

## Bioethics



Copyright © Interdisciplinary Encyclopedia of Religion and Science ISSN: 2037-2329 and the author. No part of this article may be reproduced, stored in a retrieval system or transmitted without the prior permission of the Editors. To refer to the content of this article, quote: INTERS – Interdisciplinary Encyclopedia of Religion and Science, edited by G. Tanzella-Nitti, I. Colagé and A. Strumia, [www.inters.org](http://www.inters.org)

**Date:** 2002

**DOI:** 10.17421/2037-2329-2002-AS-1

[Antonio Spagnolo](#) [1]

I. The Origin of Bioethics: a Brief Historical Overview - II. Scientific Disciplines, Special Questions and General Reasons which Have Caused the Birth of Bioethics. *1. Experimentation on Humans Beings. 2. Genetic Experimentation. 3. Themes Related to Transplants. 4. Problems Connected with the End of Human Life. 5. The Beginnings of Life and Human Procreation* - III. The Contribution of Philosophy and Theology and the Thesis of a “Lay” Bioethics. *1. The Presence of Theology in the Debate. 2. On the Possibility of a “Lay” Bioethics* - IV. The Discussion Relating to the Principles of Bioethics - V. Towards a Non-Conventional, Philosophical Foundation for Bioethics. *1. The Crisis of “Principlism” and the Rise of the Problem of Foundations. 2. An Evolutionary Bioethics? 3. Bioethics as Free and Autonomous Choice. 4. The Utilitarian Address and Ethical Contractualism. 5. The Personalist Model: Beyond Contractualism and Utilitarianism. 6. Concluding Remarks.*

## I. The Origin of Bioethics: a Brief Historical Overview

All activity within the sphere of health care, from time immemorial and in all cultures, has been imbued with both moral and religious significance, to such an extent that healing has been considered as a divine gift. Prayers and rituals accompanied the curative act and in temples dedicated to the gods of convalescence, such as Asclepio in the Greek and Roman civilizations, where physicians were also priests, their elected registration testified to the prayers and gratitude of the patients.

Following this period a great asclepiad, the Greek physician Hippocrates (5th century B.C.), maintained that the art of healing should be regarded as a scientific activity, based upon observation and on the natural effects of the attempts to cure an illness. He was, therefore, attempting to separate medicine from religion, yet not from moral roots as the medical arts for Hippocrates epitomized a love for humankind. As shown by the history of [medicine](#) [2], in all western traditions, the doctor has always sought to work according to moral precepts regarding competence and dedication with respect to the ill, mindful to avoid further damage and injustice, and curing also – above all in the Jewish-Christian tradition – the poor and infirm, foreigners and even enemies. Therefore, all medical associations from the Middle Ages up to and including all of the first part of the 20th century have preserved images of a trustworthy, dignified and

respectable doctor dedicated to the service of mankind and, consequently, medical ethics have always had a stable nucleus of moral warnings and ideals, in spite of social and cultural variables regarding environments and trends.

However, immediately after the Second World War medical ethics reached a turning point, due to the advancements taking place within the medical sciences and through the introduction of [technology](#) [3] in medical intervention. The ethical code that had traditionally supported the medical profession had to confront new questions, raised directly as a result of the extraordinary progress being made in the biomedical sciences: what is the definition of the death of a man? What are the limits for the use of resuscitation and for sustaining life? What are the consequences of organ transplants? What are the implications for interventions on new-born life and on the human genome? As a response to these questions, philosophers and theologians, jurists and sociologists, together with doctors and scientists, began to rethink and revise the old standards. Governments therefore instituted commissions to elaborate and recommend guide-lines and the tribunals began to hear and formulate ethical arguments in line with their sentences encouraging legislators to approve laws regarding these matters. This, therefore, began the “bioethical movement” that brought about a drastic and profound revision of the centuries-old professional ethics that had governed the behavior of doctors and their relationships with patients. Medicine also forced moral philosophy to extend its fields of interest outside of the arid, theoretical debates – “thus saving its life” according to S. Toulmin (1982), and as such precipitated a healthy renewal – and to assume a co-responsibility within the environment regarding bioethical questions.

The United States of America was the cradle for the birth of this movement where bioethics moved initially from a situation of alarm to a state of deep concern with respect to scientific progress and of a society that paradoxically seemed to undermine the capacity for the survival of humankind. The discoveries in those years, and in those immediately following, announced in the field of genetic engineering the frightening possibility to create biological weapons and to alter the same statute of the diverse forms of life, of species and individuals, favoring a movement of “catastrophic” ideas and fears. In this sense the Dutch oncologist Van Rensselaer Potter, who coined the term “Bioethics” in an article published in 1970, had intended to assign to the “new discipline” the task of combining biological knowledge with the knowledge of a system of human values. He, in fact, had characterized the danger for the survival of the whole ecosystem into an unnatural split between the two environments of knowledge, namely the scientific and the humanistic. So, for this reason, he foresaw the urgency for a new knowledge that not only finalized the ability to understand natural phenomena and to explain them, but also a much tighter way to discover them and to use wisely the scientific-technical knowledge that favors the survival of the human race and to improve the quality of life for future generations. Therefore he called bioethics the *science of survival*, considering it destined to form a “bridge” between those two spheres of knowledge.

Besides that original vein of bioethics, there is another “inheritance” to be considered today, which is now prevailing with respect to V.R. Potter’s view. In these same years, in fact, the development of bioethics received a strong input from the young obstetrician-gynaecologist André E. Hellegers, also Dutch, who was appointed in 1971 to direct the *Kennedy Institute of Ethics* (initially called the “Kennedy Center for the study of human reproduction and bioethics,” therefore also introducing here the new word), at Georgetown University in Washington D.C., a university founded by the Jesuit fathers, whose atmosphere he remembers to have been congenial regarding the deepening awareness of philosophy and theology. Hellegers was called in 1964 to integrate the “Pontifical Commission for the Studies on Family, Population and Birth” set into motion by John XXIII (1958-1963) during the time of the Second Vatican Council and significantly enlarged upon by his successor Paul VI (a kind of first example of these bioethics commissions established in the following years by various national governments). He played a

role of great importance within that commission as a member of the executive committee and as the secretary of the pastoral section, so achieving a notable experience for the future development of bioethics. For Hellegers bioethics had to have a “maieutic” dimension, able to recognize the values there involved through a fruitful dialogue and comparison among medicine, philosophy and ethics. The object of this new field of study had to be the ethical aspects implicit in clinical practice. It will be Hellegers who introduces the term bioethics within the international community and in the university programs, and inserts it into the field of biomedical sciences, elaborating a conception of the discipline that corresponds to that which prevails today. Hellegers has also had the merit to indicate a specific methodology for this new discipline, that is interdisciplinary, foretelling that the clinical bio-ethicist would become more expert than the philosopher or the moral theologian. He was convinced that the direct study of biological problems would have brought forward the ethics itself and, utilizing the precision and rigor of the scientific components, would have been founded and developed that which would have been called later the “ethics of principles” (see below, IV).

And so it was from this viewpoint – and not from the original one accepted by Potter – that the term bioethics was introduced and sanctioned in a definitive way by the powerful *Encyclopedia of Bioethics* (New York 1978, 1995<sup>2</sup>). By the first edition of this work, bioethics came to be defined “as the systematic study of human conduct in the area of life sciences and healthcare, insofar as this conduct is examined in the light of moral values and principles” (p. XIX); as regards medical ethics, it would include: a) problems concerning values that rise up in all the healthcare professions, not only in those that are medical, but also those of the nurse, the pharmacist, the psychologist, the health administrator, etc.; b) biomedical research and that carried out in the field of psychological and behavioral sciences, also independently of the therapies related to such research; c) a broad band of social problems, such as those related to the public health sector, to medicine at work, to demographic control, and to healthcare on an international level; d) the life and health of mankind in relation to that of the ecosystem, considering animal experimentation and the protection of the environment.

The Catholic philosopher Daniel Callahan had a similar view. He was co-founder in 1969, together with the psychiatrist W. Gaylin, of the famous *Hastings Center*. This Institute played a relevant role in the diffusion of bioethics through the research projects based on a medical-social level, opening up the horizons of bioethics if compared with Potter’s perspective, and contributing to the development of educative projects for the large public and guide-lines for workers, collaborating moreover on the preparation of many important entries of the *Encyclopedia of Bioethics*. It was really this work that was responsible for, and brought about the development of bioethics as a discipline. According to Spinsanti, the Encyclopedia was born before the discipline whose body of knowledge it was presumed to present, so disconcerting a number of ideas about the subdivision into other different subject matters and their academic arrangements. This fact would indicate that bioethics will not become a shrub with a precarious existence but rather a tree with far-reaching roots, which extend deeply into Western culture, in the historical developments of medical practice and in the theoretical developments of philosophical thought (cf. Spinsanti, *Forward* in Gracia, 1993).

Bioethics has therefore been a “revitalized” study of applied medical ethics, its freshness coming not from technology or from the novelty of problems, but rather from the method with which such themes had to be tackled, because of both the diversity of disciplines involved and the pluralistic context of modern society. Such methodologies have given a significant weight to theology and to philosophy so that they cannot be ignored; and above all Christian theology, whose reflections must not be viewed as ideologically opposed against a presumed “laity” of bioethics (see below, III.2), that would exclude all religious references from this field of study. Paraphrasing Shakespeare in *A Midsummer Night’s Dream* (cf. V, I, 15-17), it must be recognized, therefore, that “the pen” of theologians and philosophers has

given "to a airy nothing a local habitation and a name": the home is that of the Study Centers that have rapidly diffused bioethics thanks to so many Conferences and publications; the name is that which has originated putting close together, in a somewhat spontaneous and intuitive way, the two terms biology and ethics.

## **II. Scientific Disciplines, Special Questions and General Reasons which Have Caused the Birth of Bioethics**

The great themes that were the main objects of discussion at the beginning of bioethics as discipline, are those same still debated today. Even taking into account the renewal due to ongoing scientific acquisitions and the corresponding clarification of concepts, these major themes can be brought back to the five following items. They regard: a) the ethics of experimentation on human beings; b) the personal and social implications of genetic engineering; c) organ and tissue transplants; d) the role assigned to medicine when decisions of life and death are involved, and therefore the ethics of death and dying; and lastly, e) the consequences connected with the possibility to control human procreation.

*1. Experimentation on Human Beings.* The first question that becomes the object of ethical debate, even before the announcement of the great discoveries of genetics, has been the methodology to be used within scientific medicine, and thus the recourse to experimentation on human subjects to obtain data and validate therapeutic treatments on and for patients. It was this that differentiated Hippocratic medicine from modern medicine, which begun with the experiments of Claude Bernard (1813-1878). Clinical experimentation represents one of the areas that deeply upset our moral conscience during the period following the Nuremberg Trial, when it emerged for the first time, with bewildering evidence, that medicine could be used for purposes other than healing, and also to commit crimes. Today, these crimes are well known and have been testified by the documents of that trial. They remain as a witness to the atrocity that can result when an absolute power, political or military, is disjointed from any moral code or when such a power is stated to be the only ruler, not to mention the collaboration of those physicians who thought to be justified on the grounds that they were "forced," thereby leaving the political power to exploit them as it sees fit to do so.

Two accepted standards were born from this tragic moment: the formulation of the fundamental "human rights," which culminated in the *United Nations Universal Declaration of Human Rights* in 1948, and the writing of up-to-date guide-lines for an ethics concerning experimentation, approved by international Institutions, such as the *World Medical Association*, which prepared the famous *Declaration of Helsinki*, recently revised in Edinburgh in October 2000. This international standard requested and implicated a reflection upon a kind of theoretical foundation for those rights, that should necessarily be the concern of a systematic discipline, namely bioethics. The *Code of Nuremberg*, which recognized to the subjects the right to the informed consensus and asked the experimenter to ensure the objective protection of them, was one of the first *ante litteram* documents of bioethics.

But also after Nuremberg the North American society in the 60's had to be confronted with the reality of some experimentation that could resemble some of the crimes made by the Nazi doctors. Systematically organized abuses of savage experimentation on human beings produced profound moral suffering. In 1963, for example, at the *Jewish Chronic Disease Hospital* in Brooklyn tumor cells were injected, during the course of experimentation, into elderly patients – moreover without their permission – in order to study the developmental spread of the tumor. The age of the subjects and the fact that the eventual negative effects of such an experiment would not have had time to manifest within them, while such procedure permitted to study of the mechanisms of metastasis, were the reasons alleged by the doctors



called to respond before the judges of the tribunal. Or, again, in the period 1965-1971, at *Willowbrook State Hospital* in New York a series of experiments were carried out to study immunization against viral hepatitis, inoculating the virus into some orphan children, admitted to the hospital, who were psychologically and mentally handicapped. By this time many other inhuman experiments had come to light, and in 1974 President Richard Nixon signed a law regarding research and instituted a “National Commission for the protection of human subjects in biomedical and behavioral research.” The Commission remained in charge from 1974-1978, producing a series of ethical guide-lines for the research: on prisoners, on children, on the mentally ill, etc., that were nevertheless indications for the functioning of the Ethical Committees responsible for the revision of the protocols of experimentation and the formulation of fundamental ethical principles that would have to be implemented in order to guide experimentation on human subjects. Introduced in the famous *Belmont Report* (published in the Federal Register on April 18th 1979), such principles were successively extended to other bioethical issues, different from those related to experimentation.

2. *Genetic Experimentation.* With respect to all that had so far taken place, present ethical problems related to experiments on human beings involve today a new kind of dramatic dilemma: in place of prisoners, elderly patients, or the handicapped, contemporary discussion concerns human embryos, subject to experimentation not visible to the naked eye. They are stored in refrigerator cells, some of them falling away, as if it were a sacrifice to be executed in the name of scientific progress. Pushed forward mainly by the motivations that such research could result in the healing of numbers of chronic illnesses that squeeze a fifth of the population of the world, strong movements of opinion are asking bioethics (perhaps, more precisely, a certain bioethics), to provide arguments which can back the thesis that such [embryos](#) [4] do not benefit the human condition that they actually seem to have.

It was undoubtedly the discovery of genetics that brought into being a strong challenge for bioethics. The discovery by J.D. Watson and F.H. Crick of the double helix of DNA in 1953, and above all the discovery of those restriction enzymes that allowed the break-up of the genome, so giving origins to new combinations of information (recombinant DNA), were opening the road to a total “manipulation” of the human species. The consideration of this possibility prompted Potter, as we have seen, to invoke a discipline that compelled us to reflect on the consequences of such manipulation for the survival of humankind; and it also prompted the philosopher Hans Jonas to write his book *The Imperative of Responsibility* (1979), a responsibility to be understood particularly with respect to the future generations, who could be damaged by our interventions on the human genome.

Genetics entered into the Parliaments, through the hearing of the scientists (it was Watson himself who in 1971 illustrated to the politicians the possibilities of restriction enzymes), so leading to the institutions of Ethical Committees having the specific aim to study the protocols of research in the field of genetics. At the outset of the 1970's, Paul Berg and his collaborators planned at Stanford University an experiment that sought to integrate into the *Escherichia coli* the genome of the virus SV40 (responsible for tumors in monkeys but not in humans, even if it had been observed in association with human cerebral tumors). Everything was ready for the experiment to proceed when, in the last hour, the awareness of the risks became too clear: what would have happened if the *Escherichia coli*, a habitual dweller within the human bowels, now modified, were it to get out of control? And if it had infected the researchers? If it had resulted in an “epidemic” breakout of cancer?

The experiment was not carried out and the first official action brought by the same researchers in response to the concern regarding the possibility of genetic engineering was to announce in 1973 the famous *Gordon Conference* (later called Asilomar I) in the course of which M. Singer and D. Soll prepared a letter (published in “Science” 181 (1973), p. 1114) which expressed to the *National Academy*

of Sciences (NAS) and to the *Institute of Medicine* the worries of the Congress on the possibilities and risks for public health, asking for the issuing of precise measures. The NAS, therefore, formed the first Ethical Committee, presided over by Berg, in order to elaborate a series of recommendations at the request of the researchers for an auto-regulation, voluntarily suspending all those not adequately controlled experiments regarding genetic engineering (for example, the spread through bacteria of a resistance to antibiotics, the production of dangerous toxins, the diffusion of oncogenes in the bacterial population, etc.). The Berg Commission recommended, moreover, to the *National Institutes of Health* to establish a permanent *Advisory Committee* that would work out the guide-lines for the use of recombinant DNA, as well as the organization of an International Conference to discuss the connected risks. It will be the famous conference of Asilomar (Asilomar II) in 1975 that will identify and classify the dangerous experiments which demanded a moratorium on an international level.

In 1978 the Congress of the USA authorized the creation of the *President's Commission for the study of ethical problems in medicine and biomedical and behavioral research*, composed of eleven members including scientists, clinicians, theologians, jurists, ethicists, health administrators and lay members of the public. The Commission had the task of examining all the emerging problems related to genetic engineering taking into account also the points of view of the various religions, educational aspects for the greater public, social obligations and medical-legal implications as well as economic and commercial interests. With its report *Splicing Life* (1982), the Commission would recognize the exaggeration of fears with respect to genetic engineering, indicating that the new knowledge was going to be encouraged because it constituted an enrichment for humankind, yet representing at the same time "new powers" that must be exercised with responsibility.

In the following years the problems connected with the new genetics were amplified, above all, in relation to the global project of sequencing the human genome that would have completely revealed all of the human genetic code, a knowledge that would have entailed enormous implications on an ethical and social level. With the *Universal declaration on the human genome and the human rights*, UNESCO affirmed on November 11th 1997 that the human genome is, in a symbolic sense, the heritage of humanity, subtending the fundamental unity of all members of the human family and an expression of the acknowledgement of their intrinsic dignity and diversity. From this preliminary assertion many other ethical indications were all derived: the prohibition of discrimination on the basis of individual genetic characteristics, the legal protection of persons in the case of research, treatment and diagnosis relative to the genome, the rights to be informed about the results and the consequences, the reserve about genetic data identified, conserved or treated with respect to the scope of research or otherwise, and finally the prohibition of cloning within the scope of reproduction regarding human beings. The quoted *Declaration* reminds the researchers of their responsibility during the conduct of their research and in the presentation and use of results; it also reminds of the same responsibility all those who take decisions in matters of scientific policy, on a private as well as on a public level. Finally, it also appeals to the responsibility, solidarity and international cooperation among the political States in order that they permit freedom within the activity of research, the use of results for peaceful purposes, the prevention of their abuse, the international diffusion of the scientific body of knowledge pertaining to the genome, also in developing countries.

**3. Themes Related to Transplants.** In the last decades transplants have considered ever more important organs: the kidneys, heart, lungs and the liver. Besides other factors connected with the evolution of surgery, the scientific progress in this field was possible thanks to the possibility of animal experimentation, afterwards developing the valid techniques to be used for humans. Equally determining factors have been the progress of knowledge in immunology, in particular the study of blood transfusion and of blood groups, that initiated the discovery of histo-compatibility, until the setting up of efficacious

drugs to combat the phenomenon of “rejection,” that has always been the great limitation for all the transplant techniques. With the same rapidity moral dimensions for such practices were also outlined. In 1964, after a decade in which nearly 600 patients in the USA, Great Britain and France had undergone kidney transplantations, with a survival rate of two years for 50% of the cases, an editor’s article in the scientific magazine *Annals of Internal Medicine* began to underline the social and moral aspects of such operations, within which were included the uncertain quality and prospect for life of the recipient, the employment of great social resources for the benefit of a few, the necessity for duty to establish some criteria of choice of the recipients, and that not everybody with need of a transplant was being admitted for such an operation. In 1966 the *Ciba Foundation* organized a scientific Conference where, for the first time, in addition to physicians, were also invited as lecturers: jurists, theologians and other scholars involved with the ethical and social problems of transplants.

With transplants, bioethics acquired the awareness that it was asked not only to guarantee the conditions to certify death in order to remove organs from the corpse, or to ensure a good survival rate of the living donor: in reality, several other problems had also to be pondered. With the progressive growth of the number of operations, the moral questions linked to the significance of the organs removal made with the full and informed consent of the subject needed to be studied in depth. Public opinion gradually inclined to consider donation as a gesture of solidarity towards someone whose life was at risk. It remained, nevertheless, and above all within the Catholic moral theology, the problem of legitimacy regarding deliberate exposure to an alteration of ones essential and physical integrity even if it was for the benefit of someone else. Since the organs that could transplant were insufficient in number with respect to those who had need of them, it became clear that the determination of the criteria with which to assign the available organs had a strong socio-ethical component which required a response. This opened up a way for some hypotheses to emerge to effect an increase in the number of available organs such as the assertion of a presumed “right of the society” to withdraw in a routine way the organs of all the suitable “newly dead,” and to leave out of the consideration the explicit consent of the subject in life or of the will of the family. The author of this hypothesis was the psychiatrist Gaylin (co-founder together with Callahan of the *Hastings Center*). Others, like P. Ramsey, supported the idea that such procedures would be private and depend upon the virtue of the subjects together with their generosity. R. Veatch underlined the importance of auto-determination of the subjects for a society that more and more based its values on personal integrity and on the freedom of choice – and this concerned also the events that would have happened after death (for instance the removal of an organ for the transplant).

Other ethical problems raised because of the scarcity of organs to transplant, such as the possible recourse to the sale of organs or to the use of organs from animals. In 1964, after numerous failed attempts of xeno transplants, the heart surgeon J. Hardy carried out the transplant of a chimpanzee heart into a 68 year old patient who lived for several days. Nearly twenty years after bioethics dealt with the case of Baby Fae, the baby born with a serious cardiac defect, and transplanted with the heart of a baboon, that lived also for only a few days. Successively, the problem raised regarding the organ removal from anencephalic fetuses, a one that opened the discussion on the value of fetal/neonatal life that showed some grave malformation that would surely have resulted in its death, with the corresponding risk of looking at those lives as a mere source for organs. Equally relevant were becoming the problems for the permission of certain transplants that could influence the identity of the person receiving them, like for example the gonads or part of the encephalon (hypophysis, hypothalamus). The new frontiers are today represented by limb transplants (the hand) or by the more ethereal hypothesis regarding a head/trunk transplant. The hypotheses of new techniques are widening with new aims: the transplant of fetal tissue, parts of organs instead of the organ *in toto* (liver), up to the transplant of stem cells, re-programming, with methods more or less acceptable from an ethical point of view (also the so-called therapeutic cloning), the nucleus of somatic cells of the patient, so that the cloned cells form a tissue that replaces the original one containing the damaged cells.

The progress of techniques, the limitations on economic resources allocated for research and the necessity to establish criteria for the access to the transplant services, have led to ever more complicated ethical problems which involve society and politics in a more determinant manner.

4. *Problems Connected with the End of Human Life.* Medical progress made ever clearer that doctors were progressively assuming the power to decide “who should continue to live and who should die”: actually it involved the decision to suspend the applications of some life support systems that technology had at its disposal (automatic respirators, resuscitation techniques, apparatus for kidney dialysis). Directly connected with the preceding theme of transplants, there is the problem regarding the definition of the [death](#) [5] of a person. Towards the end of the 1950’s, French neurologists had identified a very deep form of coma (*coma dépassé*) correlated with the absence of any electrical activity in the brain and with an irreversible malfunction of the organ. “Life” was only possible due to the use of an artificial respirator, a fact that immediately raised diverse ethical problems: on one side, such a state could be considered a criteria for death, substituting the criteria of cardio-respiratory death up until now used, and thus permitting a more diffused removal of organs that could greatly improve the prospects for successful transplants; on the other side, there was the problem for the anaesthesiologist about the moral correctness to apply/continue respiratory support treatments in patients that had clinical signs indicating irreversibility.

Responding to the questions raised by Dr. Haid, the honored anaesthesiologist of the University of Innsbruck, concerning the moral correctness in the use of artificial respiration on the part of doctors, in 1957 pope Pius XII recalled the doctrine about conditions required for the use of “ordinary means,” the only methods that doctors were obligated to apply. The use of “extraordinary means,” that is methods or techniques that caused a grave burden for the patients or for the families, and that only served to prolong the process of death, had not to be considered, from a moral stance, as mandatory (cf. Pius XII, *Answers to some questions concerning resuscitation*, 24.11.1957). With respect to the questions put forward, Pius XII nevertheless sent back to medicine the response concerning a definition for the moment of death. It was some years later (1968) that a Committee instituted *ad hoc* at the University of Harvard formulated the criteria for the assessment of cerebral brain death, to be used either for the legal permission to remove organs, or to suspend life support systems in order to avoid a disproportionate treatment. On a more philosophical plane not everyone was in agreement with the interpretation given by the Harvard Committee, that is the consideration of the brain death as a new criterion of death. Among these was Hans Jonas, who held that these criteria were contrary to the anthropological significance of death. In fact, although they served to avoid comatose patients from being continuously maintained in a living state, it was now the suspension of the methods of resuscitation to provoke and decree the death of an individual. From a scientific point of view these criteria left open many doubts, and in the following years the problem has been studied in detail by other Commissions and scientific assizes, also including the Pontifical Academy of Sciences (cf. White et al. 1992). On the Catholic moral plane, an intervention from John Paul II at the International Congress on Transplants in the year 2000 recognized for the first time the positive ethical value of the criteria for neurological death as criteria for the death of the person (cf. *Discourse to the International Congress of the Transplantation Society*, Rome 29.8.2000).

Another significant episode for ethical reflection on the termination of life regarded the case of Baby Doe (1982), a new-born affected with Down syndrome and an oesophageal atresia that prevented feeding. Notwithstanding the perfect surgical curability of the oesophageal malformation, on the basis of the presence of the syndrome the parents requested that the operation did not go ahead (a decision incomprehensible for an otherwise healthy child). Facing the refusal of the doctors to abide by the request of the parents, the event was brought to the Supreme Court of the United States which nevertheless declined to examine the case. It was the direct intervention of President Ronald Reagan, through his



Secretary for health and human services, to establish the *Baby Doe rule*: recalling the fact that the Federal law prohibited any discrimination among its citizens, it was stated that to a handicapped child had to be applied the same curative operation as to any other child. The rule, that had a strong ethical relevance, rather than closing the argument opened it, and extended to all the problems connected with the resuscitation of severely handicapped new-born children. It is ever more frequent that these “extreme” cases (by now becoming “classical” cases for bioethics) are brought to the attention of tribunals in which, above all in the countries where a *Common Law* was in force, they became “sources of ethical norms,” more or less subject to discussion. Today, the problem regarding the end of life is being played out more on the plane of auto-determination (euthanasia, the right to die, assisted suicide and testaments of living wills), determining strong pushes in public opinion to arrive at a legislation that makes possible similar requests on a judicial plane.

*5. The Beginnings of Life and Human Procreation.* Parallel to the terminal phase of life, and at the other extreme of the spectrum, is that of its beginning, which has also been a motive for reflection within bioethics. The discussion concerning the “demographic explosion” emerged during the 1960’s, and the availability of the contraceptive pill realized by the biologist Gregory Pinkus had quickly raised an international ethical debate that culminated in the publication of the encyclical *Humanae vitae* by pope Paul VI (1968). The arguments that were confronted, much the same as today, were the presumed equality that the pill would be able to realize between men and women, permitting them to do as they wished with their body, without suffering pregnancy, and so avoiding any sexual discrimination. According to the Catholic perspective, that the encyclical intended to ground on the basis of the existence of a natural law and not on arguments inferred by biblical Revelation, the theme of the discussion was not the equality between men and women, but rather the fact that contraception negated the true anthropology of human love, since it was separating the unitive dimension from the procreative one, in which the former is finalized (at least in power) by nature (cf. *Humanae vitae*, nn. 4, 11-14).

In the same years, and connected with the beginning of life, the problem of abortion, that many states were beginning to legalize, had attracted the attention of scholars of medical ethics. In September 1967, at a Conference organized by the Kennedy Foundation and the Harvard University Faculty of Theology, the topic was discussed within an interdisciplinary context. Although the original idea, matured also within a scientific environment, it was to investigate the ethical basis for a restriction of the legislation then applied to the subject (the famous photographs taken by Lennart Nilsson were presented in the Conference to support the wonder of new-born life), the debate moved toward a different direction. The permission was then supported for an abortive choice, considered as “the lesser of two evils,” since the illegality of abortion had as consequence the increasing one of the most common causes of death for women, forcing them to prolong impractical pregnancy or resorting to clandestine abortion. In January of 1973, the well-known sentence of the United States Supreme Court regarding the case of *Roe versus Wade* legitimized abortion on the basis of the sole request of the woman and not, as it had been before, only when necessary to save the life of the mother. After this sentence, most of the bioethical reflection focused on producing works which aims were to provide arguments to support the *pros and cons* with respect to the legitimacy of abortion as a free choice. And also in this period began the debate on the rights of the fetus and on the status for prenatal life.

In contrast with contraception and abortion – yet derived from the same desire to control the beginning of life – was the request for a medical intervention to bring about fertilization that cannot develop naturally. Although only in 1978, in England, Edwards and Steptoe obtained the birth of a baby conceived in a test-tube, it had already been hypothesized in the 60’s and 70’s that fertilization external to the body of women, with the following transference of the embryo to the uterus, could be made possible (fertilization already carried out by Edwards for the first time in 1965). Until this moment the debate concerned the

legality of artificial insemination, especially that with donor sperm, also in relation to the judicial consequences for marriage and the child connected with such practices. For many scholars the possibility to control procreation represented the end of the “unknown variable” that was present in the process of procreation; some of them even spoke of “the end of reproductive roulette.” Others, such as the biochemist, doctor and philosopher Leon Kass, were struggling to reflect on the consequences related to the new technologies of reproduction, speaking of “a new biology and of an old morality to respect.” Also after the birth of the first test-tube babies, healthy and without apparent defects, Kass asked himself which “wisdom” could guide the “manufacturing” of children and above all in the moment in which “the generation of human life separates itself from human sexuality and in conclusion also from the limits of the human body.” Once again, it was Kass who offered a systematic reflection on the consequences of in vitro fertilization: the problems of the surplus of embryos, surrogate motherhood, the desire for a “perfect” child and the depreciation of those with defects, and in general the inhuman approach to sexuality, marriage and procreation. The ethical debate on the beginning of life and on the control of procreation continues to be very much open, also with problems attached to the use of certain terminologies. For instance, the action of some drugs called contraceptives, is in reality that of preventing the implantation of a fertilized oocyte, that is of a life already begun, or that of detaching it from the uterus by means of a true abortive mechanism.

Although life and death are not the only topics bioethics is concerned with, since the revival of interest in problems raised by the new biology and the new medicine they have captured the attention of scholars and of the public. The first bio-ethicists had deeply reflected on the problems, looking for clarifying the concepts and the logic of the arguments employed, helping the doctors to become aware of the power connected with biotechnology, and also helping the patients to better understand the implications, risks and benefits, that the medical interventions brought for them. In this clarification, carried out in a new way by the method of bioethics, theology, and generally speaking the humanistic disciplines, have given a relevant contribution.

### **III. The Contribution of Philosophy and Theology and the Thesis of a “Lay” Bioethics**

In the scientific congresses held during the decade of 1960 to 1970 on issues related to the new medicine and the new biology, the term “ethics” – as formerly used with Potter – was used in a broad sense, in reference to the “values” connected with human life. When the scholars of the humanistic disciplines began to participate in the discussions promoted by the scientists, they employed the concept of ethics in a more precise way, meant as the analytical and critical study of the norms of behavior for humankind, ending up by modelling the language of the dialogue according to this latest meaning. Theologians were among the first to appear on the scene, but the moral problems provoked by the new biology were much more complex than those they ever tackled until that moment.

*1. The Presence of Theology in the Debate.* Already in 1965, the theologian Karl Rahner noted the coming of a new scientific age in which the object of the experiment was humankind itself, now discovered as something “operable,” and therefore open to manipulation in each dimension of its physical, psychological and social life. Also for theology it was becoming clear that it was no longer possible to consider nature and the destiny of humankind, and even their salvation, ignoring the course of this auto-manipulation, that biology and medicine were now making feasible. Hence, some theologians began to reflect on the broader implications and doctrinal relapses that the new science was in the process of determining, for the better and for the worse. Regarding genetic manipulation, for example, not only were the risks being indicated, but also some positive interpretations. This new possibility provided by

science could be seen as a sort of continuation of the work of creation, a work that instead endured spontaneous (and often pathological) genetic mutations, could now be properly oriented and controlled by humankind. The human race in fact, because its nature was created in the image of God, could not only dominate the cosmic reality but also its own biological reality for the general well being. This opinion – much more mitigated by Rahner himself in his successive writings – was similar to the moral proposals made in the past years by the Protestant theologian Joseph Fletcher in his book *Morals and Medicine*, (1954). He brought into the discussion the classical approach founded on the value of the natural moral law, and extended the notion of “human rights” including also others, like the right to knowledge for the truth, through genetic diagnosis, the right to control procreation by means of contraception and sterilization, the right to a dignified death through the use of euthanasia, etc. (on this theme, cf. Walters *Religion and the Renaissance of Medical Ethics in the United States*, 1985).

The position expressed by Paul VI in *Humanae vitae* (1968) relating to the lack of permission for the pharmacological control of procreation (cf. nn. 14, 17) persuaded some, among them Hellegers and Callahan, that theology could not represent the adequate *forum* for the deepening of the problems which were located on the border of disciplines such as biology, medicine and moral theology. Other authors began to put into discussion the value of the teaching of the Roman Catholic Magisterium within the field of bioethics, concluding that bioethics would be born (and must therefore develop) in opposition to traditional moral prescriptions. However, the numerous links that bioethics had with moral theology traditions and with classical medical ethics demonstrated instead that the reason for the birth of this new discipline was not a break with the past; rather, it grew slowly, taking a new form and a new name, but without renouncing those dimensions of caring for humankind which rooted in the great medical tradition, and that in the ultimate analysis rested on the Christian culture that it had as its base.

For the majority of theologians, above all Catholics, the reflections on the new biology and the new medicine could be brought back into the domain of “practical” theology (pastoral and moral theology), having the task of pointing out which behavior, within the biomedical environment, was more in accordance with the requests of Christian faith. They excavated, therefore, into the foundations of their discipline to rediscover the directions that bioethics should have followed. In fact, the anchorage of bioethics to the theological tradition made it such that the direction that resulted was like “a theological voice” in the emerging field of bioethics. As a consequence, philosophers felt a need to distance themselves from the religious-theological sphere that had characterized also the language of the first steps of the “new” medical ethics and they preferred to come back to their own specific language and disciplines. But it should not necessarily be interpreted as the opposition of philosophy to the regards of theology; it was rather the expression of a new methodology that bioethics did not exclude, that is the request of the contribution of all the disciplines that would have enabled it to progress. With respect to the articulated work developed by theologians to systematize the field of the discipline, the philosophers, having realized that they also dealt with the reality of life, began to introduce their specific concepts and strategies, different from those of the theological ethics. While theologians had “discovered” that most of the concepts and vocabulary to be used in the debate could be imported from their tradition, the philosophers were finding it far more difficult and were obliged to go beyond their own formation looking for the intellectual equipment and tools necessary to enter into the specific bioethics debate. Their formation was influenced by the philosophical language of the 1950’s, a language that was not congenial for the type of analysis that the new problems seemed to ask, as the problem of helping to take practical decisions and contribute to the realization of social policies (cf. Jonsen, 1998, p. 65). With respect to this, the contributions coming from different disciplines were not opposed to each other. Philosophy, theology, law, sociology and all the other connected disciplines were asked to reflect upon common problems in order that bioethics would become a “critical conscience of the technological civilization” (cf. Pessina, 1999), so helping to clarify and evaluate, from a philosophical and moral point of view, the specific

practical and theoretical contents introduced by the new biotechnology.

2. *On the Possibility of a “Lay” Bioethics.* An ideological opposition between philosophy and theology could take place, as in fact happened, above all, in Italy, when the troubled debate between the religious (Catholic) bioethics and lay bioethics remained still open, being the search for a foundation of bioethics one of its main objects of study and discussion. On the basis of the concept of the “neutrality of science,” one which would deserve supplementary clarifications, some thinkers wanted to oppose the open vision respectful of the choice of everyone – namely a “lay” view – with a Catholic vision which was considered to be closed and intolerant and furthermore unacceptable in a pluralistic society. The terms of the debate were put in Italy in such a way that the lay bioethics was said to be founded on the reason and on the values of conscience, while the Catholic view was founded on the dogmas of the faith, that is two irreconcilable visions. According to such thinkers, the phrase “Catholic bioethics” would be an oxymoron, which resulted in drawing together two contradictory terms: how could a discipline (bioethics) that claims to be autonomous with respect to traditional religious morals come to be called Catholic, with a clear reference to a specific religious context? Bioethics, therefore, would have to reason and argue *etsi Deus non daretur*, as if God did not exist.

In reality the problem – as it was proposed some years ago by C. Flamigni and by other Italian authors in a document called *Manifesto di bioetica laica* (1996) – did not seem correctly set out and I believed to exhibit some degree of superficiality. The ontologically founded personalist formulation, usually employed by Catholic authors (see below, IV), does not elude to, nor sets apart, the rational justification of the values and norms that are proposed, and so it is far from what we could call a [fideist attitude](#) [6]. The religious faith, on the other hand, does not mortify the requirements of reason, indeed it reinforces them, asking at the same time to correctly interpret the scientific data. Thinkers who are believers, in fact, are respectful of the reality that he or she believes had been created by God; they take into account the scientific facts and from such results they obtain useful elements to be compared with the principles of faith, not vice-versa. The presumed oxymoron is not such, if one admits that each discipline includes a certain anthropology. The point to be made is that this anthropology can be founded on natural reasons or be in accordance with them, as happens with Christian anthropology, or, on the contrary, it can be constructed on artificial bases and preconceptions, often in the name of a misunderstood neutrality of science.

Having as its base a philosophical anthropology, as well as a precise biblical anthropology, Catholic bioethics is nothing but a bioethics modelled on the actual principles of the discipline (which includes biology and ethics), principles that are moreover illuminated by the light of Revelation. The biblical-theological principles introduced or considered in the study of the discipline are *in addition* to those pertaining to philosophical reason; they do not substitute philosophical or scientific principles, but have the capacity “to illuminate” the sense for all, that is to say also that which is known from reason. Utilizing an analogy (cf. Moraczewski, 1994), we can say that the visible light has given us some information on the objects which it reflects: color, dimensions, position, etc. Nevertheless, the same object, for example the human body, seen through X-rays, gives us even more additional information regarding the skeletal structure. It is with more sophisticated equipment that a new reality is evidenced regarding the three dimensional structure and also the soft tissues: thanks to these tools we approach a kind of information that could be obtained only by dissecting the body and directly observe the organs. A bioethics which includes within its horizon the theological reflections and principles that reveal the nature and dignity of humankind as an image of God, furnishes bioethics with the “third dimension,” through which it has a better possibility to comprehend what is beneficial and what is harmful for humankind and for society. The very reason which gives foundation to this “possibility for a greater comprehension” is the convergence between all that is Christian and all that is authentically “human” (cf. *Gaudium et spes*,



nn. 22, 41).

I believe that in the cited *Manifesto* the concept of “laity” there proposed resembles more the content of an ethical relativism than the affirmation of common values for all people, derived from their equal dignity and recognized in the light of human reason. A similar position would result in the renouncing of that ethical effort which was instead, for instance, at the basis of the elaboration of the doctrine of human rights. The opposition between “Catholic bioethics” and “lay bioethics” is fictitious and unhelpful. The opposition is rather on the level of the referential anthropology and of the problem of the foundation of an ethical judgement, without placing dogmas before the impartial research concerning the [truth](#) [7]. Finally, the historical point of view must not be forgotten. They were moral theologians and thinkers who were interested in the relationship between science and religion those who have contributed in a concrete fashion to the rebirth of medical ethics in the United States, and consequently to the development of bioethics. Furthermore, L. Walters emphasized that it was religion – and not only medicine or applied medical ethics, as observed by S. Toulmin – to have a relevant role in the “salvation,” that is in the rebirth, of moral philosophy.

## IV. The discussion relating to the principles of bioethics

Bioethics, as it was defined and spread through the *Encyclopedia of Bioethics* in its first intense season, had substantially the significance of a normative ethics; its intention was to find some criteria for action, for guide-lines concerning not only individual human conduct in the spheres of science, life and health, but also for *de iure condendo* (i.e. the rights and law to be founded) and for the deontological codes of professional ethics. The first scholars beginning to propose some criteria for orientation started from the consideration that at the frontline of the problems posed by the new biotechnology we could not use categories that depended exclusively on scientific and professional reasons, but we needed wider anthropological and philosophical frameworks. The first “systematic thinkers” of bioethics looked, on the one hand, for clinical requirements, having the necessity to furnish the health workers with precise indications for their decisions; and on the other hand they looked for social ones, in order to establish public directives in a society that had many diverse value categories. The proposals came from T.L. Beauchamp and J.F. Childress in the form of three “principles,” namely autonomy, beneficence-nonmaleficence and justice.

Independently of the diverse underlying ethical theories and of their various interpretations, such principles were charged with a great importance. In addition to the moral messages received through education and to the moral experience made continuously by everyone, the recourse to precise ethical principles that everybody accepted would have permitted everyone to justify with awareness their real decisions, adopting a moral alphabet to resolve perplexities before different situations. Searching, therefore, also to construct a common language for the pluralist bioethics, and provided with a rigor adequate for the environment of biomedical science, with the pretext that the above-mentioned principles could be independent of the diverse ethical theories that were a basis. The central dogma of this ethical perspective, called by the critics “principlism,” is a radically opposed theory – like deontological and utilitarian – and although not in agreement with theoretical concepts or with methods of justification, could instead arrive at an overlapping consensus of identical principles and rules, and therefore recommended actions. From the sharing of moral beliefs of the simple citizens, they supported, that the contents of the common morality could be obtained.

Effectively, these few principles identified by Beauchamp and Childress managed to cover many spheres within biomedicine. The “principle of autonomy” functioned as a base for all the other principles: since

the morality of an action implied that the individual is aware of one's choice in an autonomous way, then before the analysis of any ethical reference principles we need to clarify who is the subject of the autonomy there involved and how such autonomy shall be respected. Upon the principle of respect for [autonomy](#) [8] are founded all the other considerations regarding the informed consensus, the conscious refusal to be cured, the truth to make known to the patients, voluntary interruption of pregnancy, personal will about interventions at the end of life, the will to live, etc. Nevertheless this principle, together with the other two principles above identified, would only recall a *prima facie* obligation.

They are binding obligations that must be fulfilled in all circumstances, unless they enter into conflict, on some particular occasion, with an equal or stronger obligation, or also with some other obligation which turns out to be more forceful in a particular situation (for example, the choice of an individual that would threaten public health, or that was potentially dangerous for the fetus, or would imply too onerous costs for the State, etc., they all are circumstances in which it could be justifiable to limit this autonomy, also in a severe way).

The other two reference principles would intervene to justify such limitations: the "principle of beneficence-nonmaleficence" and the "principle of justice." The first of these goes further than the simple restraint to do harm and endorses the imperative for positive actions to prevent evil or harm, to remove that which is harmful, and therefore to promote the good. Such a principle is recalled in the decision connected with the therapy for pain, the donation of organs, and the generally agreed diagnostic/therapeutic responsibility of the doctor. The component of "nonmaleficence," asks again not to inflict what is harmful on anybody and it reflects the antique maxim of the Hippocratic tradition *primum non nocere* (first, do no harm); it should be applied, for example, to the problems of therapeutic perseverance or to the risks/benefits relationship of each medical intervention. Also this principle could suffer limitations when treating problems in which the avoidance to do harm, and actively to do good, are connected with social obligations of common justice. The reference is, therefore, to the "principle of justice," that in part comes to us connected with the classical formulas of *suum cuique tribuere* (render unto each their due) and of *alterum non laedere* (injure no one): it is founded and explained in terms of impartiality and by the recognition of some rights. This is invoked in bioethics in relation to the cures necessary and dutifully employed for each illness, and with respect to the definition of priority in the distribution of funds in the healthcare field and also, in general, for the rationalization of all medical interventions.

The proposal was, therefore, to insert these principles at the center of a "composite ethical theory" (not monistic or absolute, not all deontological, nor all teleological) that would permit every principle to have a certain weight though without a priority over the others. In the case of internal conflict among the various principles, the specific context of any particular case should be analyzed. As can be imagined, even explicitly declaring the refusal of any "situational ethics," the risk to adopt it as a frame of reference for the decisions is very strong indeed. The authors who speak of such a theory make explicit reference to the role of intuition in the balancing of values – balancing that is, by the way, not always evident, as it should instead be the action of single identifiable principles, an expression of the common morality – excluding therefore the possibility to deduce our behavior from some established and fixed principles. According to the "intuition theory," the weight of the principles in a situation of conflict "go up and down like a staircase" in diverse situations. After all, the distinction between the principles refers to a deontological, anti-utilitarian theory: the choice of an action instead of another must not depend on the fact that the first produces better consequences (consequentialism), but on the fact of responding to a duty that, in concrete circumstances, is judged to be better (intuitionism) and becomes, therefore, effectively obligatory. In the case of conflict between principles, instead, reference is made to the balancing that must be implemented among the principles, thus it is necessary to speak of the valuation of the consequences

connected with the decisions, which are inspired now by one, now by the other of the involved principles. Therefore, the contemporary reference to a theory both deontological (the *prima facie* duties) and teleological in character (utilitarian of rule), would bring the conviction to have at one's disposal a suitable method for the solution of any ethical problem within the biomedical field.

## **V. Towards a Non Conventional, Philosophical Foundation for Bioethics**

The methodological simplicity of the theory of principles has been the main reason for the success of its wider application, permitting also non experts to have a scheme with which to address the diverse ethical problems met in practice. But it soon became manifested that its utilization had brought about a real ethical relativism. Also problematic, was the fact that it missed, by definition, an anthropology and an ontology responsible for the foundation and justification of the theory itself, so that its significance became highly decreased: without a base to judge what is beneficial and what is just for a person, it soon becomes ambiguous to speak of what is beneficial or pertains to justice. If it is true that the single principles expressed part of the truth regarding human life and its needs, they lacked a clear position within a metaphysical frame, nor did they seem sufficient with respect to the simple, intuitive balancing of values that should be performed when confronting a particular situation. Yet again, these principles that were by choice without a unified ethical theory capable of giving it a foundation, were thereby not in a position to take into account the richness of moral life, and so they risked placing such moral life into an abstract scheme.

*1. The Crisis of "Principlism" and the Rise of the Problem of Foundations.* A proof of the crisis of "principlism" and of the attention paid already towards the end of the 1980's to the epistemological status of bioethics, can be easily seen in the new definition of "bioethics" contained in the second edition of the *Encyclopedia of Bioethics* (1995). In fact, we read here that "Bioethics can be defined as the systematic study of the moral dimensions – including moral vision, decisions, conduct, and policies – of the life sciences and healthcare, employing a variety of ethical methodologies in an interdisciplinary setting" (p. XXI). Such definitions do no longer refer to the "principles" for the study of life sciences and of healthcare, but rather to diverse ethical methodologies and to an interdisciplinary approach.

From the outset of the 1990's the problem of the foundations of bioethics was being raised as the search for a kind of a meta-bioethics that could define a theoretical-pedagogical plane to find a true justification of the reason for which a determinate action could be considered permissible or non permissible. In order to perform a foundational discourse, in fact, it is not sufficient to elaborate conceptual paradigms that are adequate for the solutions of extreme cases only, and based on a pragmatic and flexible consensus, according to the circumstances. Also when faced with a particular case, you could not be in a state of complete "separation" from the more general reflections on ethical values and absolute principles of reference: in other words, some theoretical moment is always necessary beyond any practical moment. Thus it seems reasonable to offer indications and directions that could be considered to be, in a sense, "strong," and thereby give reason to the assiological-prescriptive value that is latent within all choices regarding interventions on human life and on the ecosystem.

The problem of foundation is therefore crucial when speaking of bioethics, and not wishing to transform the problems that are posed into a mere question of research for consensus that, even if desirable in a pluralistic society, does not exceed the limits of conventionalism and, sooner or later, is destined to demonstrate the inability of auto-foundation. The major difficulty encountered in the quest for a bioethical foundation is that we deal with a pluralistic set of criteria which remain extremely difficult to reconcile among themselves. It is the pluralism regarding what is the reference anthropology to be used

and what is the theory on the foundation of a judicial ethics; a pluralism that is very real within society, and not just epidemic; a pluralism that leads in a natural way to endorse a true “ethics of conditions,” that with difficulty could come to any compromise or agreement, since the only possible foundation is that of excluding any foundation whatsoever. The awareness of this underlying limit is necessary to effectively realize what we could hope or expect from a dialogue and from an interdisciplinary methodology within bioethics, and to understand what is the true weight of conclusions that are simply founded on “consensus,” as those achieved by Commissions or Ethics Committees, especially in the perspective of public choices that must be taken for the good of society.

The fact that more systems of reference exist, nevertheless, does not represent a pretext to avoid bioethical research, but a challenge for the theoretical and pedagogical task I am speaking of. It would seem reductive, in fact, that before the plurality of ethical models of reference only formal rules could be established, simply based on the principle of tolerance for each of the individual ethics (cf. Scarpelli, 1987), which is in turn a form of indifference towards the very existence of ethical values, above all if one reflects on the human and social relevance of bioethical problems. When problems regarding the degree of protection to afford to a human embryo are considered, or those regarding the survival of the human species, or the safeguard of the ecosystem, one cannot responsibly escape from the moral duty to pursue valid directions and rational foundations, that are shareable, or at least, object of a responsible debate.

As Elio Sgreccia (1999) opportunely indicated in a widely spread manual of bioethics, a textbook which didactically simplifies and systematizes the articulated complexity of the diverse ethical formulations, one of the most important historical-philosophical knots related to our subject matter was the publishing of the work *Principia Ethica* (1903) by the English philosopher G.E. Moore. This takes us back to the well known “Hume’s Law,” that posed a barrier between the “is” and the “ought,” between the sphere of natural facts and those of moral values. He strongly criticized the idea that the notion of “good” could be defined in relation to human nature and had spoken for this reason of “naturalistic fallacy,” taking the notion of “good” back to an “unnatural property,” discernible only through intuition. While the facts would be known and scientifically demonstrable, and they can be described with the indicative verb, the values and moral norms would be instead simple presuppositions that gave place to indemonstrable prescribed judgements. Therefore, the passage or the inference between “being” (here identified with the observable facts) and the “duty to be,” were not possible or legitimate. For many this position resulted in an incompatibility with the results of moral experience and with each reasoning within the ethical sphere, since they precisely involve norms and values. Two opposite alliances between the “non-cognitivists” and the “cognitivists” were then born. According to the former, values could not be objects of conscience and of qualifiable affirmations such as “true” or “false,” whilst for the latter the possibility existed to research a rational and “objective” foundation for values and moral norms.

To justify ethics and consequently bioethics, it is then necessary to discuss, first of all, the possibility to overcome the division due to the “naturalistic fallacy,” whereby the overpass is bound to the significance given to the word “to be.” To re-compose such a cleavage would be possible only within a metaphysical perspective, in which “to be” becomes a source of norm for “ought to,” and so for a duty, because the metaphysical essence and nature of an entity contains and express also the meaning and the value that entity is called upon to realize. In a human person, such a fulfilment is reached by means of the exercise of one’s freedom: not the freedom to be what one is not, but rather the freedom to become more and more oneself. Any meaningful foundation must therefore presuppose a demand for metaphysics; that is to say the necessity and the capacity to go “further” than the empirical facts and understand the profound reason for the being of things and for the corresponding truth of their own behaviors, as well as their accordance to the dignity of the person. The spectrum of the “foundational” proposals remains broad. Following the analysis suggested by Sgreccia (1999), a number of reference models can be identified and recognized in



the context of international bioethics literature, some examples of which I have here synthetically derived.

2. *An evolutionary bioethics?* A first model, although directly opposed to Hume's law, has the immediate consequence to affirm the contingency of any values or norms. It is the proposal of a purely descriptive ethics, proper to a socio-historical model, according to which society, in its evolution, would produce and would change values and norms, because fully depending on its own development, similarly to how, in biological evolution, certain organs developed in view of the function they had, for the improvement of the species and their survival. The model is drawn by the Darwinist theory, that includes some specific anthropological and sociological visions. The law and the morals are the cultural expression of the "evolutionary push" that would originate from the "biological selfish" (instinct of survival) and that would always find new forms of adapting. Like the cosmos and the various forms of life in the world have been subject to evolution, also society itself is subject to biological and sociological evolution, so altering the moral values as well. When the preceding system is no longer adequate to outline in detail the new "ecosystem," a new system of values is needed and must be conceived. According to this vision, ethics would have the function to maintain the evolving equilibrium, that is to say the equilibrium of the mutation and adaptation of the ecosystem. If the historical development of bioethics is examined, it could well be noted that this formulation is indeed very close to the interpretation of Potter with respect to the task of bioethics, namely, that which must combine the knowledge of biological facts with a new system of values tightly connected. One could object to this thesis on the grounds that, although they have been in intimate connection, culture is irreducible with respect to nature, while through these thinkers nature is resolved in the culture and vice-versa: [culture](#) [9] would not therefore be anything other than an elaboration transcribed by the evolution of nature. Thereby reducing humankind to a historical and naturalistic moment within the cosmos, we fall again into relativism: as such, it is not given to recognize any stable unity, any universality of values or norms, which could remain valid for humankind throughout all times.

Such a model possesses diverse ethical consequences. Since the necessary mechanisms of evolution for the progress of the human species are those relating to adaptation and to selection, each eugenism, either negative or positive, will consequently be found to be fully justified, if it will serve adaptation to the environment, to the ecosystem and to the selection of a quality more suitable for the progress of the species. Therefore, humankind having achieved the capacity to scientifically dominate evolutionary mechanisms and biological selection through genetic engineering, it would be justifiable in its use in a selective way, improving and altering not only animal species but also humans. From the same perspective it would be thought permissible, and furthermore compulsory, to entrust to genetic diagnosis, the selection of the subjects that would be weaker in order to eliminate them and thereby improve the species.

If it is obvious that some cultural components and human customs are subject to evolution, it is equally obvious that human beings remain human beings, diverse by nature from any other living beings, and not only because of their neurological complexity. Good and evil are not interchangeable; the laws of being, the laws of morality, or also those of science, are not false and true at the same time. [Death](#) [5], pain, the desire to know the truth, solidarity and freedom are not cultural elaborations, but facts and values that accompany humankind in all seasons throughout history.

3. *Bioethics as a Free and Autonomous Choice.* Another model identified by Sgreccia regards the numerous currents of thought that flow together in the so-called "moral subjectivism," the first principle of which is the assumption that morals cannot be founded on facts, nor on objective or transcendent values, but only on the autonomous choice of the subject. It is the maximum expression of ethical "non-cognitivism" and therefore of the presumed non-knowability of values. The unique foundation of the

moral act is the autonomous choice of the individual subject, the only limit of which is the freedom owned by other people (who are able to exercise their freedom); the socio-ethical horizon of humankind is then represented by the imperative for the liberalization of society. According to this view, the supreme and ultimate point of reference is freedom itself. This is the reason that philosophically supports the various “champagnes of liberalization,” as they have been proposed or undertaken, for abortion, euthanasia, procreation (at whatever cost) and experimentation (without restrictions).

However, we deal here with a reductive view of freedom. That is, a freedom practised not by everyone, but only by those who can express themselves or have influence. Authors who oppose such “moral subjectivism” point out that life and the respect for it comes before freedom, because who is not alive cannot be free: when freedom turns against life, it ends by dissolving itself and drying up its own roots. Subjectivism understands freedom mainly as “freedom from restrictions and constrictions” (freedom *from* or *of*) and not as “freedom to construct or freedom of self-giving” in a finalistic sense (freedom *for*). In other words, it seems that we deal here with a concept of freedom without responsibility. Supported by reason, such responsibility would have had the task of pondering the proper measures and means to manage a project freely pursued.

*4. The utilitarian address and ethical contractualism.* Given the intrinsic weakness that subjectivism associated to a non-cognitivist ethics has on the social level, attempts were made on the pragmatic level to reach an inter-subjective agreement that permits to define a kind of public ethics. Nevertheless, some authors have remarked that inter-subjective alliance is a sort of subjectivism of the majority. In fact, we continue to deal here with the refusal of a metaphysical perspective with the capacity to move from phenomenon to foundation; a perspective that would ensure reason to attain a common truth about a universal human nature, as the necessary step to find an ethics capable of recognizing norms valid for everyone.

Attempts in order to recover an inter-subjective agreement on the purely pragmatic level have given origins to a third model of reference, that of the calculation of the consequences of each action on the basis of a costs/benefits ratio, with the presupposition that it is not possible to acquire a superior (metaphysical or ontological) criterium as a universal truth and norm of conduct. An analysis founded on the preceding ratio certainly has a validity when it refers to the same value and to the same person, and is in a sense both homogeneous and subordinate, that is to say when it does not play the role of a “last and absolute principle,” but is rather used as an element of judgement which ultimately refers to the human person and to his or her values. But when such a ratio is used in a conclusive and foundational manner, “balancing” among them benefits that are non-homogeneous – for example when it confronts the cost of money with the value of a human life – then its utilitarian character emerges, as one favored within the cultural context of a long empirical philosophical tradition, reinforced by the implicit action of a collectivist ethics based on the philosophy of praxis and on the justification of social utilitarianism. From this viewpoint, the utilitarianism of science also, believed necessary for the progress of knowledge and for the whole society, comes to occupy a preeminent position over the protection of individual benefits of the person.

Through the analysis of some significant points set forth by the *Warnock Committee* (United Kingdom) to endorse the experimentation on embryos, and in general to justify the procedures for in vitro fertilization (where, as it is known, in order to obtain a solitary success rate the loss of many other embryos must be accepted with the creation of surplus embryos, and the subsequent loss of many of these), the presence of a utilitarian principle to justify such procedures can clearly be gathered to be in effect. The same principle seems to work when we examine the reasons for selective abortion of malformed fetuses, conceived by some to be the only alternative to the suffering of the parents and to the

prevention of hereditary illnesses.

A further expression of utilitarianism operates, finally, in the relationship between medical cures and economic considerations. It has been verified that medicine always incurs greater costs, extending the duration of an illness, including those that are incurable, whilst the demand grows for more understanding of health related issues, such as global “well being” and not just therapy, in support of the principle of “the right to health protection.” All of this would involve the necessity on the part of society, to put the problem of performing crucial choices into the field of healthcare: which diseases are to be cured at the expense of the State and which, instead, remain with the fiscal onus upon the individual and the private sector? Whereas if the assistance is totally the responsibility of the State, there is the risk that the choice will be made on the basis of only utilitarian and pragmatic criteria, that could bring with it the abandoning of patients who are incurable and non-productive for the society, with a subsequent and evident discrimination advised by the economic utility of investments.

Another direction for public ethics, analogous in certain aspects to utilitarianism, is that of “ethical contractualism,” also based on the criteria of the inter-subjective agreement stipulated by the communitarian ethics, that is by whom have the capacity and faculty to decide. The social consensus of the communitarian ethics would justify the under-valuation of subjects that are not yet a part of the community (embryos, fetuses or babies) and that, in practice, might not be considered fully human persons, since the recognition of their rights depends on the interpretation of adults. Analogously, those who cease to partake in a social context, like for instance ill people deprived of social relations or the incurably insane, might be considered “no longer persons.” In this way, the notion of “human person” ends up by being reduced to a mere sociological dimension.

On the basis of the preceding parameters the concept of the “quality of life” has been elaborated. The concept is at times ideologically opposed by some authors to the concept of the “sanctity of life.” The quality of life is valued precisely on the basis of the minimization of the pain, and frequently of the economic costs, remaining confined to a utilitarian horizon in which it is not specified *of whom* must be found the utility, and with respect *to what thing*. In so doing, it could be deduced that human life is appraised only on the basis of the presence/absence of suffering and with respect to the economic criteria of the productivity and non-productivity of the costs incurred.

*5. The Personalist Model: Beyond Contractualism and Utilitarianism.* In the riverbed of thought inspired by Christianity and in continuity with the philosophical reflections of the Classical Age, various authors, among them Sgreccia, have proposed the “personalist model” to resolve the antinomy of the preceding models and to found the objectivity of the values and norms. The personalist tradition sinks its roots into human reason and into the heart of its freedom: each human being is a “person” because of his or her ability for “self-reflection” and self-determination; the human being is the sole living creature that has the capacity to discern and discover the sense of things and to further give sense to the expressions of conscious language. In each person, in every human being, the whole world recapitulates itself and acquires sense, and at the same time it is passed over and transcended. In each person is contained the sense of the universe and all of the values of humanity: the human person is a unity, a whole and not a part of the whole. From the moment of conception until death, in each situation regarding suffering or health, the human person is the ultimate point of reference and the true measure to discriminate between what is licit and what is illicit.

Personalism must not be confused with subjective individualism, a conception which maintains that the almost unique element which constitutes the human person is his or her capacity for auto-decision and of free choice (see above, n. 3). Classical personalism was rooted in philosophical realism and Christian

theology inherited and developed it in the light of biblical Revelation, also thanks to the synthesis made by Thomas Aquinas. Without negating the capacity for free choice, which is the condition for the historical dimension of the person, personalism has the intention to maintain an objective and essential (ontological) status of the human person. The person is, first of all, a spiritualized body, an [incarnate spirit](#) [10], someone whose value is what he or she “is,” and not only for the choices that he or she makes. In each choice, the human person engages all what he or she is, existence and essence, body and spirit; and each choice embraces not only the exercise of freedom, the faculty to choose, but also a context for the said choice. The human person and the associated values cannot be resolved or dissolved into a mere series of choices, ignoring the source from which those choices stem and the values that they express. Realist personalism sees in the person a “uni-totality” of body and spirit that represents its objective value, with which the subjectivity is charged through with the duties to both respect him or herself and the other people. For this reason, the objective and subjective aspects of the person recall themselves and mutually implicate themselves into a personalist ethics. The ethical value of an act must therefore be considered under the subjective profile of the intention, but must also be considered with respect to its objective contents and consequences.

*6. Concluding Remarks.* I believe that bioethics has a need to regain its foundation in an anthropology that contains an objective truth regarding humankind, so that an ethics for life can be soundly founded. Utilitarianism, contractualism or logical positivism, all assume their own anthropology, more or less implicitly; but they do not ground the ethics of the act and of the norm in the “humanity” of the person, that is in his or her truth; and it is precisely in the fulfillment of the nature of the person, of his and her truth, where we have to find again the criteria to judge our ethical choices, both private and public.

One of the main contributions brought forward in this sense is that offered in the ethical reflection of the encyclical by pope John Paul II, *Evangelium vitae* (1995). The life of each person is there presented in all its dignity, as an image of God belonging to the Body of Christ, in the light of the mysteries of Creation and of Redemption, but also in relation to its rationally, knowable nature. In this same document it is stated that the faith in the truths revealed by God, must search for a meeting with reason. The truths of the Christian faith are not a danger or a threat for reason, but rather a helping hand for the rational truth; nor must the faith be conceived as some sort of optional, but as a growing interior light, that without substituting the light of reason, is saving it from going astray and furthermore augmenting its depth.

Reason illuminated by the faith can therefore discover and study in depth a foundational anthropology for bioethics, seeing in humankind not only the subject who is responsible for the moral act, but giving to him or her also an ontological dignity that is not constructed but rather received, and that, therefore, reminds us of a Donor. This is the conception of a human being always seen as an aim and never as a means (as it was also for Kant’s philosophy), a human being who is in the image and likeness of God, and thereby complete in his or her full dignity, because of the nature and essence received, not for the effect of a physical or economic development, or for the existence of a social responsibility.

Undoubtedly, also the personalist ethical perspective, can be discussed and reviewed. Its complex articulation, faithful to the complexity of what is real and to the effort of its conceptual speculation, does not escape confrontation or critical examination, since it situates itself in a known “public” horizon. Personalism tries to found a bioethics on a more objective basis than the ineffable intuitions of the intuitionists or the options of the non-cognitivists, as it is convinced that the truth is not the exclusive heritage of some, but best shared by all, at least by those that are looking for it. The future of bioethics, its speculative vivacity and normative efficaciousness, will depend for the large part on the duty of all who will know how to dialogue in an interdisciplinary context, transforming the inevitable pluralism of the many possible approaches to reality into a common way to reach, with respect to the epistemological



structures of the various forms of knowledge, a better comprehension of the meaning and value of human existence (cf. Pessina, 1997). In this sense, quoting again *Evangelium vitae*: "The emergence and even more widespread development of bioethics is promoting more reflection and dialogue – between believers and non-believers, as well as among followers of different religions – on ethical problems, including fundamental issues pertaining to human life" (n. 27).

**Read also:** [Autonomy](#) [8]

[Human embryo](#) [4]

[Medicine](#) [2]

**Additional Related Documents:**

J. D. Watson, F. H. Crick, ["Molecular Structure of Nucleic Acids"](#) [11] (1953)

**Documents of the Catholic Church related to the subject:**

[Abbreviations and complete titles of the documents](#) [12]

Pius XII, Answers to some Questions Concerning Reanimation, 24.11.1957, Discorsi e Radiomessaggi, XIX, pp. 615-621; [CDF, Declaration on Euthanasia, 5.5.1980](#) [13], EV 7, 346-373; [CDF, Donum vitae, 22.2.1987](#) [14]; [Salvifici doloris, 11.2.1984](#); [15] [Veritatis splendor, 1, 29](#) [16]; [Evangelium vitae, 27, 52-67](#) [17]; John Paul II: Discourse to the participants to two Conferences of Medicine and Surgery, 27.10.1980, ORWE 17.11.1980, pp. 19-20; [Discourse to the participants to a Congress of the Pontifical Academy of Sciences, 23.10.1982](#) [18], Papal Addresses, pp. 253-256; Address to the World Medical Association: The Dangers of genetic Manipulation, 29.10.1983, ORWE 5.12.1983, pp. 10-11; Discourse to the participants to a Congress of Surgeons, 19.2.1987, ORWE 2.3.1987, p. 7; [Meeting with the catholic Health Care Representatives, Phoenix \(AZ\), 14.9.1987](#) [19]; [Discourse to the XVIII International Congress of the Transplantation Society, Roma 29.8.2000](#) [20]; [CDF, Dignitas Personae, 8.9.2008](#) [21]; [Samaritanus bonus, V: 7, 9](#) [22].

**Bibliography:**

T.L. BEAUCHAMP, J.F. CHILDRESS, *Principles of biomedical ethics* (New York: Oxford Univ. Press, 1978); A. BOMPIANI, *Bioetica dalla parte dei deboli* (Bologna: Dehoniane, 1994); K.D. CLOUSER, B. GERT, "A critique of principlism," *Journal of Medicine and Philosophy* 15 (1990), pp. 219-236; C. FLAMIGNI, A. MASSARENTI, M. MORI, A. PETRONI, "Manifesto di bioetica laica," *Notizie di Politeia* 41/42 (1996); D. GRACIA, *Fondamenti di bioetica* (Cinisello Balsamo: San Paolo, 1993); M.A. GRODIN (ed.), *Meta-Medical Ethics: The Philosophical Foundations of Bioethics* (Dordrecht: Kluwer, 1995); A.R. JONSEN, *The Birth of Bioethics* (New York: Oxford Univ. Press, 1998); H. JONAS, *The Phenomenon of Life. Toward a Philosophical Biology* (1966) (Evanston: Northwestern Univ. Press, 2001); L.R. KASS, *The ethics of human cloning* (Washington: AEI Press, 1998); A. MACINTYRE, "A Crisis in Moral Philosophy: Why Is the Search for the Foundation of Ethics So Frustrating?," *The Roots of Ethics: Science, Religion and Values*, ed. by D. Callahan and H. Tristram Engelhardt (New York: Plenum press, 1981); A.S. MORACZEWSKI, "Is there a Catholic Bioethics?," *Ethics & Medics* 19 (1994), n. 2, pp. 1-3; E.D. PELLEGRINO, D.C. THOMASMA, *A Philosophical Basis of Medical Practice: Toward a Philosophy of and Ethic of the Healing Professions* (Oxford - New York: Oxford Univ. Press, 1981); J.L. PESET, D. GRACIA, *The Ethics of diagnosis* (Dordrecht – Boston: Kluwer Academic, 1992); J.-P. PERRENX, *L'Évangile de la vie. I: À la lumière de la raison; II: À la lumière de la foi* (Paris: Beauchesne, 1999); A. PESSINA, *Bioetica. L'uomo sperimentale* (Milano: Mondadori, 1999); PONTIFICAL ACADEMY FOR LIFE, "Respect for the Dignity of the Dying," 9.12.2000, OR 11-12.2000, p. 6; PONTIFICIA ACCADEMIA PER LA VITA, *The identity and status of the human embryo*, a cura di J. Vial Correa e E. Sgreccia (Vatican City: LEV, 1999); V.R. POTTER, "Bioethics: the science of survival," *Perspectives in Biology and Medicine* 14 (1970), pp. 127-153; V.R. POTTER,

*Bioethics: bridge to the future* (Englewood Cliffs, NJ: Prentice Hall, 1971); K. RAHNER, "Experiment with man: theological observations on man's self-manipulation," *Theological Investigations* 9 (1972), pp. 206-211; W.T. REICH (ed.), *Encyclopedia of Bioethics*, 4 vols. (New York: Free Press, 1978); 5 vols., (New York: Simon & Schuster - MacMillan, 1995); W.T. REICH, "The word 'Bioethics': The Struggle Over Its Earliest Meanings," *Kennedy Institute of Ethics Journal* 5 (1995), pp. 19-29; U. SCARPELLI, "Bioetica. Alla ricerca dei principi," *Biblioteca della Libertà* 99 (1987), pp. 7-32; A. SCOLA (ed.), *Quale vita? La bioetica in questione* (Milano: Mondadori, 1998); E. SGRECCIA, *Manuale di bioetica*, vol. I (Milano: Vita e Pensiero, 1999); E. SGRECCIA et al. (eds.), *Medicine and law. For or against life? Proceedings of the symposium held on the 50th anniversary of the United Nations Universal Declaration of Human Rights* (Vatican City: LEV, 1999); E.E. SHELP (ed.), *Teology and Bioethics. Exploring the Foundations and Frontiers* (Dordrecht: D. Reidel, 1985); A.G. SPAGNOLO, E. SGRECCIA, "Il feto umano come 'donatore' di tessuti e organi," *Medicina e Morale* 38 (1988), pp. 843-875; A.G. SPAGNOLO, "I principi della bioetica nord-americana e la critica del 'principlismo'," *Camillianum* 20 (1999), pp. 225-246; S. SPINSANTI, *Le ragioni della bioetica* (Roma: Cidas, 1999); D. TETTAMANZI (ed.), *Chiesa e Bioetica. Giovanni Paolo II ai medici e agli operatori sanitari* (Milano: Massimo, 1988); D. TETTAMANZI, *Bioetica: nuove sfide per l'uomo* (Casale Monferrato: Piemme, 1991); D. TETTAMANZI, *Nuova Bioetica cristiana* (Casale Monferrato: Piemme, 2000); S. TOULMIN, "How medicine saved the life of ethics," *Perspectives in Biology and Medicine* 25 (1982), pp. 736-750; P. VERSPIEREN (ed.), *Biologia, medicina ed etica. Testi del Magistero Cattolico* (Brescia: Queriniana, 1990); C. VIAFORA (ed.), *Vent'anni di Bioetica* (Padova-Roma: Fondazione Lanza - Libreria Gregoriana Editrice, 1990); L. WALTERS, *Religion and the Renaissance of Medical Ethics in the United States: 1965-1975*, (Dordrecht: D. Reidel, 1985), pp. 3-16; R.J. WHITE, H. ANGSTWURM, I. CARRASCO DE PAULA (eds.), "The Determination of Brain Death and its Relationship to Human Death," *Pontificiae Academiae Scientiarum Scripta Varia* 83 (1992).

---

**Source URL (modified on 2024-01-18**

**09:37):**[https://inters.org/bioethics?rate=HkQv5V5cIEGtt5ppXBa8PaUq5Ry\\_NZCxuumA8seaRPQ](https://inters.org/bioethics?rate=HkQv5V5cIEGtt5ppXBa8PaUq5Ry_NZCxuumA8seaRPQ)

## Links

[1] <https://inters.org/antonio-spagnolo> [2] <https://inters.org/medicine> [3] <https://inters.org/technology> [4] <https://inters.org/human-embryo> [5] <https://inters.org/death> [6] <https://inters.org/fideism> [7] <https://inters.org/truth> [8] <https://inters.org/autonomy> [9] <https://inters.org/culture> [10] <https://inters.org/soul> [11] <http://inters.org/files/watsoncrick1953.pdf> [12] <https://inters.org/instructions#4> [13] [http://www.vatican.va/roman\\_curia/congregations/cfaith/documents/rc\\_con\\_cfaith\\_doc\\_19800505\\_euthanasia\\_en.html](http://www.vatican.va/roman_curia/congregations/cfaith/documents/rc_con_cfaith_doc_19800505_euthanasia_en.html) [14] <http://www.inters.org/instruction-donum-vitae-human-life-origin> [15] [http://www.vatican.va/holy\\_father/john\\_paul\\_ii/apost\\_letters/documents/hf\\_jp-ii\\_apl\\_11021984\\_salvifici-doloris\\_en.html](http://www.vatican.va/holy_father/john_paul_ii/apost_letters/documents/hf_jp-ii_apl_11021984_salvifici-doloris_en.html) [16] [https://www.vatican.va/content/john-paul-ii/en/encyclicals/documents/hf\\_jp-ii\\_enc\\_06081993\\_veritatis-splendor.html](https://www.vatican.va/content/john-paul-ii/en/encyclicals/documents/hf_jp-ii_enc_06081993_veritatis-splendor.html) [17] [http://w2.vatican.va/content/john-paul-ii/en/encyclicals/documents/hf\\_jp-ii\\_enc\\_25031995\\_evangelium-vitae.html](http://w2.vatican.va/content/john-paul-ii/en/encyclicals/documents/hf_jp-ii_enc_25031995_evangelium-vitae.html) [18] [http://www.vatican.va/holy\\_father/john\\_paul\\_ii/speeches/1982/october/documents/hf\\_jp-ii\\_spe\\_19821023\\_pont-accademia-scienze\\_en.html](http://www.vatican.va/holy_father/john_paul_ii/speeches/1982/october/documents/hf_jp-ii_spe_19821023_pont-accademia-scienze_en.html) [19] [http://www.vatican.va/holy\\_father/john\\_paul\\_ii/speeches/1987/september/documents/hf\\_jp-ii\\_spe\\_19870914\\_amerindi-phoenix\\_en.html](http://www.vatican.va/holy_father/john_paul_ii/speeches/1987/september/documents/hf_jp-ii_spe_19870914_amerindi-phoenix_en.html) [20] [http://www.vatican.va/holy\\_father/john\\_paul\\_ii/speeches/2000/jul-sep/documents/hf\\_jp-ii\\_spe\\_20000829\\_transplants\\_en.html](http://www.vatican.va/holy_father/john_paul_ii/speeches/2000/jul-sep/documents/hf_jp-ii_spe_20000829_transplants_en.html) [21] <http://www.inters.org/Dignitas-Personae> [22] [http://www.vatican.va/roman\\_curia/congregations/cfaith/documents/rc\\_con\\_cfaith\\_doc\\_20200714\\_samaritanus-bonus\\_en.html](http://www.vatican.va/roman_curia/congregations/cfaith/documents/rc_con_cfaith_doc_20200714_samaritanus-bonus_en.html)