



Accademia Nazionale dei Lincei

Closing ceremony of the Academic Year 2015-2016

Address of the President of the Accademia dei Lincei
Alberto Quadrio Curzio

Rome, 10 June 2016

In closing the 413th year of the Accademia Nazionale dei Lincei, I have the honour to thank the President of the Republic Prof. Sergio Mattarella for his attendance that continues and consolidates the relationship between the Heads of State and the Lincei. I wish to thank all the authorities, in particular Prof. Paolo Grossi, President of the Constitutional Court, the representatives of the Senate, Senator Maurizio Gasparri, and of the Camera, Honourable Simone Baldelli, the Honourable Ministers Stefania Giannini, representing the Government, and Dario Franceschini, as well as all who are here today, with special gratitude to the Academy Fellows. In particular, I wish to thank the Academy's Executive Board: Lamberto Maffei (Vice Chairman), Maurizio Brunori (Academic Director), Pietro Rescigno, Giancarlo Setti, Fulvio Tessitore, Annibale Mottana and Roberto Antonelli.

1. The opening address of November 2015

In the opening address of the academic year, on the 11th of November, I outlined a program of the goals I aimed at achieving during my appointment, along three guidelines: the classic institutional life, the international relations, the excellence awards. In following these three Lyncean issues we have had an intense year, even with contributions of personalities outside our Sodality.

2. The institutional life

It flowed with no interruption, with a number of meetings and conferences that surpassed that of the "historical" meetings of the second Thursday and Friday of each month. Indeed, we follow Luigi Einaudi's motto which warns our Fellows to always keep their scientific curiosity alive and continue to learn. This leads, in my opinion, to a scientific and cultural interdisciplinary wisdom that bestows composure upon shared judgments and confers individual humbleness before the greatness of the human knowledge, regarding both the achieved results and those still to be attained. Therefore, besides specialist analyses, the dialogue with personalities outside the Lincei is a crucial issue to complete our views.

It is impossible to account for all the initiatives listed in the documentation handed out (which amount to 104 events, 24 of which in collaboration with external organizations); let us then consider these activities as a sort of "bridge" (Interdisciplinarity and Committees) built on two solid "pillars" (the Classes above all). All activities have been fostered by the Lincei Fellows whose names in full are given, for each initiative, in the information sheet; for the sake of brevity, we shall illustrate only a few of them.

Emblematically, I wish to delve into three distinct topics of relevant **interdisciplinary character** that benefited of contributions from inside and outside the Academy: Europe, Italy, the Policy of science and culture.

Within the framework of our institutional role and with a view to the Academies G7 that we shall organize in 2017, our Prime Minister Matteo Renzi held the first Conference in December on a relevant subject such as «*Scienza, Cultura e Arte: il ruolo dell'Italia*» (Science, Culture and Art: Italy's role), in which he expressed his wish that the Lincei actively support the shaping of public policies.

Europe: we have dealt with this issue by combining past and present to contribute, like the Lincei have always done, to the building of Europe. With the exhibition «*I libri che hanno fatto l'Europa. Manoscritti latini e romanzi da Carlo Magno all'invenzione della stampa*» (The books that have made Europe. Latin manuscripts and novels from Charlemagne to the invention of printing), which President Mattarella visited this morning, we have retraced the development of a deep and fertile cultural tradition, here enriched by the context in which the exhibition was conceived. This is the XXVIII International Congress of Linguistics and Romance Philology, organized with the support of the Ministry of Heritage and Culture and the Ministry of University and Research (as well as other bodies). The exhibition is above all the result of the efforts of our Fellow Roberto Antonelli, who availed himself of a large scientific committee supported by two young assistants (Michela Cecconi and Lorenzo Mainini) and by the Architect Susanna Nobili. The conference of our Fellow Pietro

Rossi «*Spazi e tempi dell'Europa*» (Spaces and times of Europe), has equally been of high significance, also because it originated from a volume edited by the speaker himself and commissioned by ALLEA, an Association that gathers more than 50 European Academies devoted to the construction of Europe, as testified by the Prize "All European Academies Madame de Staël Prize for Cultural Values", of which I am a member of the evaluation Committee.

More conferences have helped to fully outline the European profile; these were held by personalities such as the President of the Camera dei Deputati Laura Boldrini, on «*Per una nuova cittadinanza europea*» (For a new European citizenship); the Director General of the European Commission on Economic and Financial Affairs Marco Buti, on «*L'Europa nella nuova governance economica mondiale. Possiamo ancora contare?*» (Europe in the new world economic governance. Shall we still count?); President Romano Prodi, on «*Europa e migrazioni*» (Europe and migrations).

These issues had been preliminarily debated in the Lincei Conference of November 2014 «*Dove va l'Europa?*» (Where is Europe going?) that I promoted with the Academy Fellows Enzo Cheli and Franco Gallo and in which took part, among others, Herman Van Rompuy, who was the President of the European Council at that time. This should also have a follow-up in the fall of 2017 to celebrate the 60th anniversary of the Treaties of Rome. I would like to include such an initiative in a partnership offered to me by the Foreign Secretary of the British Academy, which should be jointly implemented with the French and German National Academies, to concretely oppose Euroscepticism and relaunch the European project.

Italy: analyses and reflections on our Country have never paused. Therefore, I shall only quote some of the conferences held, starting with those having a more marked economic character and related to our commitment to overcome the crisis. Talks on this subject have been given by our Fellow Alessandro Roncaglia, about «*L'economia italiana e l'Europa: crisi dopo crisi?*» (Italian economy and Europe: crisis after crisis?); by the President of IntesaSanpaolo, Gian Maria Gros-Pietro, about banking innovation; by the President of Eni, Emma Marcegaglia, about Eni and internationalization; by the Managing Director of Leonardo-Finmeccanica, Mauro Moretti, with regards to that company and the Italian National Railways; by the President of the Federazione dei Cavalieri del Lavoro, Antonio D'Amato, who stressed the commitment of his Sodality for Europe.

Development today also means sustainability. To this regard, important initiatives have been taken by the Environmental Committee with the "XVI Giornata Mondiale dell'acqua" dedicated to the «*Inquinamento antropico di acque e suoli in Italia*» (Anthropogenic pollution of waters and soils in Italy) (Steering Committee: Sergio Carra, Carlo Doglioni, Annibale Mottana) and with the meeting on the «*Resilienza delle Città d'arte ai terremoti*» (Resilience of Art Cities to earthquakes), a significant part of which was dedicated to Italy (being the Steering Committee composed of Giovanni

Seminara, Antonio Sgamellotti, Michele Caputo, Carlo Doglioni, Massimo Livi Bacci, Giuliano Panza, Alberto Quadrio Curzio).

We can now turn to more **scientific-cultural issues and related Policies**. Our Fellow Giorgio Parisi, with his conference «*Ricordo di Giorgio Salvini*» (In memory of Giorgio Salvini) has also retraced part of the story of physics and science policy from the Italian-European post-war period up to the present, reflecting on the work of one of our unforgettable presidents. Science policy was also a subject covered by the new President of the CNR, the Linceo Massimo Inguscio.

The Committees

Many interdisciplinary topics are dealt with by the Committees, like the already mentioned Committee for the **Environment and Natural Disasters** (Chair Michele Caputo, with 13 members), which in November will celebrate the 34th Environment Day dedicated to *Adaptation strategies to climate change*.

The Committee on **University issues** (Chair Fulvio Tessitore, with 10 members) and the one on the **Research problems** (Chair Giorgio Parisi, with 10 members) have co-sponsored an interesting international conference «*Giurisprudenza e Scienza*» (Law and Science) coordinated by Carlo D'Adda, Carlo Doglioni, Antonio Gambaro, Giancarlo Setti and Fulvio Tessitore. The Committee on **Research** has appreciably and constructively elaborated «A note on the Master Plan of the Human Technopole» following the methods that other academies adopt towards their respective Governments. Another paper dealing with the state of the research in Italy is nearing completion. Finally, an *ad hoc* **Working Group** composed of the Fellows, whom I thank, Roberto Bassi, Giorgio Morelli and Francesco Salamini (coordinator) has painstakingly carried out an interesting scientific study on the Xylella, which is about to be concluded.

The two examples I have mentioned represent interesting methodological models for further analyses and suggestions that the Lincei could propose, following an appropriate procedure, to the Government and other government bodies.

Among the committees, we like to mention that for the **History of the Academy** (Chair Tullio Gregory, with 4 members), which in recent years has energetically resumed its activity with the publication of six volumes, one of which is currently being translated in English (with the support of SEPS): Paolo Galluzzi's *Libertà di filosofare in naturalibus. I mondi paralleli di Cesi e Galileo*.

Other active committees are those for the **Bioethics** (Chair Pietro Rescigno, with 10 members) and that for **Naturalistic museums and science museums** (Chair Stefano Turillazzi, 13 members).

Other committees could be established, including that for the **Archives**, whose online consultation facility has significantly developed during this year.

Finally, there are: a Working group, coordinated by our Fellow Luciano Maiani, which is relaunching the **Amaldi Conferences** on nuclear energy issues and international security; the **Committee for the Edizione Nazionale dei Classici Greci e Latini** (National Edition of Greek and Latin Classics) (Chair Guglielmo Cavallo, with 7 members); the Committee for the **Redazione delle Notizie degli Scavi di Antichità e dei Monumenti Antichi** (Edition of Archaeological Excavations Reports and Ancient Monuments) (Chair Antonio Giuliano, with 5 members).

The Committees, besides analysing specific problems, may develop, as we have seen, **evaluation documents** that fall within the field of their responsibilities according to particular procedures. In special cases, such papers may become documents of the Academy only if approved by the Executive Board and the joint Classes. The first recipients of these are the institutions of the Republic.

The interconnection between art, culture and science is also achieved as an increasingly wide public is attracted by two important historical monuments. One is the **Villa Farnesina** that, governed by an *ad hoc* committee, this year has achieved an important and highly appraised result with the restoration (carried out by the Istituto Superiore per la Conservazione ed il Restauro directed by Gisella Capponi) of the *Grotesque Gallery*, embellished by the splendid decorations of Raphael and his workshop.

The other is our library, the **Biblioteca Corsiniana**, directed by a Supervisory Board that was chaired for many years by our Fellow Tullio Gregory (whom we also wish to thank for his deep commitment in promoting high-profile Exhibitions) and that can be further enhanced in the future.

Finally, we must mention the **Centro Linceo interdisciplinare Beniamino Segre** whose special statute allows the secondment of university professors on the grounds of a 1977 law. I wish to thank our Fellow Tito Orlandi for his highly appreciated six years' direction.

The Classes

They are our "pillars" and indeed have done an excellent work in their own field. It is impossible to give a full account of their range of activity, as one can understand from the amplitude of their fields of research. Suffice it to recall that the activity of the Class of Physical, Mathematical and Natural Sciences (chaired by Lamberto Maffei) encompasses five categories: **First Category**, Mathematics, Mechanics and Applications; **Second Category**, Astronomy, Geodesy, Geophysics and Applications; **Third Category**, Physics, Chemistry and Applications; **Fourth Category**, Geosciences; **Fifth Category**, Biological Sciences and Applications, which are subdivided into 13 sections in all.

For the latter let me mention, albeit emblematically, the Conference «Seeing Molecules. Le microspie per le scienze molecolari» organized by Maurizio Brunori, Dante Gatteschi, Vincenzo Schettino and Giuseppe Zerbi.

The activity of the Class of Moral, Historical and Philological Sciences (which I chair myself) encompasses seven categories: **First Category**, Philology and Linguistics; **Second Category**, Archaeology; **Third Category**, Art and poetry criticism; **Fourth Category**, History and Historical and Anthropic Geography; **Fifth Category**, Philosophical Sciences; **Sixth Category**, Legal Sciences; **Seventh Category**, Social and Political Sciences.

For the latter, I shall just mention, emblematically, the debate on «The catalogue of the Library of Piero Sraffa» presented by the volume's curator Giancarlo De Vivo (who for this work was awarded the Antonio Feltrinelli Prize in 2015) and by the Trustees of the publication John Eatwell, Maurizio Mattioli, Luigi L. Pasinetti, Amartya Sen, in the presence of Senator Giorgio Napolitano. All of them were friends of the Linceo Sraffa, while Eatwell, Pasinetti and Sen (Lincai as well) were also his pupils.

The final report of each Class will be, as usual, presented by their own President on occasion of the meetings of the Classes.

An important element to better appreciate the activities of the Classes are the **publications** with 21 volumes issued in this academic year, besides the articles published in external journals.

The Academy publishes two periodicals of international prominence, namely the «Rendiconti Lincei. Scienze Fisiche e Naturali» and the «Rendiconti Lincei - Matematica e Applicazioni».

The Class of Moral, Historical and Philological Sciences publishes two Reviews of high prestige, also from the historical point of view: the «Rendiconti» and the «Memorie» (Atti dell'Accademia dei Lincei). Of great historical and archaeological relevance are also the *Notizie degli Scavi di Antichità*, as well as the *Monumenti Antichi*, of long-standing tradition, and the *Bollettino dei Classici*.

Moreover, the Academy publishes the series Contributi del Centro Linceo Interdisciplinare «Beniamino Segre» and the new series Testi di Storia e Storiografia of the Fondazione Leone Caetani.

Finally, the scientific contributions of the conferences are published in the Proceedings «Atti dei Convegni Lincei».

Commemorations of the Fellows who have disappeared over the years have been many. To remember those who gave an example of life in the scientific and civic field is a duty of gratitude and a contribution to our identity as well as to our academic and civic mission.

3. International relations: "Corint and the G7/2017"

National Academies are very dynamic in science and culture policy, while just a few pursue their own scientific research since this is usually done in Universities and Institutes. Instead, the Academies closely follow the evolution of natural sciences and humanities in a lively debate among their members. On this basis, diplomacy and scientific-cultural policy are pursued internationally in a dialogue with other Academies and with equivalent supranational Bodies. We must strengthen this diplomatic action to acquire more importance above all in Europe, where the Academies of France, Germany and the UK are very powerful.

To fulfil this role, the Commissione Relazioni Internazionali (Committee for International Relations) (CORINT) was reconstituted in 2013. Since then I have chaired the Committee, giving it a special role, supported by the unfaltering commitment of its members (Maurizio Brunori, Carlo D'Adda, Lamberto Maffei, Giovanni Seminara, Antonio Sgamellotti, Mario Stefanini and Giancarlo Vecchio).

At present the Lincei are part of 6 networks, both European and international, which connect all the scientific Academies in the world. Such a network system is extremely relevant for the dialogue between peoples and cultures.

The Academy has also established bilateral agreements with 14 national Academies (from different continents) and an agreement with the Association of Swiss Academies and the Balzan Prize Foundation.

We have also established a dialogue with the International Union of the Institutes of Archaeology, history and art history in Rome that in this field represents 19 nations and 25 Institutes (4 of which are German).

As we have often recalled, in 2017 we shall host the «G7 of the National Academies» which foreruns the political and institutional G7. I fully realized the importance of this event when I participated in the 2015 meeting in Berlin (where Chancellor Angela Merkel enthusiastically attended the final meeting) and in the 2016 meeting in Tokyo, where three Joint Statements were approved on the themes: *Global Brain Resources*, *Disaster Resilience*, *Future Scientists*. The presidents of the Academies eventually forwarded these documents to the Prime Minister of their own State.

At present, there are three issues on which we are working for the 2017 G7 of the Academies, as I have already announced in Tokyo in February, obtaining a broad consensus.

The first one is on «Resilience of the cultural heritage» and is coordinated by the Fellows Giovanni Seminara and Antonio Sgamellotti. On a similar theme, a preparatory conference was held in November 2015 and another will be held in October 2016, to coincide with the 50th anniversary of the floods in Florence and Venice. On that occasion, with the participation of some important foreign and national academies, a final document should be issued (perhaps a *Carta di Roma* for the cities of art).

The second will be on «Economic development and technical sciences», coordinated by the Linceo Sergio Carrà and myself. This topic also stems from the observations on the subject that the Lincei have been making for over a decade, supported by the Edison Foundation that will participate in the conference *«Sviluppo Economico, Tecnoscienze, Industrie. Una prospettiva italo-europea»* that is going to be held in October.

The third issue, «Population aging and neurodegenerative diseases», is coordinated by the Academy Fellows Maurizio Brunori and Lamberto Maffei. An exhaustive conference will probably be dedicated to this topic within this year to focus on issues (medical issues, social welfare, demographic and social issues) that are becoming more and more problematic in the developed countries (and not only).

These issues have in common both **methodological** and **substantial** aspects: they are interdisciplinary; they deal with general problems that are also of great significance for Italy and Europe. For this reason, we are supported by institutional, private and public bodies that also allow us to publish studies that will long remain authoritative.

4. The excellence awards

Today we shall proclaim the winners of 36 awards, including that of the President of the Republic for Moral Sciences, and shall announce (as they will be awarded in November) the national and international Feltrinelli Prizes for Physical Sciences and the Feltrinelli Prize for an outstanding enterprise of high moral and humanitarian value.

In opening this academic year, I remarked that, besides rewarding prominent scholars who have left their mark on the history of science, we also have to promote young talents.

I am therefore pleased to announce that in 2016 four «Antonio Feltrinelli Giovani» prizes have already been announced, in order to valorise Italian scholars under the age of 40 who have achieved noticeable results in terms of originality, independence and international importance thus contributing, even in a future perspective, to strengthen Italy's scientific role. The prizes shall be awarded every other year between the two Classes of the Academy. Each Class may decide from year to year that one of the four prizes is awarded to a foreign citizen who has established a collaboration with Italian scientific institutions.

This achievement is something I had close to my heart since the first year of my presidency, and therefore I am grateful to the Executive Board that has assisted me and to the Assembly, which has unanimously approved the proposal.

The Lincei are an association marked by a scientific wisdom which is usually reached by a long experience of study and research, but from 2016 we will also promote praiseworthy young scientists. In the history of our Academy only a few personalities of exceptional scientific capacity and maturity have become Lincei Fellows before the age of 40, and among them is the Speaker of today's conference, Enrico Bombieri.

In the framework of a scientific and cultural exchange between different generations, the Iinter-La+b also deserves attention; this is the international interdisciplinary seminar promoted by the Balzan Foundation and jointly conducted by the Lincei and the Association of Swiss Academies.

Our action to recognize the excellence extends onto other fronts. I wish to quote an evolving one: that of women scientists, a topic that our Fellow Francesca Matteucci has dealt with in her 'Margherita Hack' Conference and which we will soon take up again with enthusiasm.

5. In conclusion

I wish to express again my deepest gratitude to the Fellows who conceived and planned the activities that we have accomplished, also thanks to a careful management supervised with great competence by the Board of Auditors represented by Angelo Cagnazzo, Flavia Cristiano and Natalino Irti.

I also wish to thank our Chancellor, Ada Baccari, and the entire staff that has contributed to the smooth running of the Academy's life.

Finally, I wish to thank the Associazione Amici in the person of its President Pierluigi Ridolfi, who has always been constructively close to us.

In the end, I should also mention all the **Funds** and **Foundations** related to the Lincei, which almost always rely upon the generosity of benefactors. Let me just recall the most recent Foundation "**I Lincei per la Scuola**" which has received fundamental support from the MIUR, the Ministry of Education. The Foundation was created by

President Lamberto Maffei who outlined its characteristics in the final report of 2015; more information is provided in the handouts. I only wish to recall that the Foundation's Honorary President is Sen. Giorgio Napolitano, its President is Lamberto Maffei and its Vice President is Luca Serianni, assisted by an Executive Council and a Scientific Council coordinated by Francesco Clementi. Currently it articulates its activity in 24 towns, or didactic poles. The innovative impact of the initiative and the commitment of the teachers involved in the Poles' activity are indeed commendable. Admiration and esteem is finally owed to four of our members who have gained **positions of high relevance**, both institutional, with Paolo Grossi elected to the Constitutional Court of the Presidency and scientific, with Massimo Inguscio appointed President of the CNR, the National Research Council, with Carlo Doglioni appointed President of the National Institute of Geophysics and Volcanology, with Fabiola Gianotti, Director General of the CERN from 1 January 2016.

Next year, our projects and commitments, which I will better outline in November, will be challenging, especially the *G7* with its strong interdisciplinary and operational nature; such commitments may also herald a structural reorganization of the Accademia dei Lincei.

If we have enough strength, we might also contribute, in late autumn 2017, to the celebrations of the 60th anniversary of the Treaties of Rome, in the hope that they coincide with a renewed impetus in Europe, where we have the privilege (although not always the awareness) to live in a soundly rooted civilization.