whole
persons, and the final Constitution, which made a slave worth three-fifths
of a free person for purposes of representation in Congress, reflected this
belief. The *Roe* Court, on the other hand, was unable to point to any
constitutional interpretation of legal history of the United States which
permitted, much less required, the exclusion of the unborn from the status
of "person." Moreover, what little legal history and precedent there was,
firmly established that the nineteenth century legal history was very solici-
tous about the life of the unborn. More to the point, for the first time
since 1857, *Roe* introduces an interpretation of the Constitution which
excludes a whole class of biologically human beings from the enjoyment
of basic human rights.

This resemblance to *Dred Scott* becomes more pronounced when the
Court defined "wantedness" as one of the criteria for abortion. The argu-
ments suggest the principle of legalized slavery that a slave is not a person

---

106 60 U.S. (19 How.) 393 (1856).
107 Id. at 577-78.
108 See notes 22-26 supra.
but is property without civil rights until his master sets him free; at which
time, *miraculo dictu*, he acquires all the fundamental rights of a legal
person. What a human being was not, he miraculously becomes by the
"wantedness" of another, in the case of slavery, the master. Whether a live,
human being is a legal person with a right to live and to the law's protec-
tion cannot be made to depend upon the will of another; this is not only
an arbitrariness of law in the extreme; it is utterly irrational.

Yet, the Court twisted the central question and focused upon those issues which can
be satisfactorily answered only after we have answered the threshold ques-
tion: is the unborn child human? Can the Court artificially separate hu-
manity from constitutional personhood without overstepping constitu-
tional limitations? The only precedent for drawing such distinctions was
the prior legality of slavery.

Whatever else may be said concerning the intent of the framers of the
fourteenth amendment, it is clear that, from the testimony available, they
did not intend separate constitutional guarantees for the born and the
unborn based solely on the distinctions cited by the pre-war slaveholders
to justify slavery. The *Roe* Court seems to have made the precise distinc-
tion since, according to the Court, the unborn historically were not consid-
ered to be persons "in the whole sense." The Court treads upon ex-
tremely shaky historical grounds in making such a broad generalization.

More to the point, it is a fair and probable assumption that "life" which
is protected by the fifth and fourteenth amendments is human life from
conception, as all modern scientific evidence unimpeachably shows. By
what constitutional authority and reasoned principle does the Supreme
Court carve out a substantive exception to this protection to exclude
beings who are "living, human and have their being?"

---

109 See Bailey v. Poindexter's Ex'r, 55 Va. 132 (1858).
110 "The very idea that one man may be compelled to hold his life . . . at the mere will of
another, seems to be intolerable in any country where freedom prevails, as being the essence
111 See Address by Congressman John Bingham at Bowerstown, Ohio, August 24, 1866,
reprinted in *Cincinnati Commercial*, Aug. 27, 1866, at 1, cols. 1, 3:

---

112 410 U.S. at 162. It should again be noted that the Court here is speaking of legal persons
since it never addressed itself to, let alone resolve, the fundamental question of the humanity
of the unborn.
113 See Address by Congressman John A. Bingham, Bowerstown, Ohio, August 24, 1866,
reprinted in *Cincinnati Commercial*, Aug. 27, 1866, at 1, col. 3:
Although the Constitution and its amendments fail to provide a definition of the term "person," the express language of the amendment apparently includes any human being.\textsuperscript{14} A reading which excludes unborn human beings seems to impose a modern problem which was never contemplated by the framers of the fourteenth amendment. It simply was not an issue in 1868.\textsuperscript{15} The legislative history of the amendment shows that "human being" was synonymous with "person." Senator Jacob Howard, the sponsor of the amendment on the Senate floor, saw the fourteenth amendment as extending its protection to every living human being.\textsuperscript{16}

\textsuperscript{14} See Address by Congressman Thaddeus Stevens, Bedford, Pennsylvania, September 4, 1866, reprinted in \textit{Cincinnati Commercial}, Sept. 11, 1866, at 2, cols. 1, 3:

That [Union] triumph brought with it difficulties even greater than the war itself. To rebuild a shattered empire . . . and to erect thereon a superstructure of perfect equality of every human being before the law; of impartial protection to everyone in whose breast God had placed an immortal soul. . . . I shall not deny, but admit, that a fundamental principle of the Republican creed is that every being possessing an immortal soul is equal before the law.


\textsuperscript{16} See note 114 supra.
In support of Roe, it may be argued that at the time the fourteenth amendment was added to the Constitution, there was no need for creating a distinction between the born and the unborn because there was no controversy on the subject. This contention, however, does not explain why the Roe Court in fact espoused a legal standard of fourteenth amendment personhood other than "live human being" but could not justify this distinction from the legislative history of the amendment itself. The Court—and this is enough to damn the decision as a whole from a constitutional perspective—has not come forward with specific evidence that the framers of the fourteenth amendment intended to exclude unborn children from constitutional personhood. Such evidence is the very least that good constitutional theory can be expected to provide in the face of imminent extinction of a class of biological human beings. It is an undisputed fact that every human fetus is an individual, a live human being, and a member of the human race. The onus probandi is on he who would deny their existence to plead and prove by explicit evidence that they are not persons entitled to the protections of the fourteenth amendment.

The milieu in which the fourteenth amendment was enacted shows an entirely different emphasis than what the Roe Court announced as the prevalent view at that time. In 1859 Horatio R. Storer obtained unanimous adoption by the Committee on Criminal Abortion of the AMA of a resolution condemning the act of abortion at every period of gestation except when necessary to save the mother's life. The basis for that resolution was the "unwarrantable destruction of human life." In 1867, the Medical Society of New York condemned abortion at any stage of gestation as "murder." In 1868, Francis Wharton argued the injustice of the quickening distinction in abortion statutes and argued that the unborn child should be protected regardless of gestational age. In short, by the time the fourteenth amendment was ratified in 1868, twenty-six out of the thirty-seven states had statutes which incriminated abortional acts prior to quickening. In the next 15 years, a total of seven more states incriminated pre-quickening abortional acts: Colorado (1876), Delaware (1883), Georgia (1876), Minnesota (1873), Nebraska (1873), South Carolina (1883), Tennessee (1883).

117 AMA, Minutes of the Annual Meeting, 1859, reprinted in 10 The American Medical Gazette 409 (1859).
120 Alabama (1840-41), Arkansas, California (1849-50), Connecticut (1860), Florida (1868), Illinois (1867), Indiana (1859), Iowa (1860), Louisiana (1856), Maine (1857), Maryland (1868), Massachusetts (1845), Michigan (1846), Missouri (1855), New Hampshire (1848), New Jersey (1849), New York (1845), North Carolina, Ohio (1841), Oregon (1864), Pennsylvania (1860), Texas (1859), Vermont (1867), Virginia (1848), West Virginia (1863) (continuing prior Virginia laws), and Wisconsin (1858).
There is nothing in the language itself of the amendment, in the various state statutes in force at the time of ratification, in the legislative history of the amendment, in the reports of medical societies of the time or in the general philosophy of the time to give the slightest scintilla of evidence which rationally justifies relegation of any live human being, regardless of its stage of fetal development, to constitutional nonpersonhood. All the evidence that exists supports the opposite conclusion. Neither the Roe Court nor any other court, moreover, which decided against the legal personhood of the unborn child, has been able to produce a specific, unequivocal statement in the text of the history of the fourteenth amendment showing an intent to exclude the unborn. The burden rests on them to prove that unborn children as a particular class of human beings were by the intent of the framers beyond the pale of legal personhood. This is elementary in constitutional law; by framing the issue negatively, the Court foreordained the outcome and revealed its objective to force a meaning on a text for which there is not a scintilla of positive historical evidence. When the existence of potential human life is at issue, the burden is upon him who would deny it to prove beyond a reasonable doubt that: 1) either it is not human life or, 2) if it is, that it is not protected by the fourteenth amendment, by showing positive, specific evidence of such intent of the framers of that amendment.

CONCLUSION

The Supreme Court has made bad constitutional law in Roe v. Wade. It is bad law not because of its social result, a matter of intensive debate among all segments of American society, but because of its failure to develop a sufficient analysis. The threshold question concerning the humanity-personhood of the unborn was never confronted nor analytically discussed and resolved with the result that the decision is doomed as an un-principled constitutional doctrine.

---


2 The rule of liberal construction places the benefit of the doubt on the side of him whose life or liberty is threatened under color of law by the state or its instrumentalities. See In re Winship, 397 U.S. 358 (1970).