ETHICS & MEDICINE

An International Christian Perspective on Bioethics

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From Dr Teresa Iglesias

The Budapest Conference in Bioethics, 1995

Pluralism, Public Policy and the Hippocratic Tradition
Budapest Conference 22–24 June 1995

Department of Humanities
Ajtosi Durer sor 19–21
Ground Floor Room 35
University of Budapest
1146 Budapest
Hungary

'A Conference to examine the state of bioethics in East and West and to consider the relevance of the Hippocratic tradition for current debate.'

The objective of the conference was successfully achieved within a context of excellent hospitality, friendliness and good weather. The latter permitted the delegates to enjoy the short walks from hotels to university buildings, and nearby park; it also permitted us all, on the afternoon of the 23rd, to appreciate the beauty of the Danube valley during a boat-trip from Esztergom, via Visegrad, to Budapest. The 'outing' lasted for about four hours, which provided time for leisurely sociability and interchange both on bioethics and biography; there was also time for light drinking, light singing, photographing, and contemplation of God's creation; although the Danube is no longer 'blue' (but greenish-brownish) it is still magnificent. Green-peace, we were told, have contributed much to this feat by not permitting an electricity station to be built in the middle of it! At Esztergom we learned some of Hungary's Catholic history for it is there that the 19th century Cathedral is situated.

On the day of our arrival, in the evening, the delegates were invited to a reception hosted by the Hungarian Bioethics Society, which was holding its own conference at the time. We met many of our Hungarian colleagues there, but as the Hungarian language is totally inaccessible to Latin-or-Saxon-speakers, our interchange was limited, for the most part, to smiles and friendly greetings. Some of the Hungarians spoke English so there was no lack of conversation, nor of good and generous food in Hungarian style.

The 'examination of the state of Bioethics in East and West' indeed took place at the conference. The diagnosis was that neither bioethics nor medicine are in good health, and that old Hippocratic measures to restore them back to natural health were to continue and new 'up to date' ones to be adopted.

The diagnosis took place from different perspectives which complemented each other; but the agreement regarding the causes and symptoms of the present condition gave us mutual encouragement, and confirmed us that we were not mistaken in our evaluation of the situation. Symptoms of the dis-ease of our modern medicine were apparent in the current concept of *autonomy* as unrestricted freedom detached from nature and from God; with *technology* as having taken a central place in medicine, and in the day-to-day activity of doctors who may take refuge in its apparent success and efficiency; with *the law*, and judicial rulings concerning 'medical cases' which are taking over the rightful moral self-governance which belongs to the medical profession; with the national ethical *councils and committees* used by governments or other public institutions for equivalent purposes; with a Nietzschean form of mentality which encourages the *abandonment of the weak* and needy and unrestricted fulfilment of all natural impulses; with the unjust *allocation of funds* and material resources which do not favour primary medical needs in the healing of the sick.

That medicine's central concern is to heal, care for and comfort the sick, within the context of an unconditional respect for the dignity of each human being, are values that doctor and patient used to share. This moral empathy and understanding of fundamental moral values has largely broken down in East and West. Thus the moral and human elements constitutive of the doctor-patient healing relationship, as the core of medicine, need to be restored. This restoration is indeed an intellectual, moral and spiritual task which involves good teaching, dialogue, writing good articles and books, setting up conferences and workshops where ideas and outlooks can be communicated and assimilated. But, it was also made very clear in the conference that an effort has to be made to reach the ordinary doctor on the spot, i.e., the doctor in his or her busy surgery or hospital. For everyday practice does not permit the doctor to enter into the philosophical arguments underpinning world-views and moral values; yet the message and example of a medicine of ethical integrity must reach each doctor; they need to be inspired and confirmed by the lives of others and good ideas. How to do it?

Among the delegates there were very few directly involved in the designing of public policy in a pluralistic context. Those who were pointed out the difficult dilemmas and tension they experience between 'what is desirable' and 'what is possible', when confronted with decisions and policies which do not respect the ethical integrity of medicine and human dignity. The discussion of this aspect of the conference was left incomplete; it might be taken up on another occasion.

I speak for myself, and I think for most of the delegates, when I say that the conference was a most satisfying experience in its organization, and in its provision for intellectual and friendly interchange. As one of the numerous speakers I appreciated the length of time given to each one to present their paper (45–60 minutes); there was opportunity for questions; although there was no room for formal and longer group discussion, informal conversation certainly took place. To experience meeting so many delegates of one's own frame of mind and fellow feeling is such a rare event in this pluralistic age that a conference of this nature is of incalculable value as a confirming and encouraging experience. 'We are not alone.' No doubt it left many of us with the desire to participate in similar future conferences. The organisers can be happy about its success; I think they are also given the encouragement to deploy their hardworking and generous efforts for the future. Thank you.

29th June 1995
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University College Dublin

J.P. Moreland and John Mitchell

Is the Human Person a Substance or a Property-thing?

In an era where the defence of human rights is prominent, a fundamental question is who counts as a human person and, more specifically, when does human personhood begin and end? The answer to the question at both ends of the spectrum requires metaphysical reflection in three areas: 1. What is a substance and what is a property-thing?; 2. What does it mean to be a human being?; and 3. What does it mean to be a human person? In this paper, we will address these questions in order to lay a metaphysical foundation for ethical decision-making concerning human rights at the edges of life. While the implications of this analysis extend to a variety of ethical issues, we will limit our application to the ontological status of the unborn, and argue that zygotes, embryos and fetuses (hereafter referred to synonymously) are fully and equally human beings, and consequently, human persons. We shall not address the abortion question directly, though we trust the implications of the arguments presented will become obvious.

Substances vs. Property-Things

Central to the task of developing an ontology of unborn human beings is the distinction between a substance and a property-thing. According to the traditional view of Aristotle and Aquinas, acorns, dogs and human beings are examples of substances. Every substance is an individuated essence that bears accidental properties and exists as a deeply unified whole that is ontologically prior to its parts; that is, a substance is more than the aggregate or emergent sum of its parts and properties. Most importantly, a substance possesses a defining, internal principle or essence that informs its law-like change and behaviour. By contrast, an artifact is a property-thing or ordered aggregate. A Ford Aerostar is an example of such an entity, existing as a loosely unified aggregate of externally related parts. There is no underlying bearer of properties existing ontologically prior to the whole, and no internal, defining essence that diffuses, informs and unites its parts and properties. It is merely a collection of parts, standing in external, spacial-temporal relations which, in turn, gives rise to a bundle of properties determined by those parts.

The same is not true with a substance, say a dog. The properties of a dog inhere differently from the properties of an automobile. The adherent properties of the dog are grounded in and unified by the capacities that constitute the internal structure of the dog's essence. Thus, a dog is more than the external organization of its parts functioning in a given way. Its properties are deeply unified and *related internally* as part of the essential nature of 'dogness'. A dog is what it is without convention and its properties exist only in the context of a coherent, ontological whole. By contrast a Ford has no ontology beyond its additive or emergent properties, bundled together to form the whole. Lacking an internal essence or nature, an ordering principle is externally imposed upon a set of parts to form a bundle of properties by human convention. To possess an internal nature, then, is possible only for substances, all of which belong to a natural kind or Infirma Species. They exist in a manner essentially unique to a particular class of beings. Their essential nature informs their being and affords the essential properties peculiar to their natural kind. All members of a given species instantiate the same essential nature. It is, therefore, unintelligible to assert that a substance can exemplify its nature to a greater or lesser degree, since the essential nature underlying a given member of a species is non-degreed. That nature either is or is not exemplified by some particular.

While substances possess an internal nature, property-

things do not. There is no internal, ordering principle to ground its unity, nor to ground law-like change or guide the movement of an automobile toward an ontological telos. There are only modifications caused by external forces. Specifically, human minds designed and built the automobile by configuring its materials into a functional pattern. These materials had no proclivity to be so structured, and are externally related in an artificial pattern. The shape, location and function of the materials could have been radically different and each component could have been used for an entirely different purpose from constructing an automobile. By contrast, that which moves a puppy to maturity or an acorn to a mature oak tree is an internal, defining essence or nature. This nature directs the developmental process of the individual substance and establishes limits on the variations each substance may undergo and still exist. The acorn will not grow into a dog and the dog will not become an oak tree. Consequently, a substance functions in light of what it is, and maintains its essence regardless of the degree to which its capacities are realized. Thus, while morphology and the degree of functional expression may vary among members (individual substances) of a natural kind, such variance does not affect the essential nature of their being. For it is the underlying essence of a thing, not its contingent state of development at a given point that constitutes what it is. We would not, for example, say that an oak sapling is of a different kind from an adult oak tree. In general, as a substance grows, it does not become more of its kind, but rather, it matures according to its kind.

As Aristotle argued, as a substance changes, its potentialities or capacities become actualized in a way that is, at once, controlled by and a reflection of the structure of that substance's essence. The capacities for the acorn one day to develop a trunk, branches and leaves are already embedded within the acorn, prior to their realization. This is true whether the acorn actually grows into a tree or not, since such development is dependent on accidental conditions that are wholly independent of the acorn's essential nature. When such conditions are met, however, including the proper soil, environment, etc., the acorn will express its latent capacities in the proper way. The absence of such conditions is irrelevant to the essential nature of the acorn.

The nature of potentiality and actuality, as it is found in substances, exhibits a hierarchical structure of capacities. To clarify what is meant here, consider Smith, a human being. Smith has the first order capacity to speak and write in English. He also has the second order capacity to develop the first order capacity, currently lacking, to speak and write in French. Smith's capacities proceed in a hierarchy until ultimate capacities are reached. These constitute Smith's human nature and they exist in Smith as long as he has being. In general, a substance's inner nature can be understood as a unity of a substance's ultimate capacities possessed by it solely in virtue of its membership in its natural kind.

A further distinction between substances and property-things follows from the above discussion. Specifically, substances maintain their ontological identity through change, while property-things do not. An individual substance endures through change because it is more than the aggregate set of its parts or a bundle of properties, formed according to an external ordering principle. The accidental properties or parts of a substance can change without altering the thing itself. This is true because it exists as a deeply unified, ontological whole that *possesses* its properties and parts. A dog for example, can lose a tooth or shed its fur, but remain the same dog throughout these processes of change; for the dog is not an aggregate sum of its parts or an emergent whole whose parts are prior to the whole. Instead, the whole is prior to the parts and they exist in virtue of their internal relations to each other, grounded in the enduring essence of the dog. By contrast, a property-thing cannot sustain identity through loss or gain of parts. Mereological essentialism would seem to characterize a property-thing. No *single* entity endures through change; rather, a property-thing is an entia successiva, a space-time worm. Since property-things are identical to the sum of their bundled properities and/or ordered parts, a change in any property or part necessarily causes one 'entity-stage' to end and another to begin. Property-things have no enduring essences to ground their sameness through change.

The Human Being as a Substance

Regarding the theme of this paper, it is arguably the case that a human being is not a property-thing but a substance. Space does not permit a detailed defence of this claim beyond what has already been said to this point, but it may be helpful to sketch four main lines of argument relevant to such a defence. This will at least set out in explicit form just what the major metaphysical issues are in defending or attacking the view that a human being is a substance. First, a case can be made that the different structures of consciousness, as well as the different bodily organs stand to each other in internal relations and exist as parts or structures whose identity presupposes the whole of which they are parts or structures. Second, absolute personal identity through change is still defencible in light of first-person irreducibilty, introspective awareness, and the various inadequacies of ancestral chain models of personal identity. Third, humans exhibit species specific capacities for law-like stages of development that run throughout all the members of the kind 'human being,' and there are types of changes such that, if they obtain, we would no longer claim that a human being is present. Finally, libertarian free will is a defencible view of freedom and it has as a necessary condition an agency model of human action (either agent causation or a non-causal theory of agency) which, in turn, has as a necessary condition, a substance view of the actor.

Now, each of these four metaphysical claims has been disputed, and while we cannot defend them here, it is still crucial to point out that if these theses are true for human beings (they are organic, non-emergent wholes who exhibit absolute personal identity through change, law-like stages and limits to development, and libertarian freedom), then human beings are substances and not

property-things. Before we move on to an application of the preceding discussion to the question of the ontological status of the unborn, we want to look briefly at three objections to the view that humans are substances. These criticisms zero in on problems with the notion of an essential nature.

First, some claim that the classical doctrine of essential natures is too discreet and lacks the explanatory power of views that emphasize external relations.[1] Curran summarizes a form of this objection as follows:

> The contemporary view sees reality more in terms of relations than of substances and natures. The individual is not thought of as a being totally constituted in the self, whose life is the unfolding of the nature already possessed. . . . According to a more contemporary, relational view, reality does not consist of separate substances completely independent of each other. Reality can be understood only in terms of the relations that exist among the individual beings.[2]
>
> Regarding human flourishing, this view asserts that, The individual person has no intrinsic orientation (a nature) necessarily bringing about personal perfusion; rather, according to Aristotle, one depends more on the contingent and the accidental.[3]

These 'contemporary theorists' are correct that reality, taken as a whole, reflects relations among substances and not merely substances in isolation. Moreover, the human experience does indeed include contingency and accident. However, by acknowledging the role of accident and contingency, we must not deny or unnecessarily minimize the restrictive role of essential natures. The simple fact is that there are limits to the kind of change a human can undergo and still exist, as well as on the kinds of relations a human can sustain to other things. On our view, these limits establish parameters for every aspect of human development and personal flourishing. These facts are not only consistent with the doctrine of natures but also, best explained by that doctrine. Moreover, the doctrine of natures makes the best sense of the notions of contingency and accident by contrasting them to an enduring essence. Thus, one can assert that a thing is what it is and not another thing without ignoring contingent relations among existents, since the members of a given species possess a deeply unified and law-like structure that remains unaffected by contingency and accident. Essential natures, then, play an irreducibly crucial role in defining what a thing is, what it can become, and how it can be related to other entities.

A second objection centres on the entrenched debate in metaphysics over realism and nominalism. Against the typological view defended in this paper, some argue that 'essence' is a mere chimera, lacking empirical defence. J.M. Thoday suggests that genetic variations are so significant among members of any given population that regarding human beings, 'there are as many human natures as there are men.'[4] The obvious question for Thoday is why he refers to all men as having *human* natures? What is it that unifies this group of existents under the classification, 'human'? He may respond that each human being has an *individually distinct* human nature, and thus may be grouped into the set we *refer* to as 'humans': (e.g., $_1$Human Nature$_1$, Human Nature$_2$, Human Nature$_3$ . . . Human Nature$_n$}.)[5] But this clearly does not solve the problem. For now the question is, what unifies the members of this set to warrant calling it the set of individual *human natures*? To avoid an infinite regress of individualized natures within natures or making exact similarity relations among them as primitives, we must eventually point to a universal human nature that allows us to refer to the unified group of existents we call humans. '. . . unless there is some tacit, generalizable understanding of what the word "human" means, some universal signification, then it could not be used to describe more than one organic entity.'[6]

While Thoday's observation of genetic variance among populations is interesting, it hardly refutes the notion that essential natures are had and shared by members of a species. He is correct that identifying a single characteristic to fulfil this role may be difficult, but epistemic inability does not alter ontological reality. The essentialist case does not derive from our ability to catalogue and compare all the properties of existing species, finally identifying a peculiar trait in each, but rather, on the need to ground the unity of a naturally occurring class of entities. Moreover, the single-character taxonomy view is not a necessary component of essentialism. The essential nature of a being includes that set of peculiar properties and their internal relations that distinguish its class of membership from all others. The number of distinguishing characteristics in this set is irrelevant, as long as the set unifies the members of the species, irrespective of any accidental variances within the class. Thus, natural kind X will refer to all and only those beings who bear the essential X nature, regardless of any non-essential variations between the members of the class. This view is neither far fetched nor impractical.

A third argument against the essentialist view suggests that entering a species is a process. Speaking of the human species, Lawrence Becker asserts,

> Human fetal development is a process analogous to metamorphosis, and just as it makes good sense to speak of butterfly eggs, larvae, and pupae as distinct from the butterflies they become (to say that they are *not* butterflies) so too it makes sense to say that human eggs, embryos, and fetuses are distinct from the human beings they become—that they are not human *beings*, only human becomings. When can we say that the fetus is a human being rather than a human becoming? Surely only when its metamorphic-like process is complete—that is, when the relatively undifferentiated mass of the fertilized human ovum has developed into the pattern of differentiated characteristic of the organism it is genetically programmed to become.[7]

Becker's view is riddled with problems. First, he fails to distinguish between epistemic convention and essential natures. From the fact that we draw an epistemological distinction between 'pupae,' 'larvae,' and 'butterfly,' it does not follow that each is its own species, or that each is a different organism. Becker himself acknowledges that 'caterpillars and butterflies are both stages in the same insect'.[8] Though the former is modified morphologically

into the latter, the *essential nature* of the *one* insect is identical in both cases. This is what allows us to justify the notion that these are different *stages* in the *same* organism. Likewise, though we distinguish between human new-borns and adults, it does not follow they are of different species, or are different organisms. Nor does it follow that because we distinguish between human fetuses and two year-old children, they belong to different species, or are different organisms. Thus, Becker's distinction between human beings and human becomings is metaphysically confused. Moreover, he follows a widespread confusion that identifies a thing's natural kind with an adult member of that kind. But as David Wiggins has shown, when we trace the laws of development for an organism, we ground this activity in a principle of individuation that is specific and that makes process and maturation intelligible.[9]

A second problem with Becker's view is the suggestion that the fetus becomes a human being only after 'its metamorphic-like process is complete . . . [when] . . . the relatively undifferentiated mass of the fertilized human ovum has developed into the pattern of differentiated characteristic of the organism. . . .'. This judgment is highly arbitrary, especially when applied to human beings, since the development process continues for decades after birth. Thus, it is difficult to see when Becker's 'metamorphic-like' process is complete. Size and shape, as well as physical and mental capacities continue unfolding well into the teen-age years. Certainly the 18 year old is no more human than the 5 year old; but since the older person is further along in the (metamorphic) process, Becker's distinction implies this conclusion. It seems apparent that both the child and the adult are equally human. This can be accounted for if both possess a common human nature. As mentioned earlier, this essential nature informs and directs the 'metamorphic-like' process throughout a human being's life. Arguably, this same essential nature directs the process before birth. Nothing in Becker's argument dissuades this suggestion.

Finally, Becker equivocates between human-becomings and human beings. All organisms, he claims, are 'genetically programmed to become' specifically differentiated entities. Presumably, this genetic programme allows the being to develop into its adult form. But what is this genetic programme if not an essential nature? How can it continue to direct an entity's becoming if it does not continue to be present in that entity? Both the embryonic and adult stages of the organism possess the *same* genetic programme (nature). This unity of being allows Becker to refer to the fetus as the 'it' whose metamorphic process will one day be complete, affording 'it' the status of human being. On what basis, then, can Becker draw a metaphysical distinction between so-called human-becomings and human beings? It seems none. Thus, he gives us no reason to doubt that the human embryo, possessing an identical genetic programme as the adult she will become, is a bona fide member of the human species.

Human Personhood and The Unborn

The following argument defends the humanity of the unborn.

1. *An adult human being is the end result of the continuous growth of the organism from conception.*
2. *From conception to adulthood, there is no break in this development which is relevant to the ontological status of the organism.*
3. *Therefore, one is a human being from the point of conception onward.*[10]

Though few would deny premise 1, and premise 3 clearly follows from 1 and 2, the success of the argument rests on the truth of premise 2. In our view, premise 2 is as strong as premise 1. The fetus F, certainly seems to be a substance; an ontologically distinct organism, instantiating an essential nature. As such, F can and does undergo dramatic development and change, though remaining identical to itself as an individuated substance throughout the process. Further, since F belongs to the human species (instantiates an essentially human nature) at some point during the process, F must belong to the human species from the point of conception, since there is no ontologically significant break in the process (i.e., the same essential nature governs a single process from conception to adulthood). To deny that F is fully human from conception, one must point to an ontologically significant modification that occurs between conception and birth, and that would qualify as a substantial change. So far as we can tell, there is no good reason to believe that such a modification occurs at any point in the process (as opposed to important developmental moments within the life of one organism).

Nevertheless, some have asserted 'criteria for humanness,' including morphology, quickening or spontaneous movement, viability, production of an EEG or birth to demarcate human beings from 'potential' human beings. Others, like Mary Ann Warren, draw a more sophisticated demarcation between so-called 'genetic humanity' and 'moral humanity,' claiming only those in the latter group are persons. Persons, she claims, must meet one of five criteria: 1. Consciousness . . . and in particular the ability to feel pain; 2. Reasoning, the developed capacity; 3. Self-motivated activity; 4. The capacity to communicate; 5. The presence of self-concepts.[11] To this list, Joseph Fletcher adds a) self-control; b) a sense of the future and the past; c) the ability to relate to others; and d) curiosity.[12] Similar to Warren's 'genetic/moral' distinction, James Rachels draws a distinction between 'biographical' and 'biological' life,[13] placing the emphasis on the possession of low order capacities that constitute the former. We will consider each of these in turn.

Morphology and quickening are unhelpful criteria, since they confuse metaphysics with epistemology by inferring that essence is a function of outside observation. Moreover, Werner rightly dismisses these criteria by pointing to grossly deformed and fully paralyzed adult human beings. If these individuals are human persons, this determination rests on some criterion other than morphology or spontaneous movement. Likewise, viability is clearly a non-starter, since it relegates human personhood to a function of medical technology. Similarly, birth is a wholly arbitrary, metaphysically irrelevant criterion, since ontology is not a function of venue. We are left, then, with the EEG criterion and the more sophisticated criteria of Werner, Fletcher and Rachels.

What about the EEG requirement? Apart from its prima facie appeal, this criterion fails for two reasons. First, while it is true that a thing functions in light of what it is, a thing *is* what it *is*, not what it *does*. From the fact that an embryo does not have a recordable EEG, it does not follow that the embryo is not human. An equally logical conclusion is that possessing a recordable EEG is not one of its first order capacities at that particular stage in its existence. The same could be said of the capacity to master quantum physics. Disappointingly, this may not be a first-order capacity in one's life. Nevertheless, in such a case, it is still a higher order (unexpressed) capacity. Though some of one's capacities are yet unexpressed, it hardly follows that the individual is other than human. Both our first and second-order capacities are grounded in the ultimate capacities that constitute our essential human nature. This reality is clearly evident when we consider that it is entirely possible for an adult human's EEG to cease (at least to be measurable), only to begin again a short time later. If the EEG criterion is applied consistently, such an individual would be momentarily a non-human person and then regain her human personhood a short time later, but this is a strained and unnecessary view of what is going on. Adding qualifications like, 'a human being is one who has been a human being before and will have an EEG in the future' fail as well. Werner comments,

> Besides the fact that the addition of the clause, 'one has been a human being before' seems totally ad hoc (the function it serves is to rule out embryos and fetuses as humans), [it] also has some rather undesirable consequences. For instance, if a doctor were working to revive the EEG of a patient and someone came into the room and shot the patient in the head, we could not say that the patient, qua human being, was killed by the gunshot wound. Since the patient neither had an EEG nor would have one in the future, he would, by this criterion, have ceased to be a human being prior to the time of the gun shot.[14]

The more sophisticated criteria asserted by Warren, Fletcher and Rachels fare no better than those above. While epistemically thought-provoking, all functional criteria for personhood fail to draw a convincing, ontological distinction between born and unborn human beings. Moreover, they seem arbitrary, metaphysically inadequate and ethically problematic. In our view, the entire project of defining personhood in functional terms fails, since, as argued above, a thing is what it is, not what it does. Moreover, the absence of lower order functional capacities does not mean that the individual's ultimate capacities *for* those lower abilities are absent. In general, a thing's highest order capacities are realized through the development of a structural hierarchy of capacities under them. In fact, the very notion of a functional defect or privation would seem to presuppose this archetypical perspective. Thus, the absence of a lower order capacity merely signals the fact that a higher order capacity cannot be realized; it does not indicate the absence of the latter. Applied to the unborn, from the assertion that the unborn, defective or otherwise, may[15] be incapable of first-order human person skills like reasoning, communication, willing, desiring, self-reflection, aspiring, etc., it does not follow that they are not human persons. For these capacities still exist within the individual human substance as ultimate capacities constituting its essence. Therefore, even if these criteria were among the legitimate epistemological identifiers of personhood, every human substance, born and unborn would qualify as a human person; for a human being is a substance with all the ultimate capacities for fully expressed personhood, including those listed by Warren, Fletcher and Rachels.

The ontological inadequacies of functional definitions become evident if we try to practise them consistently. Applying any of the above criteria, counter-intuitive and ethically troubling results abound. Consider the person under general anesthesia. He is clearly not conscious, has no expressed capacity for reason, is incapable of self-motivated activity, cannot possibly communicate, has no concept of himself, and cannot remember the past or aspire for the future. According to the functionalist view, he is not a full person—but this is absurd. In response, it may be argued that the adult lacks the first-order capacity to respond, but still has the capacity to exercise the first-order capacity when free from anesthesia and is therefore a person who is *temporarily dysfunctional*. But this ad hoc claim is not available without appealing to something outside of first-order functional criteria. Appealing to *unexpressed* but higher order capacities as evidence of personhood smacks of essentialism; that is, defending the personhood of the anesthetized human seems to require pointing to higher order capacities embedded in human nature. To argue that the person before anesthesia remains a person while under anesthesia, we must point to what that person *is*, irrespective of the functioning of first-order capacities, not what the person is *doing*. To insist that he remains a person because he had once expressed first order-capacities of consciousness begs the question, since this merely reasserts the functional premise as a defence against the counter-argument.

A final consequence of the functionalist view takes us back to the problem with Becker's 'human-becomings'. Specifically, if essential personhood is determined by function, it follows that essential personhood is a degreed property. After all, some will realize more of their capacities to reason, feel pain, self-reflect, etc., than others. Moreover, it is undeniable that the first several years of normal life outside the womb include increasing expression of human capacities. Likewise, the last several years of life include decreasingly expressed human capacities. Consequently, if the functionalist view is correct, the possession of personhood could be expressed by a bell-curve, in which a human being moves toward full personhood in her first year of life, reaches full personhood at a given point, and then gradually loses her personhood until the end of her life. Presumably, the commensurate rights of persons would increase, stabilize and decrease in the process. Without appealing to something other than function, it is difficult to resist this counter-intuitive conclusion. Indeed, intellectual honesty has driven many to embrace this end, and the slope is ever so slippery. Applying functional reasoning to infanticide, Kuhse and Singer comment on the ontological status of newborns:

> . . . When we kill a newborn, there is no person whose life is begun. When I think of myself as the person I am now, I realize that I did not come into existence until sometime after my birth . . . It is the beginning of the life of the person, rather than of the physical organism, that is crucial so far as the right to life is concerned.[16]

While we applaud their intellectual consistency in applying their notion of personhood evenly in ethical issues, their chilling consistency reveals, at least to us, the danger of defining human personhood in functional terms. Not only are the unborn and new-borns less than persons, apparently all of us are subject to graded personhood and the commensurate rights therein. This conclusion seems unavoidable given a functional view of personhood.

It could be responded that the criteria for personhood pick out degreed properties that are, at the same time, threshold properties, i.e., properties that either have or have not made an appearance and that, once exemplified, they are degreed to the extent to which they are developed. According to this response, it is the presence or absence of the threshold property, not the degree of development, that is of relevance to moral value. But this response seems to be inadequate. The intrinsic value is either the individual human person that has the functional properties or the presence of those properties themselves. If the latter, it is hard to see what is so important about the mere presence of a property of personhood since the worth of these features varies with the degree of their realization. All things being equal, having more rational abilities is more valuable than having a minimalistic form of rationality. If the former, then it is the human person himself or herself who is of value. But then, as we have argued, there is no good reason to think the person pops into existence the moment certain threshold properties are exemplified. Instead, the human person is the bearer of the ultimate capacities for these to be actualized. And if advocates of this lemma allow a human person's value to remain constant irrespective of the degree to which the properties of personhood are realized, there is no reason not to press the point further and apply it to the value of the human person prior to but with the ultimate capacity for the instancing of these threshold properties.

In this paper, we have argued that to be a human person is to possess an essential human nature. The unborn are individual human substances, possessing an essentially human nature; therefore, they are human persons. Functional definitions of personhood are arbitrary, metaphysically inadequate and ethically problematic. Metaphysical insight prompts us to remember that a thing is what it is, not what it does. Essence precedes function—to possess an essential human nature is to be a human person, regardless of what the story is regarding first-order capacities.

1. See W.V. Quine, *Ontological Relativity and Other Essays* (New York: Columbia University Press, 1969) for an explication of this view.
2. Charles E, Curran, 'Natural Law in Moral Theology,' *Readings in Moral Theology No. 7: Natural Law and Theology.* (New York: Paulist, 1991), 276.
3. Ibid., 277.
4. J.M. Thoday, 'Geneticism and Environmentalism,' J.E. Meade and A.S. Parker eds., *Biological Aspects of Social Problems* (Edinburgh: Oliver Boyd, 1965), 101. As quoted Daniel Callahan, 'The "Beginning" of Human Life,' Michael F. Goodman, ed., *What is a person* (New Jersey: Humana Press, 1988), 41.
5. For a detailed defence of metaphysical realism, see Reinhardt Grossman, *The Existence of The World: An Introduction to Ontology* (New Jersey: Humana Press, 1988), 41.
7. Lawrence Becker, 'Human Being: The Boundaries of the Concept,' Michael F. Goodman, ed., *What Is a Person* (New Jersey: Humana Press, 1988), 60.
8. Ibid., 60.
9. David Wiggins, *Sameness and Substance* (Cambridge, Mass.: Harvard University Press, 1980).
10. cf. Richard Werner, 'Abortion: The Moral status of the Unborn,' *Social Theory and Practice*, vol. 4, (Spring 1975): 201–222.
11. Mary Ann Warren, 'On the Moral and Legal Status of Abortion,' James A. Sterba, ed., *Morality In Practice* (Hardford: Wadsworth), 144–145. Quoted by W.F. Cooney, 'The fallacy of All Person-Denying Arguments for Abortion,' *Journal of Applied Philosophy* vol. 8, no. 2 (1991): 163.
12. Joseph Fletcher, 'Indicators of Humanhood: A Tentative Profile,' *Hastings Center Report*, vol. 2 (1972). Quoted by Scott Rae, 'Views of Human Nature at The Edges of Life,' *Christian Perspectives on Being Human: An Integrative Approach* (Grand Rapids: Baker, 1993), 239.
13. James Rachels, *The End of Life.* (New York: Oxford Press, 1987), 5.
14. Ibid., 203.
15. Much of this argument boils down to epistemological, not metaphysical issues. Our ability to reliably ascertain the functional abilities of the unborn is hardly exhaustive. The budding field of prenatal psychology, experimental it may be, points to the fact that much of the cognitive/self-awareness capabilities of the unborn remain unexplored.
16. Kuhse and Singer, *Should the Baby Live* (New York: Oxford Press, 1985), 133. It is quickly apparent that Kuhse and Singer equivocate on the question of personal identity. After all, if *I* do not exist until sometime after *my* birth, in what sense is the birth *mine*? The only way for '*my* birth' to be more than a linguistic convention is to admit that 'I' existed before I was born, or at least at the time of my birth. If this is the case, Kuhse and Singer's attempt to define personhood in terms of function fails.

Juan Aristondo

A Christian Perspective on the Use of Animals for Medical Research and Transplantation

1. *Using Animals: The Background.*
2. *Using Animals: The Position Con.*
3. *Using Animals: The Position Pro.*
   3.1. *Defence of the Use of Animals through Intuitions*
   3.2. *Defence of the Use of Animals through an Ontological Concept of Personhood*
   3.3. *Reasoning through a Relational Concept of Personhood*
4. *Answering the Arguments Con.*
5. *Conclusion*

Since the first attempts in 1906, animals have been considered an interesting and very promising source of organs for transplantation and a very adaptable bench of trials and medical experimentation.[1] The need of using them for research seems to be undeniable, and the success in transplanting their organs into human recipients who otherwise would die soon, is also close at hand, especially after the birth of the first pigs genetically engineered with human cells,[2] whose organs are expected to avoid the feared rejection of xenotransplants.[3]

For the time being, the attractive possibility of using animals as a source of transplantable organs remains '. . . enormously costly and time consuming.'[4], but these problems are being solved and the issue is becoming more and more important as the use of these animals develops, since: 'Finally, the use of animal organs, or xenotransplantation, could provide the ultimate solution to all problems of donor shortages.'[5] The mere use of xenotransplants as a bridge, until a human donor is found, would be a good enough reason to perform them, especially considering that, in the case of the liver transplantation, for instance: '. . . 20% to 30% of patients waiting for a liver die before a donor organ can be found.'[6]

This use of animals, seldom questioned in traditional moral theology,[7] has been challenged in the last 30 years by different social groups and philosophical/ethical movements, up to the point in which the question often reaches the mass media,[8] and bioethical institutes have taken the issue into consideration.[9] Among the movements defending animals, the *Animal Liberation* and the *Animal Rights* ones speak up. The works of their respective founders, *Peter Singer*[10] and *Tom Regan*,[11] and others dispute the assumptions of moral theology on this particular issue and ask for an answer. On the other side, some other committed groups take the opposite perspective, such as the British Association of the *Incurably Ill for Animal Research*.[12] As we are about to see, typical Christian answers such as: 'We humans have souls, animals do not' or 'We humans matter for moral theology, but the rest of creation has been made for our sake, and we can take profit of it as we please' can be accused of *speciecism*, a movement of unconscious defence of our own species, as the defence of one's own race or sex in front of others is accused of *racism* or *sexism*, respectively.

We believe that moral theology has to offer a Christian perspective on the use of animals for medical research, experimentation, transplantation, and so on; a Christian perspective that can be presented to other thinkers, defended *ad intra* and *ad extra* the ecclesiastical group, a Christian perspective that can be combined with other ones, in order to build together a social answer to the problems raised by the use of animals. Facing this challenge, we plan to look more deeply into what we consider a Christian perspective for the use of animals, with biblical, philosophical, and anthropological insights, arriving at the conclusion that there is a need for a controlled use of animals and showing how this limited use may face the arguments against it.

We shall pay special attention to the field of xenotransplantation, since it is there where the use of animals acquires specific connotations: first because most of the animals used for transplantation purposes are doomed to instant death; second because harvesting organs from animals may be considered a solution for the organ shortage.[13]

1. Using Animals: The Background

The creation of animals is described in the two creation narratives of Gen. 1:1–2:4A and Gen. 2:4B–3:24. According to *Claus Westermann*,[14] in Gen. 1:1–2:4A the creation of animals is integrated as second on a list of quickenings (vv. 11–25) that indicate the beginning of life, namely the creation of living beings such as plants (vv. 11–13), the creation of animals (vv. 20–25), then creation of human beings (vv. 26–31). Between the first two, however, we find the creation of heavenly bodies because it is important to fix them as creatures, knowing that for some time they were considered gods.

We have to note first of all that the creation of animals is already a *blessing*. Animals share with humans the 'breath of life'. The blessing is, according to *Claus Wester-*

mann, the crux of the whole narrative of Genesis. It 'links the primal events (1:28, 9:1–2; 8:17) with the patriarchal history (35:11; 47:27; 28:3; 48:4) and with the history of the nation (Ex. 1:7; all P.)'.[15]

In this *priestly* account of creation, however, we should not talk about 'the creation of animals' on the same level as we talk about the creation of vegetation and human beings. Animals are shown as divided into two groups: those on the waters and the air (vv. 20–23) and those on the earth (vv. 24–25). Both species are blessed, the first ones specifically (v. 22) and the other ones implicitly, since the blessing does not appear in the text but it applies to them, as becomes clear after the salvation of animals from the flood (see: Gen. 8–17).[16]

In the second account of creation, the *jahvist* one, we find the animals as being created because they are needed as a helper to man.[17] It is left to man's decision[18] to give them their roles, since he puts names to them.[19]

This need of a helper, however, does not get fulfilled with the creation of animals. Animals are not real 'ezer'.[20] As verse 20 states, animals were not a fitting helper for man: 'yet for the man, he found no helper fit for him'. So, 'God creates the woman, and in her the creation of the man becomes complete.'[20]

The system of relationships established is essential to man's life, as shown in 2:8–15. In order to be really human, man needs all those specific relationships with his environment, his food, his work, with those surrounding him, and with his Creator.[22] Animals do not need them. His/her relationships with God, however, are far more important. God *talks* to and with humans, something He/She had never done with animals.[23]

Animals are created according to their kind, whether that refers to the water animals or birds (v. 21) or to the living things of the earth (v. 25). But human beings are not created in this fashion. Instead, we find that human beings are created in God's image and according to God's likeness (1:26). So that 'while acknowledging human affinity with the creatures of the earth, the early Israelites recognized that there was a dimension to these earth creatures that transcended the purely material'.[24]

Actually, the whole creational process takes place through a process of separation,[25] so that light is divided from darkness, animals from the earth, and humans divided from animals.

An important difference between the creation of animals and the creation of human persons is in Gen. 2:7, where God breathes the breath of life. That is when the human being becomes a 'living being'.[26] And another one is the use of the term *'bara'* for the work of creating human beings. Such an expression: '. . . denotes extraordinary divine activity and contains the notion of newness and of awesome or epochal production.'[27]

Two interesting features remain to be noted. First, the fact that the human and animal diet is vegetarian (1:29–30), as in a 'golden age' when killing for the sake of living was not yet necessary. It reminds us also of the eschatological motif of the peaceful kingdom (Is. 11:2–9). After the fall, this paradise of vegetarianism is forgotten: human beings are dressed with skins, *Abel* becomes a shepherd, and the flood kills guilty animals with innocent animals alike.[28]

The idea of vegetarianism itself remains until the arrival of *Noah*, when eating animals became normal (Gen. 9:1–7), allowed by God (9:3), and only the prohibition of the blood remained (9:4).[29] This authorization of eating animals was often mentioned by theologians, such as *Thomas Aquinas*.[30] Vegetarianism, however, is stressed by several defenders of the *Animal Rights Movement*.[31]

The second interesting feature to be noted is the command of God for man to hold sway over animals. The verse: 'God blessed them and said to them: 'Be fruitful and increase in number; fill the earth and subdue it. Rule over the fish of the sea and the birds of the air and over every living creature that moves on the ground.' (Gen. 1:28) shows that 'the commission to subdue and to dominate has bestowed upon the humans the distinction of rulers over the land and the animals, thereby indicating human superiority.'[32]

How much importance do we attribute to this text? For some people it is only a 'superb example of myth echoing reality'[33] until the point is reached that if the Bible says man was created in the image of God, this statement can also be read in the opposite direction, namely 'as man making God in his own image',[34] as *Peter Singer* affirms. Texts by themselves point towards the belonging of animals to the rest of creation without soul, without breath of life, and therefore destined to fulfil the needs of human beings. Nevertheless, exegetical criticism knows that *Peter Singer*'s comments have some degree of truth.

As Christians, however, we do not consider these texts alone, but integrated in the whole Word of God, expressed even with the help of mythical narratives. And other sections of the Word of God offer some other interesting references in placing animals in the creation as such, and in relation with humans and with God in particular. Animals are included among the wonderful deeds of God in the creation and as beings who take part in the giving of glory to God (Psalms 104, 148; Is. 11, 1–9). They deserve human respect and kindness, (Deut. 22:6; 25:4; and Prov. 12:10; repeated in 1 Cor. 9:9). They deserve their rest (Ex. 23, 12).

In the same vein, the New Testament points to the care God has for the animals: sparrows (Mt. 10:29) and fowls of the air (Mt. 6:26), but it also stresses, however, the care God devotes to humans. The superiority of humans over animals becomes plain and clear when one sees the Christ permitting the legion of devils in a possessed man to enter into a herd of swine (Mk. 5:1–13).

Texts by themselves, however, are not enough for building a logical argumentation; they need further integration into a whole theological reasoning. This theological reasoning has been structured in a system of hierarchy and the submission of certain types of beings to others. Some milestones of this structuring can be seen by referring to *Aristotle*,[35] *Augustine*,[36] *Aquinas*,[37] *Descartes*,[38] or *Immanuel Kant*[39] up to a point in which this idea of hierarchy in the creation, stating the existence of plants for animals, and irrational animals for the sake of man, and all of it directed towards God, the final goal of creation, is the most common one.[40]

Among the ancient Greeks we find as well other schools of thought according to which animals are to be respected. Such names would be the *mechanists*, who

thought that both animals and humans have no souls and are almost like machines. The *animists*, in almost a directly opposed view, 'held that animals and human beings shared and even at times exchanged souls of the same kind.'[41] *Plutarch*, as well as *Pythagoras*,[42] is known to have defended the rights of animals through the vegetarianism imposed on the diet of human beings.[43] *St. Basil, St. John Crysostom, Isaac the Syrian, St. Neot, St. Francis of Assisi* and others, are known for their appreciation of animals.[44] *Leonardo da Vinci*, was well known as a vegetarian.[45] *Voltaire* placed himself in defence of animals.[46] *David Hume* was convinced that we humans have to give animals gentle treatment.[47] *Jean-Jacques Rousseau*, with his *L'Émile* and the naked savage picking fruits and nuts, put humans in contact with the idealization of nature, seeing themselves as part of that nature.[48] *Jeremy Bentham*, whose writings are considered of great influence in the *Animal Liberation Movement*, called attention to the suffering of all living entities: 'The question is not, Can they reason? nor Can they talk? but Can they suffer?'[49] And *Charles Darwin* believed that humans are the end result of the evolution of animals.[50]

These views were held by a mere minority until this century, in which we find the starting point of a concept of the existence of *rights* as something proper for animals and not only for human beings. This reflection finds a main supporter in the person and work of *Peter Singer*, who wrote *Animal Liberation* in 1975.[51] In his view, animals should be subjects of rights at the same level as human beings are. Thinking that their rights may be overwhelmed by the rights of human beings just because humans are a superior species is considered *'speciesism'*,[52] and it receives the same negative moral value that characterizes *'racism'* or *'sexism'*.[53] Human beings seem to have discovered already that all races and all sexes are equally worthy of respect, equally bestowed with rights which nobody can overcome. In the same way of reasoning, it will be manifest, as it is for these authors already, that animals do have rights. Animals do have to be respected and at the same level as human beings.

This is a first step in the understanding of the role of animals in the world, before the 1970s '. . . though there were many animal welfare groups and anti-cruelty societies, they were built on the assumption that the welfare of non-human animals deserves protection *only* when *our* interests are not at stake.'[54] But now the interests of animals will have to be balanced with fairness. Before, and because of the above mentioned *'speciesism"*, all human beings were regarded as superior to all animals, whatever their capacities or conditions, just because of their belonging to the human race.[55] Equality, for instance, has to apply to all species in the same way, so that if we are compelled to chose between inflicting pain on a human being and an animal the only valid criteria will be the degree of pain, without considering any difference for the subject that suffers it.

After 1975 and the progressive impact of Singer's *Animal Liberation* and his disciples (among whom we have to mention *Tom Regan*) this use of animals had to be justified.[56] Following the work of the *Institutional Review Board* to control the use of human beings in medical education and research,[57] some special committees have been created and keep on working for the rights of animals, trying to build up a balance between the need for respecting them and the needs of research and experimentation. These are the *Institutional Animal Care and Use Committees* (I.A.C.U.C.)[58]. Their presence is compulsory in almost every U.S. institution performing animal research.[59] Their role, however, is not yet very clear. It remains doubtful whether they are endorsed with 'the regulatory authority needed to disapprove projects they might deem unimportant to society, such as cosmetic testing.'[60] They will also have some difficulties when trying to measure the merit or worth of certain experiments or research, or the use of animals for educational purposes.[61] From the philosophical perspective they have difficulties in arguing their position.[62] Let us consider therefore the arguments in favour of and those opposing such a usage.

2. Using Animals: The Position Con.

Peter Singer wrote *Animal Liberation*[63] in 1975 and *Tom Regan* his *The Case for Animal Rights*[64] in 1983. There are, of course, other philosophers who support the *Animal Liberation/Rights Movement* (=A.L.R.M.),[65] but 'Singer and Regan provide the most widely recognized philosophical analyses to date. In many ways, their work set the stage for everything else that has followed in the A.L.R.M.'[66]

According to *Richard P. Vance*, *Peter Singer* manifests himself as a real utilitarian when he writes *Animal Liberation*,[67] However, although utilitarianism as argumentation would seem to be on behalf of the use of animals, *Peter Singer* would change the field of application of the utilitarian principles.[68] As a utilitarian, he considers as the main criteria for morality the equal consideration of interests, namely, the balance of good and bad consequences for *everyone affected*. But *everyone affected* does not mean *every human being affected*. If one asks how to distinguish who enters into this category of 'everyone affected', according to *Peter Singer*, we have to take into account the possession of *sentience*, namely the capacity for feeling, especially feeling pain. All sentient creatures, all organisms responsive to or conscious of sense impressions, all beings able to feel pain, enter into the group of those who have to be considered, all those whose interests have to be balanced before performing an action.

We would normally agree with the above expressed principle: in order to act morally we have to consider the good and bad consequences for everyone affected. But our group of 'everyone affected' will probably be different. We would probably include in that group all humans, and later we would start a discussion about whether or not defective newborns, fetuses, terminally ill patients, and others are really humans or not.

In this way we will be considering our *species*, the human species. According to *Peter Singer* this way of reasoning is biased towards our own group. It is a way of defending ourselves against other groups who have the right to be equal to us, as we do when we behave as racists or sexists. And drawing from the words racism and sexism *Singer* will coin a new one for these feelings.

This way of acting will constitute what he calls *speciesism*.[69] Since animals can feel pain in the same way as humans do, and try to avoid it with their best capacities, we really have to respect those feelings.

Tom Regan brings about similar consequences but from a different perspective. He bases his reflection on the concept of *'inherent value'*, which stems from basic moral intuitions. Through intuition we realize that a living being has 'inherent value', an intrinsic worth that cannot be reduced or damaged by anybody else. Every being with inherent value has equal inherent value and therefore he/she/it will have to be respected as much as any other being with inherent value.[70] Since animals have this 'inherent value' then, they will have to be respected.

Who has inherent value, according to this intuition? Who will have to be respected? All those being *'subjects of a life'*, namely all those conscious creatures 'having an individual welfare that has importance to it whatever its usefulness to others'[71] must be respected. As *Richard P. Vance* states, this 'means at the very least that any mammal after the age of infancy has "moral rights" '.[72] *Tom Regan* agrees with *Vance* in this conclusion, but not in founding the whole theory in intuition. He stresses that intuitions are useful for understanding, testing, and manifesting the truth of a theory, but the theory itself does not flow out of mere intuitions: 'Clearly, it would be a mistake to think that the theory itself is intuited.'[73]

While facing up to these ideas, we may think that the animal rights defenders are rather biased by emotions, that they are moved more by their own purposes and motives than by real issues, or that they deny the real differences between animals and humans.

However, against those who think that these movements are purely emotional, *Peter Singer* stresses that for him emotion follows reason, and that he has no religious motivation.[74] He also points out that he has never 'been inordinately fond of dogs, cats, or horses in the way many people are'.[75]

We have to acknowledge that their way of thinking is ethically grounded, logically well developed starting from the principles they have chosen, and therefore is to be seriously taken into account, not to be dismissed as purely emotional.[76]

3. Using Animals: The Position Pro.

Let us consider now the arguments for the use of animals. First we will consider another argument based on intuitions. Secondly we will follow the thinkingof some authors through an ontological concept of personhood. Eventually, we will follow the thought of authors through a concept of personhood based on relationships.[77]

3.1. Defence of the Use of Animals through Intuitions

It is sometimes argued that we humans have an intuition about the use of animals, whether it be for their use in xenotransplantation or for other human needs. In a second step we reflect upon it and we make up a theory in which all our intuitions can be assumed and correlated. We begin thinking with our moral views and intuitions. Later we unite the intuitions into a theory to secure a condition of stable coherence between them.

According to *W. Cartwright*,[78] for instance, our intuition about treatment of animals is: *'Animals matter morally, though less than human beings'*.[79] Such an intuition is not easy to prove, nor to adjust in theories about the constitution of society. Yet, it can form a basis for our ethical reasoning, according to him.

We wonder, however, how is it possible that we have met different authors, *W. Cartwright* and *Tom Regan*, for instance, who attribute different opinions to society as a whole. Different intuitions are presumed to be shared by the same society. Is it possible that society has two contradictory intuitions, the one defended by *W. Cartwright* and the one defended by *Tom Regan*?

The recourse to intuitions, then, even if it may be worth considering, will have to be somehow proved or demonstrated through statistics, logical coherency, or other arguments. Otherwise it does not go further than a 'personal intuition' or the intuition of a group. Besides, even if we were able to manifest that a certain intuition is really held by society, we would still have to show that the agreement of society is a sufficient basis for moral rules and orientations, which is also doubtful.

3.2 Defence of the Use of Animals through an Ontological Concept of Personhood

In the classical theology of hierarchy, animals do not have a soul and humans may use them for their needs. Not to damage them when we do not need to do so will be originated only by our charity, not by any concept of justice. Even activities such as hunting for pleasure may be combined with a proper Christian behaviour, since the whole creation is placed to serve the needs of human beings and leisure is also a need.

The presence of a soul in human beings and its absence in animals, however, is fairly difficult to use as an argument on behalf of the use of animals for the needs of human beings. First, because the existence of the soul was also denied in black people, so that we might be fearful that a change of view a hundred years later would open the way for the recognition of soul in animals as well. Our interpretation of revealed theology at that time said that the whites had soul and the blacks could be enslaved. Our understanding of the Revelation today says that humans have souls but other animals do not. Do we not need a deeper reason, or a different way of arguing?

Secondly, attributing the whole problem to the presence or absence of soul in the being to be considered does not solve the problem, it only transfers it from one place to another. We Christians know of it through a traditional explanation of the constitution of human beings based on a specific philosophy, namely that of *Aristotle*. According to this, objects were composed of a material port, the body in the case of animals, and a formal one, the soul in the case of humans.

We are not denying the existence of the soul, considered as the spiritual characteristics and openness of

each person. What we are denying is the clear cut reasoning which says that our fellow human beings are persons, composed of body and soul, whereas animals are composed only of bodies, so that there is no possibility of discussion about our using them. And we deny this easy explanation because the presence or absence of spiritual characteristics in animals is not as easy to discover as a simple definition could suggest.

If the recourse to the presence of a soul does not solve the problem, let us consider the presence or absence of other characteristics, which are also included when talking about the 'nature' of human beings and animals. Among those capacities found in humans which are not present in animals some authors will refer to the *innate sense of values*.[80] Others will refer to *experience*. These characteristics are actually present in animals. Although we cannot know them clearly, we are still able to realize that animals feel and experience.[81]

Here we find another problem if we want to hold that animals may be used for the needs of human beings and at the same time we want to avoid the use of defective humans for those same needs. The characteristics we find necessary to make somebody worthy of respect, if they refer to the nature of the being, have to be found in all the beings we respect, and absent in the beings we plan to use. If we say, for instance, that we can use animals because they do not have a certain degree of intelligence, we will have to agree on the use of defective human beings with a lesser degree of intelligence.[82]

Some authors, having encountered the presence of characteristics in both humans and animals, stress the different degree in which these characteristics are shown.[83] Others will hinge upon well-being, pleasure, thought, reason, purposiveness,[84] self-awareness, interaction and kinship.[85]

Yet, this does not solve the issue of the presence of characteristics at a specific degree in certain human beings, but not all, since we know of the existence of some who lack these characteristics, such as anencephalics and handicapped people. Arguing through specific capacities of human beings that are absent in animals will bring us only to the worth and preference of 'most' human beings over 'most' animals, even though the characteristic analyzed is the capacity for appreciating existence itself.[86]

There is still a third option in the use of 'human nature' as an argument for the use of animals. It is the feeling of belonging to a group, the 'human race', and saving our fellow human beings, without further reasoning, just because they belong to our group. This is, however, pure *speciesism*. It is not a way of arguing, but rather a way of imposing our views through mere authority or with more passionate conviction than moral arguments.

3.3. *Reasoning through a Relational Concept of Personhood*

Establishing the moral difference between animals and human beings in qualities is therefore a bit risky, since we will have to decide that those human beings who do not have those capacities we are relating to are to be treated as animals. Otherwise we will be included in the above mentioned *'speciesism'*, saying that because human beings have those specific capacities in general, they are all to be respected as having them, they are all to be treated equally, and they are all to be differentiated from animals.

Now, we believe that instead of defining persons for the qualities they have, it is possible to define them through the relationships they hold with themselves, with others around them, with the environment and with God. Following the *Pastoral Constitution on the Church in the Modern World*, we believe that it is relationship, and not an ontological concept of human nature, which defines persons, and which defines, therefore, the axis of morality:

> Still, it remains each man's duty to safeguard the notion of the human person as a totality in which predominate values of intellect, will, conscience, and brotherhood, since these values were established by the creator and wondrously restored and elevated by Christ.[87]

This notion of personhood and its application has a history already in the philosophical and theological argumentations of this century, to be found mainly in names such as *Martin Buber, Emmanuel Levinas, Louis Janssens, Joseph A. Selling*, and many others, and it is argued that its foundations in the Old Testament can be proved.[88] More concretely, this perspective stems from an analysis of the human person developing through relationships, towards a fulfilment of personhood in which those beings we want to quantify as persons have established a whole network of relationships with themselves, with their fellows, with the environment and with God.[89]

The 'personhood' we are considering here is not necessarily a state which one can either enter or remain out of, but a goal to achieve, an ideal development of human relationships towards which we all tend. Each person is not to be regarded as only a physically alive body, be it nearly dead, recently born, or in a fetal state. In each person around us we should find and develop basic criteria of personhood which characterize him/her as a human being in developing towards the ideal of 'personhood'.[90]

Arguing from philosophy it is worth considering how the idea of personhood trying to develop individuality, awareness of self, and autonomy finds in the Christian story a proper place to fit in.[91] Upon this anthropological basis, Christian revelation will offer an '. . . ultimate meaning: each person is created in God's image (GS 12, 17, 24, 29, 33, 37, etc.) redeemed from his sinful situation by Christ (GS 13, 22, 37) called to overcome death and to share in the eschatological kingdom of God (GS 18, 21, 39, 45, 72, 93) and to become already a child of God who through the Son and in the Spirit may pray: 'Abba, Father', and who is capable of fulfilling the new law of love (GS 22).'[92] This may seem superfluous for a philosophical or an anthropological reader, but for us, Christians, it is basic.[93] The human person does not find fulfilment in the world we know now, but in the eschatological kingdom. Nevertheless, reflecting upon the human completion in the eschatological kingdom does not diminish the relevance of the care for the human subject in this world.

This provisional period constitutes a precious and unique part of the time-plan of God, in which human beings are already persons, but not yet fully.

The specific Christian perspective will stress still more the undoubtable fact of the equality of persons, since we know that any differences we may find out ways of living or in those categories we know, have no importance in the eyes of God; these differences are nothing in comparison with being children of God.[94]

Anyway, the Christian perspective is not grounded in specific reflections to be added to the normal philosophical or anthropological background. The Christian perspective constitutes rather a deep conviction that '. . . affects one's instincts, sensitivities, imagination, etc. and hence influences one's perspectives, analyses, judgments.'[95] The Christian attitude is not there in order to build up a whole set of moral norms and rules for decision-making, but rather to create a background perspective that informs the lives and basic criteria of the persons who have the responsibility of establishing the rules and procedures.[96]

We get then not a static but a dynamic concept of 'personhood', to which we all tend in different ways and at different speeds, which is linked to the arrival of the kingdom of God to earth: already but not yet. We are already persons, but not yet fully. Is it not true that we realize we are developing in our becoming persons? Is it not true that we, living human beings, are tending towards the fulfilment of personhood? The process of achieving personhood, therefore, will be completed by the eschatological fulfilment.

The relevant issue, once again, is not the person considered as a mere individual, is not any interior quality given by nature, and is not the person on its own. It is the person understood as a complete development of relationships with the others around him/her: 'They do not find their source in some inherent property of the anecephalic infant. It is in the relationships with others, both family and strangers, that the moral worth and standing of these children are grounded.'[97]

What matters, therefore, is not the importance of animals and human beings on their own, independently considered, but in relation to us. If we consider the rights of animals as an independent issue, we will conclude that they are to be respected, being a species with whom we humans share our existence. But if we value them in relation with ourselves we will have to conclude that they can be sacrificed for a sufficiently relevant need of ours. We sacrifice them for food, work, transport and other reasons, and in the same vein we can sacrifice them for transplantation purposes. This is not an obstacle to the acknowledgement at the same time that, since they have got a real moral significance, they will have to be preserved if we can solve our problems through other procedures.

4. Answering the Arguments Con.

Our conclusion tends towards the controlled use of animals, towards the use of animals for the needs of humans, and not for our whims. How can we answer the arguments of *Peter Singer* and *Tom Regan*, the basic presuppositions of the *Animal Liberation Movement* and the *Animal Rights Movement*?

Actually, we have to start by saying that they attack each other, and, according to *Richard R. Vance*, they themselves offer us the best arguments to counter-attack their respective positions.[98] *Regan* attacks *Singer*'s utilitarianism by stating that it does not provide protection for the individual. If it happens to be better for the greater number of individuals concerned, everything is allowed. He offers the example of 'Aunt Bea', a rich, old and endurable person some people may like to kill for the sake of beneficence.[99]

In dealing with animal experimentation, *Peter Singer* argues that '. . . he *might* approve an experiment on an animal causing painless death, if the experiment would provide the knowledge to cure all forms of cancer, and if any human of a mental capacity similar to the animal could also be saved.'[100] But for *Regan* even this experiment would be immoral, since 'it would violate the basic notion of equal inherent value. We would never allow humans to be used in this way, *Regan* says. Therefore the rights of adult mammals must be protected in the same way.'[101]

It is noteworthy that *Tom Regan* insists that 'we would never allow humans to be used in the same way'. Where has his basic notion about the 'intuition' of people gone? Previously, the 'intuition' was that every 'subject of a life' has 'inherent value'. Now, the 'intuition' remains only in the fact that 'we would never allow humans to be used in this way' but the intuition for the rest of us does not apply now. That means that a part of the intuition is really felt by people, the rest is added by Tom Regan's reflection, so that it is not a real intuition of people, only a personal intuition. Whether such an intuition is sound or not will have to be shown through other reasonings outside the intuition itself.

Peter Singer provides also some criticisms of the options adopted by *Tom Regan*. He does it, among other purposes, by using an illustration very dear to *Tom Regan*, the sinking lifeboat in which there is a need to throw somebody out for the others to have any possibility of survival.[102] *Regan* says the first to be thrown out has to be the dog, since the death is less harmful for the dog than for the human beings. The relevance of each death is discovered by the 'number and variety of opportunities for satisfaction it forecloses for a given individual'.[103] A human death takes away greater possibilities of satisfaction. And he even states that 'No reasonable person would deny that the death of any of the four humans would be a greater *prima facie* loss.'[104] Even if there are several dogs, since each is considered and thrown out of the boat independently, the balance is still morally right. They have to be thrown out before throwing out any human being.[105] These dogs may even be eaten for the sake of human beings,[106] forgetting the obligation of vegetarianism.

According to *Richard P. Vance* this argument of the lifeboat case, by itself, justifies animal experimentation and xenotransplantation, since it is aimed at saving the life of humans. But *Tom Regan* puts it differently. For him

lifeboat cases cannot be compared with animal experimentation, since in the latter there are a number of animal rights violated.[107]

Actually, according to *Tom Regan*, if the humans are sick but the dog is healthy, a medicine aimed to cure the disease but not yet tried may not be tried on the dog. This means considering the dog as a mere means to human ends, when it has the same rights, since it is a 'subject of life'.[108]

Even with the nuance of the medicine, and the following refusal of medical experimentation, *Peter Singer* considers as speciesist this disposibility of the dog's life because of the human need.[109] For *Regan*, however, this is not speciesism, since the life of the dog is actually less worthy, less capable of experiencing satisfaction.[110]

It has to be said, however, that even with the disagreements they show on some points, their conclusions are broadly similar against the use of animals for animal research and a great challenge to the researcher's ideology and philosophical reflection. Commenting on the article of *Richard P. Vance* we have been following, *Mark H. Bernstein*[111] says: 'His major oversight is his blindness to the implications of this discussion for those who favor medical experimentation in animals.'[112]

One may wonder, however, why the *Animal Liberation/Rights Movement* directs its attacks more towards animal researchers than towards farmers, since they agree on the need of humans to be vegetarians[113] and the number of animals savagely treated and killed for food is much higher than the number of animals used in medical research and experimentation.[114] This may be a strategy, since directly opposing farmers might mean opposing the whole society, whereas animal researchers are a smaller group. *Peter Singer* acknowledges: 'American animal researchers are a smaller and politically less powerful group than American farmers and they are based in regions where animal liberationists live. They therefore made a more accessible and slightly less formidable opponent. . .'[115]

If the objectives of the attacks of the animal rights movement may be questionable, the same happens with their arguments. *J. Damas*,[116] for instance, considers some of the problems presented by the animal rights movement as exaggerated. Their accusation of cruelty is not fair, since animals are operated on under anesthesia, and the number of animals used is exaggerated.[117] According to him, even in Belgium, there are cases in which the society, protector of animals, has to kill some of them. Besides, the results obtained with experimentation using animals and the inability to obtain them through other means are the best reasons to pursue it.[118] Some activists of the *Animal Rights Movement* still eat meat or wear leather.[119] Does this not run against the coherency of their positions?

Anyway, the main objection against the use of animals, put forward by the *Animal Rights Movement*, still remains: it is speciesist to say that we are humans and we are using them just because they are not humans.

Answering *Peter Singer*, we have to say that if the former limit of being human is not clear, the limit of *sentience* is not clear either. How many kinds of animals are we including? Are we including any kind of insects or only grown up mammals? Do we consider plants as well? Why not, since it is clear that they have also some movements and reactions on their own, such as tropisms and fototropisms. . .?[120]

Some other concepts are not clear in *Peter Singer*'s philosophy. How can a utilitarist talk about rights of individuals? When he talks about rights he is entering into a certain deontology. According to *Gary E. Varner*,[121] *Peter Singer* wrote *Animal Liberation* for popular consumption, avoiding difficult philosophical issues such as the definition of rights or harm. It will only be in his *Practical Ethics*[122] that he explicitly defines these notions, determining that neither animals nor humans have real rights.[123]

We have to discuss as well the mere use of utilitarianism as a criterion for decision making. Why do we say that the preferable option is always producing the best result for the biggest number of individuals affected? We have to understand the concept of utility that we are using and whether or not it can be considered the main value to be pursued, or, as *Richard R. Vance* notes: '. . . utilitarians never provide enough defense against terrible crimes committed in the name of the greatest good for the greatest number. There is, moreover, no theory-neutral, objective, or publicly agreed-on notion of utility. . .'[124]

Answering *Tom Regan*, we can ask what to do if we face the inherent value of two or more persons against that of a single animal, as could be the case in organ transplantation once the experimental stage is over? Are two 'inherent values' able to overcome the rights of an individual being with 'inherent value'? Besides, where do we stop that intuition? Why do some animals have this value and others do not? When we are confronted with a desperate need of organs for our own survival, we really wonder if humans will still have the *'intuition'* of the 'inherent value' of animals? When our main argument is the 'intuition' of people, are we not submitting our value-systems to renewal every ten, five or less years? Does it not depend more on the persons who are valuing than on the value itself? And above all, we saw the different 'intuition' brought forward by *W. Cartwright*; where the 'intuition' of society varies so widely according to the different authors who are considering it. Is it not arbitrary?[125]

Conclusion

The definition of human person through relationships meets the accusation of *speciesism*, since we are not merely saying: 'this is a human being and therefore it has to be respected', but rather: 'this is an individual able to develop full degree relationships with his/her fellow humans, with creation as a whole and with God'. It constitutes a criterion to be used progressively, establishing preferences. This is to say: the wider the possibility for relationships, the higher the respect we owe. Our respect for a dog or a dolphin should usually be higher than our respect for rats and mice if we are compelled to choose between them. Our respect for a rabbit definitely

has to have a place in our moral environment so that we do not go hunting out of mere pleasure, for instance, but it can be overcome by our respect for a fellow human being who is able to establish full relationships, able to establish a quality of life which embraces the concept of being a person.

This is not an ontological concept, since our definition of relationships does not flow from a static concept of the nature of both animals and humans, but from the possibility of establishing life in contact with others. It is not the fact of belonging to the human race which we promote, which we respect. Being a human being may be a mere belonging to a *species* group. It is being a person wicht we define as worthy of full respect, a respect that may not be destroyed.

That dynamic definition of person we have introduced, as a goal towards which we tend, makes us understand the difference in the degree of respect we established before: the greater the possibility for relationships, the higher the respect. It is clear that it includes respect for animals, but only so far as there is no confrontation with another greater respect we owe to a being more advanced in the pursuing of 'personhood'. It includes also the respect for handicapped human beings, in a different situation from that of the animals, as it also includes the animals themselves in different ranks. The respect for handicapped human beings will be manifested even where they are not able to express or develop any relationship, because they can still be objects of the relationship. In any relationship we have two poles, whether it be person to person, group of persons to a single one, or other combinations. Defective newborns may not be able to instigate relationships, but they can be objects, objects of a relationship established by their relatives or by society. At the same time, since the situation of defective newborns may be further from the ideal of personhood than the situation of other human beings, the necessary respect for them may be overcome.

This is also something more than respect for animal and human life as the life of the animal community that sometimes is stressed by ecologists and the like. *Strachan Donnelley*, for instance, stresses the need to promote organic life as composed of different kinds and species of animals.[126] We do not find this to be enough. We try to develop a policy of respect for each individual animal, be it human or belonging to other species. But this respect that is felt for one of them may be overcome by the respect for another far more advanced in the journey towards personhood.

In this way we are in accordance with the doctrine we saw in the Bible and with the traditional way of thinking that presents the correlation humans–animals as a hierarchy. We do not introduce such a hierarchy out of mere *speciesism*, but out of a dynamic concept of person defined as an ideal of full relationships with God, with other persons, and with the whole of creation so that the individual closest to this ideal will be worthy of higher respect.[127]

1. See some bibliographical resources on this topic: Magel, Charles R., *Keyguide to Information Sources in Animal Rights*, Mansell Publishing Company, London, 1989, 267 pp. It offers an overview of the Animal Rights literature, with philosophical, scientific, religious, legal and educational perspectives. Chronological index of the bibliography. Organizations in defense of Animal Rights Movements and appendices. Kellert, Stephen R.; Berry, Joyce K., *A Bibliography of Human/Animal relations*, Yale University Press, Lanham, New York, London, 1985. It offers 3861 titles of articles and books, without pagination. Magel, Charles R., *A Bibliography on Animal Rights and Related Matters*, University Press of America, Lanham, London, 1981. It even offers titles related with Centuries B.C. and A.C.: 1, 3, 4, 5, 10, 13, 16,17, 18, 19, 20. The ones of the first centuries are mainly comments on Genesis.

2. See: James, Astrid, *Transplants with Transgenic Pig Organs?*, in *The Lancet*, 342 (1993) 45; *Pig Hearts with Human Genes Could Overcome Transplant-Rejection Problems, Scientists Say*in *Canadian Medical Association Journal*, 151 (1994) 72.

3. For the 'State of the Art' of the use of animals as sources of transplantable organs see: Cooper, D.K.C.; Kemp, E.; Reemtsma, K.; et al. (eds.) *Xenotransplantation: The Transplantation of Organs Between Species*, Springer-Verlag, Berlin, 1991; Hammer, C., *Xenografting: Its Future Role in Clinical Organ Transplantation*, in Land, W.; Dossetor, J.B., (eds.) *Organ Replacement Therapy: Ethics, Justice and Commerce. First Joint Meeting of ESOT and EDTA/ERA.* Munich, December 1990, Springer-Verlag, Berlin, 1991, pp. 512–518; Reemtsma, K., *Xenografts in Transplantation Proceedings*, 24 (1991) 2225; White, David; Wallwork, John, *Xenografting: Probability, Possibility, or Pipe Dream?*, in *The Lancet*, 342 (1993) 879–880; Pierson, Richard N.; White, David, et al., *Ethical Considerations in Clinical Cardiac Xenografting*, *Journal of Heart and Lung Transplantation*, 12 (1993) 876–878; Hammer, C., *Xenotransplantation: State of the Art*, in *Transplantation Proceedings*, 25 Suppl. 3 (1993) 35–37; Bach, F.H.; Platt, J.L., Bach, F.H., *Xenotransplantation: A View to the Future*, in *Transplantation Proceedings*, 25 (1993) 25–29; Bach, F.H., *Discordant Xenografting: A Summary and Look to the Future*, in *Transplantation Proceedings*, 24 (1992) 739–742; Cooper, D.K.C., *Is Xenotransplantation a Realistic Clinical Option?* in *Transplantation Proceedings*, 24 (1992) 2393–2396; Starzl, T.E.; Fung, J.; Tzakis, A.; et al., *Baboon-to-Human Liver Transplantation*, in *The Lancet*, 341 (1993) 65–71; Hammer, C.; Suckfüll, M.; Saumweber, D.; *Evolutionary and Immunological Aspects in Xenotransplantation*, in *Transplantation Proceedings*, 24 (1992) 2397–2400. For the fight against rejection of transplanted animal tissue/organs see: Calne, R.Y., *Organ Transplantation Between Widely Disparate Species*, in *Transplantation Proceedings*, 2 (1970) 550–556; Najarian, J.S., *Overview of In Vivo Xenotransplantation Studies: Prospects for the Future*, in *Transplantation Proceedings*, 24 (1992) 733–738; Rose, Marlene L., *Antibody-Mediated Rejection Following Cardiac Transplantation*, in *Transplantation Reviews*, 7 (1993) 140–152; Roake, Justin A., *Dendritic Cells and the Intiation of the Immune Response to Organ Transplants*, in *Transplantation Reviews*, 8 (1994) 37–52; Hergueux, J.; Bodmer, H.; Cardell, S.; Chan, S.H.; Cosgrove, D.; Benoist, C.; Mathis, D., *Knock-Out Mice: A New Tool for Transplantation Immunologists*, in *Transplantation Proceedings*, 25 (1993) 30–32; Moore, Francis D., *The Potential Clinical Applications for Inhibition of the Serum Complement System*, in *Transplantation Reviews*, (1994) 22–36. For the adaptation of these organs for the recipient's needs and the fight against infections brought by the new organ, see: Michaels, Marian G.; Simmons, Richard L., *Xenotransplant-Associated Zoonoses. Strategies for Prevention*, in *Transplantation*, 57 (1994) 1–7.

4. Vetter, H.O.; Reichenspurner, H.; Reichart, B., *The Baboon as Cardiac Donor in Man: A Reasonable Approach or an Immoral Desperate Search for Suitable Organs?*, in Land, W.; Dossetor, J.B., (eds.) *Organ Replacement. . .* op. cit., p. 533.

5. Hardy, Mark, A.; Goodman, Elliot, R., *Transplantation*, in *Journal of the American Medical Association*, 270 (1993) 262–265.

6. Skolnick, Andrew A., *Transplantation Pioneer Predicts Successful Xenotransplantation Soon*, in *Journal of the American Medical Association*, 269 (1993) 2951–2958, p. 2955.

7. See for instance the absence of the concept in handbooks such as: Vacant, A.; Mangenot, R., *Dictionnaire de Théologie Catholique*, XV vols., Paris 1909–1946; Latourelle, René; Fischirella, Rino, *Dictionnaire de Théologie Fondamentale*, Bellarmin/Cerf, Montréal/Paris, 1992; Barbaglio, G.; et al., *Nuovo Dizionario di Teologia Dommatica*, Paoline, Roma, 1979; Bouyer, L., *Dictionnaire Théologique*, Desclèe, Tournai (Belgium) 1963; Eicher, Peter, *Neues Handbuch theologischer Grundhegriffe*, Kösel-Verlag, Munich, 1984; O'Collins, Gerald S.J.; Farrugia, Edward, S.J., *A Concise Dictionary of Theology*, Paulist Press, New York/Mahwah, NJ, 1991; Rahner, Karl; Vorgrimler, Herbert, *Theological Dictionary*, Herder, New York, 1965.

8. See for example: Conway Morris, Roderick, *In Italy, Medieval Pageantry vs. Horses' Rights*, in *International Herald Tribune*, The Hague,

Monday, August 16, 1993, pp. 1.4. Hilts, Philip J., *Organ Transplants: Progress on 'Barrier', in International Herald Tribune*, The Hague, October 21, 1993, p. 10. It is also interesting to see the editorial of *The Lancet* on May 22, 1993: The Lancet (Editorial), *A Predator's Compassion*, in *The Lancet*, 341 (1993) 1311–1312 answered later by Crawford, Donald, *Ethics of Experiments in Animals*, in *The Lancet*, 341 (1993) 1662, who represents *The British Union for The Abolition of Vivisection.*

9. See for instance: Donnelley, Strachan; McCarthy, Charles R.; et al., *The Brave New World of Animal Biotechnology*, in *The Hastings Center Report*, 24/1 Suppl. (1994).

10. Director of the Center for Human Bioethics, Clayton, Melbourne, Australia. Coeditor of *Bioethics.*

11. Tom Regan is a professor at the North Carolina State University.

12. Cf. Karcher, Helmut, et al., *Using Animals in Medical Research*, in *British Medical Journal*, 306 (1993) 1019–1023, p. 1020.

13. Talking for instance about the existence of transgenic animals, *Philip J. Hilts*, journalists of the *New York Times*, points out that the use of xenotransplants may save 60,000 to 80,000 lives each year. Cf. Hilts, Philip J., *Organ Transplants. . . art. cit.*, p. 10.

14. Professor of Old Testament at the University of Heidelberg, The Netherlands.

15. Westermann, Claus, *Genesis: A Practical Commentary*, B. Eerdmans Publishing Company, Grand Rapids, Michigan, 1987, p. 10.

16. See idem.

17. Cf. Gen. 2: 19–30.

18. We apologise for using sexist language in this section, but we feel compelled to do when dealing with the *jahvist* account of creation.

19. 'The first part of the creator's decision, "I will make a helper for him" applies also to the animals. However, it is left to the man himself to discover how the animals can help him. Of course, he must take them just as God created them; but God brings them to him so that he can give them names, and with the names a statement of what he understands them to be. By giving the animals names, the man arranges them in this world. . .' Westerman, Claus, *Genesis. . . art. cit.*, p. 20.

20. McMullin, Ernan, *Evolution and Creation*, University of Notre Dame Press, Notre Dame, Indiana, 1985, p. 158.

21. Westermann, Claus, *Genesis. . . art. cit.*, p. 20.

22. '8–15 The creation of the human race in its relationships. However, this does not complete the creation of the human race; the man is not yet fully human simply because he has been formed. In the biblical Creation narrative humanity is considered to be God's creation in all its relationships. Integral to the creation of the man is his environment (the garden), his food (the fruits of the garden), his work (v. 15), his community (vv. 18–24), and in all of these his relationship to his Creator.' ib. p. 19.

23. Cf. Manaranche, Andrè, *En séparant le sable et l'eau. . . La création*, Fayard, Paris, 1990, pp. 127–128.

24. McMullin, Ernan, *Evolution. . . op. cit.*, p. 160.

25. Cf. Köning, Adrio, *New and Greater Things. Re-Evaluating the Biblical Message on Creation*, University of South Africa, Pretoria, 1988, pp. 15–19.

27. ib. p. 161.

28. See this argument in the defenders of the *Animal Liberation Movement*: Singer, Peter, *Animal Liberation*, Random House Inc., New York, 1990², p. 187.

29. Manaranche, Andrè, *En séparant le sable et l'eau. . . op. cit.*, pp. 127–128.

30. Aquinas, Thomas, *Summa Theolgiæ*, II–II, q. 64, a. 1. English version by Marcus Lefébure, O.P., vol. XXXVIII, Blackfriars, Oxford, 1975, p. 21.

31. See for instance: Singer, P., *Utilitarianism and Vegetarianism*, in *Philosophy of Public Affairs*, 9 (1980) 325–337; Frey, R.G., *Rights, Killing, and Suffering: Moral Vegetarianism and Applied Ethics*, Basil Blackwell Publishing, New York, 1983. For a defence of the so-called 'philosophical vegetarianism' see: Dombrowski, Daniel A., *Hartshorne and the Metaphysics of Animal Rights*, State University of New York Press, 1988, 159 pp.

32. McMullin, Ernan, *Evolution. . . op. cit.*, p. 161.

33. Singer, P., *Animal Liberation*, Random House Inc., New York, 1990², p. 186.

34. ib. p. 187.

35. Cf. Aristotle, *Politics*, 1,8 1256B15, lect. 6.

36. Cf. Augustine, *De Vicitate Dei*, 1,20, PL 41,35.

37. Cf. Aquinas, Thomas, *Summa Theologiæ*, II–II, q. 64, a. 1. English version by Marcus Lefébure, O.P., vol. XXXVIII, Blackfriars, Oxford, 1975, p. 18–21, closely related to I. qq. 71–72; I. q. 75, a. 3; I, q. 96, a. 1; I–II, q. 6, a. 2; I–II, q. 11, a. 2; I–II, q. 12, a. 5; I–II, q. 13, a. 2; I–II, q. 15, a. 2; I–II, q. 17, a. 2; I–II, q. 40, a. 3.

38. See: Corringham, John, *A Brute To the Brutes? Descartes' Treatment of Animals*, in *Philosophy* 53 (1978) 551–559.

39. 'So far as animals are concerned, we have no direct duties. Animals are not self-conscious, and are there merely as a means to an end. That end is man.' Kant, Immanuel, *Lecture on Ethics*, Trans. by L. Infield, Harper Torchbooks, New York, 1963, pp. 239–240.

40. See for instance the fifth chapter of Flick, M.; Alszheghy, Z., *Il Creatore. L'inizio della salvezza*, Libreria Editrice Fiorentina, Florence, 1964, which is entitled *Dio fine della creazione* (= God the Aim of Creation), in pp. 154–181; and also Guelly, R., *La Création*, Desclèe, Tournai (Belgium), 1963.

41. Self, Donnie J., *The Use of Animals in Medical Education and Research*, in *Theoretical Medicine* 10 (1989) 9–19, p. 10.

42. Singer, P., *Animal Liberation. . . op. cit.*, pp. 188–189.

43. Plutarch, *Of Eating of Flesh*, in Regan, Tom; Singer, Peter, *Animal Rights and Human Obligations*, Prentice-Hall, Englewoods Cliffs, New Jersey, 1989, pp. 111–117.

44. See: Artfield, R., *Western Traditions and Environmental Ethics*, in Elliot, R.; Gare, A.; (eds.), *Environmental Philosophy*, University of Queensland Press, St. Lucia, 1983, pp. 201–230.

45. Cf. Singer, P., *Animal Liberation. . . op. cit.*, p. 199, referring to: McCurdy, E., *The Mind of Leonardo da Vinci*, Cape, London, 1932, p. 78.

46. Singer, P., *Animal Liberation. . . op. cit.*, p. 202. See also: Voltaire, *A Reply to Descartes*, in Regan, Tom; Singer, Peter, *Animal Rights and Human Obligations. . . op. cit.*, pp. 67–68.

47. According to *Peter Singer* he was expressing a common enough sentiment when talking about this respect. See Singer, P., *Animal Liberation. . . op. cit.*, p. 202. The reference sends to *Inquiry Concerning The Principles of Morals*, Chapter 3, without further specifications. See a selection of David Hume's texts in Hume, David, *Of the Reason of Animals*, in Regan, Tom; Singer, Peter, *Animal Rights and Human Obligations. . . op. cit.*, pp. 69–71.

48. Singer, P., *Animal Liberation . . . op. cit.*, pp. 202–203.

49. Bentham, Jeremy, in Regan, Tom; Singer, Peter, *Animal Rights and Human Obligations. . . op. cit.*, p. 130, referring to: Bentham, Jeremy, *The Principles of Morals and Legislation*, Chapter XVII, section 1, 1789, without further specifications.

50. Cf. Darwin, Charles, *The Descent Of Man*, London, 1871, p. 1. See an in-depth study of Charles Darwin's influence in Rachels, James, *Created From Animals: The Moral Implications Of Darwinism*, Oxford University Press, Oxford, 1990. A collection of main references both in favour of and against respect for animals can be seen in Regan, Tom; Singer, Peter, *Animal Rights and Human Obligations. . . op. cit.*, a study we have already used.

51. Singer, Peter, *Animal Liberation. . . op. cit.*

52. 'What kind of ethics can tell us that it is all right to rear sentient animals in barren cages that give them no decent life at all, and then kill them to take their organs, while refusing to permit us to take the organ of a human being who is not, and never can be, even minimally conscious? Obviously, a speciesist ethic.' Singer, P., *Xenotransplantation and Speciesism*, in *Transplantation Proceedings*, 24 (1992) 728–732, p. 730. The word 'speciesism' comes from Ryder, Richard, *Victims of Science*, Davis Poynter, London, 1975. Referred in Fox, M.W., *Animal Rights and Nature Liberation*, in Paterson, David; Ryder, Richard D., (ed.) *Animals' Rights—A Symposium*, Centaur Press Ltd., Sussex & London, 1979, p. 54.

53. For the comparison of speciesism with sexism and racism see: Singer, Peter, *Animal Liberation. . . op. cit.*, pp. 1–23.

54. ib. p. 729.

55. 'Animal liberationists question the right of our species to assume that *our* interests must always prevail. They want to extend the basic moral ideas of equality and rights—which we apply to all *human* beings—to animals as well.' idem.

56. See a summary of objections in a review of the second edition of *Animal Liberation*, in 1990, prepared by Charlesworth in *Australian Council for the Care of Animals in Research and Teaching. Newsletter*, 4/2 (1991) 9–10. It is referred to in Bellenger, Christopher R., *The Ethics of Using Animals in Biomedical Research*, in *Medical Journal of Australia*, 158 (1993) 222–224.

57. Cf. Tomson, Farol N., *Approving The Use of Animals in Medical Education*, in *Theoretical Medicine*, 10 (1989) 35–42, p. 37.

58. See: Moseley, Ray, *Ethical Problems with The Use of Animals in*

Medical Research and Education: An Introduction, in *Theoretical Medicine*, 10 (1989) 1–7, pp. 4–5.

59. Enforced by U.S. Department of Health and Human Services, *Public*

Health Policy on Humane Care and Use of Laboratory Animals, U.S. Government Printing Office, Washington D.C., 1986.

60. Dresser, Rebecca, *Measuring Merit in Animal Research*, in *Theoretical Medicine*, 10 (1989) 21–34, p. 29.

61. According to *Farol N. Tomson* the I.A.C.U.C.s will have three main roles related with the use of animals in education: namely, an *oversight* one to assure that policies are being performed; an *investigative* role, to verify the appropriate husbandry and veterinary care, and a *training* role providing instructional courses for technicians and students. See: Tomson, Farol N., *Approving. . . art. cit.*, pp. 35–42.

62. See Donnelley, Strachan, *Speculative Philosophy, The Troubled Middle, and The Ethics of Animal Experimentation*, in *the Hastings Center Report*, 19/2 (1989) 15–21.

63. Singer, P., *Animal Liberation*, Random House Inc., New York, 1975[1], 1990[2]. We use the second edition, as the reader may have noticed.

64. Regan, Tom, *The Case for Animal Rights*, University of California Press, Berkeley, 1983.

65. See for instance: Clark, S.R., *The Moral Status of Animals*, Oxford University Press, New York, 1977; Rachels, J., *Created from Animals. . . op. cit.; Rollin, B.E.; the Unheeded Cry*, Oxford University Press, New York, 1989; Rollin, B.E.; *Animal Rights and Human Morality*, Prometheus Books, Buffalo, New York, 1981.

66. Vance, Richard P., *An Introduction to the Philosophical Presuppositions of the Animal Liberation/Rights Movement*, in *Journal of the American Medical Association*, 268 (1992) 1715–1719, p. 1715.

67. ib. p. 1716.

68. See: Russow, Lilly-Marlene, et al., *Section 1: Ethical Theory and the Moral Status of Animals*, in Donnelley, Strachan; Nolan, Kathleen, (eds.), *Animal Science and Ethics*, in *The Hastings Center Report*, 20/3 suppl. (1990) 1–32, p. 1–8.

69. 'Speciesism is logically parallel to racism and sexism. Speciesists, racists, and sexists all say: the boundary of my own group is also the boundary of my concern.' Singer, P., *Xenotransplantation. . . art. cit.*, p. 730.

70. 'Regan argues in the following way. Everything with inherent value must have equal inherent value, since the alternative would lead to a "perfectionist" theory of justice, one which sanctions differential treatment of individuals on the basis of the degree to which they exemplify various virtues. [. . .] Next Regan introduces the Respect Principle, which rests on the Postulate of Inherent Value.' Jamieson, Dale, *Rights, Justice, and Duties to Provide Assistance: A Critique of Regan's Theory of Rights*, in *Ethics*, 100 (1990) 349–362, p. 350.

71. The concept is described in Regan, Tom, *The Case for Animal Rights. . . op. cit.*, pp. 243–248.

72. Vance, Richard P., *An Introduction. . . art. cit.*, p. 1716.

73. Regan, Tom; et al., *Is Justification of Animal Research Necessary?*, in *Journal of the American Medical Association*, 269 (1993) 1113–1115, p. 1113.

74. Cf. Singer, Peter, *Animal Liberation. . . op. cit.*, p. 24.

75. ib. p. ii.

76. 'Despite their differences, both Regan and Singer extend beyond the species barrier basic ethical principles, terms and concepts. This extension is demanded by the logic of universalizability—to seek the broadest and consistent application of the principles that cases should be treated similarly unless there is a relevant difference between them. Despite their radical conclusions, both Singer and Regan are very much in the mainstream in their ethical methods. Consequently, the charge that they are motivated primarily by emotion is unconvincing to anyone who takes the time to read their work and is familiar with modern ethics.' Vance, Richard R., *An Introduction. . . art. cit.*, p. 1716.

77. On this whole issue of animal rights there has been a dissertation submitted at the Georgetown University: Moseley, Ray, *Animal Rights: An Analysis of the Major Arguments for Animal Rights*, Georgetown University, Washington, D.C., 1984.

78. From the Department of Philosophy, University of Essex, Wivenhoe Park, Colchester, United Kingdom.

79. Cartwright, W., *The Ethics of Xenografting in Man*, in Land, W., Dossetor, J.B., (Eds.) *Organ Replacement. . . op. cit.*, p. 519.

80. Such as Charlesworth, Cf. Bellenger, Christopher R., *The Ethics . . . art. cit.*, pp. 222–224.

81. See for instance the following studies: Radner, Daisie; Radner, Michael, *Animal Consciousness*, Prometheus Books, Buffalo, New York, 1989; Rollin, Bernard E., *The Unheeded Cry. . . op. cit.*

82. As *Ray Moseley* says: '. . . whatever characteristic one holds as necessary for rights possession must be shared by all 'marginal' or defective human beings as well as functioning human beings. Since many animals operate at or above the level of a severely retarded or brain-damaged human being no matter what characteristic is chosen, those animals must also possess moral rights of at least equal strength as those possessed by defective humans.' Moseley, Ray, *Ethical Problems. . . art. cit.*, p. 3.

83. For instance, *A. Caplan*, from the Center for Biomedical Ethics, University of Minnesota, Minneapolis, will point at the intelligence and behavior of humans above that of animals: 'It is indisputable that there are some differences in the capacities and abilities of humans and primates. Chimps can sing but humans have much more to say. Gorillas seem to reason but humans have calculus, novels, and quantum theory. Humans are capable of a much broader range of behavior and intellectual functioning than are any specific primate species.' Caplan, A.L., *Is Xenografting Morally Wrong?* in *Transplantation Proceedings*, 24 (1992) 722–727, p. 725.

84. Purposiveness is also stressed by Arthur C. Caplan in his *Beastly Conduct: Ethical Issues in Animal Experimentation*, in Sechzer, J.A., (ed.) *The Role of Animals in Biomedical Research*, in *Annals of the New York Academy of Sciences*, 406 (1983) 159–169.

85. For instance *Jerrold Tannenbaum*, lawyer and assistant professor in the School of Veterinary Medicine, Tufts University, and *Andrew N. Rowan*, biochemist and assistant dean for New Programs at the School of Veterinary Medicine, Tufts University. See Tannenbaum, Jerrold; Rowan, Andrew N., *Rethinking the Morality of Animal Research, in The Hastings Center Report*, 15/5 (1985) 32–36. Their explanation of the criterion of kinship can illustrate this perspective. 'Thus, even if pigs and family poodles have comparable mental abilities—indeed, even if pigs are smarter—we may owe something more to the poodle because of the social interaction between the poodle and ourselves.' ib. p. 41. With this criterion, however, we come closer to the one we face in the next section, the defense of the use of animals through a concept of personhood defined by the establishment of relationships.

86. 'The objection to using material from animals to save human lives or to ameliorate the condition of human beings on the grounds of the wrong thereby done to animals has in my view no force at all, although I shall not argue for this conclusion here and now. It derives from the moral difference between most humans and most animals. While we should never cause sentient creatures pain or distress if this can be avoided, it is not wrong to take the lives of creatures that cannot value existence (non-persons) and so to use, for example, animals to benefit humans who can value existence (persons). In any event, no persons who are not vegetarians can have this sort of objection to using animals for therapeutic purposes. . .' Harris, John, *Wonderwoman and Superman*, in his *The Ethics of Human Biotechnology*, Oxford University Press, Oxford, New York, 1992, 140–161, pp. 148–149.

87. 'Attamen unicuique homini remanet officium retinendi rationem totius personae humanae, in qua eminent intelligentiae, voluntatis, conscientiae et fraternitatis valores, qui omnes in Deo Creatore fundantur et in Christo mirabiliter sanati et elevati sunt.' *Guardian et Spes* (= GS), 61, in *Acta Apostolicæ Sedis*, 58 (1966) 1082. And also: 'Man's dignity therefore requires him to act *out of conscious and free choice*, as moved and drawn in a personal way *from within*, and not by blind impulses in himself or by mere external constraint.' GS. 17; 'God has regard for the dignity of the human person which he himself has created; the human person is to be *guided by his own judgment* and *to enjoy freedom*.' *Dignitatis Humanae* 11. See also GS. 12, where the person is shown to have the capacity to know and love God.

88. Jerome Wernow, evanglical pastor, pharmacist, nurse and ethicist who obtained the Doctor's Degree in Sacred Theology from the Catholic University of Leuven, personal communication.

89. Some basic bibliography may be referred to here: Selling, Joseph A.: et al., *Personalist Morals*. Essays in Honor of Professor Louis Janssens, Leuven University Press, Leuven, 1988; Janssens, Louis, *Personalism in Moral Theology*, in Curran, Charles E. (ed.), *Moral Theology: Challenges for the Future, Essays in Honor of Richard McCormich S.J.*, Paulist Press, New Jersey, 1990, pp. 94–107. Selling, Joseph A., *1993–1994: Fundamental Moral Theology*, K.U. Leuven class notes, Leuven 1994.

90. Some authors will understand this idea as the 'full development of the humanum' Selling, Joseph A., *In Search of a Fundamental Basis for Ethical Reflectionin Ethical Perspectives*, 1–1 (1994) 13–21. p. 15. I,

however, understand 'personhood' more as an ideal to be achieved rather than the unraveling of the inner self.

91. As *Vicente Miranda*, professor of Fundamental Morals at the 'Instituto Superior de Ciencias Morales' of Madrid, says: 'No deja de ser significativo que el personalismo, como filosofía que 'reivindica la dignidad ontológica, gnoseológica, moral y social de la persona', haya encontrado en el cristianismo el terreno apropriado en que asentarse de forma adecuada. Los motivos para una inspiración personalista del cristianismo se encuentran en cada página del Neuvo Testamento. Por eso las fibras más esenciales del tejido antropológico cristiano son las que introducen en la misma comprensión constitutiva de persona el principio de apertura, de ser dialogal, de responsabilidad y reciprocidad del ser persona.' Miranda, Vicente, *Conciencia moral*, in Vidal, Marciano, *conceptos fundamentales de ética teológica*, Trotta, Madrid, 1992, p. 333.

92. Janssens, Louis, *Artificial Insemination: Ethical Considerations*, in *Louvain Studies*, 8 (1980) 3–29, p. 5.

93. See the different key elements of the Christian story relevant for medical ethics presented by Richard McCormick, among which the eschatological perspective gains importance. McCormick, Richard A., S.J., *Theology and Biomedical Ethics*, in *Église et Théologie*, 13 (1982) 311–331, pp. 317–318.

94. 'This fact [being community]—attested by so many biblical images—underscores two aspects of our personhood that are highly relevant to medical ethics: our essential equality (regardless of functional importance) and our radical sociality.' ib. p. 325.

95. ib. p. 312.

96. 'It is persons so informed, persons with such "reasons" sunk deep in their being, who face new situations, new dilemmas, and reason together as to what is the best policy, the best protocol for the service of all human values. They do not find concrete answers in their tradition, but they bring a world-view that informs their reasoning.' ib. p. 316.

97. Caplan, A.L., *Is Xenografting. . . art. cit.*, p. 726.

98. 'Regan provides convincing criticisms of Singer, and Singer provides devastating criticisms of Regan. Each shows that his competitor's ethical model is inconsistent and leads to immoral or irrational outcomes. Singer and Regan, therefore, provide for us all the arguments needed to demonstrate the incoherence of their philosophical presuppositions.' Vance, Richard P., *An Introduction. . . art. cit.*, p. 1717.

99. 'My aunt Bea is old, a cranky, sour person, though not physically ill. She prefers to go on living. She is also rather rich. I could get a fortune if I could get my hands on her money, money she intends to give me in any extent, after she dies, but which she refuses to give me now. In order to avoid a huge tax bite, I plan to donate a handsome sum of my profits to a local children's hospital [. . .] Why not kill my aunt Bea? Oh, of course I might get caught. But I'm no fool, and besides, her doctor can be counted on to cooperate. . .' Regan, Tom, *The Case for Animal Rights*, in Singer, Peter, *In Defence of Animals*, Basil Blackwell, Oxford, New York, 1985, pp. 20–21.

100. Vance, Richard P., *An Introduction. . . art. cit.*, p. 1717, referring to Singer, P., *Ten Years After Animal Liberation*, in *New York Review Books*, January 17, 1985, 46–52, p. 49.

101. Vance, Richard P., *An Introduction. . . art. cit.*, p. 1717, referring to Regan, T.; Singer, P., *The Dog in The Lifeboat: An Exchange*, in *New York Review Books*, April 25, 1985, 56–57.

102. 'Recall the situation: There are five survivors, four normal adult human beings and a dog. The boat will support only four. All will perish if one is not sacrificed. Which one ought to be cast overboard? The rights view's answer is: the dog. The magnitude of the harm that death is, it has been argued, is a function of the number and variety of opportunities for satisfaction if forecloses for a given individual, and it is not speciesist to claim that the death of any of these humans would be a prima facie greater harm in their case that the harm would be in the case of the dog. Indeed, numbers make no difference in this case. A million dogs ought to be cast overboard if that is necessary to save the four normal humans, the aggregate of the lesser harms of the individual animals harming no one in a way that is prima facie comparable to the harm death would be to any of these humans. But, suppose, a critic may conjecture, it is not a question of having enough room on the boat. Imagine it is a question of which individual to eat if four others are to survive. Who should be eaten? The rights view's answer, once again, is: the dog. And it is the dog who should be eaten because the harm that death is in the case of that animal is not as great a harm as the harm that death would be in the case of any of these humans.' Regan, Tom, *The Case for Animal Rights. . . op. cit.*, p. 351.

103. idem.

104. ib. p. 324.

105. ib. p. 325.

106. ib. pp. 351–352.

107. 'Questions of such tendencies to one side, Vance seems to think that my view on lifeboat cases would justify animal experimentation. This is false. Details aside, all mammalian animals (at least) used as "models" for standard experimental purposes, have their most basic moral right violated: their right to be treated with respect, which includes their right not to be used as means to ends that either will or might benefit others. In contrast, dogs who happen to find themselves in a lifeboat have not had any of their rights violated. Given my theory, what may be done in situations in which no one's rights have been violated (e.g. lifeboat cases) cannot serve as a moral template for determining what may be done in situations in which someone's rights have been violated (e.g. institutionalized "animal model" research).' Regan, Tom; et al., *Is Justification. . . art. cit.*, p. 1113.

108. Cf. Regan, Tom, *The Case for Animal Rights. . . op. cit.*, pp. 385–394.

109. Cf. Singer, P., *Ten Years. . . art. cit.*, p. 50.

110. '. . . I argue: a) that killing is not necessarily wrong and b) that the one who is killed should be the one whose life, so far as we can judge, is the least rich in terms of possible sources of satisfaction. Thus, if four normal humans and a dog find themselves in these dire circumstances, my view is that it would not be wrong to throw the dog overboard. Vance observes that some critics wonder whether my position "displays speciesist tendencies". Clearly it does not. The dog is chosen, given my view, not because he is other than human, but because his life is less rich in terms of possible sources of satisfaction. If we imagine a situation in which one of the humans is irreversibly comatose, then, given my analysis, it would be wrong to throw the dog overboard but not the comatose human. I may, of course, be mistaken about much of this, but not in denying the imputation of "speciesist" tendencies.' Regan, Tom, et al., *Is Justification. . . art. cit.*, p. 1113.

111. University of Texas at St. Antonio.

112. Berstein, Mark H.; et al., *Is Justification of Animal Research Necessary?*, in *Journal of American Medical Association*, 269 (1993) 1113–1115, p. 1113. The same is defended by other authors, such as *Andrew N. Rowan*, from Tufts University, North Grafton, Mass. 'While Singer and Regan expose the weaknesses and inconsistencies in each other's arguments, they do an even better job of exposing the weaknesses of the essentially unexamined status quo position regarding animals. For the most part, animal use by humans is permitted because we find such exploitation useful, but utility does not consistute a sophisticated ethical defense (as the defenders of slavery discovered)' Regan, Tom, et al., *Is Justification. . . art. cit.*, p. 1114; and *P. Singer*: 'While I applaud Dr. Vance's exposure of the myths that the ALRM is emotional or denies that there are differences between animals and humans, I am puzzled that he should see it as a weakness of the movement that it includes philosophers who argue from different ethical outlooks toward similar conclusions.

I would have thought, rather, that it is a sign of strength of a movement that people starting from different premises should agree on the need for a radical change in our attitudes to animals.' idem.

113. See: Nicholl, C.S.; Russell, S.M., *Analysis of Animal Rights Literature Reveals the Underlying Motives of the Movement: Ammunition for Counter-offensive by Scientists*, in *Endocrinology*, 127 (1990) 985–989.

114. Strachan Donnelley talks about 5 billion animals killed each year for food: Donnelley, Strachan, *Introduction. The Trouble Middle: In Medias Res*, in Donnelley, Strachan; Nolan, Kathleen, (eds.) *Animal, Science. . . op. cit.*, 2–4, p. 2.

115. Singer, P., *Unkind to Animals*, in *New York Review Books*, February 2, 1989, 36–38, p. 37, quoted in Vance, Richard P., *An Introduction. . . art. cit.*, p. 1719.

116. From the *Service de Physiologie humaine normale et pathologique, Université de Liège*, Belgium.

117. Cf. Damas, J., L'Experimentation chez l'animal, la vivisection et quelques autres choses, *Revue Médicale de Liège*, 48 (1993) 569–577, p. 575.

118. ib. p. 576. In the same line see: Garattini, Silvio, *considerazioni sulla sperimentazione animale*, in *Kos: Rivista di scienzia e etica*, 7 (1991) no. 70, pp. 13–16, which is a passionate and emotive defense of the use of animals for experimentation, as something absolutely right and honest, as well as needy.

119. Up to a 40%, according to Warner, Gary E., *The Prospects for Consensus and Convergence in the Animal Rights Debate*, in *The Hastings Center Report*, 24/1 (1994) 24–28, p. 28.

120. 'When [. . . the concept of speciesism is. . .] applied, as by Singer

in his plea for the humane or ethically responsible treatment of sentient beings, it tends to backfire as speciesism to those who have as much empathy for rocks and trees as for wolves and whales! Singer deals only with half of the problem when he pleads for humane treatment of sentient beings only: non-sentient creations should be treated with no less responsible concern. While the humane imperative is relevant to our treatment of sentient beings, the ecological imperative of responsible stewardship concerns our treament of, and relationship with, all forms of creation, both sentient and non-sentient.' Fox, M.W., *Animal Rights and Nature Liberation*, in Paterson, David; Ryder, Richard D., (ed.) *Animals' Rights—A Symposium*, Centaur Press Ltd, Sussex & London, 1979, p. 54.

121. Assistant professor in the Department of Philosophy at Texas A&M University, College Station, Texas.

122. See: Singer, Peter, *Practical Ethics*, Cambridge University Press, New York, 1993[2].

123. Cf. Warner, Gary E., *The Prospects for Consensus. . . art. cit.*, pp. 24–28.

124. Vance, Richard P., *An Introduction. . . art. cit.*, p. 1718.

125. 'Similarly, intuitionists like Regan cannot help but appear arbitrary. Intuitionists have a very difficult time explaining why so many otherwise ethically sophisticated and sensitive people disagree with one another. . .' idem.

126. 'In consequence, our final duty is to the overall goodness or well-being of organic life (its active and elaborate self-affirmations). The ultimate ethical principle is responsible respect for life's goodness. This means to balance judiciously the needs of organic individuals and ongoing communities and does not entail always sacrificing the interests of animal life to our own. Foremost, we are objectively obligated to protect the symbiotic balance of the organic realm and, where practically possible, the multiform diversity of animate being. [. . .] Given the inherent goodness and the essential interconnectedness of all life, we are enjoined to promote human well-being only admist the ongoing well-being of the many forms of organic life.' Donnelley, Strachan, *Speculative Philosophy. . . art. cit.*, p. 20.

127. In fact, Judeo-Christian theology does not contain any specific divine prohibition against crossing species, as was asserted by a special commission of theologians in 1984. Cf. Jonsen, Albert R., *Ethical Issues in Organ Transplantation*, in Veatch, Robert M., (Ed.), *Medical Ethics*, Jones and Bartlett, Boston, 1989, 229–252, p. 241.

Book Reviews

Procuring Organs for Transplant: The Debate Over Non-Heart-Beating Cadaver Protocols

Edited by Robert M. Arnold, M.D.; Stewart J. Youngner, M.D.; Renie Schapiro, M.P.H.; and Carol Mason Spicer, M.A.

The Johns Hopkins University Press, Baltimore and London, 1995.

'Our society is on the brink of a paradigm shift in which the production of body parts will increasingly link the intentional ending of some lives with the salvaging of others . . . These practices will inevitably pit our insatiable longing for better health and longer life against deep-seated notions of the sacred and profane. How we attempt to resolve this conflict will reveal a great deal about who we are' (p. 228–229). While solid organ transplantation's unparalleled technical success qualifies as a 'best of times' scenario for medical science, transplant's *sine qua non*—organ donation—continues to be a prisoner of the 'worst of times'. How else would one describe a 1995 ledger sheet characterized by a staggering 38,000 patient waiting list (in the U.S.A.) and further complicated by a mortality of six people per day—each a direct result of organs never donated. Focused study of a recent three-year period demonstrated a 55% increase in potential recipients, but only a dismal 16% increase in donors. Is there a substantive and yet simultaneously ethical answer to the critical and ongoing need for organ donations?

The title under review proposes a controversial solution to the problem: utilization of non-heart-beating cadaver donors (NHBCD). Unlike heart-beating donors (more commonly called brain-dead donors), the predominant source of donated organs presently, NHBCDs do not meet criteria for brain death and may qualify as donors only after an agreed upon interval of *circulatory cessation* or, simply stated, a discernable absence of heart beat. The interval, however, must be short enough so as not to damage potentially transplantable organs, and may be accompanied by catheter-directed organ cooling for preservation after death, but should never be allowed to blur the essential ontologic distinction between the dying and the dead.

Within the confines of NHBCD protocols, cardiac standstill may occur in 'controlled' (e.g. the surgical or medical team disconnects the donor's ventilator which leads to death, as in the University of Pittsburgh protocol) or 'uncontrolled' circumstances (e.g. a trauma victim who expires in a emergency room after medical treatment). In fact, this controlled versus uncontrolled characterization is the optimal context in which the boundaries of NHBCD protocols should be set.

When cardiopulmonary cessation is chosen as the criterion for death, the duration of cessation is the critical determinant of whether the protocol withstands vigorous ethical scrutiny. More specifically, within the context of the University of Pittsburgh protocol, the duration chosen to define death is arbitrary and is the presence of only two minutes of pre-terminal cardiac rhythm (pulseless electrical activity, ventricular fibrillation or standstill). The two-minute interval was ostensibly chosen as a time which makes autoresuscitation opportunities (the patient's ability to resuscitate without medical intervention) 'vanishingly small'. In reality, the time selected is no accident and is optimal only for warm organ preservation without ischemia (deficiency of blood), rather than a representation of an appropriate interval for what has become the new definition of death. In any group of terminal patients, a two-minute autoresuscitation criterion would be appropriately construed as nothing less than vivisection—a substantive blurring of traditionally accepted definitions of dying and death respectively.

On the contrary, uncontrolled NHBCD protocols do not alter the accepted definition of death. When trauma patients are pronounced dead after fulfilling the usually accepted criteria for death (not merely the absence of autoresuscitation capability), catheters are then placed in the peritoneal cavity and vessels to cool and protect the recently deceased's organs from ischemia. Rather than dangerously shorten criteria for the definition of death, cool preservation in 'uncontrolled' NHBCDs protects potentially transplantable organs—but only after a person is clearly determined to be dead (not dying) by traditional criteria.

Though comprising only 1% of donations in the U.S.A. presently, NHBCDs could theoretically generate another 26,000 donors per year. This is not an unreasonable estimate considering the plethora of trauma victims dying in witnessed hospital circumstances.

The book under review is an expanded version of a special issue of the *Kennedy Institute of Ethics Journal* (1993) addressing the University of Pittsburgh's 'controlled' NHBCD protocol, with the addition of five new chapters engaging the aforementioned 'uncontrolled' protocols.

If nothing else, this volume is sobering and reminds those who hold the Christian worldview perspective that transplantation is one arena where a representative paradigm shift in the euthanasia debate has already taken place. One may contrast the Christian-Hippocratic tradition in transplantation trenchantly summarized by Paul Ramsey (a categorical dead-donor rule; the President's Commission Report protecting donors with death-as-irreversible criteria; and the inviolable protection of dying donors as members of the living community) vis-a-vis a post-consensus perspective (the 'titration of donor-death' primarily to produce viable, transplantable organs; consequentialism for recipients as the ethical summum bonum in transplantation; and the boundaries between dying and dead blurred by 'life-not-worthy-of-living' criteria). A 'controlled' NHBCD protocol which literally titrates the donor's dying process solely for the production of viable organs becomes the unsettling result.

For the Christian, the book crystallizes three essential aspects of a critical contemporary issue. First, the University of Pittsburgh's 'controlled' protocol is unequivocally inconsistent with the Christian-Hippocratic tradition. In this regard, the chapters by Weisbard, Fox, Veatch and Caplan articulate cogent arguments essential to the vigorous engagement of a post-consensus culture. Second, arguments in favour of 'controlled' NHBCD protocols which primarily emanate from the 'conflict of interest' perspective are pure sophistry (chapters 8–10). To argue the ethics of NHBCDs solely from a protocols perceived impact on future potential donations is entirely to miss the ethical point. Finally, and quite possibly the most critical new message, despite the red light to 'controlled' NHBCD protocols, 'uncontrolled' protocols are substantively dissimilar since they appear to obviate the ethically questionable aspects of gerrymandering the boundaries of dying to death and thus may represent a practical as well as ethical means to increase organ donations (chapters 3 and 15). These two chapters carefully lay out the logistics of relevant 'uncontrolled' protocols.

NHBCD protocols will not go away and should receive serious study from any Christian interested both in transplant ethics and the ongoing euthanasia debate. Post*consensus support for controlled NHBCD protocols such as the University of Pittsburgh model, come as close to the 'body parts' scare of Robin Cook's *Coma* as any other recent accompaniment of Post-Hippocratic medicine.

Canton, Ohio GREGORY W. RUTECKI, M.D.

The Virtues in Medical Practice
Edmund Pellegrino and David Thomasma
Oxford University Press, New York and Oxford, 1993, 197 pp., hardback $35.00.

Edmund Pellegrino and David Thomasma are two of the most respected voices in contemporary medical ethics. Their collaborative works have made a tremendous impact since their first contribution, *A Philosophical Basis of Medical Practice* (1981). They have produced another impressive work in *The Virtues in Medical Practice*. It's fifteen chapters are organized into three sections: 1) Theory, 2) Virtues, and 3) The Practice of Virtues. The first chapter focuses on virtue theory and its criticisms, beginning with general definitions and progressing through an overview of its historical evolution and current reemergence. Pellegrino and Thomasma 'opt for the classical definitions of Aristotle and Thomas Aquinas' (p. 12) in their use of 'virtue' and 'the virtues'. In the second chapter they differentiate between virtues and the principles of justice, beneficence, nonmaleficence, and autonomy (or what David Solomon of Notre Dame University calls 'The Gang of Four'). By the end of the first section they feel they have 'suggested an alternative approach to the problem of pluralism' (p. 60). The next section, 'The Virtues in Medicine', treats fidelity to trust, compassion, *phronesis,* justice, fortitude, temperance, integrity, and self-effacement—each virtue having its own chapter. A recurrent theme in the works of Pellegrino and Thomasma is that 'trust is most problematic when we are in states of special dependence' (p. 65). They argue that fidelity to trust is of primary importance, since 'if there is any meaning to professional ethics, it must revolve around the obligation of fidelity to trust' (p. 75). A discussion of the 'ethics of distrust' also occupies a major portion of this chapter. The 'ethos of distrust asserts the radical impossibility of trust in professional relationships' (p. 72). Further, they believe the virtue of compassion is 'a necessary, habitual attribute of the morally authentic healer' (p. 80); however, it must coexist with competence.

Pellegrino and Thomasma consider *phronesis* (the virtue of practical wisdom) to be the 'capstone virtue . . . the link between the intellectual virtues . . . and those that dispose to good character' (p. 84). Justice, on the other hand, is the 'most complex of all the virtues', since it has no 'mean' (p. 92) and is simultaneously a principle and a virtue. There is an element of justice in each of the other principles in the 'Gang of Four'. When judgements must be made between conflicting *prima facie* principles, 'justice has a trumping function' (p. 96). Further, 'justice would require that neither physician nor patient impose her values on the other' (p. 97). The virtue of fortitude is more difficult to practise than the other virtues, according to the authors, due to the erosion of the ability to practise medicine freely without constraints. They suggest, however, that the medical professional must 'aim at temperance—the optimum balance between benefits, effectiveness, and burdens' (p. 123).

The explication of the virtue of autonomy begins in the chapter on integrity, since 'the ultimate safeguard of the integrity of the patient's person is the fidelity of the physician to the fiduciary nature of the healing relationship' (p. 132). Integrity, on the other hand, is the virtue which 'defines for us the nature of the individual who integrates all of the virtues' (p. 127). Throughout the discussion of self-effacement the authors attempt to define virtue, character, profession, and other problematic terms. Here they discuss reasons for the erosion of virtue ethics from both an historical and a philosophical perspective. They conclude, perhaps rightly, that 'never has there been more confusion about who and what it is to be a physician' (p. 154).

In chapter 14, 'Can Medical Virtues Be Taught?', the authors answer a resounding, 'Yes, we think the virtues essential to being a good physician can be taught' (p. 175). Pellegrino and Thomasma distinguish between those virtues essential for the person *qua* person and the physician *qua* physician. These latter virtues are those the medical faculty can teach, and indeed they do teach whether they wish to or not. In chapter 15, the authors argue 'that an ethic of virtue must complement the existing ethic of principles if we are to have a comprehensive perspective on the ethical behavior of the scientist (*and physician*)' (p. 133). They claim that principles enable physicians to do good, but virtues enable them to be good. The authors conclude this excellent work by stating, 'Physicians and other health workers must be

familiar with the shifts in contemporary moral philosophy if they are to help restructure the ethics of their profession . . . Medical ethics is too ancient and too essential a reality for physicians, patients, and society to be left entirely to the fortuitous currents of philosophical fashion' (p. 195).

The Virtues in Medical Practice is broad in scope. It includes a brief history of virtue theory and principalism, and attempts to provide both a 'comprehensive philosophy of medicine' and a discussion of seemingly every concept in medical ethics from autonomy to noncompliance and from pharmaceutical companies to the nature of suffering. Clearly, this is a critical work in medical ethics—perhaps the most important to come out in the past few decades. Few, if any, significant monographs devoted solely to virtue medical ethics have been published. Pellegrino and Thomasma have provided interested individuals with a volume which is well-written and thought-provoking.

One question still remains, however. Without a common moral foundation, how can there be 'transcendent moral principles upon which to ground moral acts in medicine'? (p. 14). Virtue theory has much to offer; but does joining it with principalism eliminate pluralism? For instance, the virtues of compassion and justice are used to defend both euthanasia and abortion. As H. Tristram Engelhardt has said: 'One cannot simply talk about justice without specifying to which justice one makes reference, and this will beg the questions on matters of substantial disagreement' ('Medical Ethics for the 21st Century', *Journal of the American College of Cardiology* 18 [1991], p. 303). Indeed, most of the virtues examined by Pellegrino and Thomasma are embraced by nearly everyone writing in contemporary medical ethics. They all would view their actions as virtuous and themselves as virtuous persons. Even the Nazis considered themselves virtuous. How does virtue theory account for such pluralism? Regardless of how much we may agree with Pellegrino and Thomasma, or how adamantly they proclaim success, they are still plagued with the 'pluralism problem'.

A second problem with the authors' approach is the consistent focus on the necessity of consensus. If one moral stance is right, notwithstanding our pluralistic society, why continue pressing for moral consensus? Pellegrino and Thomasma resolutely believe they have discovered the correct approach to medical ethics, viz. virtue-principalism. Accordingly, physicians should uphold the principles to *do* good and the virtues to *be* good. This, in their view, is the correct ethical stance. Yet, the United States is a heterogeneous moral community and, thus, establishing a moral consensus may be a futile undertaking. Again, as Engelhardt posits, 'the roots of the moral world are heterogenous . . . for bioethics this means *irreconcilable* moral tensions' (*The Foundations of Bioethics*, Oxford University Press, 1986, p. 180). We may, however, be able to come to moral consensus within specific moral traditions. This is obviously what Pellegrino and Thomasma are attempting to do in *The Virtues of Medical Practice*. They argue that 'the medical school and the profession are moral communities, and moral consensus in those communities is essential if the practices of the virtuous physician are to be sustained' (p. 180). Moral traditions within the profession of medicine may reach moral consensus; however, whether or not the entire profession will be able to agree on moral issues is an open question. It seems hard to believe that the arguments presented by Pellegrino and Thomasma are forceful enough to convince the entire profession that moral issues such as abortion and euthanasia are inappropriate activities for the virtuous physician.

Unarguably, both physicians and patients inject their values into the therapeutic relationship. The honesty and trust Pellegrino and Thomasma believe is crucial to this relationship would be enhanced by physicians making some statement of their basic worldviews. The authors, however, seem to maintain that physicians should be value-neutral. This appears inconsistent with their statement near the end of the volume: 'our contention is that medical faculties must be concerned about the moral values they transmit to their students. Ideally, they would be cognizant of their own moral values and able to discuss these with their patients and their peers.' (p. 181). Therefore, academic physicians should discuss their values with their patients, although non-academic physicians should maintain a value-neutral position (see my articles, 'What is the Relationship Between Physician Values and Physician Value Neutrality: A Christian Perspective', in David Schiedermayer, Nigel Cameron, and John Kilner, eds. *Bioethics and the Future of Medicine: Toward a Christian Agenda*, Paternoster Press, forthcoming, and 'Physician Neutrality and Patient Autonomy in Advanced Directive Decisions', *Issues in Law and Medicine* forthcoming). How Pellegrino and Thomasma plan to reconcile this conflict is not entirely clear, at least to this reader.

The distinction between virtues essential for the person *qua* person—'a broader and more private enterprise' (p. 178)—and those for the physician *qua* physician is also unclear. The authors' position seems to conflict with the notion that, 'ultimately, we must place our trust in the *person* of the physician' [my emphasis] (p. 68). It may be true that a person can be an excellent (in the Aristotelian sense) physician and a morally excellent person (i.e. virtuous), or a not-so-excellent physician but a virtuous person. It is not at all clear, however, that a person can be a non-virtuous person and still be an excellent physician. Perhaps Pellegrino and Thomasma will further explicate what they mean by virtue *qua* person vis-vis virtue *qua* physician in a future work.

The Virtues in Medical Practice is an attempt to define a moral consensus within the medical profession. Why then would we assume, merely for the sake of preserving autonomy, that the correct moral foundation (viz. virtue-principalism) is trumped by the patient's values when values conflict? Often in the literature of medical ethics the patient's responsibility for the values they bring to the patient-physician relationship is conveniently ignored. Pellegrino and Thomasma believe that physicians can refuse to enter or continue a relationship with patients when there is a strong conflict over a moral issue. The authors' rationale is not based, however, on the correctness of the patient's perspective, rather, 'the patient cannot violate the physician's integrity as a person' (p. 131). So it is not virtue but mutual autonomy which constitutes the integrity of a person and a physician. According to the authors, patients 'owe a debt to the community for the lifelong benefits they derive from social relationships. They should also feel some duty to limit their demands for expensive or marginally beneficial treatments and technologies that pose financial burdens on society and families' (p. 68). Do patients also owe a debt to society to be virtuous? I hold that patients have an obligation to be virtuous and that demands for abortion, euthanasia, or the like, do not fall within the virtuous patient's domain. Perhaps an interesting sequel to the present volume would be, *The Virtuous Patient*.

The Virtues in Medical Practice is well worth the price. I would heartily suggest placing this volume at the top of one's 'must read' list. It is with anticipation that I await the authors' promised sequel, *The Christian Virtues in Medicine*. (I would like to thank Avak A. Howsepian and Sandy Lu Peppin for their editorial assistance).

Marshfield, WI JOHN PEPPIN, D.O.

Cleansing the Fatherland: Nazi Medicine and Racial Hygiene
Götz Aly, Peter Chroust, and Christian Pross
Johns Hopkins University Press, Baltimore and London, 1994.
xii + 296 pp.

Of the recent spate of books dealing with the Holocaust and the atrocities committed by the Nazi physicians, *Cleansing the Fatherland* is clearly one of the best and most notable. Sadly, many of the errors of history threaten to repeat themselves in the contemporary assaults on the sanctity of human life. This fact, along with the obvious historical value of the volume, makes *Cleansing the Fatherland* a critically important resource. As Michael Kater (also author of *Doctors Under Hitler,* 1994) says in the forward, this volume is of great interest 'to those who are capable of recognizing not only the historic German crimes but also the potential for similar or parallel occurrences in their own countries' (p. ix).

The introduction by Christian Pross, M.D., medical director of the Berlin Center for the Treatment of Torture Victims, sets the stage nicely for the latter chapters by Aly and Chroust. Pross perceptively argues that, contrary to some recent Holocaust scholarship, oral history is an extraordinarily unreliable source for understanding the minds of the Nazi perpetrators. Specifically, Pross maintains that Robert Jay Lifton's work, chronicled in *The Nazi Doctors: Medical Killing and the Psychology of Genocide* (Basic Books, 1986), is misleading. From his personal interviews with former Nazi doctors, Lifton suggests that physicians in the Third Reich justified their gruesome work through a process called 'doubling'—a sort of intellectual schizophrenia—through which a physician had an 'Auschwitz self' and a humane healer-self (Lifton, pp 419–65). Pross, however, shows that the study of the diaries, letters, and publications of the physician-perpetrators reveals something far more sinister. Says Pross, 'Today the perpetrators are old men who have rehearsed the legends about their lives for decades, with the result that they firmly believe them' (p. 12). The documents of the Nazi doctors reveal, instead, 'small-minded greed for money and privileges, careerism, and a mixture of envy, inflated self-esteem, and contempt for the so-called inferior' (p 13). The volume is worth its cost for this insight alone.

The second chapter, 'Medicine against the Useless', by Götz Ally, examines the infamous 'Operation T-4', the euthanasia campaign against the mentally and physically disabled. 'In July 1943, the T-4 professors and advisers decided to kill psychiatric patients in order to make beds available for victims of Allied bombing raids. When local authorities needed blankets, medical equipment, and beds for the wounded, the mentally ill and infirm were transferred to public asylums, where they were killed in great numbers through overdoses of tranquilizers' (p 25).

Aly's research of the Nazi doctors's personal and public communications is striking. The notion of 'unworthy life' was as pervasive in that literature as it was lethal. Equally lethal was the use of euphemisms to describe medicalized killing. Words such as 'treatment' and 'defense of the Reich' became effective word games to refer to euthanasia. Indeed, there are very interesting parallels in contemporary advocacy of euthanasia. Furthermore, Aly points out that there were notable objectors to Hitler's so-called 'Final Solution'. Heinrich Hermann, for instance, objected to registering residents of the asylum over which he was warden, saying, 'I am simply convinced that the authorities are doing wrong by killing certain patients . . . by exterminating such a patient . . . we are acting against God's will. That is the reason I cannot go along with this. I am sorry, but we must obey God more than human beings. I am prepared to accept the consequences of my disobedience' (p. 34). Sadly, the majority of wardens were accomplices rather than protectors. Operation T-4 moved relatively quickly from targeting persons with disabilities to targeting 'Aliens to the Community.' Thus, the 'unstable', 'emotionally impoverished', 'moody', 'insecure', 'sexually deviant' and 'nonconforming social minorities' became objects of extermination by the Nazi killing machine. Again, this chapter is suffused with entries from physician's diaries, correspondence, and medical records. Though it is not altogether pleasant reading, it is necessary for understanding the morbid dynamic which gave impetus to T-4.

Chapter 3 is the annotated diary of anatomist Hermann Vos. While Vos was noted as an anatomist and co-editor of one of Germany's most impressive journals, *Anatomischer Anzeiger,* he was also a convinced Nazi who 'rejoiced over each Pole shot to death, who bought and sold the skeletons of resistance fighters, who had victims of the guillotine examined seconds after death, and who, out of sheer racial hatred and fear, advocated "retaliatory" massacres . . .' (p. 100). Much of the basic anatomical knowledge possessed by German physicians from 1952 to 1980 came from articles edited or contributed by Vos. Recently, ethicists have re-examined the morality of using information derived from concentration camps, Nazi experimentation, and anatomy studies (see Arthur Caplan, Ted, *When Medicine Went Mad: Bioethics and the Holocaust,* Humana Press, 1992).

That Nazi medicine and psychiatry led both to medical progress and inhumanity is incontrovertible. In the fourth chapter, Götz Aly describes the advances made in psychiatric treatment by Professor Paul Hermann Nitsche and others. Some of Nitsche's reforms in institutional psychiatry are still in place. For instance, Nitsche maintained that, 'Mechanical constraint, an everyday event prior to the destruction of "no-restraint" is inhuman and undignified, brutalizes the spirit of doctors and nursing personnel, and damages patients physically and mentally' (p. 159). At the same time, Aly reminds readers that Nitsche was executed on 25 March 1945 for his leading role in the euthanasia programme. Patients thought to be incurable were killed under the rubric of 'wartime economic measures'. German euthanasia researchers George Friedrich, Julius Dussen, Julius Hallervorden, and others are also treated in this chilling chapter.

The final chapter comprises a collection of letters from Friedrich Wilhelm Heinrich Mennecke. Mennecke was tried in 1946 for the murder of at least 2,500 people through his work as a 'consultant' in psychiatric facilities, concentration camps, and as head of his own pediatrics department. Presented as evidence at his trial were the extant one third of about 8,000 pages of detailed correspondence, mostly to his wife. Portions of many of those letters are reproduced in the chapter, revealing the blatant 'careerism and profit-seeking' that marked Mennecke's participation in the Nazi war crimes. In a letter to his wife, whom he endearingly calls 'Mommy', Mennecke said, 'Your letter hasn't come yet, it won't turn up until tomorrow; instead a registered letter came, a new package (of euthanasia registration forms) from Berlin. It's like this all the time; they always make sure Pa has something to do. God knows, he's not here to laze about; but in exchange Berlin should be sending something too—I mean money!' (p. 257). Mennecke's correspondence is at once warm and intimate toward his wife and calculating and callous toward his victims.

Cleansing the Fatherland is a potent reminder that the Western world has not learned its lessons well. The acceptance of euthanasia in the Netherlands and the growing embrace of assisted-dying in the United States exemplify an astounding blindness to the past. If we are to turn back the barbarians we must commit ourselves to the rich tradition of Christian-Hippocratism, to a refusal to employ euphemisms for medicalized murder, and to educating ourselves about the subtle ways in which mercy may be turned to madness. Aly, Chroust, and Pross have given us a splendid resource for our moral education. Now, we must learn our lessons well.

Knoxville, TN C. BEN MITCHELL

Our Genetic Future: The Science and Ethics of Genetic Technology
British Medical Association
Oxford University Press, Oxford 1992, ISBN 0 19 286156 5

Developments in genetics have in recent years received much justifiable attention both in scientific literature and in the mass media. Progressively researchers announce further insights which they have gained in the understanding of the molecular basis of life. This interest primarily concerns the biomedical field and the developments in the understanding of genetic illness. However, the so-called genetic revolution affects all our lives, whether implicitly or explicitly, with developments in genetics already having immense practical consequences, say, in agriculture, pharmaceuticals and food production. Genetic research presents us with an imperative to consider our objective ethical norms, since such developments not only generate intensive scientific and medical information but aslo have social, ethical and legal implications. Issues such as these are discussed in the present text by the BMA.

The authors give particular consideration to those aspects of genetic research, and the resulting developments in clinical practice, which have implications for human well-being. Concomitant with the scientific and medical developments, the authors deal with the social, ethical and legal implications of recent genetic developments.

A major strength of the book is the manner in which it starts off by explaining the contemporary developments in genetics in a manner very much accessible to the lay person. This part begins with a historical review of the discoveries of Gregor Mendel, working through to Watson and Crick, and concluding with an account of recent techniques in recombinant DNA technology, such as polymerase chain reaction and gene cloning.

The scientific progress that has been made finds considerable application in the wide spectrum of biotechnology, including genetic modification of micro-organisms, plants and animals. To such issues the authors give generous consideration. Micro-organisms have been used especially in the production of pharmaceuticals and vaccines; and the text sheds light on how their use is being expanded by the techniques of genetic modification, ranging from insulin production to the production of yeast that makes bread rise more quickly. Plants can be genetically modified giving crops with a higher yield or pest resistance. Livestock can be improved by inserting advantageous genes, leading to the production of superior milk or meat.

The implications of genetic modification of animals, plants and micro-organisms have the potential to generate substantial benefits for humans. However, the authors are keen to point out that the genetic modification of organisms is not entirely free of risks, warning of unpredictable consequences of releasing genetically modified organisms into the environment—such as the accidental release of weeds. Although benefits from genetic modification are highly desirable, it is necessary to scrutinize carefully such scientific innovations, before realizing their commercial potential. Furthermore, the text gives us warning against placing too many agricultural eggs into few genetic baskets. The authors are prudent in their advice on the importance of maintaining the genetic diversity of commercial species; genetic diversity helps species to survive.

It is in medical genetics that the greatest controversies rage over the benefits and burdens of our new-found genetic knowledge. Sufferers of genetic disease are often seen as a strain on both social and fiscal resources. The authors view a major part of genetic research as being directed towards the removal of such burdens. They see the aim of present developments as leading to easier and earlier diagnosis with a view to preventing the transmission of genetic illness where possible. Prevention by means of prenatal diagnosis, embryo screening and carrier screening is facilitated by the knowledge emanating from genetic research.

Considerable attention is given to the issue of somatic and germ-line gene therapy, with the authors looking forward to the day when effective therapy will replace the need for selective screening. However, the blind pursuit of curing all genetic ills has its own dangers. We do not know why certain genetic traits are maintained within the gene pool; they probably have some advantageous quality, of which we are unaware. For example, carriers of the gene causing sickle-cell anaemia have an inbuilt immunity to malaria. On this cautionary note, the authors stress that genetic diversity is essential to the survival of the human race.

The desire to remove the burdens of genetic illness has been the driving force behind the human genome project. However, the authors provide only a rudimentary account of the scientific background to human genome project. Their discussion of the implications of the human genome project, although informative, gives the impression of having been tacked on as an afterthought not fully integrated with the other reflections on the implications of genetic research. This is a short-coming in a work aiming to provide a complete picture of human genetics.

Visions of a system of health-care increasingly influenced by genetic information leads the authors to consider issues such as confidentiality and pricacy. It is argued that increased information about a patient's genetic constitution is helpful in medical assessments. However, without proper legislation and guidelines, such information could easily be abused by employers and insurers. Employers and insurers have been quick to recognize the potential of genetic screening as a means of protecting their own interests by avoiding people with undesirable genetic traits—a trend that is already leading to a class of people who are uninsurable and unemployable. The authors highlight the fact that the social consequences of genetic information are far-reaching, leading to abuses, including stigmatization of individuals, coercion and invasion of privacy. In view of our recent history, they condemn the use of genetics to produce a master race, with such abominations disguised as scientific progress.

In the rapidly developing field of genetics, it seems as if the ethical considerations have yet to catch up with the shirt-tails of the scientific developments. And if legislation has been slow to respond to the challenge of the new genetics, commercial interests centred on patents and profits most certainly have not. While the text successfully considers the science and its implications for human living, the ethical reflection is at times a rather poor second cousin.

There are, indeed, dangers in large scientific developments, if the scientific achievement itself becomes the sole aim with a view to the issues of ownership and patenting of genetic knowledge. In such a situation the importance of justice becomes diminished or ignored. There is nothing ethically wrong with genetic developments per se; it is their applications that create dilemmas. Clearly, genetic research aiming towards improving the condition of mankind, while at the same time respecting the innate dignity of every human being, is ipso facto good. This, the authors do, however, fail explicitly to acknowledge.

For example, they take the via media, holding that the debate on the moral status of the human embryo remains disputed. On such an emotive issue, a morally neutral stand-point may seem plausible. Yet, in the discussion of pre-implantation screening, there is a failure even to hint at the existence of an ethical dilemma.

The acquisition of knowledge in genetics is certainly occurring at a tremendous pace; and the authors indicate that this constituted a major difficulty during the writing of this book.

And three years after its publication, the book is in some respects out of date. Nevertheless, it does have a contribution to make to the current reflection on the genetic developments of our day. The authors do fail to have explicit recourse to an objective morality; however, their implicit theme is that genetic developments must be at the service of the human person; if they are not, then science has failed in its raison d'étre. The text at no stage falls into the emotivism and hysteria that frequently surrounds discussion of genetic developments. Rather, it provides the reader, lay, scientist or ethicist, with some clear guidance about the best way forward regarding our genetic future.

St Patrick's College, Maynooth, Co. Kildare PATRICK J O'ROURKE

Ethical Issues in Nursing
Edited by Geoffrey Hunt
Routledge, London and New York, 1994, ISBN 0-415 08145 9 (pbk)

This collection of papers centres on the specific difficulties and ethical dilemmas arising for nurses. The practice of nursing, one of caring, not curing, is examined in different contexts. What seems to be a common thread—and what strikes one most—is a certain frustration felt by so many nurses. As the editor of the book, Geoffrey Hunt, points out in the introduction, it would seem that nurses often feel uneasy 'about a lack of freedom to care for patients and clients as they feel is decent, as they feel they themselves would like to be cared for or have their loved ones cared for'. The reason for this, Hunt suggests, might be found in 'the way in which doctors think about and "approach" people in care' and 'the domination of nursing by a metaphysics of procedure', with the nurse being seen as an 'obedient technical assistant, as a subordinate element in a command structure'.

Hunt's point about procedures is exemplified in Deborah Taplin's chapter, showing that obtaining a patient's consent to medical treatment is only too often no more than a mechanical procedure of obtaining a signature on a consent form—a signature which in no way guarantees that the patient knows what is going on. An example of certain realities which complicate decent nursing care is provided in Paul Wainwright's paper on privacy and the intimate aspects of care in the presence of non-participant observers, such as student nurses and medical students. The difficulty of providing good care is also highlighted by Linda Smith, who argues that in some ways institutional health care promotes a paternalistic and even bossy attitude among nurses, which renders the elderly patient more rather than less dependent and helpless. The question of patients' loss of control is further discussed in Julie Fenton's contribution on artificial feeding. According to Fenton, the technologization of care tends to leave the nurses with less scope for decision making in an area which used to be above all theirs and where they may be better placed to make the decisions than the medical profession.

The tensions between nursing and medicine are even more evident in Ann Kennedy's paper on HIV testing of pregnant women without their knowledge. While nursing always is personalized, medicine has social aims as well aims relating to cure of the individual patent. Kennedy's paper raises questions not only about patients' rights with respect to informed consent and confidentiality but also about the role of nurses as the patients' advocates. Maddie Blackburn shows that another area where nurses may play a special role alongside the medical profession—but in a less technical and medicalized way—is clinical research. This area used to be reserved for the medical profession, but increasingly, due to an enhanced awareness of themselves as professionals in their own right, nurses too undertake clinical investigations.

If nursing is a profession, it remains nevertheless true that nurses are accountable for their actions 'vertically' within the health-care hierarchy in a way that members of the medical profession are not. And, at the same time, like the members of the medical profession, they have a moral responsibility to the individual patient, are accountable 'horizontally' vis-a-vis their own colleagues and share a corporate responsibility as members of a profession. But, as Hunt shows in the central chapter, the 'upward' responsibility of nurses is not always easily reconciled with their 'downward' responsibility to their patients. Nor, he argues, could legislation alone alter this situation; what is required is rather a change of attitude and culture, rendering the managers accountable to the patient and the public. Only so, could the 'upward' and 'downward' responsibilities of nurses be harmonized.

The professional status and responsibility of nurses is further discussed both in Andrew Edgar's paper on professional codes and in Ann Young's chapter on the law and the nurses' code of conduct. Linda Hanford examines the nature of caring and the caring relationship, with particular attention to the difficulty of caring for someone for whom one would not care outside the nursing context.

Ann MacLean raises the question of whether a doctor's decision to perform euthanasia would or would not be a medical decision; she does so in the light of discussion about the concept of medical judgement and makes the point that there is no such thing as a value-free medical judgement. While it is a pleasure to read because of its elegance, this chapter seems out of place in the present volume.

The book closes with a discussion of nursing time as a scarce health-care resource, a problem with which nurses are only too familiar today, especially in our hospitals.

This voulme presents no theory of nursing; it is no handbook for nurses on how-to-act. But anyone who is interested in the nursing approach to health care will find it most illuminating.

London AGNETA SUTTON

Pursuing Parenthood: Ethical Issues in Assisted Reproduction
Paul Lauritzen
Indiana University Press, 1993, ISBN 0 253 33261 3

The aim of this book is to bring together Lauritzen's personal experience of the field of assisted reproduction and the wealth of literature on the moral but theoretical implications of such techniques.

In the Introduction, he sets out his own personal reasons for embarking on the study. He and his wife, on discovering that they were unable to have children, entered into the world of assisted reproduction, hitherto unknown to them. The options available to them were outlined by their physicians, but they were never informed of the moral questions underlying the various techniques.

He admits that they found it immensely difficult to avoid the goal-based mentality of the physicians which tempted them to view effectiveness in accomplishing their goal as the sole criterion on which to base a decision. However, he believes that anyone facing such a decision should consider not only the goal but also questions of ethics and of parenthood.

Part I, Chapter 1 begins with a discussion of the least controversial and least invasive of the treatments, namely Artificial Insemination with the Husband's sperm (AIH). First, Lauritzen provides an excellent synopsis of the responses of the Catholic Church. Their fundamental condemnation of AIH

stems from the view that a person is a union of body and soul and that to use artificial insemination is to treat the person as soul only or body only, which is contrary to the created order. AIH therefore reduces procreation to a mechanistic enterprise which does not take into account spiritual union. It neglects the embodied character of human love and is intrinsically wrong.

Lauritzen then goes on to imply that the Catholic response is based on a fear of the consequences that AIH will lead to the treatment of people as mere objects of scientific technology, as commodities. To expand on these tangible concerns, he gives a brilliant summary of some classic feminist arguments. Feminist writers submit that a child could have three 'mothers'—genetic, gestational and social. The family as it is known could become shattered, women would be treated as products and children as goods to be bought and sold, of which the buyer is entitled to demand certain standards. This is a world of reproductive prostitution, in which genetic screening is a type of quality control mechanism and in which women are subject to objectification and coercion.

The way in which Lauritzen links these two streams of thought is fascinating and the feminist response is expounded beautifully, but his theory is arguably misplaced. The Catholic tradition is surely based on the integrity of the soul and body, embodied love and the Christian view of marriage: fear of the consequences of AIH are not the force behind the tradition. Therefore, when Lauritzen proceeds to reject this view, his arguments are somewhat lacking in substance and do not address the Vatican's true claims.

In Part I, Chapter 2, Lauritzen considers the case of In Vitro Fertilization and outlines the concern that IVF is a coercive offer. He argues from the position of one who has faced such a 'choice' that the option of IVF is in fact no choice at all. The fact that many women opt for IVF is not to say that they had freedom of choice, since to refuse IVF is to take on responsibility for one's childlessness, and in the eyes of society this is unacceptable. In being given a choice, the option is lost.

He then contends that this issue alone should not be sufficient to oppose IVF on moral grounds, but rather that we should be aware of the dangers of coercion and guard against them. With such safeguards in place, he believes that IVF is a morally acceptable technique. However, it is submitted that while it may be true that IVF is a coercive offer, it is questionable whether this is ever the basis of a sound argument to IVF. Surely a more fundamental objection is that within the Christian doctrine of the sanctity of life and of personhood. For many this is the crux of the matter and it is a weakness of the book that Lauritzen fails to address it.

Lauritzen then considers techniques such as screening for genetically defective embryos, embryo research and cryopreservation. He concedes that such technology may ultimately lead to embryos being valued in economic terms, leading to pressure to provide 'perfect' children. For this reason, he concludes that IVF may not *always* be morally acceptable.

Regrettably, he does not analyze these techniques coherently, but embarks upon a detailed discussion about the moral and legal implications of the freezing of embryos. His arguments here are not as lucid as elsewhere in the book and do not reach a satisfactory conclusion. It is inevitable that some complicated issues will have to be stated very simply, but it is a shame that he concentrates on this detailed analysis of cryopreservation, while merely skirting over essentials concerning the morality of IVF, particularly those relevant to the Christian faith, such as superovulation, research and the resultant destruction of spare embryos.

In Part II, Lauritzen shifts his emphasis to a discussion of parenthood. He suggests that critics of assisted reproduction frequently base their objections on the fact that genetic parenthood is the sole basis for parenthood. In contrast, he believes that parenthood is in fact constituted in relationship and responsible social parenting. He therefore rejects the claim that to separate genetic, gestational and social parenthood weakens the bonds of the family, but stresses that a child can be the embodiment of a couple's love without genetic ties, since the social parents who have taken upon themselves the ongoing emotional relationship become the true parents.

From this premise, he considers Artificial Insemination by a Donor (AID), and concludes that it is morally acceptable since the social parents become the true parents. This view is well expounded, but is weakened by the fact that he does not fully address the concern that AID fundamentally challenges the equilibrium of the family. The only problems he discusses are secrecy between the parents and child and asymmetry between the mother's relation to the child as compared with the father's.

He claims that the problem of asymmetry is not a true problem, since the standard by which to judge the morality of AID is responsible parenting, and the fact that the mother is the social and genetic parent and the father is only the social parent does not have to impede this goal. As regards secrecy, however, he stresses that this cannot be morally justified, since to keep a secret from the child is to build the parent-child relationship upon the foundation of deception. Responsible parenting cannot be the fruit of such a relationship. His arguments are well presented and sympathetic, but he seems to believe, perhaps a little naively, that honesty about the origins of the child will dispel any psychological problems that secrecy would create. Whether this is the case in practice poses an interesting question.

In Part III, Lauritzen asks the question that is on the minds of many, namely, why consider assisted reproduction when there is the alternative of adoption. He asks whether adoption really is morally unproblematic and he answers with a resounding 'no'.

First, he expounds the prevalent view that adoption facilitates the interests of all the parties, but then claims that in reality it does not. The system in fact takes advantage of the vulnerable to satisfy the demands of the powerful. For the reality of adoption practice is that there are numerous private profit-making agencies, which rarely employ trained social workers and in which prospective parents are not screened. Their policies are driven by the demands of the infertile rather than the welfare of the child, which, at its worst, involves the redistribution of children from the poor to the middle classes.

Lauritzen alleges that there are therefore the same concerns and potential dangers with adoption as there are with assisted reproduction. Curiously though, he does not attempt to overcome these concerns in the same way as he did in the latter case. For example, with the case of IVF, he acknowledged the dangers but merely said that they should serve as a salutary warning against which to safeguard. It is unclear why he is not willing to make the same assertion for adoption.

The book as a whole is very readable and the concept of responsible parenting as the overriding criterion sheds a fresh perspective on this already well documented subject. Lauritzen has an excellent grasp of certain issues, such as the feminist arguments on parenthood, and these he expounds beautifully. However, his views do not always seem tenable, particularly as he chooses to address selective issues to substantiate his personal beliefs. He therefore fails to address issues which, for many, are at the core of the moral dilemmas. The book is also perhaps weakened by what some will consider to be insufficient reference to Christian doctrine and thought. It seems that Lauritzen's personal experience and his overriding criterion of responsible parenting have so influenced him that his stated aim to bring together the theoretical and the practical cannot fully succeed.

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