

## **Excerpts about Technology and Information from Catholic Social Teaching**

### **Pacem in Terris (Peace on Earth), Saint John XXIII, 1963**

#### *Order in the Universe*

2. That a marvelous order predominates in the world of living beings and in the forces of nature, is the plain lesson which the progress of modern research and the discoveries of technology teach us. And it is part of the greatness of man that he can appreciate that order, and devise the means for harnessing those forces for his own benefit.

3. But what emerges first and foremost from the progress of scientific knowledge and the inventions of technology is the infinite greatness of God Himself, who created both man and the universe. Yes; out of nothing He made all things, and filled them with the fullness of His own wisdom and goodness.

### **Compendium of the Social Doctrine of the Church, 2004**

#### **II. MAN AND THE UNIVERSE OF CREATED THINGS**

**456.** The Second Vatican Council affirmed that man “judges rightly that by his intellect he surpasses the material universe, for he shares in the light of the divine mind”. The Council Fathers recognized the progress made thanks to the tireless application of human genius down the centuries, whether in the empirical sciences, the technological disciplines or the liberal arts. Today, “especially with the help of science and technology, man has extended his mastery over nearly the whole of nature and continues to do so”[948].

**457.** *The results of science and technology are, in themselves, positive.* “Far from thinking that works produced by man's own talent and energy are in opposition to God's power, and that the rational creature exists as a kind of rival to the Creator, Christians are convinced that the triumphs of the human race are a sign of God's grace and the flowering of His own mysterious design”... In this regard, the Magisterium has repeatedly emphasized that the Catholic Church is in no way opposed to progress, rather she considers “science and technology are a wonderful product of a God-given human creativity, since they have provided us with wonderful possibilities, and we all gratefully benefit from them”. For this reason, “as people who believe in God, who saw that nature which he had created was ‘good’, we rejoice in the technological and economic progress which people, using their intelligence, have managed to make”.

### **Laborem Exercens (On Human Work), Saint John Paul II, 1981**

The Church finds in the very first pages of the Book of Genesis the source of her conviction that work is a fundamental dimension of human existence on earth....When man, who had been created "in the image of

God.... male and female", hears the words: "Be fruitful and multiply, and fill the earth and subdue it", even though these words do not refer directly and explicitly to work, beyond any doubt they indirectly indicate it as an activity for man to carry out in the world....In carrying out this mandate, man, every human being, reflects the very action of the Creator of the universe.

In industry and agriculture man's work has today in many cases ceased to be mainly manual, for the toil of human hands and muscles is aided by more and more highly perfected machinery. Not only in industry but also in agriculture we are witnessing the transformations made possible by the gradual development of science and technology. Historically speaking, this, taken as a whole, has caused great changes in civilization, from the beginning of the "industrial era" to the successive phases of development through new technologies, such as the electronics and the microprocessor technology in recent years.

The development of industry and of the various sectors connected with it, even the most modern electronics technology, especially in the fields of miniaturization, communications and telecommunications and so forth, shows how vast is the role of technology, that ally of work that human thought has produced, in the interaction between the subject and object of work (in the widest sense of the word). Understood in this case not as a capacity or aptitude for work, but rather as a whole set of instruments which man uses in his work, technology is undoubtedly man's ally. It facilitates his work, perfects, accelerates and augments it. It leads to an increase in the quantity of things produced by work, and in many cases improves their quality. However, it is also a fact that, in some instances, technology can cease to be man's ally and become almost his enemy, as when the mechanization of work "supplants" him, taking away all personal satisfaction and the incentive to creativity and responsibility, when it deprives many workers of their previous employment, or when, through exalting the machine, it reduces man to the status of its slave.

If the biblical words "subdue the earth" addressed to man from the very beginning are understood in the context of the whole modern age, industrial and post-industrial, then they undoubtedly include also a relationship with technology, with the world of machinery which is the fruit of the work of the human intellect and a historical confirmation of man's dominion over nature.

The word of God's revelation is profoundly marked by the fundamental truth that *man*, created in the image of God, *shares by his work in the activity of the Creator* and that, within the limits of his own human capabilities, man in a sense continues to develop that activity, and perfects it as he advances further and further in the discovery of the resources and values contained in the whole of creation.

## **Caritas in Veritate (Charity in Truth), Pope Benedict XVI, 2009**

### **CHAPTER SIX: THE DEVELOPMENT OF PEOPLES AND TECHNOLOGY**

69. The challenge of development today is closely linked to *technological progress*, with its astounding applications in the field of biology. Technology — it is worth emphasizing — is a profoundly human reality, linked to the autonomy and freedom of man. In technology we express and confirm the hegemony of the spirit over matter. "The human spirit, 'increasingly free of its bondage to creatures, can be more easily drawn to the worship and contemplation of the Creator'". Technology enables us to exercise dominion over matter, to reduce risks, to save labour, to improve our conditions of life. It touches the heart of the vocation of human labour: in technology, seen as the product of his genius, man recognizes himself and forges his own humanity. Technology is the objective side of human action whose origin and *raison d'être* is found in the subjective element: the worker himself. For this reason, technology is

never merely technology. It reveals man and his aspirations towards development, it expresses the inner tension that impels him gradually to overcome material limitations. *Technology, in this sense, is a response to God's command to till and to keep the land* (cf. Gen 2:15) that he has entrusted to humanity, and it must serve to reinforce the covenant between human beings and the environment, a covenant that should mirror God's creative love.

70. Technological development can give rise to the idea that technology is self-sufficient when too much attention is given to the “*how*” questions, and not enough to the many “*why*” questions underlying human activity. For this reason technology can appear ambivalent. Produced through human creativity as a tool of personal freedom, technology can be understood as a manifestation of absolute freedom, the freedom that seeks to prescind from the limits inherent in things... Truth has come to be seen as coinciding with the possible. But when the sole criterion of truth is efficiency and utility, development is automatically denied. True development does not consist primarily in “*doing*”. The key to development is a mind capable of thinking in technological terms and grasping the fully human meaning of human activities, within the context of the holistic meaning of the individual's being. Even when we work through satellites or through remote electronic impulses, our actions always remain human, an expression of our responsible freedom.

71. This deviation from solid humanistic principles that a technical mindset can produce is seen today in certain technological applications in the fields of development and peace. Often the development of peoples is considered a matter of financial engineering, the freeing up of markets, the removal of tariffs, investment in production, and institutional reforms — in other words, a purely technical matter. All these factors are of great importance, but we have to ask why technical choices made thus far have yielded rather mixed results. We need to think hard about the cause. Development will never be fully guaranteed through automatic or impersonal forces, whether they derive from the market or from international politics. *Development is impossible without upright men and women, without financiers and politicians whose consciences are finely attuned to the requirements of the common good.* Both professional competence and moral consistency are necessary. When technology is allowed to take over, the result is confusion between ends and means, such that the sole criterion for action in business is thought to be the maximization of profit, in politics the consolidation of power, and in science the findings of research.

74. A particularly crucial battleground in today's cultural struggle between the supremacy of technology and human moral responsibility is the field of *bioethics*... Is man the product of his own labors or does he depend on God? ... *Entranced by an exclusive reliance on technology, reason without faith is doomed to flounder in an illusion of its own omnipotence. Faith without reason risks being cut off from everyday life.*

75. ...bio-technology places [life] increasingly under man's control. *In vitro* fertilization, embryo research, the possibility of manufacturing clones and human hybrids: all this is now emerging and being promoted in today's highly disillusioned culture, which believes it has mastered every mystery, because the origin of life is now within our grasp. Here we see the clearest expression of technology's supremacy. In this type of culture, the conscience is simply invited to take note of technological possibilities. Yet we must not underestimate the disturbing scenarios that threaten our future, or the powerful new instruments that the “*culture of death*” has at its disposal. To the tragic and widespread scourge of abortion we may well have to add in the future — indeed it is already surreptitiously present — the systematic eugenic programming of births. At the other end of the spectrum, a pro-euthanasia mindset is making inroads as an equally damaging assertion of control over life that under certain circumstances is deemed no longer worth living. Underlying these scenarios are cultural viewpoints that deny human dignity. These practices in turn foster a materialistic and mechanistic understanding of human life.

77. The supremacy of technology tends to prevent people from recognizing anything that cannot be explained in terms of matter alone. Yet everyone experiences the many immaterial and spiritual dimensions of life. Knowing is not simply a material act, since the object that is known always conceals something beyond the empirical datum.

## **Encyclical letter Lumen Fidei (The Light of Faith), Pope Francis, 2013**

25. Today more than ever, we need to be reminded of this bond between faith and truth, given the crisis of truth in our age. In contemporary culture, we often tend to consider the only real truth to be that of technology: truth is what we succeed in building and measuring by our scientific know-how, truth is what works and what makes life easier and more comfortable. Nowadays this appears as the only truth that is certain, the only truth that can be shared, the only truth that can serve as a basis for discussion or for common undertakings. Yet at the other end of the scale we are willing to allow for subjective truths of the individual, which consist in fidelity to his or her deepest convictions, yet these are truths valid only for that individual and not capable of being proposed to others in an effort to serve the common good. But Truth itself, the truth which would comprehensively explain our life as individuals and in society, is regarded with suspicion...In this regard, though, we can speak of a massive amnesia in our contemporary world. The question of truth is really a question of memory, deep memory, for it deals with something prior to ourselves and can succeed in uniting us in a way that transcends our petty and limited individual consciousness.

## **Laudato Si' (Praise be to you, My Lord), Pope Francis, 2015**

### **CHAPTER ONE WHAT IS HAPPENING TO OUR COMMON HOME**

47. When media and the digital world become omnipresent, their influence can stop people from learning how to live wisely, to think deeply and to love generously.... True wisdom, as the fruit of self-examination, dialogue and generous encounter between persons, is not acquired by a mere accumulation of data which eventually leads to overload and confusion, a sort of mental pollution. Real relationships with others, with all the challenges they entail, now tend to be replaced by a type of internet communication which enables us to choose or eliminate relationships at whim, thus giving rise to a new type of contrived emotion which has more to do with devices and displays than with other people and with nature. Today's media do enable us to communicate and to share our knowledge and affections. Yet at times they also shield us from direct contact with the pain, the fears and the joys of others and the complexity of their personal experiences. For this reason, we should be concerned that, alongside the exciting possibilities offered by these media, a deep and melancholic dissatisfaction with interpersonal relations, or a harmful sense of isolation, can also arise.

### **CHAPTER TWO THE GOSPEL OF CREATION**

#### **III. THE MYSTERY OF THE UNIVERSE**

76. In the Judaeo-Christian tradition, the word “creation” has a broader meaning than “nature”, for it has to do with God’s loving plan in which every creature has its own value and significance. Nature is usually seen as a system which can be studied, understood and controlled, whereas creation can only be understood as a gift from the outstretched hand of the Father of all, and as a reality illuminated by the love which calls us together into universal communion.

77. “By the word of the Lord the heavens were made” (*Ps* 33:6). This tells us that the world came about as the result of a decision, not from chaos or chance, and this exalts it all the more. The creating word expresses a free choice. The universe did not emerge as the result of arbitrary omnipotence, a show of force or a desire for self-assertion. Creation is of the order of love. God’s love is the fundamental moving force in all created things...

### 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, airplanes, 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”.<sup>[81]</sup>

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...

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”,<sup>[83]</sup> 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”,<sup>[84]</sup> because our immense technological development has not been accompanied by a development in human responsibility, values and conscience...

#### II. 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.

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.

114. 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”.<sup>[92]</sup>...

116. 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.

117. When we fail to acknowledge as part of reality the worth of a poor person, a human embryo, 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”.

#### *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”.<sup>[99]</sup> 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...

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...It is also the mindset of those who say: Let us allow the invisible forces of the market to regulate the economy...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?

## CHAPTER SIX ECOLOGICAL EDUCATION AND SPIRITUALITY

### I. TOWARDS A NEW LIFESTYLE

222. Christian spirituality proposes an alternative understanding of the quality of life, and encourages a prophetic and contemplative lifestyle, one capable of deep enjoyment free of the obsession with consumption...Christian spirituality proposes a growth marked by moderation and the capacity to be happy with little. It is a return to that simplicity which allows us to stop and appreciate the small things, to be grateful for the opportunities which life affords us, to be spiritually detached from what we possess, and not to succumb to sadness for what we lack...

224. Sobriety and humility were not favorably regarded in the last century...Once we lose our humility, and become enthralled with the possibility of limitless mastery over everything, we inevitably end up harming society and the environment. It is not easy to promote this kind of healthy humility or happy sobriety when we consider ourselves autonomous, when we exclude God from our lives or replace him with our own ego, and think that our subjective feelings can define what is right and what is wrong.

225. Many people today sense a profound imbalance which drives them to frenetic activity and makes them feel busy, in a constant hurry which in turn leads them to ride rough-shod over everything around them.

### VI. SACRAMENTAL SIGNS AND THE CELEBRATION OF REST

235. The Sacraments are a privileged way in which nature is taken up by God to become a means of mediating supernatural life. Through our worship of God, we are invited to embrace the world on a different plane. Water, oil, fire and colors are taken up in all their symbolic power and incorporated in our act of praise. The hand that blesses is an instrument of God's love and a reflection of the closeness of Jesus Christ, who came to accompany us on the journey of life. Water poured over the body of a child in Baptism is a sign of new life. Encountering God does not mean fleeing from this world or turning our back on nature...“Christianity does not reject matter. Rather, bodiliness is considered in all its value in the liturgical act, whereby the human body is disclosed in its inner nature as a temple of the Holy Spirit and is united with the Lord Jesus, who himself took a body for the world's salvation”.[165]

236. It is in the Eucharist that all that has been created finds its greatest exaltation. Grace, which tends to manifest itself tangibly, found unsurpassable expression when God himself became man and gave himself as food for his creatures. The Lord, in the culmination of the mystery of the Incarnation, chose to reach our intimate depths through a fragment of matter. He comes not from above, but from within, he comes that we might find him in this world of ours. In the Eucharist, fullness is already achieved; it is the living centre of the universe, the overflowing core of love and of inexhaustible life. Joined to the incarnate Son, present in the Eucharist, the whole cosmos gives thanks to God...The Eucharist joins heaven and earth; it embraces and penetrates all creation...