



ACCADEMIA NAZIONALE DEI LINCEI

Inauguration / opening ceremony of the Academic Year 2017-2018
10 NOVEMBER 2017

Address of the President of the Accademia Nazionale dei Lincei
ALBERTO QUADRIO CURZIO

1. An opening address in the wake of the tradition

In opening the 415th academic year of the Accademia Nazionale dei Lincei, I wish to thank all the authorities who honour us with their messages and by attending our meetings together with the friends and supporters of the Lincei who are with us today.

I will illustrate my reflections according to what I had already delineated in the opening and closing speeches of the last two years of my tenure, trying to outline the planning of the forthcoming academic year in the wake of our history that is marked by a twofold character, that of *continuity and innovation*. On such a combination, the Lincei should continuously reflect and even more at the beginning of the 21st century, keeping in mind Galileo's enlightening scientific revolution that brought forward great cultural and social, economic and technological changes. An important step, although in a different way, was the Italian Risorgimento when the Lincei were reborn (or born) as a scientific and cultural institution purposely aimed at strengthening the newly established national state in an international open context where other countries were far more advanced than ours. In that period, many of our members - from Quintino Sella to Vito Volterra - were also involved in politics (often as senators for life) with a strong and coherent outlook. After the traumatic fascist interruption, the Lincei were reborn as the institution of a national Republic with a European and international character that is still undergoing consolidation, perhaps also because the European political entity is not fully understood yet.

Today the Lincei are - and must be - an *Italian internationalized institution, both national and European, aware that science and culture are universal and that this profile can help achieve excellence, far from any localism*. The Lincei were, are and will keep this profile, as confirmed by the presence of 164 Corresponding Members and 191 National Members from all over Italy, of Italian citizens living in many other countries of the world and of 170 foreign members of 21 countries. The comeback of localist policies, which Europe seems to experience today, does not help the progress of our civilization to which single national and cultural identities instead provide a character of multiplicity within unity. This is also essential to mitigate the disruptive effect of sectorized technoscience on which interdisciplinarity can bestow an overall comprehensive character.

As usual, I turn now to the *Members of the Lincei* in the belief that in the oncoming academic year they will continue to devote their knowledge and culture to the Academy. They know that the Executive Board (with vice-president Maurizio Brunori, the Academician Administrative Chief Renzo Piva, and Pietro Rescigno, Giancarlo Setti, Annibale Mottana, Fulvio Tessitore and Roberto Antonelli) is a highly committed team. Our Fellows are also aware that the financial and managerial side of our activity is especially demanding and that the supervision of auditors Dr. Angelo Cagnazzo (President), Prof. Natalino Irti and Dr. Flavia Cristiano is essential.

Moreover, relevant support is provided by a qualified, although short-handed, technical and managerial staff, directed by our Chancellor Ada Baccari.

I wish to express my appreciation to all of you, as well as to the "Associazione Amici della Accademia dei Lincei" chaired by Cav. del Lavoro Dr. Umberto Quadrino.

As in the past, I now wish to address the *new Italian and foreign Members* who officially join the Lincei today. They are 26 Italian and 8 foreign citizens who have passed a complex procedure of co-optation that has highlighted their scientific excellence as well as their cultural wisdom, as they express a sharpness of view in which science and culture, deeply rooted in history, do contribute to social progress and the common good for human development.

For this reason, interdisciplinarity and internationality - which characterize the dialogue between the two Classes (Physical, Mathematical and Natural and Sciences and Moral, Historical and Philological Sciences) - are of paramount importance.

I remind all members not to overlook our statute, its 1st article in particular, which I have the duty to quote in full:

- «1. The Accademia Nazionale dei Lincei, an institution of higher learning based in Rome, pursuant to art. 33 of the Constitution, has its own jurisdiction and carries out institutional duties in compliance with and within the limits of the State laws.
2. The Accademia Nazionale dei Lincei is formed by its Members and such an associational composition characterizes its structure and activity.
3. The Accademia aims at promoting, coordinating, integrating and spreading scientific knowledge at its highest level in the framework of the unity and universality of culture».

My talk will focus on three features of the Lincei that I have already mentioned: the **institutional**, the **international** and the **interdisciplinary** character of our institution. These issues embody an outlook on the present balanced between past and future, a topic on which I hope to conclude and publish a paper within this academic year.

2. Institutional activities

2.1. Institutional activities are carried out above all in the *two Classes*: that of Physical, Mathematical and Natural Sciences and that of Moral, Historical and Philological Sciences. Events include scientific meetings scheduled on the second Thursday and Friday of each month as well as many other initiatives, like conferences and seminars, which take place throughout the whole academic year. 116 initiatives have taken place in the academic year 2016-17. The 2016-2017 agenda is already crowded, as around 50 initiatives are scheduled besides external events held under the Academy's patronage. It is therefore impossible to illustrate them in detail; events and discussions are reported in full in our site.

The wide range of our activity should not lead adrift, to forms of particularized fragmentation or to scientific monads, regardless of their excellence. We shall instead hold our course, thanks to the work of the Committees and the Working groups that involve about 100 fellows of both Classes.

Moreover, in the joint meetings of the two Classes - along with monthly meetings for statutory and management purposes - Conferences are also held whose scientific and/or cultural and/or political-institutional nature focuses on the future of *science for science, of culture for science and of politics for science. Only in this way the Lincei might hold their ground as a top ranging national institution in a European and international environment.*

This is the purpose pursued by various initiatives of the Lincei, among which I wish to mention the Conferences of the two joint Classes, subdivided in two different types: The «*Conferenze Lincee*», held on the second Thursday of each month at 17.00 or 17.30 and the «*Conferenze Istituzionali*», held on the second Friday of each month at 11 o'clock. I have chosen to mark my tenure as President of the Academy by clearly typifying such meetings as follows.

The «Conferenze Lincee» of the two joint Classes, held mostly by Lincei fellows, are dedicated to the memory of a Member of the past; however, they do not retrace his or her accomplishments but rather highlight their impact in the field of science-policy and culture., The Conferences scheduled for this year will be held by:

* the Lincei fellow Paolo Galluzzi, on *Caleidoscopio Galileo. L'Edizione Nazionale (1890-1909) tra appelli alla laicità dello Stato, battaglie filosofiche e operazioni apologetiche,*

* the Lincei fellow Michele Caputo on *L'Accademia dei Lincei e la sua Commissione Ambiente,* whose history began in 1923;

* the Lincei fellow Salvatore Settis on *Lo "stato dell'arte" Il patrimonio artistico fra il museo e la mostra;*

* the Lincei fellow and Senator for life Elena Cattaneo on *Scienza, politica, progresso* (working title);

* the Nobel Prize in Chemistry Kurt Wuthrich on a topic to be further defined in accordance with the Lincei fellow Maurizio Brunori;

* the Lincei fellow Natalino Irti on *Tradizione e attualità dell'Istituto Italiano di Studi Storici,* founded in 1946 by the Lincei fellow Benedetto Croce.

The «*Conferenze Istituzionali*» of the two joint Classes will be held by eminent personalities who, because of their position, experience and competence, can offer a first-hand survey on issues of wide public relevance against a well-defined cultural or scientific background. For us at the Lincei, the standpoint of these scholars is essential even in the field of institutional affairs and, incidentally, let me announce that the volume *Corte Costituzionale, Corte di Cassazione, Consiglio di Stato*, which collects the essays by Presidents Paolo Grossi, Giovanni Canzio e Alessandro Pajno who held their conferences in the academic year 2016-2017, is about to be published.

In the oncoming academic year, these Conferences will be given by personalities who have been awarded important prizes or who hold high national and international positions. The first «*Conferenza istituzionale*» of the 2017-18 series will be held shortly by Abraham Yehoshua on the topic *Literature as a Moral Laboratory*. The following speakers have also confirmed their participation:

* Walter Ricciardi, Chair of the Istituto Superiore di Sanità, will give a talk on *L'Istituto Superiore di Sanità: Il contributo alla ricerca per la salute*.

* Francesco Profumo, Chair of the *Compagnia di San Paolo*, will relate on the nature of the Foundation San Paolo, which - starting from 2020 - will be reshaped to bring fresh energy and motivation into the field of science and culture.

Three more Conferences shall evidence how gender equality, when founded on professional merit plays a vital role in the progress of science, sustainable development and international peacekeeping. These Conferences will be held by:

* Fabiola Gianotti, Lincei fellow and, from January 2016, Director of the CERN (founded in 1951 also through the commitment of the Linceo Edoardo Amaldi), the first woman to direct the largest physics laboratory in the world.

* Bina Agarwal, Lincei fellow, Professor of Development Economics at The University of Manchester and New Delhi, 2017 Balzan Prize for "Gender Studies" with the motivation: "For challenging established premises in economics and the social sciences by using an innovative gender perspective; for enhancing the visibility and empowerment of women in rural areas in the Global South.

* Berit Reiss-Andersen, who will speak about the Nobel Peace Prize, whose committee she has been a member of since 2011 and President since 2017. During her tenure, 10 prizes were awarded, including 4 to women who significantly contributed to peace and human development, especially in the poorest countries.

2.2. The Committees

As I have often stated, the Committees play a highly relevant interdisciplinary role in their power to provide the institutions and the public opinion with *pro veritate* advice.

In the course of the academic year the role, the composition and the terms of the Committees will be reconsidered. Vice-President Brunori, appointed by the Executive Board, is developing a proposal that will be illustrated in the joint meeting of the Classes.

The following Committees are interdisciplinary, made up of Members of both Classes: "Environment and great Natural Disasters" (Chair Michele Caputo, who shall give a conference); "University Problems" (Chair Fulvio Tessitore); "Research issues" (Chair Giorgio

Parisi, with 10 members). They all have contributed to critically draw attention upon the topic of the public subsidy of the research, an issue towards which the Lincei fellow and Senator Elena Cattaneo has shown great attention as a member of the Committee on Research. I must also mention the Working group on the International security and Arms control (co-chaired by Luciano Maiani), founded in 1986, and that the recently relaunched Amaldi Conferences have also revamped.

Committees on specific fields - whose members belong to a single discipline or to neighbouring disciplines - are the Committee on the "History of the Academy" (Chair Tullio Gregory), that on naturalistic and science museums (Chair Stefano Turillazzi), the Editorial Committee of the publications *Notizie degli Scavi di Antichità* and *Monumenti antichi* (Presidente Antonio Giuliano), the Committee for the "Edizione Nazionale dei Classici Greci e Latini" (Chair Guglielmo Cavallo).

Finally, some special Committees are instituted to deal with specific and urgent pressing issues with *pro veritate* advice, like the *Commissione vaccini*, an initiative promoted by Vice President Maurizio Brunori (coordinated by the Lincei fellow Guido Forni, made up of the Lincei fellows Alberto Mantovani, Lorenzo Moretta and Giovanni Rezza of the Istituto Superiore di Sanità). Now an English translation of their report is available for an international circulation.

2.3. The publications

Our intense editorial activity will of course continue, even if I believe that some innovative steps should be taken to selectively give more weight to our international coverage.

It is my impression that the big effort put in the realization of some publications is not adequately rewarded because of a limited circulation, in spite of their essential importance.

The Class of Physical, Mathematical and Natural Sciences has two long-established journals of international prominence, namely the «Rendiconti Lincei - Matematica e Applicazioni» and the «Rendiconti Lincei. Scienze Fisiche e Naturali».

Notwithstanding the intrinsic difference between the science of the two Classes, for some works of the Class of Moral, Historical and Philological Sciences the translation in English with international publishing houses is envisaged. This will imply a reshaping of our publishing system, but it is worth the effort.

The debut of our monographic editions in English will take place in the oncoming year with two new series in English: a monographic one, with Yehoshua's essay *Literature as a Moral Laboratory*, a collective one, with the essays of the winners of the Balzan Prize for Young researchers.

2.4. The Centro Segre, the Foundations, the wealth

The programs of the Lincei are complemented by those of the Centro Linceo Interdisciplinare «Beniamino Segre», directed by Mario Stefanini, staffed by university professors on a three-year secondment.

Fifteen Foundations are also involved in the activities of the Lincei, among which the "I Lincei per la Scuola" (Honorary President is Sen. Giorgio Napolitano, and President is Lamberto Maffei), the Donegani Foundation (Chairman Maurizio Brunori) and the Caetani Foundation (Chairman Mario Liverani) stand out.

The Lincei are also very dynamic in the valorisation of their own historical, artistic and cultural heritage: the Library of the Accademia Nazionale dei Lincei and Corsiniana, controlled by a Supervisory Board chaired by Giovanni Jona Lasinio; the Historical Archive; the Villa Farnesina, with Raphael's frescoes. And, finally, Palazzo Corsini, which in 2018 will be re-examined and appreciated in a book on art history sponsored by the Associazione Amici dei Lincei.

3. International activity

3.1. A successful relaunch

Since 2013, the new Committee for International Relations (CORINT), that I chair myself, has experienced a strong impetus. In 2016-17 the Committee organized and successfully coordinated the G7 of Science Academies, demonstrating that we were up to the task at least as much as the two other countries (Germany and Japan) headquarters of the 2015 and 2016 G7. We received a remarkable support from Ministers Padoan and Franceschini, who also contributed to the final conference of the G7, and from the President of the Republic, Sergio Mattarella. At our meeting at the Quirinale, at the end of the G7, he expressed his appreciation for the initiative, thus bestowing it with the highest institutional recognition. I already highlighted this point at the closing of the previous academic year but for the future I believe that, coordinated by the Lincei, interdisciplinary research programs could be launched (a field where the Lincei are stronger than many other academies) in which science and technology on one side and humanities on the other could take a fresh start from the three joint statements, that is, from *Cultural Heritage: building resilience to natural disasters* (coordinated by Giovanni Seminara); from *The challenge of neurodegenerative diseases in an aging population* (coordinated by Maurizio Brunori); from *New economic growth: the role of science, technology, innovation and infrastructure* (coordinated by myself).

The regular consultations I have had with the Lincei fellow Massimo Inguscio, President of the National Research Council, right after the beginning of Inguscio's term as president, gave shape to an agreement of collaboration between the CNR and the Lincei. During the G7 I realized that the structural consistency (technical-scientific staff and financial resources) of the other academies was unreachably greater than that of the Lincei, we therefore decided to strengthen the Lincei-CNR collaboration favouring the embedment of CNR researchers who can spend their institutional time collaborating in research groups of international networks that operate also in the field of European and international scientific-cultural policies.

3.2. New initiatives

* The *Western Balkans Process*, promoted by the German government since 2014 to foster cooperation with the Balkan countries. The initiative moves along two complementary directions: the political-institutional *Western Balkans summits* (Berlin, 2014, Vienna, 2015, Paris, 2016, Trieste, 2017); the *Western Balkans Joint Science Conferences* (Berlin-Halle, 2015; Vienna, 2016; Paris, 2017). In 2018 the *Joint Science Conference* will be held at the Accademia Nazionale dei Lincei.

On the grounds of an intergovernmental agreement, in 2018 the "Western Balkans Research Foundation" is planned to be established in Trieste to promote the activities of young

researchers from the Balkan countries within a network connecting the scientific communities of Western Europe. The Italian Government, through the Ministry of Foreign Affairs, has asked the Lincei to contribute to the establishment and operation of this foundation. We have accepted that invitation, in collaboration with the National Research Council - Chaired by the Lincei fellow Massimo Inguscio - that has five laboratories and institutes in Trieste.

* *Twas and Iap*. The Third World Academy of Sciences, the international academy for the progress of science in developing countries, that Italy subsidizes through UNESCO, is already headquartered in Trieste. With the Italian contribution, *Twas* also finances *Iap*, which is also based in Trieste. Therefore, this represents a junction of the Italian scientific foreign policy in which the Lincei with the CNR can take on considerable importance.

These are academic associations that also have relations with the UN and its agencies. For this reason, we were pleased that in October the Presidency of the Council of Ministers and the CNR have held the Conference "Climate, agriculture, migration" at the Lincei, in view of the World Food Day. The conference opening addresses were delivered by Prime Minister Paolo Gentiloni and FAO Director General José Graziano da Silva.

* *Sapea Science Advice for Policy by the European Academies* is the program launched in December 2016 aimed at providing European Union institutions with a scientific advice-giving service. This initiative is also carried out by the Lincei in collaboration with the National Research Council.

3.3. International academic associations.

An increasing number of new initiatives are on the way, driven by the strong impetus given by the successful outcome of the G7 that has confirmed to the academies of the other countries and the international academic associations that the Lincei have evolved from the generous spontaneity of their individual members, thus expressing their corporate identity capable of accomplishing carefully planned programs. This is in fact an indispensable feature to pursue national policies on international science, as the most important European academies of France, Germany and the United Kingdom demonstrate.

However, we have also realized that, compared to us, these academies can rely upon greater resources in personnel and financial support that the Lincei appear unlikely to equal.

At present, the Lincei participate in six networks, both European and international. Among them, ALLEA (All European Academies, with almost 60 academies as members), is worth mentioning, with the Lincei fellows D'Adda in the Board and Marcuzzo, Orlandi and Vecchio in the working groups *Social Sciences and Humanities* and *Humanities, Science Education*. We also participate in the committee of the award "All European Academies Madame de Staël Prize for Cultural Values".

Our fellows Carrà and Carli represent us in EASAC (European Academies Science Advisory Council, (with 27 academies as members); in IAP for Health (with 78 academies as members) we are represented in the *Executive Committee* with the Lincei fellow Stefanini; we are also one of the associates in IAP, an organization that brings together 111 academies over 6 continents.

3.4. Bilateral collaboration agreements

Over the years, the Academy has stipulated 25 bilateral collaboration agreements with national academies in over 20 countries.

Among the many initiatives in collaboration with the new academic year we call attention to the first one that will take place in a few days at the Arts and Science Academy of Israel with a symposium on immunopharmacology, promoted by our fellow Moretta. In 2018 a meeting on Arabic studies is also foreseen at the Lincei.

In a few days the prize-giving Forum of the 2017 Balzan winners will be held in Bern with the Balzan Foundation and the Swiss Academies. Next year, this ceremony will be held at the Lincei with Iinter-Lab (International Interdisciplinary Research Laboratory), coordinated by the Lincei fellow Bina Agarwal, who was awarded the 2017 Balzan Prize. The agreement with the Balzan Foundation has been standing since 2009 and has become of paramount importance also because its annual occurrence.

3.5. The European Union

This is a political-institutional, economic and scientific area in which we are always present and in which we must combine ideals and pragmatism, avoiding any declamatory or pessimistic approach. Regarding the oncoming academic year, on February 22-23 the ALLEA Board meeting, which represents 60 academies, will take place at the Lincei. On that occasion we wish to promote a wider seminar to discuss the matter of science policy in Europe also in connection with Brexit. Some suggestions on this matter can come from the study, to which many of our members have contributed, on *Europe: a utopia under construction*. To this end we have consulted the Lincei fellow Franco Gallo, president of the Treccani Institute that launched the series of volumes, who gave us his full support for a joint initiative.

3.6. The celebrations of three universal geniuses: Leonardo (2019), Raphael (2020), Dante (2021)

Finally, I think that in the "national" chapter of their "internationality" the Lincei must have a part in the celebrations of the anniversaries of these three universal masters; the 500th of the death anniversary of Leonardo and Raphael and the 700th anniversary of Dante's death.

4. The interdisciplinary character

So far, I have illustrated the programs for the 2017-18 academic year for the Lincei, which I have labelled as an "Internationalized Italian and European Institution". I shall now briefly consider the fruitful interaction of different knowledges (or interdisciplinarity), a feature that might disclose a deeper perspective, even though this is deeply rooted in our history.

The experience we have gathered with the past G7 has evidenced that our interdisciplinary nature is almost unique among the world's most relevant academies. In fact, in almost all other countries, a clear distinction is made between physical, mathematical and natural sciences and the humanities so much so that these subjects are dealt with by two or more separate academies. This emerges clearly in the G7 statements before 2017 in which historical and cultural, socio-economic and juridical-institutional issues are very often inadequately represented.

Our Academy's interdisciplinary approach should urge us to reflect more accurately on the cultural, social, political and ethical implications that stem from the amazing power of the

latest, revolutionary innovations. However, techno-sciences (with economic and technical-engineering implications) cannot avoid rules and regulations (having institutional, juridical and ethical implications). We are fully immersed in the globalization and communication revolution, with pervasive repercussions that call forth our commitment in a painstaking effort to direct such innovations towards the target of sustainable human progress.

Of course, detailed plans or projects cannot be outlined now; nonetheless, I shall reflect on these issues, bearing in mind the developments of the G7.

I would also like to mention here the prestigious collaboration agreement between the Lincei and the *Scuola Superiore della Magistratura*, which began within our Academy just a few days ago. These two institutional bodies of the Republic can collaborate now, after the significant scientific-legal initiatives of the Lincei fellow Natalino Irti.

Regarding the interaction of positive knowledges (or interdisciplinarity), the history of the Lincei still has much to say about the building of the institutional structure of a European State. Brilliant examples of this are the periods of the Risorgimento and of the post-Risorgimento when outstanding personalities, who were also highly respected and influential in politics (including the presidents of the Lincei Sella, Mamiani della Rovere, Brioschi, Villari), established the national identity of the Lincei both in the European and international scenario and in the arena of the scientific and cultural revolution brought forward by industrialization. This approach found its political and scientific peak in the brilliant intellectual energy of Vito Volterra, who founded the CNR in 1923 almost as a filiation of the Lincei. Volterra was aware of history's long periods, and of what science and internationality can do for the progress of humanity. He was a great scientist as well as an influent personality in the field of culture and politics, faithful to the values of freedom that he defended by immediately opposing the rising fascist regime. Italy and Europe, strong and democratic institutions, freedom and progress, eventually found their full expression in the Constitution of the Italian Republic. As early as 1944, thanks to two Lincei fellows, Benedetto Croce and Luigi Einaudi, the Lincei were born again contributing to the Republic with Luigi Einaudi - who at that time was president of the Academy's class of Moral, Historical and Philological Sciences - as first Head of State. Science, in the broadest meaning of the word, also had a functional role in politics in its highest connotation. Science and politics, within their respective autonomy, contributed to the Italian development and the formation of public opinion, albeit today public opinion seems to reject them both.

5. A conclusion: our commitment to promoting and awarding excellence

Today we will assign eleven 2017 "Antonio Feltrinelli" Awards, including the four "Antonio Feltrinelli Giovani" Awards to Italian scholars under the age of 40.

The Awards of the class of Physical, Mathematical and Natural Sciences in Mathematics, Astronomy, Physics and Medicine have been awarded to Italian scholars, two of them work in Italy and two abroad; moreover, two of these researchers are women. Such a perfect gender balance stems only from meritocratic criteria.

We do wish to put all our commitment in these Awards in the belief that one of the tasks of the scientific heritage of the Lincei is that of supporting and promoting the excellence of researchers who are in the full blooming of their scientific and cultural career.

I am also glad to announce that the call for the 2018 Antonio Feltrinelli Awards (whose deadline expired on the 31st of October) have had a considerable return in terms of nominations. I refer to the Awards in «Arts» and «an exceptional enterprise of high moral

and humanitarian value», which have a decades-long tradition. And then to the «Feltrinelli Giovani» Awards of the Class of Moral, Historical and Philological Sciences, in Juridical Sciences, Social and Political Sciences, Art and Poetry Criticism, Archeology. The heavy responsibility of a successful outcome of the prizes will now rely upon the evaluation committees.

Other 25 prizes, including that of the President of the Republic and that of the Minister of Cultural Heritage and Activities and Tourism are announced with an application deadline expiring on the 31st of December 2017.

The 415th academic year is now opened, in the strong belief that today a new commitment to science is born of our history, brought forward by new generations with fresh initiatives in the European and international scenario, a field in which, with the G7, we have also reasserted that the Lincei deserve to be the National Academy of the Italian Republic.