



The Words of Christ 'Vos Estis Lux Mundi' May be Applied to the Academician

Address at the Solemn Audience Granted to the Plenary Session of the Academy



The Pope praises the scientists Marconi and Hertz, both believers, whom he holds up as examples to be followed. As a librarian he had come into happy direct contact with science. Faith and science should not be separated, but should, through their 'essential unity', work 'for the good of souls, for the good of intelligences'. The scientific ability to investigate the created world is God-given and involves the quest for truth. In this endeavour, the supernatural light of faith does not contradict, but aids, the light of sciences.

The Holy Father began his speech by heartily congratulating Prof. Bjerknes on the magnificent things he had said, and on having come from such a distant place – from Oslo, where the Pontifical Academy also had a fellow. Although geographically speaking Oslo, in Norway, was far away, it was necessary to add at once that spiritually it was not far from the heart of the Pope, from the Vicar of Jesus Christ. Nor was it far scientifically speaking, as the illustrious professor had come specially from that extreme northern part of Europe to speak in the elect and solemn gathering. Thus, if only by his association with the subject of that meeting, he rendered his country very close.

The presence of Prof. Bjerknes was truly valued. He was a scholar and a collaborator of Hertz who was, so to speak, one of the spiritual fathers of Marconi. Although he died after a short life, 37 years, Hertz had already followed a road to which he was very happy to be called and predestined. This was so because Hertz saw above and before himself Him who had called and chosen him: the God, that is, who rules nature, that God who has enclosed in nature and in his most secret beings the splendours of wonderful light. This was true also of Marconi. In the same

manner did Marconi see the wonders of creation, as the late scientist had effectively shown very often. Also at the eve of his departure from this life, when the signs of death were already upon him, he repeated at a Pontifical Audience in Castel Gandolfo his gratitude to the Holy Father for having accepted his scientific work in service of the Holy See. Both scientists remind one of what the great German poet, Schiller, wrote: *soll das Werk den Meister loben – doch der Segen kommt von oben:*¹ the work should praise the master, but the blessing comes from above. Truly we find ourselves here before two of the greatest works to which human activity was ever called by the Creator – the blessing of God has descended on them so clearly and so manifestly, and is splendidly glorious and glorifying.

The August Pontiff was therefore extremely grateful to the professor from Oslo who had given such a delightful and enjoyable hour, with such learned and authoritative words and with a comment so appropriate to the theme of that meeting. The Holy Father had always followed the work of Marconi in its developments, and had seen it unravel itself little by little. And the professor, furthermore, came precisely from those regions where the work of Marconi rendered inestimable service, not any more under the bright sun of Rome, nor under the warm skies of Italy, but in the middle of the ice, and in polar night, evidently useful even for the material salvation of those peoples trapped in the snares of a dangerous navigation at sea, useful in their situation with the means at their disposal.

His Holiness repeated his acknowledgements to Prof. Bjerknes, turning to him and saying in German that he thanked him for having desired to be present despite the discomforts of the long journey. And together with a warm welcome he extended to him a special greeting for his country so that on his return the scientist could announce that the Pope, the old Pope, always thinks of the Norwegians, and despite his inability to do much, earnestly desires to contribute towards their well-being, and their lives. Together with the greetings that the Supreme Pontiff sent to everyone, but particularly to the old and to the children, the beloved Academician could also assure his fellow citizens of the blessing of the Holy Father, who loved them dearly and prayed constantly to God for them.

Speaking again in Italian, the Holy Father said that he truly could not see what might be added to the beautiful and distinguished things already said, and for which he had been present. Indeed it all made one think that not only had the great spirit of Marconi returned in that meeting but that he had also gently fanned his ardour. The Supreme Pontiff was glad to be able to testify to it that to the beloved Marconi he owed the assurances and expressions of a fervent, of a particular, true, filial devotion; and also to his frank and sincere happiness at having been able to place the fruits of his research and of his scientific study at the service of the Holy See, which is to say at the service of truth in the highest, widest, most beneficent sense of the word. Nor could the Holy Father fail to repeat his acknowledgements for all the testimonies of profound devotion that the great scientist repeatedly sought to give to the Person of the Vicar of Jesus Christ.

What then should he say to those beloved Academicians from Italy and abroad who had gathered together to procure a true festival of intelligence and of sciences? What could he say which would return thanks to them, although he knew that everything which came from the mouth of the old Father was made lovable to them by their filial piety? He wanted first to record that the presence of

the beloved members and fellows of the Pontifical Academy of Sciences aroused in his spirit one of the most beautiful hours of his life. It should not seem out of place to recall that sublime hour since it is of hours such as these that the mercy of God had granted to him to spend before the grandiosity and majesty of nature by himself, as the great Hertz and Marconi had spent hours alone in which their genius was called to contemplate incomparable magnificence. The Holy Father wanted to recall an unforgettable night, spent at above 4600 m: a night full of light, a true image of the luminous night that surrounds the created world and before which great minds alone, like Marconi and Hertz, invoke and will always invoke greater splendours of other firmaments: that light which, at least in part, evoked the mystery of creation.

Thus he found himself, as it were, in the middle of an assembly of giants: about him there were in fact more than ten peaks, all above 4000 m. They made one think of the inspired image of the prophet Habakkuk, since those great mountains like giants seemed to raise their arms to heaven, so seeming even higher: *Dedit abyssus vocem suam, altitudo manus suas levavit.*² The Holy Father had never before seen the words of the prophet come true in such a real way: mountains amongst the greatest mountains which soared up with fresh impetus towards new summits, towards the abysses of the heavens.

His Holiness was sure that more than one of those present would not have found the recollection out of place: what a great school of sciences a high mountain is! Quite apart from other teachings, the mountains say at once what great abundance of riches these rocky masses tear up from the depths of earth to launch themselves into the depths of heaven. It was all a complex of forces, of hidden and as it were secret actions in the immense workshop of nature, which prepare the verdant dowries of the hills and the beautiful waves of the waters. Certainly those beloved sons, those great scientists, are called to contemplate such singular wonders, and to an exceedingly beneficent end.

Apart from that recollection, the August Pontiff felt himself united to the beloved Academicians also for another reason. It had pleased the Lord of everything that he should have spent many days, and among them the most beautiful of his life, in libraries. These long stays had given him a certain familiarity with their names. From their works it had seemed to him many times that their intelligence, their genius, the researches of their studies seemed to flame out just like those peaks to which he had referred, which lift up their arms to heaven. How many of the beloved participants at that meeting were often with the Pope, with the old Librarian, on his daily journey along the long rows of library shelves which stretched for kilometres about him! They, the scientists with their respective works, their famous names, their vast researches with which they honour the sciences and the activities of their various countries! And how many could remember in that moment, on the other hand, that the Pope of today is the old friend of books, of the writers and creators of books, and of those who are and who want to be workers for the development of the human sciences! These recollections gave a way to reflect on a splendid passage of the gospel, which recalls an exalted mission and responsibility. It was a passage that the Sacred Liturgy proposes very often and which had been read only a few days before. In it is the Lord Jesus, God Himself, who speaks first, as is easily understood, to His Apostles and to their successors: to the agents therefore not of science, but of faith. Nevertheless, those divine words can be applied, after the men of faith, to

those of the sciences because they come from God, the Lord of the sciences: *Deus scientiarum Dominus.*³ God does not want a separated faith and science, and even less that they should be in conflict. Rather through their own essential unity, He wants them working for the good of souls, for the good of intelligences.

Faith and sciences. To faith belongs that word which the Divine Master says and repeats: *Vos estis lux mundi: ... neque accedunt lucernam, et ponunt eam sub modio, sed super candelabrum ut luceat omnibus, qui in domo sunt.*⁴ You are the light of the world: ... and a lamp is not lit to put it under a bushel but on the lampstand, so that it might give light to everyone in the house. These words, His Holiness repeated, are directed above all to giving the command, the preaching, the teaching of faith: the teaching of those truths which are indispensable for everyone, even to those to whom to speak of the necessities of science becomes cruel derision because they do not have, nor will have, the predisposition for it. And yet they have need of truth, of that essential truth which Hertz and Marconi, and all those who through the created world see the work of the Creator. The truth which releases the mystery from the created world, the truth of faith. But equally these words can be applied to those who dedicate themselves to those other truths that come as subsidiaries, in help and in service to the Faith itself. Therefore, these words can also be applied to the Academicians, to the men of sciences: *Vos estis lux mundi.* Indeed, the hand of God has not lit the light of sciences in all, as it has in them, nor has it given the intellect of all a far-sighted gaze. They have received the privilege of such an outstanding light, and for this reason they must use it for the good of the world.

It is true that all the discoveries of sciences up to now, before the immense vision of the created world, are slight. Thus one could repeat with the great scientist Golgi, speaking of the present, and alluding precisely to the discoveries already made: *ignoramus*, and giving a glance to the future: *ignorabimus*. But the contemplation of the created world is nevertheless a delight. Scientific research of its treasures, up to yesterday only descriptive, one might say, and more than ever mechanical, has today become a true unceasing investigation dealing with all the created world. It is clear, therefore, that God has given us the ability to investigate not just matter, its structure and composition, but also the nature, the mystery of the created world, with the research of such splendours to which sciences arrive little by little, and at the heart of which is at last the splendour of the Truth.

Concerning this, the great Christian poet Alessandro Manzoni saw two categories in the created world: that of the most useful things, whose usefulness is immediately obvious, and the other of things which seem superfluous, but which nonetheless concur to celebrate the glory of that Truth. He described the first, saying:

To Him who is hidden in every plant of the earth
from which is made every thread of your clothes
and which provides chemical substances
that makes pine strong against the wind,
that makes the willow pliable
that makes the larch and alder waterproof.

And then he continues with the second category:

If you are haughty, ask Him why,
 on a deserted beach, swept by savage breezes,
 there should grow a silent flower,
 which explains before Him alone the glories of His canvas,
 and which releases the incense of its perfume,
 from the deserts up to the heavens, and then it dies.⁵

There are therefore created things whose usefulness is so evident, so clear, that they do not need explanation: to that category belong the high intelligences of the scientists which, for this reason, must spread beneficial light around them. On the other hand, there are other created things which, one might say, have been made just for the pleasure of making them, of seeing them, of saying of them that which the great poet has said so effectively with insuperably beautiful verses, inviting people to perceive the work of God.

It is with good reason that those illustrious academics, who more directly cultivate the research of truth, belong to the first category. So it can be seen why that which the Gospel said of the Apostles can be applied also to them: *Luceat lux vestra*.⁶ They in their search for the ultimate reason, in their creation, in their very being in the world, must always be a light, a great light, for all.

The Holy Father had already alluded to this elevated idea, this magnificent observation. He intended to apply it firstly to himself, and to all those who share with him the apostolate of Faith: we are in this world, he said, to be the light which saves, the supernatural light of Faith which surpasses all others. A light which does not contradict but aids the light of sciences, helping it in a unique and indescribable way to explain the universe. Thus to him and to those who with him inherit this apostolate of Faith apply above all the divine words: *Vos estis lux mundi*. But next he insisted upon applying them also to those scientists of his Academy, which the hand of God has called to investigate the splendours of the created world, giving the light of scientific truth which concurs to unveil in ever greater visions and reflections the uncreated Truth. Thus the Word of God is also valid for them: *Vos estis lux mundi*. There shines in them that true light of scientific research which continually brings great benefit to humanity, but then rises to the source of all those truths. It is in fact the hand of God which has arranged these studies, the same hand that lit the geniuses of Marconi and Hertz. It awakens the energies of the beloved Pontifical Academicians so that they be a light to those who do not dwell in the Father's House. Therefore, so that the terrible vision the Apostle to the Gentiles had, if only for a moment, be not realised for any of them, every great intelligence such as theirs, needs to thrill in the research of the full truth, lest there be an intelligence created by God, illuminated by God, which stops at the created and does not rise to the Creator. To such an intelligence would be applicable that grave and logical penalty alluded to by the Apostle himself with the fearful words: *ita ut sint inexcusabiles*,⁷ as if to say that they cannot have an excuse for not having known the Artificer, the Creator, after having known the work, the creature. It is true that the limits of excusability and inexcusability are among the most difficult to comprehend in this area of the unknown, of the inscrutable, even for the

greatest intelligences. Only that God who is Truth, who is all Truth, who calls all creatures to truth, who gives them the means for following truth, only that God sees these limits with certainty, even if the Apostle has spoken of inexcusability.

After these reflections, the Holy Father added that he had wanted above all to say something useful for himself and for the souls of all those who work for the apostolate of faith. But then he wanted also to rejoice with all those present in that great hour, that great gift which God had granted him: an hour of light, an hour of truth. It was an exquisite gift, one of the greatest genuine participations of his own perfections, because God is Truth. *Ego sum veritas.*⁸ In these words is contained everything that the August Pontiff wanted to and could say to exalt the beloved Academicians' opportunity of having received from God such riches, such light of truth, such zeal for the search for truth. And since *Deus veritas est*, the most intimate, most supreme, most beneficent, most extensive participation to which God could elevate, is the constant quest for truth. With these thoughts His Holiness went on to impart his blessing to all those present, wishing that it remain with them and with their intentions in that moment and always.

1 *Das Lied von der Glocke.*

2 *Hab* 3:11.

3 St. Augustine, *De Civitate Dei*, Bk. XVII, Ch. 4.

4 *Mt* 5:14.

5 *Inni Sacri, Ognissanti*, 15-36.

6 *Mt* 5:16.

7 *Rm* 1:20.

8 *Jn* 14:6.