



ALMA MATER STUDIORUM UNIVERSITÀ
DI BOLOGNA



РОССИЙСКАЯ АКАДЕМИЯ ЕСТЕСТВЕННЫХ
НАУК

Election as a Foreign Member of the Russian Academy of Natural Sciences: happiness is like a butterfly.

Salvatore Lorusso

My respectful greetings to everyone present.

I would like to start with a few words from Prof. Angelo Pompilio, Director of the Department of Cultural Heritage of the Alma Mater Studiorum of Bologna University, Ravenna, Italy.

"I am extremely pleased by Professor Salvatore Lorusso's election as a Foreign Member of the Russian Academy of Natural Sciences and would like to say, together with the members of the Department of Cultural Heritage, that we are with Professor Lorusso in spirit for this prestigious award and would like to express our most sincere thanks to the President and members of the Academy, convinced of the importance of the synergy between art and science and also in the shared scientific aims that unite our Institutions".

Why does the title of my presentation on this particular occasion end with Nathaniel Hawthorne's quotation "happiness is like a butterfly"? Because, a butterfly, "when pursued, is always beyond our grasp, but if you sit down quietly, may alight upon you".

Well, on this occasion it has alighted on me, certainly not waiting quietly for it to do so, but because someone – and I am profoundly grateful to them – allowed the butterfly to settle on me: my deep appreciation therefore goes to the President of the Academy, Distinguished Professor Oleg Kuznetsov; to those who supported my election, as well as the Chairman, from the Division of Chemistry and Member of the Academy Presidium, Distinguished Professor Valery Petrosyan of the Division of Chemistry; and to all of you, who have allowed me to be part of your Scientific Family: the Russian Academy of Natural Sciences.

My presentation will address some brief considerations concerning Cultural and Environmental Heritage and represent a summary describing the fundamental aspects at the basis of my study over the years.

First of all, I think that the following assertion is pertinent to our life and, in particular, to cultural and environmental heritage: “Our past is part of our future through our present”.

This truth can be applied to art, because the various artistic conceptions, expressions and productions are linked to each other and to the history of man.

The second assertion is: art and science, art is science, because “art and science are two different but complementary ways of reading reality”. This concept of “reading reality” is very important to us and to the study of Cultural Heritage. In fact “read” is synonymous of the following path: knowledge, interpretation, and evaluation of art work. This sequence is carried out through subjective evaluation performed by historians, and objective evaluation performed by technicians. This twofold possibility, connected to the fusion and reciprocal need of art and science, represent the “core and nucleus” of my intervention and, correspondingly, of the study of Cultural Heritage.

In relation to “art”, I would like to mention one of the greatest and most versatile geniuses in the history of humanity – an Italian artist with a many-sided personality: painter, architect, sculptor, writer, art theorist, scientist, engineer – Leonardo da Vinci, who underlines that: “Wisdom is the daughter of experience... and experience does not err, only our judgments do”.

I would like to emphasize these keywords: “wisdom”, “experience” and “judgments”, that is to say, experience and consequent wisdom determines “judgments”. This fundamental concept is at the basis of the evaluation of the work of art.

In relation to “science”, as an extension of technology, it is continuously in progress and so creates a sense of incompleteness.

One of its emblematic representatives is another brilliant personality, a Russian chemist, who made a great contribution to science, and both Russian and international culture, and to chemistry, physics, geology, art (mosaics), literature, poetry, geography, cartography and astronomy, Michail V. Lomonosov. He points out:

“The intellect with the help of science penetrates the secrets of matter, indicating where the truth lies. Science and experience are only tools, they are only the means for gathering materials for the intellect”.

Here again, I would like to underline these expressions: “intellect”, “science”, “truth”, “experience” because they are just as essential in making any kind of judgment.



Leonardo da Vinci



Michail V. Lomonosov

What these two geniuses, Leonardo and Lomonosov, have expressed, allows one to understand how the man of science and the man of art can coexist, without the one ever prevailing over the other and how it is possible to achieve results and reap success in both fields at the same time. They in fact sensed the revolutionary value of technics and technology and sought to converge the arts and humanities, bridging the gap between “the two cultures”: these two aspects of their personalities come alive in their work, in their mission. Ultimately, it can be said that: Art and Science are two ways of narrating the history of the world: not two entities in contrast with each other, but two different complementary ways of “reading reality”.

Deriving from these concepts is the holistic value of art work, which is a set of values connected to different scientific areas.

As a result, education and research have an important role in the “system: artifact-environment-biota”, with the aim not only of protecting artifacts, but also of safeguarding human health: the implementation of an appropriate and complete methodological path is therefore necessary.

And in addressing the environment, understood as a cultural asset in respect of ecosustainability, the World Wide Fund for Nature points out that: “Nature does not support the human footprint”. In other words the human footprint exceeds the regenerative and receptive capacity of natural systems.

It is evident from the above, that the study and approach of the various and integrated scientific experiences and competences are fundamental for “the good of cultural goods”. At the same time, however, this interdisciplinarity is necessary for the training, teaching and education of professional figures in this sector, to enable them to compete at a national and international level.

It is just as true to say that the cultural object with its holistic value, important in study and research, meets the needs of internationalization, both in the scientific field and in the employment market. The cultural significance of a work of art, moreover, goes well beyond local and national confines, requiring involvement and participation, in its role of acculturation, joy, contemplation, enjoyment, sadness, pathos and enthusiasm.

An emblematic example of interdisciplinarity and internationalization in the field of heritage research is represented by the setting up of the project “Italy-Russia-Armenia” on the theme of “Atmospheric pollution, protection of cultural property and quality of life in megalopolises”. Participants in the project are:

- the Diagnostic Laboratory for Cultural Heritage of the Department of Cultural Heritage, Alma Mater Studiorum University of Bologna , Ravenna Campus, Italy;
- the Department of Chemistry and the Faculty of Arts of Lomonosov Moscow State University;
- the Center of Ecology and Health of Moscow;
- the Institute of Chemical Physics of the National Academy of Sciences of Armenia.

Below is a summary of the key points underpinning the research:

1. The study is to be conducted by various experts from different cultural backgrounds and competences in respect of interdisciplinarity.
2. As regards the impact of atmospheric pollution, research is not only applied to the protection of cultural heritage, but also to human safeguard (biota).
3. This problem is particularly acute in megalopolises, due to the very intensive traffic and productive activities which determine high concentrations of atmos-

pheric pollution. But I would like to underline the synergic effects of different factors and chemical agents. The choice of the sites and artifacts is representative, not only from an artistic-architectural, but also a logistic-environmental perspective: here I would like to point out, in particular, the prestigious sites in Bologna, Ravenna and Moscow.

4. At the end of the research, it is then fundamental to share and communicate results, not only to experts and scientists, but also to political representatives of the government and the general public.

In renewing my sincere thanks to the President of the Academy, Professor Oleg Kuznetsov, the Academicians and to all of you for the honor you have conferred on me with my election as a Foreign Member of the Academy of Natural Sciences, I would like to gather in one embrace, two dear friends and colleagues from the Lomonosov University, whom I met at different times, but with whom I share one unique profound feeling and common scientific interest: the Chemist Professor Valery Petrosyan, of the Department of Chemistry, who as well as introducing me and helping me in attaining this prestigious election, has allowed me to meet the Philologist, Professor Aleksandre Lobodanov, Deputy of the Department of the Semiotics and Basic Theory of Fine Arts and Dean of the Faculty of Arts. They represent – and not only scientifically – concrete evidence of the belief in “two different languages, one culture” a truth already expressed by the Rector Professor Ivano Dionigi of the Alma Mater Studiorum University of Bologna and the Academician Professor Cosimo Damiano Fonseca and on which the Department of Cultural Heritage’s activities are based: so, taking up once more what I initially underlined “art and science, art is science”.

They represent, from both a human and scientific point of view, concrete proof that there are: “Two different languages in a single culture” and therefore taking up what I initially emphasized:

“Art and science, art is science”.

To end, I would like to embrace and trace back my forty years of university activity and experience to those basic principles defined as pillars of an individual’s development inside the scientific community:

- competence -> I have acquired, but I don’t know to what extent;
- courage -> in some cases, perhaps too much, but I haven’t been aware of it;
- merit -> it is you, today, who have spoken with authority and to you today that

I must humbly address my deepest gratitude.

And speaking once more of Lomonosov:

“Science is the clear recognition of the truth, pure enlightenment of the intellect, enjoyment of life, praise in youth, support in old age, builder of cities, troops, stronghold of success in misfortune, ornament in happiness, an ever faithful and inseparable traveling companion”.

So, in achieving this objective, I will have the certainty that “happiness is like a butterfly”.

My profound gratitude to you all.