CHAPTER THREE

THE HUMAN ROOTS OF THE ECOLOGICAL CRISIS

101. It would hardly be helpful to describe symptoms without acknowledging the human origins of the ecological crisis. A certain way of understanding human life and activity has gone awry, to the serious detriment of the world around us. Should we not pause and consider this? At this stage, I propose that we focus on the dominant technocratic paradigm and the place of human beings and of human action in the world.

I. TECHNOLOGY: CREATIVITY AND POWER

102. Humanity has entered a new era in which our technical prowess has brought us to a crossroads. We are the beneficiaries of two centuries of enormous waves of change: steam engines, railways, the telegraph, electricity, automobiles, aeroplanes, chemical industries, modern medicine, information technology and, more recently, the digital revolution, robotics, biotechnologies and nanotechnologies. It is right to rejoice in these advances and to be excited by the immense possibilities which they continue to open up before us, for "science and technology are wonderful products of a God-given human creativity".[81] The modification of nature for useful purposes has distinguished the human family from the beginning; technology itself "expresses the inner tension that impels man gradually to overcome material limitations". Technology has remedied countless evils which used to harm and limit human beings. How can we not feel gratitude and appreciation for this progress, especially in the fields of medicine, engineering and communications? How could we not acknowledge the work of many scientists and engineers who have provided alternatives to make development sustainable?

103. Technoscience, when well directed, can produce important means of improving the quality of human life, from useful domestic appliances to great transportation systems, bridges, buildings and public spaces. It can also produce art and enable men and women immersed in the material world to "leap" into the world of beauty. Who can deny the beauty of an aircraft or a skyscraper? Valuable works of art and music now make use of new technologies. So, in the beauty intended by the one who uses new technical instruments and in the contemplation of such beauty, a quantum leap occurs, resulting in a fulfilment which is uniquely human.

104. Yet it must also be recognized that nuclear energy, biotechnology, information technology, knowledge of our DNA, and many other abilities which we have acquired, have given us tremendous power. More precisely, they have given those with the knowledge, and especially the economic resources to use them, an impressive dominance over the whole of humanity and the entire world. Never has humanity had such power over itself, yet nothing ensures that it will be used wisely, particularly when we consider how it is currently being used. We need but think of the nuclear bombs dropped in the middle of the twentieth century, or the array of technology which Nazism, Communism and other totalitarian regimes have employed to kill millions of people, to say nothing of the increasingly deadly arsenal of weapons available for modern warfare. In whose hands does all this power lie, or will it eventually end up? It is extremely risky for a small part of humanity to have it.

105. There is a tendency to believe that every increase in power means "an increase of 'progress' itself", an advance in "security, usefulness, welfare and vigour; …an assimilation of new values into the stream of culture",[83] as if reality, goodness and truth automatically flow from technological and economic power as such. The fact is that "contemporary man has not been trained to use power well",[84] because our immense technological development has not been

accompanied by a development in human responsibility, values and conscience. Each age tends to have only a meagre awareness of its own limitations. It is possible that we do not grasp the gravity of the challenges now before us. "The risk is growing day by day that man will not use his power as he should"; in effect, "power is never considered in terms of the responsibility of choice which is inherent in freedom" since its "only norms are taken from alleged necessity, from either utility or security".[85] But human beings are not completely autonomous. Our freedom fades when it is handed over to the blind forces of the unconscious, of immediate needs, of self-interest, and of violence. In this sense, we stand naked and exposed in the face of our ever-increasing power, lacking the wherewithal to control it. We have certain superficial mechanisms, but we cannot claim to have a sound ethics, a culture and spirituality genuinely capable of setting limits and teaching clear-minded self-restraint.

II. THE GLOBALIZATION OF THE TECHNOCRATIC PARADIGM

106. The basic problem goes even deeper: it is the way that humanity has taken up technology and its development according to an undifferentiated and one-dimensional paradigm. This paradigm exalts the concept of a subject who, using logical and rational procedures, progressively approaches and gains control over an external object. This subject makes every effort to establish the scientific and experimental method, which in itself is already a technique of possession, mastery and transformation. It is as if the subject were to find itself in the presence of something formless, completely open to manipulation. Men and women have constantly intervened in nature, but for a long time this meant being in tune with and respecting the possibilities offered by the things themselves. It was a matter of receiving what nature itself allowed, as if from its own hand. Now, by contrast, we are the ones to lay our hands on things, attempting to extract everything possible from them while frequently ignoring or forgetting the reality in front of us. Human beings and material objects no longer extend a friendly hand to one another; the relationship has become confrontational. This has made it easy to accept the idea of infinite or unlimited growth, which proves so attractive to economists, financiers and experts in technology. It is based on the lie that there is an infinite supply of the earth's goods, and this leads to the planet being squeezed dry beyond every limit. It is the false notion that "an infinite quantity of energy and resources are available, that it is possible to renew them quickly, and that the negative effects of the exploitation of the natural order can be easily absorbed".[86]

107. It can be said that many problems of today's world stem from the tendency, at times unconscious, to make the method and aims of science and technology an epistemological paradigm which shapes the lives of individuals and the workings of society. The effects of imposing this model on reality as a whole, human and social, are seen in the deterioration of the environment, but this is just one sign of a reductionism which affects every aspect of human and social life. We have to accept that technological products are not neutral, for they create a framework which ends up conditioning lifestyles and shaping social possibilities along the lines dictated by the interests of certain powerful groups. Decisions which may seem purely instrumental are in reality decisions about the kind of society we want to build.

108. The idea of promoting a different cultural paradigm and employing technology as a mere instrument is nowadays inconceivable. The technological paradigm has become so dominant that it would be difficult to do without its resources and even more difficult to utilize them without being dominated by their internal logic. It has become countercultural to choose a lifestyle whose goals are even partly independent of technology, of its costs and its power to globalize and make us all the same. Technology tends to absorb everything into its ironclad logic, and those who are

surrounded with technology "know full well that it moves forward in the final analysis neither for profit nor for the well-being of the human race", that "in the most radical sense of the term power is its motive – a lordship over all".[87] As a result, "man seizes hold of the naked elements of both nature and human nature".[88] Our capacity to make decisions, a more genuine freedom and the space for each one's alternative creativity are diminished.

109. The technocratic paradigm also tends to dominate economic and political life. The economy accepts every advance in technology with a view to profit, without concern for its potentially negative impact on human beings. Finance overwhelms the real economy. The lessons of the global financial crisis have not been assimilated, and we are learning all too slowly the lessons of environmental deterioration. Some circles maintain that current economics and technology will solve all environmental problems, and argue, in popular and non-technical terms, that the problems of global hunger and poverty will be resolved simply by market growth. They are less concerned with certain economic theories which today scarcely anybody dares defend, than with their actual operation in the functioning of the economy. They may not affirm such theories with words, but nonetheless support them with their deeds by showing no interest in more balanced levels of production, a better distribution of wealth, concern for the environment and the rights of future generations. Their behaviour shows that for them maximizing profits is enough. Yet by itself the market cannot guarantee integral human development and social inclusion.[89] At the same time, we have "a sort of 'superdevelopment' of a wasteful and consumerist kind which forms an unacceptable contrast with the ongoing situations of dehumanizing deprivation",[90] while we are all too slow in developing economic institutions and social initiatives which can give the poor regular access to basic resources. We fail to see the deepest roots of our present failures, which have to do with the direction, goals, meaning and social implications of technological and economic growth.

110. The specialization which belongs to technology makes it difficult to see the larger picture. The fragmentation of knowledge proves helpful for concrete applications, and yet it often leads to a loss of appreciation for the whole, for the relationships between things, and for the broader horizon, which then becomes irrelevant. This very fact makes it hard to find adequate ways of solving the more complex problems of today's world, particularly those regarding the environment and the poor; these problems cannot be dealt with from a single perspective or from a single set of interests. A science which would offer solutions to the great issues would necessarily have to take into account the data generated by other fields of knowledge, including philosophy and social ethics; but this is a difficult habit to acquire today. Nor are there genuine ethical horizons to which one can appeal. Life gradually becomes a surrender to situations conditioned by technology, itself viewed as the principal key to the meaning of existence. In the concrete situation confronting us, there are a number of symptoms which point to what is wrong, such as environmental degradation, anxiety, a loss of the purpose of life and of community living. Once more we see that "realities are more important than ideas".[91]

111. Ecological culture cannot be reduced to a series of urgent and partial responses to the immediate problems of pollution, environmental decay and the depletion of natural resources. There needs to be a distinctive way of looking at things, a way of thinking, policies, an educational programme, a lifestyle and a spirituality which together generate resistance to the assault of the technocratic paradigm. Otherwise, even the best ecological initiatives can find themselves caught up in the same globalized logic. To seek only a technical remedy to each environmental problem which comes up is to separate what is in reality interconnected and to mask the true and deepest problems of the global system.

112. Yet we can once more broaden our vision. We have the freedom needed to limit and direct technology; we can put it at the service of another type of progress, one which is healthier, more human, more social, more integral. Liberation from the dominant technocratic paradigm does in fact happen sometimes, for example, when cooperatives of small producers adopt less polluting means of production, and opt for a non-consumerist model of life, recreation and community. Or when technology is directed primarily to resolving people's concrete problems, truly helping them live with more dignity and less suffering. Or indeed when the desire to create and contemplate beauty manages to overcome reductionism through a kind of salvation which occurs in beauty and in those who behold it. An authentic humanity, calling for a new synthesis, seems to dwell in the midst of our technological culture, almost unnoticed, like a mist seeping gently beneath a closed door. Will the promise last, in spite of everything, with all that is authentic rising up in stubborn resistance?

113. There is also the fact that people no longer seem to believe in a happy future; they no longer have blind trust in a better tomorrow based on the present state of the world and our technical abilities. There is a growing awareness that scientific and technological progress cannot be equated with the progress of humanity and history, a growing sense that the way to a better future 33 lies elsewhere. This is not to reject the possibilities which technology continues to offer us. But humanity has changed profoundly, and the accumulation of constant novelties exalts a superficiality which pulls us in one direction. It becomes difficult to pause and recover depth in life. If architecture reflects the spirit of an age, our megastructures and drab apartment blocks express the spirit of globalized technology, where a constant flood of new products coexists with a tedious monotony. Let us refuse to resign ourselves to this, and continue to wonder about the purpose and meaning of everything. Otherwise we would simply legitimate the present situation and need new forms of escapism to help us endure the emptiness.

114. All of this shows the urgent need for us to move forward in a bold cultural revolution. Science and technology are not neutral; from the beginning to the end of a process, various intentions and possibilities are in play and can take on distinct shapes. Nobody is suggesting a return to the Stone Age, but we do need to slow down and look at reality in a different way, to appropriate the positive and sustainable progress which has been made, but also to recover the values and the great goals swept away by our unrestrained delusions of grandeur.

III. THE CRISIS AND EFFECTS OF MODERN ANTHROPOCENTRISM

115. Modern anthropocentrism has paradoxically ended up prizing technical thought over reality, since "the technological mind sees nature as an insensate order, as a cold body of facts, as a mere 'given', as an object of utility, as raw material to be hammered into useful shape; it views the cosmos similarly as a mere 'space' into which objects can be thrown with complete indifference".[92] The intrinsic dignity of the world is thus compromised. When human beings fail to find their true place in this world, they misunderstand themselves and end up acting against themselves: "Not only has God given the earth to man, who must use it with respect for the original good purpose for which it was given, but, man too is God's gift to man. He must therefore respect the natural and moral structure with which he has been endowed".[93]

116. Modernity has been marked by an excessive anthropocentrism which today, under another guise, continues to stand in the way of shared understanding and of any effort to strengthen social bonds. The time has come to pay renewed attention to reality and the limits it imposes; this in turn is the condition for a more sound and fruitful development of individuals and society. An inadequate presentation of Christian anthropology gave rise to a wrong

understanding of the relationship between human beings and the world. Often, what was handed on was a Promethean vision of mastery over the world, which gave the impression that the protection of nature was something that only the faint-hearted cared about. Instead, our "dominion" over the universe should be understood more properly in the sense of responsible stewardship.[94]

117. Neglecting to monitor the harm done to nature and the environmental impact of our decisions is only the most striking sign of a disregard for the message contained in the structures of nature itself. When we fail to acknowledge as part of reality the worth of a poor person, a human embryo, 34 a person with disabilities – to offer just a few examples – it becomes difficult to hear the cry of nature itself; everything is connected. Once the human being declares independence from reality and behaves with absolute dominion, the very foundations of our life begin to crumble, for "instead of carrying out his role as a cooperator with God in the work of creation, man sets himself up in place of God and thus ends up provoking a rebellion on the part of nature".[95]

118. This situation has led to a constant schizophrenia, wherein a technocracy which sees no intrinsic value in lesser beings coexists with the other extreme, which sees no special value in human beings. But one cannot prescind from humanity. There can be no renewal of our relationship with nature without a renewal of humanity itself. There can be no ecology without an adequate anthropology. When the human person is considered as simply one being among others, the product of chance or physical determinism, then "our overall sense of responsibility wanes".[96] A misguided anthropocentrism need not necessarily yield to "biocentrism", for that would entail adding yet another imbalance, failing to solve present problems and adding new ones. Human beings cannot be expected to feel responsibility for the world unless, at the same time, their unique capacities of knowledge, will, freedom and responsibility are recognized and valued.

119. Nor must the critique of a misguided anthropocentrism underestimate the importance of interpersonal relations. If the present ecological crisis is one small sign of the ethical, cultural and spiritual crisis of modernity, we cannot presume to heal our relationship with nature and the environment without healing all fundamental human relationships. Christian thought sees human beings as possessing a particular dignity above other creatures; it thus inculcates esteem for each person and respect for others. Our openness to others, each of whom is a "thou" capable of knowing, loving and entering into dialogue, remains the source of our nobility as human persons. A correct relationship with the created world demands that we not weaken this social dimension of openness to others, much less the transcendent dimension of our openness to the "Thou" of God. Our relationship with the environment can never be isolated from our relationship with others and with God. Otherwise, it would be nothing more than romantic individualism dressed up in ecological garb, locking us into a stifling immanence.

120. Since everything is interrelated, concern for the protection of nature is also incompatible with the justification of abortion. How can we genuinely teach the importance of concern for other vulnerable beings, however troublesome or inconvenient they may be, if we fail to protect a human embryo, even when its presence is uncomfortable and creates difficulties? "If personal and social sensitivity towards the acceptance of the new life is lost, then other forms of acceptance that are valuable for society also wither away".[97]

121. We need to develop a new synthesis capable of overcoming the false arguments of recent centuries. Christianity, in fidelity to its own identity and the rich deposit of truth which it has

received from Jesus Christ, continues to reflect on these issues in fruitful dialogue with changing 35 historical situations. In doing so, it reveals its eternal newness.[98] Practical relativism

122. A misguided anthropocentrism leads to a misguided lifestyle. In the Apostolic Exhortation Evangelii Gaudium, I noted that the practical relativism typical of our age is "even more dangerous than doctrinal relativism".[99] When human beings place themselves at the centre, they give absolute priority to immediate convenience and all else becomes relative. Hence we should not be surprised to find, in conjunction with the omnipresent technocratic paradigm and the cult of unlimited human power, the rise of a relativism which sees everything as irrelevant unless it serves one's own immediate interests. There is a logic in all this whereby different attitudes can feed on one another, leading to environmental degradation and social decay.

123. The culture of relativism is the same disorder which drives one person to take advantage of another, to treat others as mere objects, imposing forced labour on them or enslaving them to pay their debts. The same kind of thinking leads to the sexual exploitation of children and abandonment of the elderly who no longer serve our interests. It is also the mindset of those who say: Let us allow the invisible forces of the market to regulate the economy, and consider their impact on society and nature as collateral damage. In the absence of objective truths or sound principles other than the satisfaction of our own desires and immediate needs, what limits can be placed on human trafficking, organized crime, the drug trade, commerce in blood diamonds and the fur of endangered species? Is it not the same relativistic logic which justifies buying the organs of the poor for resale or use in experimentation, or eliminating children because they are not what their parents wanted? This same "use and throw away" logic generates so much waste, because of the disordered desire to consume more than what is really necessary. We should not think that political efforts or the force of law will be sufficient to prevent actions which affect the environment because, when the culture itself is corrupt and objective truth and universally valid principles are no longer upheld, then laws can only be seen as arbitrary impositions or obstacles to be avoided.

The need to protect employment

124. Any approach to an integral ecology, which by definition does not exclude human beings, needs to take account of the value of labour, as Saint John Paul II wisely noted in his Encyclical Laborem Exercens. According to the biblical account of creation, God placed man and woman in the garden he had created (cf. Gen 2:15) not only to preserve it ("keep") but also to make it fruitful ("till"). Labourers and craftsmen thus "maintain the fabric of the world" (Sir 38:34). Developing the created world in a prudent way is the best way of caring for it, as this means that we ourselves become the instrument used by God to bring out the potential which he himself inscribed in things: "The Lord created medicines out of the earth, and a sensible man will not despise them" (Sir 38:4).

125. If we reflect on the proper relationship between human beings and the world around us, we 36 see the need for a correct understanding of work; if we talk about the relationship between human beings and things, the question arises as to the meaning and purpose of all human activity. This has to do not only with manual or agricultural labour but with any activity involving a modification of existing reality, from producing a social report to the design of a technological development. Underlying every form of work is a concept of the relationship which we can and must have with what is other than ourselves. Together with the awe-filled contemplation of creation which we find in Saint Francis of Assisi, the Christian spiritual tradition has also

developed a rich and balanced understanding of the meaning of work, as, for example, in the life of Blessed Charles de Foucauld and his followers.

126. We can also look to the great tradition of monasticism. Originally, it was a kind of flight from the world, an escape from the decadence of the cities. The monks sought the desert, convinced that it was the best place for encountering the presence of God. Later, Saint Benedict of Norcia proposed that his monks live in community, combining prayer and spiritual reading with manual labour (ora et labora). Seeing manual labour as spiritually meaningful proved revolutionary. Personal growth and sanctification came to be sought in the interplay of recollection and work. This way of experiencing work makes us more protective and respectful of the environment; it imbues our relationship to the world with a healthy sobriety.

127. We are convinced that "man is the source, the focus and the aim of all economic and social life".[100] Nonetheless, once our human capacity for contemplation and reverence is impaired, it becomes easy for the meaning of work to be misunderstood.[101] We need to remember that men and women have "the capacity to improve their lot, to further their moral growth and to develop their spiritual endowments".[102] Work should be the setting for this rich personal growth, where many aspects of life enter into play: creativity, planning for the future, developing our talents, living out our values, relating to others, giving glory to God. It follows that, in the reality of today's global society, it is essential that "we continue to prioritize the goal of access to steady employment for everyone",[103] no matter the limited interests of business and dubious economic reasoning.

128. We were created with a vocation to work. The goal should not be that technological progress increasingly replace human work, for this would be detrimental to humanity. Work is a necessity, part of the meaning of life on this earth, a path to growth, human development and personal fulfilment. Helping the poor financially must always be a provisional solution in the face of pressing needs. The broader objective should always be to allow them a dignified life through work. Yet the orientation of the economy has favoured a kind of technological progress in which the costs of production are reduced by laying off workers and replacing them with machines. This is yet another way in which we can end up working against ourselves. The loss of jobs also has a negative impact on the economy "through the progressive erosion of social capital: the network of relationships of trust, dependability, and respect for rules, all of which are indispensable for any form of civil coexistence".[104] In other words, "human costs always include economic costs, and economic dysfunctions always involve human costs".[105] To stop investing in people, in order to 37 gain greater short-term financial gain, is bad business for society.

129. In order to continue providing employment, it is imperative to promote an economy which favours productive diversity and business creativity. For example, there is a great variety of smallscale food production systems which feed the greater part of the world's peoples, using a modest amount of land and producing less waste, be it in small agricultural parcels, in orchards and gardens, hunting and wild harvesting or local fishing. Economies of scale, especially in the agricultural sector, end up forcing smallholders to sell their land or to abandon their traditional crops. Their attempts to move to other, more diversified, means of production prove fruitless because of the difficulty of linkage with regional and global markets, or because the infrastructure for sales and transport is geared to larger businesses. Civil authorities have the right and duty to adopt clear and firm measures in support of small producers and differentiated production. To ensure economic freedom from which all can effectively benefit, restraints

occasionally have to be imposed on those possessing greater resources and financial power. To claim economic freedom while real conditions bar many people from actual access to it, and while possibilities for employment continue to shrink, is to practise a doublespeak which brings politics into disrepute. Business is a noble vocation, directed to producing wealth and improving our world. It can be a fruitful source of prosperity for the areas in which it operates, especially if it sees the creation of jobs as an essential part of its service to the common good. New biological technologies

130. In the philosophical and theological vision of the human being and of creation which I have presented, it is clear that the human person, endowed with reason and knowledge, is not an external factor to be excluded. While human intervention on plants and animals is permissible when it pertains to the necessities of human life, the Catechism of the Catholic Church teaches that experimentation on animals is morally acceptable only "if it remains within reasonable limits [and] contributes to caring for or saving human lives".[106] The Catechism firmly states that human power has limits and that "it is contrary to human dignity to cause animals to suffer or die needlessly".[107] All such use and experimentation "requires a religious respect for the integrity of creation".[108]

131. Here I would recall the balanced position of Saint John Paul II, who stressed the benefits of scientific and technological progress as evidence of "the nobility of the human vocation to participate responsibly in God's creative action", while also noting that "we cannot interfere in one area of the ecosystem without paying due attention to the consequences of such interference in other areas".[109] He made it clear that the Church values the benefits which result "from the study and applications of molecular biology, supplemented by other disciplines such as genetics, and its technological application in agriculture and industry".[110] But he also pointed out that this should not lead to "indiscriminate genetic manipulation"[111] which ignores the negative effects of such interventions. Human creativity cannot be suppressed. If an artist cannot be stopped from using his or her creativity, neither should those who possess particular gifts for the advancement of science and technology be prevented from using their God-given talents for the service of others. We need constantly to rethink the goals, effects, overall context and ethical limits of this human activity, which is a form of power involving considerable risks.

132. This, then, is the correct framework for any reflection concerning human intervention on plants and animals, which at present includes genetic manipulation by biotechnology for the sake of exploiting the potential present in material reality. The respect owed by faith to reason calls for close attention to what the biological sciences, through research uninfluenced by economic interests, can teach us about biological structures, their possibilities and their mutations. Any legitimate intervention will act on nature only in order "to favour its development in its own line, that of creation, as intended by God".[112]

133. It is difficult to make a general judgement about genetic modification (GM), whether vegetable or animal, medical or agricultural, since these vary greatly among themselves and call for specific considerations. The risks involved are not always due to the techniques used, but rather to their improper or excessive application. Genetic mutations, in fact, have often been, and continue to be, caused by nature itself. Nor are mutations caused by human intervention a modern phenomenon. The domestication of animals, the crossbreeding of species and other older and universally accepted practices can be mentioned as examples. We need but recall that scientific developments in GM cereals began with the observation of natural bacteria which spontaneously modified plant genomes. In nature, however, this process is slow and cannot be

compared to the fast pace induced by contemporary technological advances, even when the latter build upon several centuries of scientific progress.

134. Although no conclusive proof exists that GM cereals may be harmful to human beings, and in some regions their use has brought about economic growth which has helped to resolve problems, there remain a number of significant difficulties which should not be underestimated. In many places, following the introduction of these crops, productive land is concentrated in the hands of a few owners due to "the progressive disappearance of small producers, who, as a consequence of the loss of the exploited lands, are obliged to withdraw from direct production".[113] The most vulnerable of these become temporary labourers, and many rural workers end up moving to poverty-stricken urban areas. The expansion of these crops has the effect of destroying the complex network of ecosystems, diminishing the diversity of production and affecting regional economies, now and in the future. In various countries, we see an expansion of oligopolies for the production of cereals and other products needed for their cultivation. This dependency would be aggravated were the production of infertile seeds to be considered; the effect would be to force farmers to purchase them from larger producers.

135. Certainly, these issues require constant attention and a concern for their ethical implications. A broad, responsible scientific and social debate needs to take place, one capable of considering all the available information and of calling things by their name. It sometimes happens that complete information is not put on the table; a selection is made on the basis of particular interests, be they politico-economic or ideological. This makes it difficult to reach a balanced and prudent judgement on different questions, one which takes into account all the pertinent variables. Discussions are needed in which all those directly or indirectly affected (farmers, consumers, civil authorities, scientists, seed producers, people living near fumigated fields, and others) can make known their problems and concerns, and have access to adequate and reliable information in order to make decisions for the common good, present and future. This is a complex environmental issue; it calls for a comprehensive approach which would require, at the very least, greater efforts to finance various lines of independent, interdisciplinary research capable of shedding new light on the problem.

136. On the other hand, it is troubling that, when some ecological movements defend the integrity of the environment, rightly demanding that certain limits be imposed on scientific research, they sometimes fail to apply those same principles to human life. There is a tendency to justify transgressing all boundaries when experimentation is carried out on living human embryos. We forget that the inalienable worth of a human being transcends his or her degree of development. In the same way, when technology disregards the great ethical principles, it ends up considering any practice whatsoever as licit. As we have seen in this chapter, a technology severed from ethics will not easily be able to limit its own power.