THE BEGINNING AND THE END OF LIFE FROM THE PERSPECTIVE OF SWEDISH CRIMINAL LAW

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During the last few years, questions relating to the beginning and the end of human life viewed from the perspective of criminal law have become topical and have given rise to lively debate in Sweden as in other countries. All these questions have certain features in common. They are concomitants of medical advances which render possible the scientific control and/or determination of biological events. Moreover, in Sweden at least, they were initially thought of as purely medical problems having only a slight relation to legal analysis. Upon closer examination, they have proved to contain ideological and legal aspects which are intimately related to the fundamental issue of legal development in a democratic society ruled by law.

The Beginning of Life

Problems associated with the beginning of life have been considered by legislators and legal scientists in connection with criminal-law provisions concerning abortion, murder, manslaughter and negligent homicide. According to the Swedish Penal Code of 1962,[1] the victim of murder, manslaughter and negligent homicide must be a living being as opposed to a foetus. The question of the line to be drawn between the killing of a child and abortion has been discussed in legal writing. The point of departure for such discussion was the provisions of the 1864 Penal Code, which was replaced by the Penal Code of 1962. The generally accepted point of view was that under criminal law the foetus became a person upon birth (upon the commencement of labour).[2] This interpretation received support from the wording

[1] The penal code has been translated into English by Th. Sellin and is entitled *The Penal Code of Sweden* (Stockholm 1965). It contains an introduction by I. Strahl. The translation is published and distributed by the Swedish Ministry of Justice.

[2] R. Carlén, *Kommentar öfver Strafflagen,* Stockholm 1866, p. 263, J. Hagströmer, *Svensk straffrätt II,* Uppsala & Stockholm 1906, pp. 6 ff., J. Thyrén, *Kommentar till strafflagen kap. 14,* 2nd ed., Lund 1918, pp. 1 and 111, and R. Bergendal, *Lärobok i rättskunskap för blivande landsfiskaler III. Straffrätt,* 2nd ed., Lund 1928, p. 271. Cf. E. Sjövall, *Rättsmedicin,* 2nd ed., in collaboration with H. Thornstedt and G. Voigt, Stockholm 1959, p. 198.

of the statute. As regarded the murder of a child, which was considered to be a special form of murder and manslaughter, ch. 14, sec. 22, prescribed punishment for a woman who intentionally killed her child "at its birth or thereafter". Case law was, probably, adapted to this point of view. There are, however, no reported cases in which this particular question was dispositive. The advent of the new Penal Code probably did not imply a change in legal position on this point.[3] According to ch. 3, sec. 3, of the Penal Code, the crime is termed infanticide and it occurs when a woman kills her child at its birth or at a time when, owing to the delivery of the child, she is in a disturbed mental state or in grave distress.[4]

From the viewpoint of Swedish criminal law, the foetus is not considered to be a person prior to the initial stages of delivery. It is, however, protected before delivery in accordance with the abortion provisions of the Penal Code. Ch. 3, sec. 4, makes it a crime unlawfully to abort or otherwise to kill a foetus with the aid of internal or external means. This rule is directed both against the pregnant woman and any person who helps her to commit abortion. As a matter of public policy, however, the abortion provisions are directed against the aborter. That is, ch. 3, sec. 4, also provides that the sanctions against the pregnant woman herself may be remitted if there are extenuating circumstances. In addition, prosecution of the pregnant woman may not be initiated unless reasons of public policy so dictate in a particular case. In modern times, there are practically no prosecutions against women who have submitted to unlawful abortions. Certainly, no crime is committed when the abortion occurs in accordance with the provisions of the 1938 Abortion Act. That statute authorizes abortions in certain specified cases.[5]

Abortion has been criminally proscribed in Sweden since about A.D. 1350. The crime was judged to be a form of murder. It

[3] Cf. N. Beckman, C. Holmberg, B. Hult, I. Strahl, *Brottsbalken jämte förklaringar I*, 2nd ed., Stockholm 1968, p. 112.

[4] Infanticide can result in imprisonment for from one month to six years while murder may lead to imprisonment for ten years or for life and manslaughter (murder in less serious form) may lead to imprisonment for from six to ten years. The infanticide provisions are similar to those of many other countries. Cf. Simson and F. Geerds, *Straftaten gegen die Person und Sittlichkeitsdelikte in rechtsvergleichender Sicht*, Munich 1969, p. 41.

[5] Concerning the contents of this Act see, e.g., Glanville Williams, *The Sanctity of Life and the Criminal Law*, London 1958, pp. 214 ff., and Simson and Geerds, *op. cit.*, pp. 117 ff. Cf. G. B. Giertz in *Ethics in Medical Progress* (Ciba Foundation Symposium, London 1966), pp. 140 f.

seems probable that criminal responsibility was premised upon the stage of the development of the foetus.[6] This was in accordance with the medieval doctrine relating to the difference between embryo "formatus" and "informatus" or between foetus "animatus" and "inanimatus".[7]

The 1734 codification of Swedish law (*Sveriges Rikes Lag*, "The Law of Sweden") contained explicit criminal-law provisions concerning abortion.[8] The prescribed punishment was death. The law spoke of killing or aborting the foetus and contained no prescriptions concerning the stage of development of the foetus. The contemporary literature, however, expressed doubt as to whether the death penalty was warranted where the killing occurred "before the foetus had come to life".[9] At the same time, however, it does not appear that the act was to go unpunished if it had occurred prior to the quoted time.

The 1864 Penal Code contained similar provisions concerning abortion.[1] Early writers pointed out that the sanctions applied even though the foetus was at en early stage of development.[2]

Along with generally accepted, modern scientific opinion about fertilization and the earliest stages of pregnancy have come discussions, related in legal writing, about the meaning of these discoveries in relation to the question when the foetus is formed. We now know that fertilization of the egg usually occurs in the oviduct and that the fertilized egg quickly develops through mitosis (cell division) into an embryo which, after about a week, reaches the uterus and is implanted in the mucous membrane of the uterus. A question which up until modern times has been regarded as fairly academic (owing to difficulties of proof) is whether, from the point of view of criminal law, the embryo becomes a foetus immediately after fertilization or whether it is to be regarded as a foetus only after implantation (nidation) has occurred.

[6] See J. Thyrén, *Förberedande utkast till strafflag, Speciella delen* I, Lund 1917, p. 138, and C. Blomquist, *Fosterliv och fosterdöd. Den provocerade abortens etik*, Uddevalla 1966, pp. 17 f.

[7] See, e.g., Williams, *op. cit.*, p. 143, and Simson and Geerds, *op. cit.*, pp. 85 ff. Cf. the earlier English-law view that life began when the woman began to observe foetal movement, i.e. "the quickening" (Williams, *op. cit.*, pp. 143 f.).

[8] The 1734 Criminal Code, ch. 16, sec. 3; cf., secs. 2 and 4.

[9] J. A. Flintberg, *Lagfarenhets-Bibliothek* V, Stockholm 1803, p. 241.

[1] Ch. 14, secs. 26–29. The maximum penalty for women was six years' hard labour.

[2] Carlén, *op. cit.*, p. 262.

The two leading Swedish criminal-law writers of the first decades of the 20th century, Johan Hagströmer and Johan Thyrén, were in agreement on this point. They said that a foetus can be the object of unlawful abortion following fertilization.

Hagströmer explained that an embryo is, juridically speaking, in being from the moment of fertilization. He pointed out, however, that responsibility for abortion presupposes a showing of proof that an embryo exists. From this he drew the following realistic conclusion.

> It thus follows from the nature of things that, as stated above, although the stage of development of the foetus is without meaning as regards the question whether, according to law, punishment is called for, it is seldom the case that punishment will follow upon measures taken immediately or shortly after the time of sexual intercourse.[3]

Thyrén expressed a similar point of view:

> Modern law has given up the attempt to discover a theoretical measurement other than the point of fertilization of the egg in the effort to determine the inception of the foetus. An action taken prior to fertilization, e.g. destruction of an unfertilized egg (ovariotomy), falls naturally outside the area of proscription.[4]

Somewhat later, Thyrén's pupil Professor Ragnar Bergendal was able to confirm this conclusion.[5]

A change in the provisions of the criminal law relating to abortions seems to indicate that the legislative branch accepted Hagströmer's and Thyrén's conclusions. Thus, in 1921 the law was amended and the punishment for criminal abortion was reduced. A report prepared by four experts (including Thyrén) provided the basis for the amendment.[6] The report sought to examine the abortion provisions from various points of view with an eye to law reform. The experts contented themselves with proposing that for the time being the punishment for abortion be reduced. They recommended that further abortion-law reform be instituted along with a complete revision of ch. 14 of the Penal Code. It is important to note that the report pointed out that under the criminal law prevailing at that time a human life was

[3] Hagströmer, *op. cit.*, pp. 88 f.
[4] Thyrén, *op. cit.*, p. 112.
[5] Bergendal, *op. cit.*, p. 297.
[6] *Betänkande och förslag rörande ändring i 14 kap. 22, 23, 24, 25, 26 och 27 §§ strafflagen*, Stockholm 1921.

protected against arbitrary interference from the moment of its "purely biological" beginning, i.e. "from the commencement of fertilization until the moment of death". The report was submitted in its entirety to the commission of justices charged with responsibility for rendering opinions upon proposed legislative measures (the Law Council) without first being revised in the Ministry of Justice. Neither the Council's opinion nor the statement of the Minister of Justice recommending the matter for Parliament's consideration made any mention of the above-quoted statement found in the report. Parliament's first legislative committee issued a proposal which relied upon the report and the quoted statement was reproduced verbatim without giving rise to comment.[7]

The question of the commencement of the legal existence of the foetus was also examined in a 1927 case.[8] In that case, the City Court of Stockholm acquitted a woman of the crime of aborting two other women, although the latter persons had reached the "state of pregnancy" at the time of the acts in question, as there had been no reliable showing of proof that "the pregnancies had progressed to the stage where ... either of the women, at the time of the acts in question, was carrying a foetus". The prosecutor appealed the decision on the ground, among others, that the abortion statute did not mention any specific stage of pregnancy as a precondition for guilt. The Court of Appeal reversed the decision and found the defendant guilty on the grounds that it had been established that the two women were pregnant at the time of the acts in question and that in each case the foetus was dead upon delivery. The Supreme Court sustained the Court of Appeal.

The decision of the superior courts appears to be compatible with the views of Hagströmer and Thyrén. The case reporters, Justices of the Supreme Court, presented the case under the heading "the question of the meaning of the concept 'foetus' as an object of the crime of abortion".

Thus we can summarize by saying that the theory regarding criminal abortion advanced in legal writing holds that a

[7] *Royal Proposition* no. 71, 1921, Memorandum no. 38, First Committee on Legislation (*Första lagutskottets utlåtande*) 1921.
— Concerning legislative procedure in Sweden and the importance of preparatory work in statute interpretation, see F. Schmidt in 1 *Sc.St.L.*, pp. 168 ff. (1957). Cf. S. Strömholm, 10 *Sc.St.L.*, pp. 175 ff. (1966) and Thornstedt, 4 *Sc.St.L.*, pp. 240 ff. (1960).

[8] 1927 NJA 315.

foetus comes into existence upon fertilization. This view was expressed in the relevant *travaux préparatoires* and has, apparently, also been accepted by the Supreme Court.[9]

In the course of drafting the new Penal Code provisions concerning abortion, which in this connection do not materially differ from the provisions they supersede, the criminal law committee explained that the crime of abortion is directed towards a live foetus and that a foetus comes into existence upon fertilization of an egg cell and continues to exist up until birth. The Bill submitted to Parliament by the Ministry of Justice did not include any comments respecting the committee's definition of the term "foetus". From this it must be concluded that the legislative branch has decided that the relevant point is the time of the fertilization of the egg cell. This conclusion is shared by the authors of the Penal Code commentaries.[1]

It may appear that the Swedish legal response to the question at what phase of life's beginning criminal-law protection is first afforded is impractical. The test described above is difficult to apply, as there are obvious difficulties involved in proving that an act of abortion has occurred vis-à-vis a fertilized egg which has not yet become implanted in the mucous membrane of the uterus.

This question in fact arose several years ago when the Swedish Board of Health (which today forms part of the Social Board) had before it an application for the use of a birth-control substance with was said to have a "pregnancy-preventive" effect. The substance was designed to prevent implantation of a fertilized egg (which had begun to undergo cell division) in the mucous membrane of the uterus or to prevent normal growth of an egg so implanted. The substance influenced certain hormonal processes which, in turn, reduced the capacity of the mucous membrane of the uterus to receive the fertilized egg.

Before deciding upon the application, it was necessary to determine whether the pregnancy-preventive effect would be regarded as a form of abortion, in which case the substance could only be employed in accordance with relevant abortion-law provisions,

[9] During the preparation of the 1938 Abortion Act other opinions were expressed. They are, however, unclear in meaning and, in accordance with prevailing methods of statute interpretation, have little significance in interpreting older provisions of the 1864 Penal Code.

[1] See Beckman *et al., op. cit.*, p. 119. See also A. Nelson in *Socionomförbundets tidskrift* 1966, p. 404. The conclusion draws added strength from the fact that an organization whose opinion was solicited expressed doubts about the suitability of this limit. This opinion did not give rise to ministerial comment.

or whether the effect would be said to be a fertilization-preventive effect, in which case the substance could be freely employed. The Board of Health asked for my opinion in the matter.

I proceeded to analyse the relevant legislative materials, case law, and legal literature. I expressed the view that it was fairly clear that the meaning of the relevant legal provisions—derived in accordance with customary methods of interpretation—was that under criminal law a foetus comes into existence upon egg fertilization and not upon implantation. I also pointed out that this interpretation was subject to the criticism that it was too technical and failed to take into account the more recent, practical possibilities of destroying the egg during the period between fertilization and implantation. The criticism could, perhaps, influence the interpretation of the statute if that interpretation could be advanced with little or no regard for the reason underlying the statute. This, however, was not the case. The ideological presupposition of criminal abortion law in Sweden is that regard for life shall be upheld and that the individual shall be protected from the point of his coming into existence in his mother's body until the time of his natural death.[2] As it is certain that the individual comes into existence upon fertilization and the initial stages of cell division, legal protection should be afforded at that time. It is apparent, from another point of view, that it may be deemed more desirable not to protect the foetus until after implantation or even later, i.e. when the foetus has further developed or when the mother has begun to feel foetal movement. The latter ideological starting point, however, differs from the one derived from the relevant legislation. Occasionally, one may be permitted to take into account new social values and altered social, technical, and economic relationships in determining the scope of a law's applicability. In regard to the concept "foetus", however, we are confronted with the interpretation of an enactment which was passed only recently and with legal-political discernment of societal premises. To permit a conclusion to be drawn, other than the conclusion drawn in preparing the law in question, appears to be unjustifiable. Should it appear desirable that the law be substantively altered, then it is up to the legislative organs to re-examine the issue. To delegate to the courts or to administrative bodies the task of interpreting a modern statute in order to reach a principle other than that apparently con-

[2] Cf. Simson and Geerds, *op. cit.*, p. 131.

tained in the law itself is not consistent with the basic principles of the Swedish legal system.

The conclusion of my analysis was that use of the substance in question could conflict with the criminal-law provisions concerning abortion—even though it might be difficult or impossible to prove that fertilization had occurred in a concrete case—and that the Board of Health was, therefore, not justified in permitting the use of a medical preparation which had such effects. However, as public policy on population encourages complete experimentation with substances which are capable of discontinuing further development of a fertilized egg at a very early stage, I also suggested that a legislative amendment to facilitate such experimentation would be in order. The Board of Health accepted my conclusions and stated that it was desirable to establish the legal basis for scientific testing of birth-control substances. It proposed legislation which would permit medical experimentation, under the supervision of the Board of Health, of substances including those that had the effect of interrupting pregnancy. In 1967 Parliament was presented with a separate statute which dealt directly with the medical experimentation discussed above. The draft was approved by Parliament following debate in which various points of view were expressed.[3] The 1967 Act concerning clinical experimentation with certain birth-control substances provides that birth-control substances which can prevent the development of fertilized eggs in women may only be designated as suitable for use after special, Government-authorized experimentation with such substances.

The same statute thus recognizes—although the legislative branch does not explicitly express its interpretation of the Penal Code abortion provisions—that destruction of a fertilized egg is unlawful unless performed with statutory permission.

The 1967 statute is probably only provisional. A committee is currently preparing an abortion-law reform. The result of this endeavour may well be that women will be free to undergo abortions during the first twelve weeks of pregnancy. The punishment for unauthorized abortions will probably also be abolished. At the same time, the need remains for punishment of those who perform illegal abortions upon others. The reason for this is

[3] *Royal Proposition* no. 18, 1967, Memorandum no. 19, First Committee on Legislation (*Första lagutskottets utlåtande*) 1967. Parliamentary Debates 1967, Upper House (Första kammaren) 17: 46, Lower House (Andra kammaren) 17: 93 ff. and 17: 101 ff.

more a desire to prevent "quack" medicine than to protect developing life. There is a difference of opinion as to what form eventual legislation will take. Should it take the form just described, this will imply that the legislators have abandoned the view that the fertilized egg is a living being which should be protected by society and have approached a standpoint prevalent up until the 19th century that a foetus, during its earliest stages of development, has no independent existence which, in itself, need be protected.[4] There is, however, an important distinction between the older and the more modern viewpoints. The foetus, in its earliest stages of development, was formerly not deemed worthy of protection owing to the fact that it was not considered to be an individual with human life. The modern approach, on the other hand, derives from the claim that the woman has a right to decide whether or not she shall give birth to her child.

The End of Life

Turning to the second question of interest here, the problem of the end of life from the point of view of criminal law, it should be noted that legislators, case law, and legal science have been more concerned with killing than with death itself. The traditional areas of interest have been questions related to the object of crime (the foetus, the newborn child, the dying person), subjective prerequisites, causation, and the divisions of criminal killing in relation to these and other circumstances (abortion, infanticide, manslaughter, murder, negligent homicide, etc.). The question of "mercy killing" has also been the subject of lively debate.[5] On the other hand, little interest has been expressed in the actual concept of death.[6] Swedish law has touched upon the latter concept in only two connections, namely when seeking to determine the point at which an infant may be said to be capable of surviving in deciding whether a newborn child could be the object of infanticide,[7] and when discussing the general question of whether

[4] Cf. Simson and Geerds, *op. cit.*, pp. 81 ff. and p. 144, and Giertz, *op.cit.*, p. 141.

[5] Regarding this discussion see, e.g., Williams, *op. cit.*, pp. 277 ff., Simson and Geerds, *op. cit.*, pp. 42 ff., and C. Blomquist, *Livet, döden och läkaren. Om medicinsk dödshjälp*, Uddevalla 1964. Cf. Nelson, *op. cit.*, pp. 411 ff.

[6] Cf. Williams, *op. cit.*, pp. 17 f., I. MacColl Kennedy in 22 *Current Legal Problems*, p. 103 (1969); and J. C. Smith and B. Hogan, *Criminal Law*, 2nd ed., London 1969, p. 183.

[7] See Thyrén, *op.cit.*, p. 2, and Sjövall, *op. cit.*, p. 199. *Contra* Hagströmer, *op. cit.*, p. 8. — The 1967 National Registration Ordinance contains a rule concerning registration of a child born dead or born alive. "Child means a new-

a dying person can be the object of criminal killing.[8] The seemingly paradoxical lack of discussion and legal regulation of the concept of death is readily explicable if one considers that the question of the point of death was probably regarded as a purely medical question and that the point of death, so regarded, did not give rise to controversy. Historically, death has been said to occur at the point when heart and circulatory functions cease permanently.

> The point which has traditionally been given as the advent of death has been the moment when one observes the heart beat for the last time (for example, through external or, in exceptional cases, direct observation of heart activity, ceasing of the pulse, or electrocardiographic registration—in accordance with existing possibilities) or, where the last heartbeat has not been accurately observed and determined, the moment after the dying person has taken his last breath.[9]

In this manner, the point of death can be easily determined —often through non-scientific observation—and the exact moment of death can be stated.[1] It is, therefore, not difficult to understand why the legislator and the legal scientist have not devoted much attention to the concept of death.

The situation has, however, changed owing to the development of various technical methods of sustaining life, such as intravenous blood and liquid supply, heart-lung machines, respirators, and artificial kidneys. It has been established for some time that death does not affect all organs simultaneously. Ordinarily, the individual dies gradually and some organs continue to function after others have ceased functioning. When the circulatory system stops the brain suffers immediate, irreparable damage, whereas certain muscle tissues, for example, survive for hours and the hair and the nails continue to exhibit life through growth for days. In

born child who, following birth, has breathed or shown other sign of life, and a still-born child who has died after the twenty-eighth week of pregnancy." Cf. Williams, *op. cit.*, pp. 19 ff.

[8] Thyrén, *loc. cit.*, Hagströmer, *loc. cit.*, Bergendal, *op. cit.*, p. 273.

[9] *Legal Aspects of Transplantations. Some Views on the Definition of Death*, Stockholm 1969 (The Swedish National Board of Health and Welfare), p. 22. The work is an English translation of the principal parts of (Biörck, Franksson, Langton, Lindblom) *Legala aspekter på transplantationsverksamhet och synpunkter på dödsbegreppet. Utredning av en arbetsgrupp inom Medicinalstyrelsen*, 1967 (stencil). Cf. D. Louisell in above-mentioned *Ethics in Medical Progress*, p. 91, and D. Daube, *ibid.*, p. 191.

[1] *Legal Aspects of Transplantations, loc. cit.*,

fact, the precise moment of death can only be stated in certain cases of sudden death, for example where an explosion results in instantaneous and general organic damage. For practical reasons, however, the concept of death has been tied to the obvious and definite ceasing of heart activity because of the fact that, as a rule, a heart which has stopped does not recommence functioning: permanent cessation of heart activity has been held to be synonymous with life's definite end.[2]

New methods of sustaining life render it possible to employ artificial means to perform some basic human functions, with the result that *other* bodily functions can be sustained and the collapse of all organs delayed, sometimes for long periods of time. In certain cases this has little significance for the concept of death. It is clear, for example, that a patient who is conscious, though dependent upon a pacemaker for his heart function, a respirator for his breathing or an artificial kidney for excretion, cannot be regarded as dead. A considerably more difficult situation would be one involving an unconscious patient who is given life-sustaining treatment but whose brain is not functioning and who cannot be brought back to health. It should be obvious that, where the patient's condition is hopeless, death will soon follow irrespective of the life-sustaining techniques employed.

The fact that bodily functions can be maintained even though the brain is irrevocably destroyed has, in Sweden as in other countries, given rise to a demand for a change of the traditional concept of death by substituting "brain death" for "heart death". More specifically, it has been suggested that "irreversible cessation of brain functioning" be employed as a basis for the pronouncement of death.[3] It has also been asserted that it is fundamentally incorrect to assume that the concept of brain death implies a new definition of human death. Two Swedish doctors develop this point of view in the following way.

> For as long as man has known that mental functions are tied to the brain's functions, he must have seen that the brain's death is synonymous with the person's death and that cessation of heart activity serves to indicate that the brain is dead. It has been and continues to be a very useful indicator, as the death of both organs—the brain and the heart—usually occurs at the same time.[4]

[2] *Op. cit.*, p. 24. Cf. Biörck in *Sv.J.T.* 1965, p. 550.

[3] See, e.g., *Ethics in Medical Progress*, pp. 67 ff. and 91 ff. Concerning Swedish literature see, e.g., D. Ingvar and L. Widén, *Läkartidningen* 1967, pp. 4899 ff.

[4] Ingvar and Widén, *Läkartidningen* 1968, p. 333.

This reasoning seems to render the question of the concept of death in medical and juridical terms a question of semantics. It is doubtful, however, whether a linguistic expression which implies that a patient whose brain has ceased to function but whose heart and respiratory systems continue to function is to be considered dead, in the normal sense of the word, would be generally accepted or acceptable. The concept of death is considerably more complicated[5] and a one-sided, semantic reasoning offers little help in solving the criminal-law problem concerning the point of death.

In reality, behind the demand for recognition of brain death as the criterion of death lie practical, medical considerations and, perhaps, a new approach to the issue of the individual's right to have full disposal of his own body.

The above-mentioned practical considerations are related partly to the care of a patient whose brain is not functioning and partly to transplants.

In relation to the care of a patient whose brain is not functioning, the question arises of the doctor's right to abstain from employing life-sustaining treatment or to discontinue such treatment begun before the heart functions have spontaneously ceased. As the number of such patients is certainly not very great, this cannot be said to be a serious problem at this stage.[6]

It is, nevertheless, a problem which should not be neglected. The treatment of patients, unconscious over long periods of time, is economically and administratively burdensome. Often, their condition results in difficult emotional crises for their relatives. Artificial sustenance of certain bodily functions, following complete stoppage of brain activity, may also conflict with views concerning the dignity of death which are held by many people.[7] It should, however, be observed that long-term unconsciousness is not synonymous with brain death (which implies that the brain functions have ceased permanently) and that there have been cases in which consciousness has returned following long periods of unconsciousness. Legal acceptance of the concept of brain

[5] Cf. G. Biörck in *Perspectives in Biology and Medicine*, vol. 11, no. 4, 1968, pp. 527 ff.

[6] According to *Legal Aspects of Transplantations*, Appendix 4, p. 59, there were in Sweden, in February 1967, 108 protractedly unconscious patients in regard to whom there existed little hope of their regaining consciousness.

[7] Cf. Giertz, *op. cit.*, p. 144.

death would not resolve those problems which are associated with treatment.[8]

The question of the doctor's obligation to continue life-sustaining treatment was the focal point of an incident in 1960 which received great attention and which was troublesome for the relevant legal authorities.[9]

In December 1960 an 80-year old woman suffering from brain haemorrhage was admitted to a hospital in northern Sweden. She was unconscious upon admission and never regained consciousness. Owing to her condition, fluid by the drip technique was applied for a period of two months (from the beginning of her hospital confinement). During the course of the treatment her condition improved slightly and then worsened. Following consultation with the patient's relatives and with their consent, the doctor in charge ordered the fluid by the drip technique to be discontinued. Six days later the patient died.

The case came up before the disciplinary committee of the Board of Health which, in 1963 and 1964, stated that the procedure employed by the doctor, i.e. discontinuance of provision of fluids necessary for continued existence, could not be regarded as compatible with established scientific procedure. The committee ruled that the doctor had neglected medical instruction and his official duty as a doctor in public service. It turned the matter over to the chief county prosecutor. The forensic medicine committee of the Board of Health, however, expressed a somewhat divergent opinion. It stated, among other things, that the medical profession would regard as defensible and as legitimate the decision not to initiate life-sustaining treatment in hopeless cases where death can be expected within a short time. The committee added: "Similarly, fluid administered by the drip technique to a dying patient may be discontinued." The prosecutor initiated a prosecution in the jurisdiction where the alleged breach of duty occurred. He could have initiated a prosecution for murder, as it had been established that the patient's death (owing to discontinuance of fluid by the drip technique) occurred earlier than otherwise would have been the case.

[8] This is indicated in a submission from the Social Board to the King in Council dated February 28, 1969, proposing a Transplantation Act (stencil), pp. 20 f. See *Aspects of Legal Transplantations*, pp. 108 f.

[9] An account of this case was presented by Giertz, *op. cit.*, pp. 142 f., and by G. Biörck in 1968, *Wisconsin Law Review*, pp. 488 ff. The case has been reported in 1965 Sv.J.T., ref. 77.

The district court stated that, without going into a detailed analysis of the question whether the patient was dying, it had been established that she was in such a condition that continued provision of fluid nourishment would not have served any medical or human purpose. In the light of these circumstances and the fact that the forensic medicine committee thought it proper to discontinue life-sustaining treatment in certain cases, the court could not find that the doctor's procedure was contrary to established scientific practice or that the doctor had broken other rules of an ethical or other nature. The doctor was, therefore, acquitted.

Following the decision, the Chief Public Prosecutor turned, once again, to the disciplinary committee of the Board of Health, which had in the meantime undergone a partial change of membership. By three votes to two, the committee found that as the court's decision indicated that the doctor had not committed a breach of duty the prosecution should not be pursued further. The Chief Public Prosecutor was, however, more inclined to adhere to the minority opinion that the doctor had acted improperly. Nevertheless, he took the view that in light of the majority ruling and the apparent difference of opinion expressed within and outside the medical profession on the question of the justification of continuing life-sustaining treatment when all hope is lost, it could hardly be maintained that the doctor's actions constituted punishable activity. The then Chief Public Prosecutor, E. Walberg, has, in a later statement,[1] adhered to his earlier conclusion that the doctor acted wrongly but added that it was doubtful whether the doctor had committed any breach of duty, given the uncertainty as to the legal position which was prevalent when he acted as he did. A separate question would be raised should another doctor act in a similar fashion now that the Prosecutor's opinion has become public knowledge.

It is, in any case, clear that the decision of a district court has little value as a precedent in Swedish law. The legal picture, therefore, appears to be unclear in relation to the point discussed in the above-mentioned case.

The Social Board, however, expressed its view on the matter in 1969.

> The Board upholds the principle that every sick person shall be given adequate care so long as all hope is not lost. Only in those

[1] *Sv.J.T.* 1965, p. 568.

> cases where death can be expected to follow with certainty, as an immediate consequence of the patient's condition, and where the condition is such that life-sustaining treatment has no effect other than temporarily to delay the moment of death, can it be said not to be wrong to discontinue treatment.[2]

This statement, coming as it does from an administrative agency —albeit the agency charged with supervision of Sweden's medical profession—cannot alone be taken to represent applicable law. In more concrete and specific form, however, it could be acceptable as law.

Such a concretization would probably summarize the legal picture in the following way. In a case which is established to be hopeless, as where death can be expected in a short time, the doctor is not under an obligation to initiate life-sustaining treatment (this is compatible with already existing law). If life-sustaining treatment is initiated the doctor, in such a case, is authorized to discontinue the treatment. The consent of relatives is not required in these instances and the doctor may proceed in accordance with his own judgment. The relatives' motivations, for example, might be conflicting. Moreover, it is not unlikely that a relative might, during the patient's fight for life, give his consent in order to mitigate the patient's suffering. Later, when feelings of grief and loss set in, the same relative might repent of his decision and turn against the doctor, possibly initiating prosecution or disciplinary proceedings.

The question of changing the concept of death is not significantly related to the crystallization of the legal rules prescribed in these cases.[3]

The discussion of the concept of brain death in relation to transplants began when kidney transplants became possible. Initially, it was believed that transplanted kidneys had to be taken from donors having functioning hearts.[4] It was later discovered that positive results were obtainable even if the donor was dead. Thus, the need for a new definition of death in this connection vanished.

The discussion became heated in Sweden when, during the sum-

[2] The above-mentioned submission of February 28, 1969, p. 21. *Legal Aspects of Transplantations*, p. 109.

[3] Cf. Daube, *op. cit.*, pp. 190 f., and J. Hamburger in *Ethics in Medical Progress*, p. 205, and L. Leksell in *Läkartidningen* 1967, p. 4337.

[4] The discussion in *Ethics in Medical Progress* is principally concerned with kidney transplantations.

mer of 1964, a kidney was removed from a patient suffering from serious brain damage. The patient was unconscious, owing to haemorrhage, upon arrival at the hospital and her prognosis was "definitely *pessima*". She was given artificial respiration and fluid supply treatment. With the consent of the patient's spouse, one of the patient's kidneys was removed several days later and was transplanted to another patient. The latter patient's kidneys had been removed and he was undergoing dialysis in anticipation of the kidney transplant. Respiratory and fluid-supply treatment of the donor was continued until her spontaneous heart functioning ceased, two days after the transplant operation. Her death was recorded at the time her heart ceased functioning. She was treated as living both during and after the kidney removal.

Upon the inquiry of the chief county prosecutor, the disciplinary committee of the Board of Health stated that the death was not hastened by the kidney removal. Actually, life was lengthened by the supportive measures taken in connection with the operation. The committee further stated that there was no basis in law or legal usage for the position that such a measure taken without the consent of the donor was lawful.[5]

For technical reasons, the chief county prosecutor turned the case over to the Attorney-General (*Justitiekanslern*).[6]

The Attorney-General stated, with reference *inter alia* to a statement of mine, that the removal of the patient's kidney implied resulting bodily injury. As the measure was not taken in order to benefit the patient herself (in which case it would have been lawful) and as the consent given by the patient's spouse lacked legal effect, the action was to be regarded as assault and battery in accordance with ch. 3, sec. 5, of the Penal Code.[7]

In light of the circumstances surrounding the case, for example that the resulting injury was without significance and that the evaluation of the consent given was a legal and not a medical

[5] *Legal Aspects of Transplantations*, pp. 50 ff.

[6] The Attorney-General is a (non-political) legal adviser and representative of the King in Council. He has (as does the Ombudsman (JO) who, however, is selected by Parliament) jurisdiction over civil servants and can, like the JO, prosecute civil servants for breach of official duty. The Attorney-General was, formerly, also Chief Public Prosecutor and public prosecutor in the Supreme Court. These latter functions were transferred to the Office of Chief Public Prosecutor in 1948.

[7] Such medical measures fall within criminal assault and battery but are usually lawful if the patient has given his consent or if taken, in accordance with established medical practice, to improve an unconscious patient's condition. Cf., e.g., Beckman *et al.*, *op. cit.*, p. 124.

question, the Attorney-General decided that prosecution for assault and battery was not called for.[8]

During the discussion which resulted from this case it was generally agreed that the doctor had acted improperly. Many persons maintained, however, that the concept of brain death ought to be recognized in the law. This was prompted by the need to transplant unpaired organs such as the liver and the heart. In particular, several medical groups stressed the desirability of carrying out heart transplants in Sweden.

Even before the Attorney-General announced his decision, a working group appointed by the Board of Health to study the question of administrative regulation of transplants involving living donors called for statutory regulation of transplants involving living donors.

Questions relating to deceased donors are regulated under a 1958 statute concerning the taking of tissue and other biological material from dead persons. The statute provides that tissue and other biological material may be taken from the body following the death of a person who has died in a hospital or who was dead upon arrival to the hospital. Such measures may not, however, be taken if the deceased or his close relatives have expressed disapproval or if special reasons for not taking such measures exist. The statute contains no requirement that consent of relatives must be given, and it may well be questioned whether, in practice, the law is not applied too liberally. The statute presupposes that the donor is heart-dead when the measures are taken.[9]

In a report of 1967, the working group did not suggest changes in the 1958 law. It stated that it was doubtful whether a transplant measure could lawfully be taken where the donor had been declared brain-dead though his heart was functioning, in the absence of provisions to that effect. The group did not, however, suggest such provisions. It contented itself with proposing that the Board of Health should draft a law containing rules concerning the taking of tissue and other biological material from living persons for transplant objectives. A rule that the donor's consent must be given in writing before the transplantation may be undertaken was suggested.[1]

[8] The Attorney-General's resolution may be found in *Läkartidningen* 1968, pp. 10 ff. The earliest stages of the case are referred to by Giertz, *op. cit.*, p. 146, and G. Biörck in 1968, *Wisconsin Law Review*, p. 490.

[9] *Legal Aspects of Transplantations*, pp. 30 f.

[1] See *Legal Aspects of Transplantations*, pp. 31, 35 and 60.

The working group's report aroused lively discussion; the demand for legal recognition of the concept of brain death was raised once again, this time with the objective of facilitating transplantation of beating hearts.

After various authorities and organizations had voiced their opinions concerning the working group's proposals, the Social Board (which by then included the Board of Health) concluded that transplant activity involving living donors ought to be legally proscribed. In 1969, the Board suggested to the King in Council that an act concerning transplants[2] and living and dead donors be enacted. The suggested act was rather similar to the 1958 statute in relation to dead donors. Concerning live donors, the following was suggested.

> Transplants may be taken from living persons who have given their consent to the operation. Transplants may, however, be taken from persons who are not legally competent only if there are pressing reasons and the Social Board has given its consent to the operation.
>
> Transplants may not be taken if the operation might result in serious injury to the person from whom the transplant is taken.
>
> Consent shall be given entirely voluntarily, with an understanding of the purpose and nature of the operation and the risks connected with it. Before consent is given, the person from whom the transplant is to be taken shall have been fully informed in these respects.
>
> The consent shall be given in writing, in the presence of the doctor responsible for the decision to operate, and in close connection with the operation.

The Social Board intended the proposed legislative rules concerning deceased persons to apply, as did the 1958 law, to persons who had died (in the traditional sense of the word) and not to apply to brain-dead individuals. The Social Board did not wish to modify the concept of death.

After summarizing the various arguments for and against legalization of the concept of brain death, the Social Board stated that it would be necessary that such legalization be supported by a widespread public opinion. Such a widespread opinion, according to the Board, did not exist. The situation was best represented by the medical profession itself, which was not united behind the concept of brain death.

[2] Submission of February 28, 1969, Dnr A 1 29/1968. Se *Legal Aspects of Transplantations*, pp. 95 ff.

The question of transplants and brain death has also been examined by the Nordic Council. Upon the suggestion of two members, the Council, in 1969, recommended that the governments of the Nordic countries should investigate the possibilities of adopting uniform laws concerning transplantations.[3] The committee report which served as the basis for the recommendation contained careful studies of the legal conditions existing in the Nordic countries and reports from various authorities and interest groups. In relation to the concept of death, the committee stated that the then current heart-transplant possibilities could be seen as providing the basis for affording legal relevance to the concept of brain death. The committee added:

> The current concept of death, however, has strong support deriving from tradition and legal practice. The subject as such is naturally delicate and any change in the prevailing position can be expected to take a relatively long time. Certain relevant authorities have pointed out the suitability of public discussion and evaluation of the fragile and elusive concept of death. An open Nordic debate in which the public's point of view could be elucidated would undoubtedly be of great importance.
>
> The committee wishes to emphasize that the moment of death (its determination) has a legal importance which extends beyond the area of transplants, for example to the area of inheritance law.
>
> An investigation of possibilities of uniform Nordic transplantation law would entail discussion of the question of the concept of death.[4]

The arguments presented in support of the concept of brain death, as pointed out above, are generally of two kinds. I am not referring to the semantic reasoning referred to above which implies that brain death is death in the proper sense.

The first set of arguments allege that acceptance of the concept of brain death would facilitate discontinuance of medical treatment of unconscious persons for whom there is little or no hope that consciousness will return. This would have advantages from humanitarian, economic and hospital-administration points

[3] The Nordic Council, 17th session 1969 (Stockholm 1969), pp. 227 ff. and 2364 f. (recommendation 12/1969). The representatives of the governments of the states in question agreed that Sweden should serve as the coordinating country for this endeavour. Concerning the Norwegian opinion in this area, see E. Enger, J. B. Hygen and J. Andenæs in *Samtiden* 1969, pp. 130 ff.

[4] *Op. cit.*, pp. 805 f. (A 177/s: Appendix 2).

of view. As pointed out above, this objective could be brought about without changing the traditional definition of death.

Thus, it remains to consider the second view, which alleges that a change in the concept of death is needed to facilitate heart transplantations. A sucessful heart transplantation presupposes, according to the community of surgeons, that the operating physician shall have access to a beating heart.

The reasoning behind this point of view is as follows. Heart transplantations are desirable and can only be successfully undertaken if the heart is beating when it is removed from the donor's body. If a patient from whom a beating heart is taken is not regarded as dead, the operating physician shortens his life by removing his heart. He, in fact, kills the patient. If, on the other hand, the patient were to be regarded as dead when his brain activity irreversibly ceased there would be no killing when his beating heart was removed. Rather, the operation would involve a transplant from a dead donor.

This reasoning is largely semantic. The reality is the same whenever one removes a beating heart, whether or not the donor is technically regarded as dead.

The difference appears to be that if the donor is considered to be dead the measures taken are compatible with the medico-ethical requirement that a doctor may not injure a patient. In addition, a change of the concept of death might possibly be easier for public opinion to embrace than legislation which authorized a "killing" measure.

Seen in the perspective of these practical and, perhaps, ideological objectives, the demand for recognition of brain death as the criterion of death, expressed in jurisprudential terms, embraces the desire to change applicable law. That is, it calls for a replacement or a supplementing of the legal event which is called death and which produces varying legal consequences (that inheritance or insurance fall due, that the wife receives a widow's pension, that she may marry without getting a divorce, that the body can be buried, etc.) without changing the term employed to describe the legal event. However, the desired change to brain death only seeks to effect one or two of death's consequences, namely the right to remove organs for transplant purposes in accordance with the rules which are applicable to removing biological materials from a dead person and the right not to continue life-sustaining treatment of a dead person. From a legal point of view, these objectives can be realized without altering the definition of death.

For example, rules could be enacted relating to the right to remove organs for transplantation from a living person, without the consent of that person, under certain conditions (e.g. where there is total and irreversible brain damage)[5] and, as mentioned above, relating to the right to discontinue life-sustaining treatment in similar cases.

The objections against the use of brain death as the criterion of death are of differing types.

The first type raises the question whether it is possible to determine brain death with the same degree of certainty with which heart death can be determined. This is a medical question and it is difficult for a layman to form accurate opinions about it, especially as medical experts themselves are not agreed on this point.[6] Obviously, certainty regarding this question is called for before the concept of death is changed.

Even if the concept of brain death is accepted, it would appear that heart death must continue to be the criterion of death in many cases, as brain death is more difficult to determine with certainty. It has been maintained[7] that a double concept of death would give rise to undesirable legal consequences (e.g. in relation to inheritance or the payment of pension money) as the time of death would differ in accordance with the death criterion—brain or heart death—used.[8] The problem would be aggravated if the choice varied with the geographical area where the death occurs. It is clear that not every doctor could determine brain death. On the other hand, it may be objected that even if the concept of heart death is employed, the point of death is uncertain and may depend upon external circumstances such as rescue measures, quality of treatment, and the initiation or omission of life-sustaining treatment.[9] The possibilities of deliberate or unintentional manipulation of the point of death seem, however, to

[5] Cf. Leksell in *Läkartidningen* 1967, p. 4337, and the Attorney-General in *Läkartidningen* 1968, p. 536.

[6] The Social Board expressed certain doubts concerning this question in the submission dated February 28, 1969. See *Legal Aspects of Transplantations*, p. 109. The concept of brain death has been accepted by the medical professions of some other countries. See Kennedy, *op. cit.*, pp. 112 f. Regarding Switzerland, see *Schweizerische Zeitung für Strafrecht* 1969, pp. 334 ff.

[7] See *Legal Aspects of Transplantations*, p. 30.

[8] English case law includes one case, *Re Potter*, in which the legal resolution of various questions was dependent upon the concept of death employed. Regarding this case, see Kennedy, *op. cit.*, pp. 107 f. D. W. Elliott in *Medicine, Science and the Law*, vol. 4, 1964, pp. 77 ff., and Louisell, *op. cit.*, pp. 92 f.

[9] Cf. Ingvar and Widén in *Läkartidningen* 1968, p. 333.

be greater if the concept of brain death is employed. This does not, however, appear to be a serious obstacle to the employment of that concept.

It has also been maintained that general awareness of the fact that transplantations involving brain-dead persons may be performed at hospitals will negatively affect the attitude of hospital personnel and, above all, will turn public opinion against hospitals and doctors. Should the public assume that doctors are disposed to take hearts and other organs from patients taken to hospitals in an unconscious condition, mistrust and apprehension which might be difficult to remove might well develop.[1]

Essentially, we are confronted with an ideological question which concerns a person's relationship as an individual and as a citizen to his own and to other people's bodies and to biological life. It involves striking a balance between the individual's integrity and his relatives' feelings towards him and towards his, more or less, lifeless body, on the one hand, and his fellow man's need of his tissue or organs, on the other. How one considers this balance should be struck depends upon one's outlook upon life and one's political ideals.

For those who incline towards a collective political orientation, it will appear natural that a person who no longer needs an organ should relinquish it in favour of one who needs it more. Those who lean towards individualism will assert that the person should be allowed to decide for himself what shall be done to him.

Nor should we forget that it may well be easier to alter peoples' abstract views concerning the concept of death than to affect their concrete opinions. It may be easy to plead for brain death in a lecture room filled with young and progressive people but more difficult to explain to a layman—with the help of diagrams and x-ray pictures—that the unconscious relative whose hand he is holding and whose pulse he can feel is already dead.[2]

[1] Cf. Lundevall in *Nordisk Kriminalteknisk Tidskrift* 1968, p. 106.

[2] It has been maintained during the course of the Swedish debate that Pope Pius XII, in a 1957 speech, accepted the concept of brain death. Aside from the fact that the Pope's view cannot be given great importance in a country which has Protestant traditions and which is highly secularized, the Pope's speech concerned the right and the obligation to initiate life-sustaining treatment. He conceded the right to omit and to discontinue such treatment after the soul had left the body. The problem of greatest concern to him was the question of when the dying person is no longer capable of receiving extreme unction because his soul has left his body. He did not express an opinion concerning removal of organs from brain-dead persons.

Most important, the concept of brain death is more complex and medically technical than the relatively uncomplicated and—even for the layman—observable concept of heart death. Weighty reasons should, therefore, be presented before departing from the traditional concept of death. Should the technical reasons for removing organs before cessation of heart activity (i.e. reasons associated with transplantations) necessitate facilitation of such measures, one can turn to ways other than the changing of the concept of death.

When it becomes apparent that a heart transplant can, practically speaking, return a patient to a relatively normal life for a reasonable length of time,[3] one could, in my opinion, seek to overcome the differences of opinion relating to the suitability of generally changing the concept of death by allowing these transplantations on an experimental basis. Such an experiment might well make use of testament-type permission from donors. Such permission could be given in special forms in order to minimize problems of interpretation: the names of persons who have thus given their advance consent to heart transplants could be recorded in a register convenient to the hospital(s) in question. Under Swedish law, such an experiment could be effected by means of a special statute similar in nature to the 1967 Act relating to clinical experimentation with certain birth-control substances.[4]

Regarding the question when a person should be regarded as dead *de facto* and *de jure* he stated that the decision did not fall within the church's jurisdiction. He added, "Mais des considérations d'ordre général permettent de croire que la vie humaine continue aussi longtemps que ses fonctions vitales—à la différence de la simple vie des organes—se manifestent spontanément ou même à l'aide de procédés artificiels." See *Ethics in Medical Progress,* pp. 223 ff.

[3] It is doubtful whether this is the case. See G. Biörck in *Läkartidningen* 1969, pp. 1745 ff., and in *Socialnytt* 1969, p. 52.

[4] Stockholm University Faculty of Law's comments upon the Social Board's proposal for a Transplantation Act. Cf. L. Leksell in *Dagens Nyheter* June 17, 1969, and G. Biörck in *Läkartidningen* 1969, pp. 1750 ff., and in *Socialnytt* 1969, pp. 54 ff.