The reader that approached the documents of the Vatican Council II superficially could come to the conclusion that the references to scientific thinking are quite rare. Counciliar Fathers’ seemed to focus mainly on exposing the mystery of the Church – universal sacrament of salvation – its liturgy, the great topic of ecumenism, religious freedom etc. Nonetheless, a Council whose main effort was to discuss on how the Church should explain to the world the mystery of Jesus Christ, and in a social context that was profoundly different from that of the past, could not have avoided talking about science. And in fact, at a closer look, we can find brand new openings for dialogue and a reciprocal stimulation; an exortation to a deep study; and, finally, declarations that are aimed to free the dialogue from misunderstandings and errors of the past, followed by legitimate recommendations – and some concerns as well. We present below a number of excerpts from the documents of the Vatican Council II, that we are celebrating in this Year of the Faith, for the 50th anniversary of its opening. Some short introductory notes, that may be helpful to the reader, have been added as well. Actually, each of those documents deserve to be studied in a more profound way; however, taking these excerpts as a whole, they can give us an idea of how scientific thought was viewed by the Catholic Bishops some fifty years ago: they considered it a central tenent, both for the development of dogma and for evangelization.

The encounter with these declarations does not impede a deeper study of the counciliar texts. We recommend this attentive study, particulary the lecture and meditation of *Gaudium et Spes*: this is an especially dense document, whose writing was inspired by the suggestions of many important theologians, among whom we have to remember H. de Lubac, K. Rahner, Y. Congar, J. Danielou, G. Thils, B. Häring, A. Grillmeier, O. Semmelroth, and Crakov’s cardinal Karol Wojtyla as well. This conciliar constitution devoted a long chapter (nn. 53 to 62) to the promotion of culture in its relation with the Christian faith. But even more than the scattered references to the scientific culture, it is actually the very spirit of the Council that represents the real point of no return in the way of approaching human work in the world, and thus to scientific knowlege at large: in this activity, the Council sees an effective participation to Christ’s headship over creation. Earthly realities still mantain all their legitimate autonomy, but at the same time there is no fear in saying that they are fully revealed and fulfilled only in Christ’s Easter and by the law of charity. Still, much remains to be done in order to clarify how science and scientific progress partake to this headship and can find their fullfillment in charity. This is an exciting work for christians who live inside the scientific and cultural community. The re-discovery of these counciliar writings can help them in such an enterprise.

**Gaudium et spes**

This counciliar constitution offers brief but significant insights on our topic, witnessing to a new and general feeling of trust that scientific progress has much to offer to human progress at large, and that scientific knowledge renders a big service to the Church and to society. At n. 5 it is acknowledged that the results stemming from the sciences have the capacity to mold the public’s way of thinking: the Church
has to keep this in mind in its pastoral work. Making an indirect reference to Galileo’s affair, n. 36 declares that sciences and human activities have the right to their own methodological autonomy, but one that respects the dependence of the creation by its Creator. “Autonomy” means “to respect” those specific laws that are present inside the creatures, and that concerns every science’s own method of inquiry. This acceptance of the term “autonomy” opens the possibility of addressing the right questions about the foundations of being and of knowing. The erroneous concept of a complete autonomy – in the sense of a total independence from a Creator, as if creature could give foundation to itself – is not established by the Council by appealing to supernatural revelation or to biblical data. Rather, it is established by appealing to natural revelation, and to human capacity to think about the Absolute (Being) as the ultimate reason for the contingency and non-necessity of the becoming reality. This is a conclusion that, in principle, could be reached by all philosophy having a metaphysical outlook. By studying subjects such as philosophy, history, math, natural sciences and so forth, men and women contribute to the improvement of human culture and society (n. 57). At n. 62 Christian believers are reminded that it is necessary for them to live in strict union with people of their times, and to share with them the most recent results and knowledge, for a deeper understanding of their faith. A highly summarizing passage, one that speaks of the relationship between human progress and scientific progress within the logic of God’s creation, as well the attitude Christians should have in regard to culture, can be found at n. 34.

“Today’s spiritual agitation and the changing conditions of life are part of a broader and deeper revolution. As a result of the latter, intellectual formation is ever increasingly based on the mathematical and natural sciences and on those dealing with man himself, while in the practical order the technology which stems from these sciences takes on mounting importance.

This scientific spirit has a new kind of impact on the cultural sphere and on modes of thought. Technology is now transforming the face of the earth, and is already trying to master outer space. To a certain extent, the human intellect is also broadening its dominion over time: over the past by means of historical knowledge; over the future, by the art of projecting and by planning.

Advances in biology, psychology, and the social sciences not only bring men hope of improved self-knowledge; in conjunction with technical methods, they are helping men exert direct influence on the life of social groups.

At the same time, the human race is giving steadily-increasing thought to forecasting and regulating its own population growth. History itself speeds along on so rapid a course that an individual person can scarcely keep abreast of it. The destiny of the human community has become all of a piece, where once the various groups of men had a kind of private history of their own.

Thus, the human race has passed from a rather static concept of reality to a more dynamic, evolutionary one. In consequence there has arisen a new series of problems, a series as numerous as can be, calling for efforts of analysis and synthesis” (n. 5).

“Now many of our contemporaries seem to fear that a closer bond between human activity and religion will work against the independence of men, of societies, or of the sciences.

If by the autonomy of earthly affairs we mean that created things and societies themselves enjoy their own laws and values which must be gradually deciphered, put to use, and regulated by men, then it is entirely right to demand that autonomy. Such is not merely required by modern man, but harmonizes also with the will of the Creator. For by the very circumstance of their having been created, all things are endowed with their own stability, truth, goodness, proper laws and order. Man must respect these as he
isolates them by the appropriate methods of the individual sciences or arts. Therefore if methodical investigation within every branch of learning is carried out in a genuinely scientific manner and in accord with moral norms, it never truly conflicts with faith, for earthly matters and the concerns of faith derive from the same God. Indeed whoever labors to penetrate the secrets of reality with a humble and steady mind, even though he is unaware of the fact, is nevertheless being led by the hand of God, who holds all things in existence, and gives them their identity. Consequently, we cannot but deplore certain habits of mind, which are sometimes found too among Christians, which do not sufficiently attend to the rightful independence of science and which, from the arguments and controversies they spark, lead many minds to conclude that faith and science are mutually opposed [cfr. P. Paschini, Vita e opere di Galileo Galilei, 2 voll., Lev, Città del Vaticano 1964].

But if the expression, the independence of temporal affairs, is taken to mean that created things do not depend on God, and that man can use them without any reference to their Creator, anyone who acknowledges God will see how false such a meaning is. For without the Creator the creature would disappear. For their part, however, all believers of whatever religion always hear His revealing voice in the discourse of creatures. When God is forgotten, however, the creature itself grows unintelligible” (n. 36).

“Christians, on pilgrimage toward the heavenly city, should seek and think of these things which are above. This duty in no way decreases, rather it increases, the importance of their obligation to work with all men in the building of a more human world. Indeed, the mystery of the Christian faith furnishes them with an excellent stimulant and aid to fulfill this duty more courageously and especially to uncover the full meaning of this activity, one which gives to human culture its eminent place in the integral vocation of man.

When man develops the earth by the work of his hands or with the aid of technology, in order that it might bear fruit and become a dwelling worthy of the whole human family and when he consciously takes part in the life of social groups, he carries out the design of God manifested at the beginning of time, that he should subdue the earth, perfect creation and develop himself. At the same time he obeys the commandment of Christ that he place himself at the service of his brethren.

Furthermore, when man gives himself to the various disciplines of philosophy, history and of mathematical and natural science, and when he cultivates the arts, he can do very much to elevate the human family to a more sublime understanding of truth, goodness, and beauty, and to the formation of considered opinions which have universal value. Thus mankind may be more clearly enlightened by that marvelous Wisdom which was with God from all eternity, composing all things with him, rejoicing in the earth, delighting in the sons of men.

In this way, the human spirit, being less subjected to material things, can be more easily drawn to the worship and contemplation of the Creator. Moreover, by the impulse of grace, he is disposed to acknowledge the Word of God, Who before He became flesh in order to save all and to sum up all in Himself was already "in the world" as "the true light which enlightens every man" (John 1:9-10).

Indeed today's progress in science and technology can foster a certain exclusive emphasis on observable data, and an agnosticism about everything else. For the methods of investigation which these sciences use can be wrongly considered as the supreme rule of seeking the whole truth. By virtue of their methods these sciences cannot penetrate to the intimate notion of things. Indeed the danger is present that man, confiding too much in the discoveries of today, may think that he is sufficient unto himself and no longer seek the higher things.

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Those unfortunate results, however, do not necessarily follow from the culture of today, nor should they lead us into the temptation of not acknowledging its positive values. Among these values are included: scientific study and fidelity toward truth in scientific inquiries, the necessity of working together with others in technical groups, a sense of international solidarity, a clearer awareness of the responsibility of experts to aid and even to protect men, the desire to make the conditions of life more favorable for all, especially for those who are poor in culture or who are deprived of the opportunity to exercise responsibility. All of these provide some preparation for the acceptance of the message of the Gospel a preparation which can be animated by divine charity through Him Who has come to save the world” (n. 57).

“In pastoral care, sufficient use must be made not only of theological principles, but also of the findings of the secular sciences, especially of psychology and sociology, so that the faithful may be brought to a more adequate and mature life of faith. […]

May the faithful, therefore, live in very close union with the other men of their time and may they strive to understand perfectly their way of thinking and judging, as expressed in their culture. Let them blend new sciences and theories and the understanding of the most recent discoveries with Christian morality and the teaching of Christian doctrine, so that their religious culture and morality may keep pace with scientific knowledge and with the constantly progressing technology. Thus they will be able to interpret and evaluate all things in a truly Christian spirit.

Let those who teach theology in seminaries and universities strive to collaborate with men versed in the other sciences through a sharing of their resources and points of view. Theological inquiry should pursue a profound understanding of revealed truth; at the same time it should not neglect close contact with its own time that it may be able to help these men skilled in various disciplines to attain to a better understanding of the faith. This common effort will greatly aid the formation of priests, who will be able to present to our contemporaries the doctrine of the Church concerning God, man and the world, in a manner more adapted to them so that they may receive it more willingly.(14) Furthermore, it is to be hoped that many of the laity will receive a sufficient formation in the sacred sciences and that some will dedicate themselves professionally to these studies, developing and deepening them by their own labors. In order that they may fulfill their function, let it be recognized that all the faithful, whether clerics or laity, possess a lawful freedom of inquiry, freedom of thought and of expressing their mind with humility and fortitude in those matters on which they enjoy competence” (n. 62).

“To believers, this point is settled: considered in itself, this human activity accords with God’s will. For man, created to God's image, received a mandate to subject to himself the earth and all it contains, and to govern the world with justice and holiness; a mandate to relate himself and the totality of things to Him Who was to be acknowledged as the Lord and Creator of all. Thus, by the subjection of all things to man, the name of God would be wonderful in all the earth.

This mandate concerns the whole of everyday activity as well. For while providing the substance of life for themselves and their families, men and women are performing their activities in a way which appropriately benefits society. They can justly consider that by their labor they are unfolding the Creator's work, consulting the advantages of their brother men, and are contributing by their personal industry to the realization in history of the divine plan.

Thus, 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. For the greater man's power becomes, the farther his individual and community responsibility extends. Hence it is clear that men are not deterred by the Christian message from building up the world, or impelled to neglect the welfare of their fellows, but that they are rather more stringently bound to do these very things” (n. 34).

Optatam Totius

In this Decree, one dedicated to priests' formation, the Council says at nn. 13 and 15 that the seminarians are requested to have an adequate understanding of culture, both in the humanities and in science. Furthermore, during their theological studies, they are requested to be aware of modern science's progress and latest developments, so that, thanks to an awareness of the contemporary mentality, they will be well equipped for a fruitful dialogue with the people of their times.

“Before beginning specifically ecclesiastical subjects, seminarians should be equipped with that humanistic and scientific training which young men in their own countries are wont to have as a foundation for higher studies. Moreover they are to acquire a knowledge of Latin which will enable them to understand and make use of the sources of so many sciences and of the documents of the Church” (n. 13).

“The philosophical disciplines are to be taught in such a way that the students are first of all led to acquire a solid and coherent knowledge of man, the world, and of God, relying on a philosophical patrimony which is perennially valid and taking into account the philosophical investigations of later ages. This is especially true of those investigations which exercise a greater influence in their own nations. Account should also be taken of the more recent progress of the sciences. The net result should be that the students, correctly understanding the characteristics of the contemporary mind, will be duly prepared for dialogue with men of their time” (n. 15).

Gravissimus educationis

In this the Decree, one dedicated to the rights and duties of education, when talking about the Catholic Universities and Theological Schools (nn. 10-12), we read that Faculties are called to develop a cooperation with all Schools dedicated to scientific research.

“The Church is concerned also with schools of a higher level, especially colleges and universities. In those schools dependent on her she intends that by their very constitution individual subjects be pursued according to their own principles, method, and liberty of scientific inquiry, in such a way that an ever deeper understanding in these fields may be obtained and that, as questions that are new and current are raised and investigations carefully made according to the example of the doctors of the Church and especially of St. Thomas Aquinas” (n. 10).

“Cooperation is the order of the day. It increases more and more to supply the demand on a diocesan, national and international level. Since it is altogether necessary in scholastic matters, every means should be employed to foster suitable cooperation between Catholic schools, and between these and other schools that collaboration should be developed which the good of all mankind requires. From greater coordination and cooperative endeavor greater fruits will be derived particularly in the area of academic institutions. Therefore in every university let the various faculties work mutually to this end, insofar as
their goal will permit. In addition, let the universities also endeavor to work together by promoting international gatherings, by sharing scientific inquiries with one another, by communicating their discoveries to one another, by having exchange of professors for a time and by promoting all else that is conducive to greater assistance” (n. 12).

Christus Dominus

*Even the Decree dedicated to the Bishops of the Catholic Church and to their pastoral mission recommends, at n. 12, that, when evangelizing God’s people, they are called appreciate contemporary society’s many values; among them, also technology is to be remembered.*

[Bishops] “They should show, moreover, that earthly goods and human institutions according to the plan of God the Creator are also disposed for man's salvation and therefore can contribute much to the building up of the body of Christ.

Therefore, they should teach, according to the doctrine of the Church, the great value of these things: the human person with his freedom and bodily life, the family and its unity and stability, the procreation and education of children, civil society with its laws and professions, labor and leisure, the arts and technical inventions, poverty and affluence. Finally, they should set forth the ways by which are to be answered the most serious questions concerning the ownership, increase, and just distribution of material goods, peace and war, and brotherly relations among all countries” (n. 12).

Apostolicam actusitatatem

*By emphasizing and subscribing to ideas still present in other documents, this Decree concerning lay faithful activity underlines in n. 7 the value of temporal order, the value of science and technology, for the edification of God’s Kingdom. As usual, the Council underlines the risk of an excessive and disproportionate trust in material goods, a dependance that could easily become idolatry.*

“All those things which make up the temporal order, namely, the good things of life and the prosperity of the family, culture, economic matters, the arts and professions, the laws of the political community, international relations, and other matters of this kind, as well as their development and progress, not only aid in the attainment of man's ultimate goal but also possess their own intrinsic value. This value has been established in them by God, whether they are considered in themselves or as parts of the whole temporal order. "God saw that all He had made was very good" (Gen 1:31). This natural goodness of theirs takes on a special dignity as a result of their relation to the human person, for whose service they were created. It has pleased God to unite all things, both natural and supernatural, in Christ Jesus "so that in all things He may have the first place" (Col 1:18). This destination, however, not only does not deprive the temporal order of its independence, its proper goals, laws, supports, and significance for human welfare but rather perfects the temporal order in its own intrinsic strength and worth and puts it on a level with man's whole vocation upon earth.

In the course of history, the use of temporal things has been marred by serious vices. Affected by original sin, men have frequently fallen into many errors concerning the true God, the nature of man, and the principles of the moral law. This has led to the corruption of morals and human institutions and not rarely to contempt for the human person himself. In our own time, moreover, those who have trusted excessively in the progress of the natural sciences and the technical arts have fallen into an idolatry of
temporal things and have become their slaves rather than their masters.

The whole Church must work vigorously in order that men may become capable of rectifying the distortion of the temporal order and directing it to God through Christ” (n. 7).