



QUO VADIS, ACADEMIA?

We discuss what role national academies have to play in today's world, and what challenges they have to face, with **Prof. Antonio Loprieno**, President of ALLEA, the European Federation of Academies of Sciences and Humanities

What mission and goals do the national academies have in the context of the contemporary global challenges?

The role of national academies has changed over time. At their inception in the seventeenth century, learned societies such as the Royal Society in England, the *Akademie der Naturforscher Leopoldina* in Germany or the *Académie française* in France prompted the establishment of empirical science and the development of

scientific dictionaries and encyclopedias, as a counterpart to the prevailing religious instruction then being provided at universities. The nineteenth century saw on the one hand the birth of the modern university, on the other hand the development of the German model of academies as the locus for interdisciplinary exchange. Finally, after the model of the Russian academy, many national academies in Central and Eastern Europe established themselves in the nineteenth and



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icated institutions of science in society and as open spaces for scientific exchange, academies are also the natural locus for tackling complex societal challenges.

How can the national academies from different countries support each other in pursuing these goals?

We should keep in mind that European national academies not only operate according to the different models described above, but also have very different budgets at their disposal. Some academies, for example in the United Kingdom, in Austria or in Germany, are comparatively well funded and have the means to fulfil their role as a think-tank or as a research institution and provide important counsel, since their impact is based on broad societal trust. Other academies, on the other hand, are less well funded and usually have to fight to have their voice heard at the sociopolitical level. A network such as ALLEA functions as a bridge between these two European realities, operating both as a center of competence in science, science communication and science advice (e.g. by participating in European research mechanisms) and as a capacity building project for our less fortunate members. At ALLEA, we try to learn from the national experiences and raise our common voice whenever in Europe we see the integrity and the primacy of science in danger. In sum: we combine best practice with benchmarking for all our members. Successful examples of this close collaboration and interaction within ALLEA are the European Code of Conduct for Research Integrity¹ and our recent paper on the dangers of science disinformation “Fact or Fake?”² In these cases, we can say that the interaction between academy members produces far better results than a single academy would ever have been able to achieve.

One of the roles of the national academies is to deliver a consensus of knowledge.

What is needed to transfer this knowledge into practice? Are the national academies where this works best?

The issue of knowledge consensus is a relatively new one for European academies and is connected with the democratization of information that – at different levels – has taken place in our continent in the latter part of the twentieth century and is increasingly dominating our societal discourse in times of digital turn. When knowledge, as was the case until very recently, was the private property of a small elite, there was no need for societal consensus. When on the contrary, as is the case today, everyone is just three mouse-clicks away both from a Nobel-prize level scientific paper and from the fake news of an American flat-earth believer, knowledge consensus must be at the center of academic attention. Now, there are two major keys for developing this form of consensus. The first is to maintain

twentieth century as the highest research and research funding institution in their respective country.

But since the political and social changes of the 1990s, all European academies have developed common concerns; our network ALLEA (established 1994) is a prototypical expression of this societal turn in the European academic landscape. The academies’ new concerns moved away from pure science and focused on how to best position science in a knowledge-based society. Contemporary global challenges, therefore, are an expression of these common goals of European academies: what was once “fostering empirical science” has now become “addressing global challenges.” We now realize that our most urgent societal needs (climate change, digital transformation, sustainable growth) can only be addressed on the basis of trans-disciplinary approaches. Therefore, as the most ded-

¹ <https://allea.org/code-of-conduct/>
² <https://allea.org/portfolio-item/fact-or-fake/>

ACADEMIA PART I The Academy Ideal



Professor Antonio Loprieno

has been President of ALLEA since May 2018. He studied Egyptology, linguistics and Semitic studies at the University of Turin in Italy. He has taught at the University of Göttingen in Germany, University of Perugia in Italy, University of California Los Angeles, University of Basel. He has served as President of the Swiss Academies of Arts and Sciences, President of the Jacobs University Bremen, President of the Rectors' Conference of the Swiss Universities and holds the Presidency of the Austrian Science Board.

the highest standards of competence in our scientific community: we bear a responsibility always to look for research excellence without any form of discrimination, and to make sure this excellence is adequately mediated to society. The second key is to generate trust in science within our society by mediating scientific results to the public and to the political leaders.

In order to generate knowledge consensus, both science communication and science advice are of paramount importance: science communication means choosing from among our peers the right people and the right channels to help make our research known among larger segments of society than "just" the academic world. And science advice means making our political leaders aware that while there may be different legitimate scientific opinions on a particular issue, they should always be aware that empirical evidence is not negotiable. Never should anyone, particularly in a position of sociopolitical responsibility, indulge in spreading fake news, because

this poses a threat not only to the knowledge consensus, but also to society as a whole. Competence and trust are the main conditions necessary for creating scientific, ethical and societal consensus. This is also why science advice at the national and international level has become so important. In the SAPEA project,³ which is the science advice program by European academies for the European Commission, European academies join forces to provide scientific, evidence-based advice for policy making at the level of the EU. Academies nominate experts who together provide a so-called Evidence Review Report, which in its turn is used by the Commission's Group of Chief Scientific Advisors to provide an opinion on topics ranging from sustainable food development to energy security and safety.

What are the biggest obstacles currently faced by the national academies?

There are two main challenges currently faced by national academies. Ironically, the first challenge comes from within the academic system itself, namely the increasing visibility of European universities and other institutions of higher education. Please understand me correctly: the autonomy of universities and their major role in fostering research and innovation in Europe is a wonderful development and has been one of the key factors in promoting science and education at the continental level, more than in any previous period of history. European universities also have Europe's attention at the political level, as shown by French President Macron's initiative to establish strategic alliances between higher education institutions.

But at the same time, the universities' increased strength over the last two decades has coincided with a gradual loss of relevance for European academies: both the general public and economic and political leaders have become attentive stakeholders of the universities as education providers, whereas academies have often come to be seen – of course incorrectly – as more elitist institutions. As members of European academies, we should aspire to modify this perception and present ourselves as equally engaged as universities, if not even more so, in upholding the value of science for our modern societies.

The second challenge can be described as a diversity issue: members of European academies tend to be both generationally and culturally less diverse than the society in which they operate. This is a significant challenge for our academies: if we do not become more inclusive at all levels, including gender and background, we might compromise precisely the bridging function between science and society that we rightly consider as one of our main institutional assets. This is why ALLEA has made it one of its strategic priorities to encourage young European academies to become members of our network of academies. In

³<https://sapea.info>

this respect, I very much applaud the role played by the Polish young academy under the auspices of the PAS. This bodes very well for the future.

What is the PAS's role among the world academies society? What are its most important international projects?

The PAS is one of the most luminous examples of a successful academic development at the continental level. Since the political change of 1990, it has consistently generated the most substantial amount of research of all national scientific institutions and continues to rank very high at the international level – which cannot be said of all Central and Eastern European national academies. In other words, within a very short time span the PAS has managed the formidable task of transforming itself into an agile institution based on excellence, competing for European research grants at the highest level. It is not by chance that a Vice-President of the PAS was elected, as the candidate with the widest support, to the Board of ALLEA. And as the current chair of SAPEA, I can also testify that the experts nominated by the PAS are far more frequently asked to contribute to our Evidence Review Reports than the size of the Polish academic community might lead one to believe. Thus, the PAS represents in all respects a model for academies and offers a best practice to be followed by other Central and Eastern European academies – and even beyond.

How to you see the future of the PAS and what would be your recommendations for it?

There is hardly a more adequate ambassador than the PAS to represent, convey, and defend Polish science at the European level. As far as we can judge as colleagues within the ALLEA network, the PAS is a success story to be invested in. My recommendation, therefore, would be the American proverb: “If it ain’t broke, don’t fix it.” I can only hope that PAS continues along the lines it has so effectively established: serving the national interests by remaining competitive at the international level. I say this because I have heard rumors, which I hope are unfounded, that PAS’s uniqueness could become jeopardized by internal competition at the national level. In my opinion, such a move would be close to suicidal in terms of the visibility of Polish science and its positive impact on society. The reason is the importance of critical mass for scientific excellence. It suffices to take a look at recent developments in Europe’s academic landscape to understand that critical mass is absolutely vital both for empirically oriented science itself and for its impact on society. Take a look at the rankings: in recent years, academic institutions in countries like the Netherlands, Germany, or France, where excellence has been systematically supported by governmental initiatives, have made the most visible prog-



A lecture marking the 25th anniversary of ALLEA

SWISS ACADEMIES OF ARTS AND SCIENCES

About ALLEA

ALLEA is the European Federation of Academies of Sciences and Humanities, representing more than 50 academies from over 40 EU and non-EU countries. Since its foundation in 1994, ALLEA speaks out on behalf of its members on the European and international stages, promotes science as a global public good, and facilitates scientific collaboration across borders and disciplines.

Academies are self-governing bodies of distinguished scientists drawn from all fields of scholarly inquiry. They contain a unique human resource of intellectual excellence, experience and multidisciplinary knowledge dedicated to the advancement of science and scholarship in Europe and the world.

Jointly with its members, ALLEA seeks to improve the conditions for research, to provide the best independent and interdisciplinary science advice available, and to strengthen the role of science in society. In doing so, ALLEA channels the expertise of European academies for the benefit of the research community, decision-makers and the public. Outputs include science-based advice in response to societally relevant topics, as well as activities to encourage scientific cooperation, scientific reasoning and values through public engagement.

ALLEA is constituted as a non-for-profit association and remains fully independent from political, religious, commercial or ideological interests.

Website: www.allea.org

ress, whereas reductions in size, as have happened in other countries, have always gone hand in hand with loss of scholarly quality. In the world of European academies, reduction leads to loss of impact, whereas critical mass attracts even more excellence. So, my appeal to your political leaders is this: in Poland’s interest, make the PAS even stronger than it already is, and the country as a whole will benefit!

INTERVIEWED BY JUSTYNA ORŁOWSKA, PHD