

Basilica di S. Maria degli Angeli e dei Martiri

Ninth Michelangelo Award, 2000

*“ART as FAITH”*

## **Knowledge, Art and Science**

Address by the Governor of the Bank of Italy

Antonio Fazio

Rome, 19 November 2000



*“I see the walls and the arches ...”*

But I – and you with me – also see the glory.

Faced with the task of remodelling a ruined building designed by a Roman architect thirteen centuries earlier, Michelangelo interpreted it to express the Glory of *“the Supreme Maker, who willed to stamp on him a vaster imprint of his Creator’s spirit”*.

The artist discerns and expresses elements of beauty and harmony in Creation that would otherwise remain unperceived.

This is true of the architect and the poet, of the painter and the musician. Each one interprets and creates, seeing what is concealed from most of us and making it accessible, to be enjoyed and appreciated.

We cannot define beauty. Yet it does exist. The artist unmasks it, offering parts of it to our gaze.

It is a very great honour for me to be awarded the Michelangelo prize: I am pondering on the motivation.

Nature, Creation and Being are unfathomable when set against our knowledge.

Among you here are not only artists, but also men of science. The world and material things are there, outside us. Science, like art, explores the arcane laws and harmonies, the beauty of Nature and Creation. Like the artist, the scientist seeks to discover the essence of things, the laws and the relationships between all things and phenomena.

The artist is often moved by a blaze of intuition, a flash of lightening in the dark, which he then recreates, describing what he has seen for the rest of us.



The scientist too starts from an instinctive recognition of some aspect of nature and develops it, building from hunches; he formulates concepts and prepares the groundwork for experiments, which he then performs. How scientific this is depends on how much of it can be checked or falsified.

The moving force is always man's thirst for knowledge. The objective is to communicate, to speak to people.

In art, as in science, the expression of an opinion is an implicit appeal that the rest of the community will share it. A need for harmony elicits a concept that must be recognized by all. Herein lies the universal nature of art and science. Both are profoundly meaningful and are essential to man and the community.

Art is beauty: but beauty and goodness are indivisible. By virtue of its nature as an interpretation - by an artist, a critic, or whoever created it - art presents us with a theory of truth. *"Bonum et verum convertuntur"*.

We are all aware of the difference between physical and life sciences.

In the first the results of applying pre-determined procedures to well-known elements can be very closely controlled. In biology the outcome of an experiment is less certain; our knowledge of the basic elements is less complete, given their complexity; and the experimental procedures involve factors not all of which are known. But this does not make the tests less meaningful or the results less useful, as can be seen by advances in medicine.

The risks associated with the manipulation and subversion of human life and freedom intensify the problem of setting ethical limits, not to the advancement of scientific research, but to the claim that its results should automatically be applied. The very destiny of man is at stake; the issue demands consistent and timely answers.

In the social sciences the relationship between the basic elements, procedures and results is still less certain, more delicately balanced.



Man's free will comes into play.

Experiments cannot be repeated in the laboratory.

Yet even in this field we cannot doubt the laborious advancement of knowledge. In this case knowledge must be based on careful observation of reality, which must be defined and circumscribed for the purposes of analysis; while the laws governing it must be sought through intuition and reflection, by studying the past.

I sometimes enjoy comparing the intellectual and practical work of social scientists, and of economists in particular, to that of doctors.

In medicine the object of analysis, the subject to whom research is applied, is the living body. In economics it is the social body.

Society, like the human body, can be seen as a single organism within which many functions are performed. Some of these functions are encompassed by the concept of economics: production, trade, enjoyment of the goods and services necessary and useful to life, the creation and distribution of income.

Economics is similar to medicine in that it aims to achieve the regular functioning, the welfare and health of the social body. Economic analysis and measures must be motivated by the welfare of society. This is particularly evident when we are called upon to make momentous decisions and commitments in order to invest in the future.

The prodigious growth of communications, the information technology revolution, the process of so-called globalization, and exchanges between all parts of the world mean that the welfare and workings of each geographically and institutionally discrete community are increasingly linked in mutual dependence on those of numerous other communities, even in remote corners of the globe.

The object being observed, under study, and the action thus tend to expand geographically and conceptually, to become more complex. This is partly on account of the emergence of new



phenomena which, though present in the past, were relatively unimportant, but which have become significant in today's context.

The enormous variety of these phenomena and their immediate significance for so many people often lead to partial and fragmentary interpretations of their nature. Their duration, often spanning many years, complicates the task of analyzing and regulating them.

A decisive approach is needed, one that can comprehend today's more complex reality and endow the various phenomena with cohesion.

As occurred at other historical moments of transition, we must redirect our thoughts to find answers to the questions raised by the new and closer relationships between diverse nations and peoples, so full of consequence for the production of goods and services and for that quintessential human activity which is labour.

The laws that regulate relationships in economic and social life are objective and perceptible; they can be approached following scientific criteria.

The fact of their immediate significance for the welfare of individuals means that, notwithstanding intentions of objectivity, efforts to analyze and regulate them become coloured by political visions.

Since in the final analysis the ultimate architect of each improvement – as also of each error and each step backwards – is man, and since man and his welfare are the ultimate aim of each activity, including economic activity, the latter is but a step on the ladder to the higher sphere of human sciences.

The universality of art, its ability to overcome spatial and temporal bounds, helps and sustains this ascent towards the higher branches of knowledge. A society without art is inconceivable.

We must re-unite scientific, technical and economic knowledge with humanistic knowledge, freedom and responsibility so demand.



In this endeavour we must be guided by a spirit of wisdom.

*Wisdom reacheth from one end to another mightily: and sweetly doth she order all things. ...  
She knoweth things of old, and conjectureth aright what is to come. She is the fount of all riches.*