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THE PROGRESS OF SCIENCE AND THE MESSIANIC IDEAL

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My contribution to the Academy's discussion will begin with a passage from the Bible. Why this particular text? Because it is a 'file' corner stone of our culture. In fact, it justifies scientific research and the resulting development of technology. God addresses his people thus:

> 'And I will rejoice in Jerusalem, and joy in my people: and the voice of weeping shall be no more heard in her, nor the voice of crying. There shall be no more thence an infant of days, nor an old man that hath not filled his days: for the child shall die an hundred years old; [...] And they shall build houses, and inhabit them; and they shall plant vineyards, and eat the fruit of them; they shall not build, and another inhabit; they shall not plant, and another eat: for as the days of a tree are the days of my people, and mine elect shall long enjoy the work of their hands. They shall not labour in vain, nor bring forth trouble; for they are the seed of the blessed of the Lord, and their offspring with them. [...] The wolf and the lamb shall feed together, and the lion shall eat straw like the bullock: and dust shall be serpent's meat. They shall not hurt nor destroy in all my holy mountain, saith the Lord' (Isaiah, 65, 19-25).

This text repeats previous texts which are explicitly connected to the role of the Messiah (Isaiah, 11, 7; 62, 8; Za, 8, 4). It is important to evaluate the role played by the Messiah in various expressions of culture and in what founds modern thought. I would like to recall the exacting demands it involves within the scope of this session on 'Science and the Future of Mankind'. As a matter of fact, many elements quoted by the Prophet Isaiah have come true (to the benefit of developed countries) thanks to the progress of science – of fundamental science and of medicine. Science always has been, and remains more than ever before, instrumental in the conquest and

mastery of the world. It has helped to make some of the Messianic experience voiced by Isaiah come true. It is therefore important to throw light upon the exact role of biblical Messianism, which bears within it the sign of happiness.

I. Messianism

The concept of the 'Messiah' can be traced back to a tradition based on the promise made to David when he founded the City of Jerusalem. The Prophet Nathan said to him – speaking in the name of God – that God's blessing would rest on his house, and that a king would arise from his offspring who would establish perfect justice and bring prosperity to his people (2 Sam 7, 1-17).

The word 'Messiah' has ever since served to designate a man consecrated by God, who would bring happiness and prosperity to all people along the lines of the picture drawn by the Prophet Isaiah. Through the presence of God (marked by this anointing) he would be at the origin of their happiness and would bring about justice and prosperity.

This hope was put to the test with a twofold effect: first, it resulted in an idealisation of Israel, and secondly in a widening of the Messianic expectation to the dimensions of the world.

1. *The Promised Land*

In the founding biblical texts, presented to us as a sort of memory coming from patriarchal times, the territory of Israel is idealized. It has become 'the promised land', 'a land flowing with milk and honey' (Ex 3, 8; Nb 13, 27). These phrases symbolize the abundance of cattle and the fertility of the soil in a world of cultivated lands, but also the wild lands where bees gather nectar. The ultimate symbol of this land is a cluster of grapes which was so large that it took two men to carry it on a stick – according to the emblematic text which sought to express God's benediction:

> 'And they came unto the brook of Eschol, and cut down from thence a branch with one cluster of grapes, and they hare it between two upon a staff; and they brought of the pomegranates and of the figs' (Nb. 13,23).

2. *The Land Looked Forward to by the Exiles*

The expression 'Promised Land' took on a more radical meaning at the time of the Exile.

Firstly, the exiles idealised the land of their childhood and passed on enchanted memories to their children. They forgot the difficulties, the toil and the labour, the aridity of the soil, the scarcity of water and the precariousness of peace with their neighbours, and imagined a period without faults. This is a repeated process with exiles, the world over.

Secondly, a new dimension of memory appeared, as a source of hope: the exiles gave a spiritual value to their country. Thus the Promised Land was depicted as having even richer attributes through a process which involved drawing on the universal resources of primary symbols. The desire for that Land took form and substance within the framework of a tale structured as a myth, i.e. of a rational explanation, operating within the language of images. In this idealising process, the exiled transformed the Promised Land into Paradise.

The word 'Paradise' deserves a word of comment: it is of Persian origin and means 'garden': an image of bliss in arid countries. Coined at a time of exile, under Persian influence, the word 'Paradise' occurs in a tale which is about what the people have lived through: first, the gift of the earth, represented as a garden of happiness; then the transgression; then the exile; and finally the expected salvation. But the biblical text which universalizes the experience of Israel in exile is not just a nostalgic evocation of the Past: it also looks forward into the Future, for a Holy Land given by God.

3. *Happiness without End*

The Exile came to an end when the Persians allowed the restoration of Israel. But this was a disappointing experience. The craving for happiness was also frustrated. Only those who have come back, at the end of a long journey, to the places where they had a happy childhood can understand this psychological process. There were many who suffered from disenchantment amongst those who dwelt in the Promised Land, after it was restored to them. Only a prophetic minority did not remain frustrated. The return to the Land of the Fathers was for them an opportunity to give hope a fresh start, under the guidance of the Prophets whose precepts were conveyed by the Bible. In this work of faith, a more universal dimension appeared.

The word 'exile' came to mean no longer the separation from the ancestral land, but the human condition, considered as the consequence of a Fall. The tale enlarged to the point of embracing all of mankind, represented by the patriarch Adam, who stands for mankind in its entirety. Thus the scribes who wrote the Bible gave a universal dimension to trans-

gression and the Messianic hope: Adam's mysterious son, referred to in Genesis 3, 15, will crush the head of the snake which represents evil, according to what – literally – God said to the snake: 'and I will put enmity between thee and the woman, and between thy seed and her seed; it shall bruise thy head, and thou shalt bruise his heel.' The word 'seed' refers to a Messiah whose coming is expected from within the lineage of David and Solomon.

Moreover, the end of exile does not mean returning to a land which was formerly inhabited, but reaching a reality which is more beautiful than what explorers can say about visited lands, more beautiful even than what has been experienced during a happy childhood. Paradise regained is not only a land flowing with milk and honey, but a place where the wolf shall lie down with the lamb, where the calf and the bear shall feed together, and where the child shall play around the hole of the asp, according to the Prophet Isaiah (Is 11,1-9). The whole of creation will be restored to its primal purity.

The place of happiness is not only agrarian or arcadian; it also has an urban expression. It is no longer a Jerusalem which can be frustrating for those in distress, it is the New Jerusalem whose walls are made of precious stones, and whose streets are paved with light, according to the Prophet Isaiah's words, which were repeated by John in his Apocalypse (Is 54, 11-12; Ap 21, 11-21). The vision of future life is that of a happiness which breaks away from present limits imposed by time and space.

Conclusion

These texts are the foundation of hope, a hope which does not refer to a world which us purely spiritual but to a transfigured material world. Within the framework of my reflection on the origins of modern science, I feel confident that this vision of the future and this hope for happiness are together one of the main sources of modern culture, a culture in which scientific research and its application have allowed the Prophets' dreams – as illustrated by the long quotation from the Prophet Isaiah – to come partly true. It is now important to understand how this has come about.

II. The Founding Project of Modernity

In western civilisation the desire for happiness took on a particular form at the beginning of the sixteenth century with the great discoveries of

that epeoch. The discovery of America compelled man to reconsider the map of the world. It was made clear that Paradise, which the ancients had placed in the East behind the high mountains and the burning sands of the desert, and which was thus inaccessible, was not a place but a symbol. It thus became impossible to read the biblical texts from a historical point of view as St Augustine and the medieval scholars had done. In order to locate the place of happiness a new word was coined: the word 'utopia',[1] which expressed the idea of hope in a happy world.

1. *The Birth of Utopias*

1. The word 'utopia' was coined by Thomas More.[2] In his work, published in Holland in 1516 and in London in 1518, which presented itself as fiction, he depicted an ideally happy life, not a purely spiritual eternal life but its present-day prior-experience. One of the major features of this ideal city was the fact that reason played a major role: the reason in question being that as conceived by the humanists, a conquering reason.

For Thomas More, men – after being purified by ordeals, despotism and religious wars – are allowed to find a refuge on an island of perfect happiness. The wish to reform the Church has led to the horrors of war and dictatorship conducted in the name of faith: Savonarola in Florence and Calvin in Geneva. As a reaction to this misuse of religion to promote violence, Thomas More – with a humour made up of subtlety, a touch of scepticism, and occasionally stinging irony – offers the enchanting picture of an island where everyone is happy thanks to the right use of Reason.

Reason rules over the activities of everyone. On the island of Utopia no one is allowed to be idle. Every person works, happy to earn his or her

[1] The word 'utopia' was coined by the humanists in the sixteenth century in order to project their desire for a happy life into the future. It is nowhere to be found, which means that it cannot be identified with past realisations or mistaken for a contemporary model. It is not exactly the Platonic myth of Atlantis, a vanished city, nor that of Priest John's kingdom looked for by Marco Polo, nor the happy Arabia dreamt of by the Romantics, nor even the islands of the Pacific, which the explorers and conquerors of the vast universe considered paradise. Utopia is the formulation of a reformer's political project. See on this theme Raymond Ruyer, *L'Utopie et les utopies* (Paris, PUF, 1950), and Jean Servier, *L'Utopie* (Paris, PUF, 1979) and *Histoire de l'Utopie* (Paris, Gallimard, 1991).

[2] Thomas More (1478-1535) was an English statesman, an ambassador of England and the Chancellor of the Exchequer. He was Henry VIII's counsellor and prime minister, but eventually dissociated himself from him to remain faithful to the Church of Rome. He died on the scaffold, proclaiming himself 'the king's good servant, but God's first'.

living. Work is varied, and each person in turn goes from one job to another. Free time is devoted to music and the fine arts. Religion is free. Gold is considered a vile, worthless metal. Moreover, in order to avoid the misuse of power, there are no secrets about people's private lives. The island of Utopia is thus a perfect city and offers all the advantages of idealised Jerusalem and Athens.

2. The work of Thomas More was written in connection with that of his friend Erasmus – the master of humanist studies.[3] In his *Praise of Folly* (1509), Erasmus's statements about his projects of reform are carried forward along a pathway of derision and the spectacle of a world turned upside down. In accordance with St. Paul's phrase, literally construed, 'because the foolishness of God is wiser than men' (1 Cor 1,25), Erasmus proposes to reform society and the Church in order to bring about a reign of peace.

3. We find a different vision of humanism in Rabelais.[4] A Franciscan monk, he was a worthy disciple of More and Erasmus. The abbey of Theleme represents the union of an ascetic ideal and a craving for joy through an education based on genuine science, as opposed to the futile scholastic quarrels. The main subject taught in this abbey is joy, ant this abbey which is thus different from monasteries, which are associated with fruitless penance! The abbey of Theleme is like an ark built to convey – beyond the waters of a new Flood – an ideal of serene science, righteous living, courteous manners, and free thinking.

4. A similar approach is found in the work of the Italian Tommaso Campanella.[5] The son of a workman, he was a monk intent on reforming

[3] Erasmus was born in 1469 and died in 1536. He is the figurehead of European thought: he lived not only in his native country, the Netherlands, but also in England, in Italy, and in Switzerland: Louvain, Oxford, Rome, Basel. He was a counsellor to Charles V and Pope Julius XI, who wanted to make him a cardinal – an appointment he refused. He was the apostle of peace, advocating the union of Christian European States. His studies are the foundation of classical humanities.

[4] François Rabelais was born in 1494 and died in 1553. He was not a classical philosopher, but his work is full of humanist erudition and can only be understood with reference to the philosophical tradition (Socrates, Plato, Pythagorus, Democritus) and to his criticism of medieval doctors.

[5] He was born in Southern Italy, in Stilo (1568) and died in Paris in 1639. He was a Dominican. He played an important political role, taking an active part in the rebellion of the southern Italian regions against the despotism of the empire. He was imprisoned with those who had been defeated in Naples. On being made free again, Pope Urban VIII made him his private counsellor. He spoke in defence of Galileo in 1633. But he sided with France and had to go into exile.

the Church who was sent to prison because of his insubordinate character. While in prison, in Naples, he wrote *The City of the Sun* in 1602. The book, published in 1623, is about an ideal kingdom where men are ruled by a priest-king-philosopher, with the assistance of three dignitaries: Power, Wisdom and Love. Power is responsible for peace and order; Wisdom looks after science and the arts; and Love takes care of the relationships between men and women, and also between the generations, so as to ensure a harmonious transmission of knowledge. In the City of the Sun all people worship God as the Father. A strong bond of brotherhood makes people live in peace with each other. Science plays an all-important role because it allows man to read the Great Book of Nature.

5. As a last form of utopia, one could mention that promoted by Francis Bacon[6] at the end of the Renaissance. He expounded it in the *Novum Organon*, which in Anglo-Saxon culture is the equivalent of Descartes' *Discourse on Method.* This work by Bacon presents a post-Copernican vision of the world: the world is no longer centred around the earth but around the Sun, which, according to Kepler, is more worthy of God's creation.

As far as our intersts are concerned, Bacon's most important work was *The New Atlantide* (1627). It deals with life on an island where morals are pure, where family virtues are honored, and where prostitution is unknown (even among sailors!) Right in the middle of the island stands Solomon's House, where wise men know how to grow wonderful plants which yield plenty of fine-tasting fruit. Men can move through the air and under the water. The country is governed not by tradesmen but by researchers, who are also called 'merchants of light'. They gather universal knowledge and build machines which enable artisans to practice their craft in a good way and without effort. Men move around without any difficulty; they communicate from a distance; they can fly through the air; and reach the bottom of the sea. Science not only provides a complete mastery of the technical, it also enables man to penetrate the secrets of the universe.

This brief glance at the main utopias shows how the dream of happiness gathered new strength with the great discoveries of the world and the scientific revolutions.

These texts were written by political and religious men who played an important part in society and had major responsibilities towards princes,

[6] 1561-1626. He had a legal and scientific background. He was close to Queen Elisabeth and was appointed Chancellor of the Exchequer under King James I. His principal interest was science.

kings and popes. The texts show how a new ideal was forged in relation to the use of Reason. Reason is something which keeps passions at bay and gives access to universal values. They also show that happiness is not an abstraction but something which is concrete, something to be enjoyed in a transfigured present time.

2. *The Realisation of the Ideal*

These texts talk to us because they have been fulfilled in diverse ways. I shall not discuss each one in detail but provide general configurations and contours of relevance to our subject.

2.1 *The conquest of the world*

The first realisation was the conquest of the world. The founding of the United States of America was achieved by men and women who wished to fulfill their goals in a land which they thought was virgin. Emigrants went there to survive famine but also to escape the persecution and the narrow-mindedness of the 'old world'. They founded States based on a utopian belief in liberty, human rights and happiness.

Colonisation was nourished by such a vision. In schools of administration, people learnt that they were supporting civilisation and leaving behind the quarrels of the past.

Urbanisation accompanied the movement: architects built cities according to geometrical rules. The twistings and turnings of streets gave way to constructions based on the circle, the square and other regular features. Such a project was founded on what utopians had said. The freshly revived myth of the golden number also illustrated this desire to make the terrestrial city a replica of the ideal celestial city. Reason organized space in perfect harmony with the cosmos, and since – according to Galileo – the world was written in a mathematical language, appeals were made to the ruler and compass and references were made to the science of the architect and engineer.

The mastery of time, made possible by the clock and the chronometer, also illustrates this desire: happiness lay in a well-shared, fairly measured, time which made justice and a just recompense possible.[7]

[7] See Lewis Mumford, *Technique and Civilization,* (Paris, 1950)*;* David Landes, *L'heure qu'il est: la mesure du temps et la formation du monde moderne* ['*What time it is: the measurement of time and the formation of the modern world*"] (Paris, Gallimard, 1987).

Human fertility was also mastered and the renewal of generations was taken care of, and this with a special concern for what was called eugenics, i.e. the wish to eliminate genetic illnesses and ensure that the future was totally dedicated to health.

2.2 *The development of science and technology*

Science was the major development. Descartes said that man should become 'the master and the owner of nature'. This is something which man has gradually accomplished.

Let us consider the great scientific and historic explorations which were carried out in order to achieve greater and more effective knowledge of the world: the classification of human beings implemented by Linnaeus as early as the seventeenth century, then the orderly distribution of all living species on the great tree of evolution; the study of languages and of the structure of language; the understanding of the deepest parts of matter; the mastery of energy, particularly of electricity, which was rightly termed 'fairy electricity'; and the mastery of life and of the knowledge of its origins.

In brief, the wished-for project came true, along the lines of what was called, as early as the eighteenth century, *progress*. The progress of reason did not originate only in the sciences: it was also applied to the political world, which was eager to place itself under the rule of reason. An illustration of this can be found in Jules Verne's works. It is worthwhile reading them during adolescence, at an age when one dreams of submarines, air travel, voyages to the moon, canons serving peace, and the infinite extension of man's power over nature.

Enlightened despotism, and the middle-class republican ideal, as well as (paradoxically) the expressions of socialism of the nineteenth century, fed on that hope. Utopia acquired many different faces during the nineteenth century including the various kinds of socialism described for that very reason as 'utopian'. They proposed a society where everything is shared and where greed is abolished by giving to each according to his needs and expecting from that person that he gives according to his means. Such approaches are numberless. They can be traced back through the forms of European socialism marked by the Christian tradition. We encounter the same thing in Charles Péguy's early writings, in the form of the phenomenon of 'the harmonious city'.[8]

[8] Charles Péguy, *Marcel. Premier dialogue de la cité harmonieuse,* (1898), in *Oeuvres en Prose,* I (Paris, Gallimard, 1965), pp. 12-86.

Those utopias mobilised all the efforts made in favour of science. But their successes were achieved at a very heavy cost – hence the time of disenchantment which later followed.

3. *The Time of Disenchantment*

During the twentieth century (which has just come to a close) we lived through a time of disenchantment. The desire for progress gave birth to disappointment, which is, so are we told, at the heart of what should be called 'post-modernism'.

3.1 *The effect of the great war*

What died, on the battlefields of the Great War, alongside the millions of soldiers and victims, was the founding hope that happiness on earth could be achieved through reason. The Second World War reinforced this disillusion. Critics realised that reason had done a deadly job by allowing the multiplication of the powers of destruction and by powerfully contributing to the enslavement of peoples.

The Great War proved to moralists that science helps people to live, but can also be a cause of death. It provides the means by which to govern, but also by which to enslave, peoples. Moralists repeatedly asserted that science as such does not promote happiness because it is devoid of meaning.[9]

Similarly, the great European wars put an end to the conquest of the world by Western Europe. The best of us, with an awakened conscience, denounced the plundering of the Third World – as Conrad did in his fiction.[10]

The explosion of the first atomic bomb (6 August 1945) was the symbol of an inappropriate use of science and gave rise to numberless debates between scientists – Einstein's attitude on the subject is well known. Political analysts noted that the power of technology cannot replace the inspiration of a genuine political project.[11]

3.2 *The condemnation of utopias*

Among the great literary works of the century, many were anti-

[9] See as an illustration of this the writings of Georges Duhamel, a humanist doctor, e.g., *La Possession* du *Monde* (Paris, Gallimard, 1920).

[10] Especially in *The Heart of Darkness* (1899).

[11] See Raymond Aron, *The Disillusions of Progress*, (Paris, 1949).

utopias. Two of them are well known: *Brave New World* (translated into French as *Le Meilleur des Mondes*) by Aldous Huxley[12] and *Nineteen Eighty-Four* by George Orwell.[13] In these novels one can read the condemnation of those utopias which acted to establish modernism. The authors acknowledge that the world realised in compliance with such principles has become inhuman. Despotism is still there and it has become even more tyrannical. The oppression of the poor by the rich is even more absolute. Similarly, Kafka's works and the novels of the absurd as a metaphysical value are protests against the power of techno-science and an all-powerful administration.

These criticisms linked up with those produced by the victims of the economic and political system.[14] Such a reality contradicted the notion of an ideal natural state and made that of the Fall topically relevant again.[15]

3.3 *Reason in crisis*

The scientific method was condemned and criticised for falsifying the human experience. Religious circles were involved in a controversy against 'secularisation'. This kind of criticism involves a wish to rehabilite the sacred. Today's wild manifestations of the sacred also bear witness to such a reaction.[16]

Philosophers developed a philosophy which favoured subjectivity within a current of thought based on existence which makes freedom quite independent from material contingencies – a philosophy which distanced itself from the results of scientific investigation and considered them only from a utilitarian point of view.

This is to be found in the writings of the greatest philosophers of the century: Edmund Husserl and Martin Heidegger. The former, in a major

[12] *Brave New World (*Albatros Continental Library, 1947). One should not mistake Aldous for his grandfather Thomas Henry Huxley, who was the great populariser and defender of the theory of evolution. He was Darwin's friend and he supported a philosophy of nature from which the notion of finality was absent but which remained within the framework of deist thought. He was born in 1825 and died in 1895.

[13] A pseudonym for Eric Blair. *Nineteen Eighty-Four (*London, Secker & Warburg, 1965).

[14] On this point it is proper to note the contemporary relevance of Simone Weil's thought, particularly in *L'Enracinement* (Paris, Gallimard, 1949).

[15] See Ivan Gobry, *Procès de la culture. Mise en question chrétienne de la Culture (*Paris, Régnier, 1995).

[16] See Jacques Ellul, *Les Nouveaux Possédés (*Paris, Fayard, 1973).

work entitled *Die Krisis*,[17] started with the crisis in Europe, on the verge of a new war, and condemned scientific reductionism as the main source of the oblivion of values which alone could maintain civilisation.[18] Similarly, within the context of the collapse of Germany after the war, Heidegger saw in technology the triumph of practical reason and the dismissal of the question of being.[19]

The radical nature of these criticisms and the situation from which they sprang invite us to return to the foundations of modern culture. In a very particular way, it is our duty, within the framework of this Academy's activities, to consider one of the instruments of progress, the weapon which for better or worse has proved so efficient, that is to say, fundamental science and its technical applications. It is our duty to ask ourselves why it is so efficient – and at what cost. But we shall have to adopt a moderate approach, since no one should benefit from the progress of science on the one hand, and on the other hand treat it with contempt. It is not right to speak ill of what exists, for it is impossible not to acknowledge that we enjoy advantages which our ancestors did not have.

The question – it seems to me – is: how can we ensure everyone gains advantages from the good things which follow from the ascendency of man over nature? And this in a way that is comparable to what I tried to show is present in the Bible: how, from a singular situation (the kingdoms of David and of Solomon) a hope and a project grew up which involved the whole of mankind (represented by Adam, the human archetype).

III. Science and Conscience

I suggest that we should return to Rabelais' famous formula: 'science without conscience is the ruin of our souls'.

This phrase is useful because it prevents us from falling into two extremes, those of excluding or despising what exists. Science, it seems to me, should be recognised for what it is. In order to do that, one should bear its limits – which derive from its specialisation and abstraction – in mind. One should also consider that science only progresses because it

[17] The complete title is *Die Krisis der Europaischen Wissenschaften und die transzendentale Phänomenologie* (1935).

[18] The theme has been developed by modern phenomenology. See, for example, Michel Henry, *La Barbarie* (Paris, Gallimard, 1995).

[19] This is a recurrent theme found in *Was heisst denken?* (1954).

has been preceded by a specific project and is sustained by a fundamental desire for happiness.

1. *Science has Lost its Sacred Aura*

Science remains a source of hope that happiness can be achieved because it is capable of eradicating a number of scourges. But its successes created an illusion: the belief that all problems could be solved and that – short of vanquishing death – it would be possible to change man. On the eve of the new millennium, the lesson which history teaches us is that we should not sacralise science. Pascal said that 'even truth itself can become an idol'.[20]

It would be a mistake to lapse into what the Bible condemns as being idolatry, i.e the fact of worshipping one's own creation, or in other words, the fact of considering what is merely a means as an absolute.

Such an approach allows one to examine justly and fairly the new powers of science over human life, and not to jump to conclusions which either approve or condemn everything. The technical means of communication and information, remedies for sterility and methods of birth control, gene therapies, the achievement of longevity and the treatment of pain, the organisation of work, the management of agricultural resources, genetics – all these should be considered as instruments to an end. The power gained over nature is not the same thing as the use that is made of it. This is something which implies a moral responsibility, the principles of which are not provided by science. 'Science without conscience is the ruin of the soul' said Rabelais.

2. *A Sensible Approach*

The best attitude is – as the French say – 'to be reasonable' about it, i.e. to use one's reason and avoid extreme interpretations.

The value of science comes from the use of reason and this characterises human behaviour.

Although reason does not entirely command thought and the exercise of intelligence, it is important for us not to depreciate it. The return of the irrational is a snare.

[20] 'Truth itself can be made an idol of, because truth without charity is not God, but an image of God which must be neither loved nor adored – far less should its opposite, untruth, be loved or adored', *Les Pensées* (Paris, Gallimard (La Pléiade), 2000), p. 861.

To be reasonable about it, means to acknowledge that reason does not cover the whole of thought. Human thought is intuition, imagination, expectation, judgment, contemplation and inspiration. It is not only deductive, or a logical arrangement.

Thus science rests on elements (principles and intuitions) which are external to it and on which it is dependent. Science, which is a work of reason, also involves the other activities of intelligence. There are in science itself essential elements which do not fall within the province of objectivising reason. There are – as has already been said – elementary principles which resort to intuition, to convictions, as to the value of intelligence and its ability to reach the innermost reality of things, and finally to representations which have a symbolic dimension.

This is why the fundamental desires conveyed by the Messianic hope keep on living in mankind. Science rests on them in order to progress. It is therefore suitable to take them into consideration according to their motivations, to express a desire for happiness, and to allow it to realise itself.

3. *Science as a Source of Liberation*

All scientists know that science is based on research, which implies a climate of freedom. Science is today a source of hope in the future because it is connected with freedom of thought. A creative freedom, a founding freedom. Freedom in research, freedom in the formulation of theories, freedom in the refusal of certain approaches which are conducive to death.

In that sense, science is at one with the first meaning of the word 'Messianism' – 'to bring freedom'. Life is the best thing we possess. Life is not only a work of reason. The life of man involves both his body and his soul. The condemnation of 'modernism' invites us not to forget the fundamental dimension of mankind – the living soul. Every human being is a creature of desire. He is such because he is a creature endowed with speech. He feeds on the received word, on the given word, on a word which is bound up with the mystery of the Covenant, and with relating to others.

Thus is met the exacting demand of justice, which is part of the Messianic call.

CONCLUSION

It would seem that if the future is to be a future of happiness for everyone, it is important to return to the meaning of the word 'Messianism'. If

we are to accept it, the promised horizon is not an abstract one. It is centered on the figure of the Messiah. Now the Messiah – in Greek: *Christos*, Christ – is a man.

Therefore man is the measure of the world. Man is the measure of everything that exists. Man is on the horizon of every creative act. The Christian faith provides us in Jesus with a figure of man which is identical with the eschatological person, the Son of Man, whose Second Coming the Christians await. The human reference prevents Messianism from being reduced to millenarianism.

The place for happiness is not a heavenly garden, or an enchanted island, or a city built harmoniously, or anything that man can dream of. Happiness is a happy, peaceful relationship with oneself, with others, above all with one's neighbours. Happiness is that sort of relationship with God that transfigures the present. The place for happiness is not another world, located in some indeterminate beyond, but a world of others, immediately to be experienced, centred on beaming love, founded on the word, on reciprocal trust and respect. The scientific community plays in this world a prominent role. To conclude, allow me to quote a passage from the Gospel. Jesus is evoking a last judgment scenario. As the Messiah, he says to the just:

> 'For I was hungry, and ye gave me meat; I was thirsty, and ye gave me drink; I was a stranger, and ye took me in; naked, and ye clothed me; I was sick, and ye visited me; I was in prison, and ye came unto me' (Mt 25, 35-45).

This addresses all nations. It concerns the whole of mankind, for the situation under discussion is that of every human being when he comes into this world. A new-born babe dies, if he is not fed with milk, clad, taken care of, and welcomed into this world with words that give a meaning to his life. This is how we should consider our lives, our searchings, our cares – with reference to such achievements.

At the beginning of this new millennium, let us rejoice that science enables us to make our contribution to this task, without excluding any one, and in a decisive way.