



The role of the Royal Swedish Academy of Agriculture and Forestry is, with the support of science and practical experience, to promote agriculture and forestry and related activities, for the benefit of society. The Academy was founded in 1811 at the initiative of Karl XIV Johan and started its work on 28 January 1813.

The Academy's 205th Commemorative Meeting

January 28, 2017

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Academy President Lisa Sennerby Forsse

The Commemorative Meeting of the Royal Swedish Academy of Agriculture and Forestry (KSLA), January 28, 2017

KSLA strengthens the green industries for a sustainable future

Your Excellency

Madam Minister

Honorary Fellows

New Fellows

Laureates

Esteemed Fellows

Distinguished Guests

We live in a globalised world. The terms set for our Swedish staple industries are largely determined by the EU and worldwide trade. In many low-income countries the living standards of a growing middle class have improved while the most deprived still live in extreme poverty. Civil wars with their roots in poverty, the struggle for natural resources and religious conflicts characterise parts of the world – with multitudes of people fleeing to safety and a better life to follow. Added to this are the problems arising from a changing climate and extreme weather conditions that alter food production in the affected areas. Our modern day's greatest challenge is to mitigate climate change while at the same time provide a growing world population with food, water and energy – sustainably.

Access to natural resources, such as farmland, forests, water and many ecosystem services, are becoming increasingly important. Increasingly, we are expected to switch to a fossil-free and bio-based society. In the transition the green industries will play a key role. Sweden, with its considerable resources of land and water, research of a high standard and a stable economy, has a responsibility to contribute to such a transition, both nationally and globally.

The first week of January saw the publication of the Parliamentary Rural Areas Committee's final report "Towards a new policy for Sweden's rural areas – jobs, sustainable development and prosperity" in which a unanimous report proposes 75 measures to develop significant production values in rural areas. Among the proposals, which include IT, housing, transport, service, etc., emphasis is also given to the importance of a Swedish food strategy, the aim of which is to increase Swedish food production, which is world class in terms of its low impact on the climate and the environment. We agree with this and hope the promised food strategy adopts a long-term political stance.

In the process of formulating a national forest programme it has been noted that the forest-based sector is one of Sweden's most important staple industries; not only does it account for a significant share of our exports, but it is also a guarantee for efforts to counter climate change, as well as for biodiversity, recreation and development of the tourist industry. Projections also indicate tremendous potential in industrial development of both the forest and food industries. We are already seeing further development of production based on biomass. Besides food, fuel, renewable energy, wood and paper, we are also seeing the development of other products that can be based on cellulose, such as chemicals, textiles, plastics and health products.

This requires continued knowledge building, more active marketing and export drives, along with clear and long-term political positions, in order to increase the competitiveness of the green sector in general. These issues are central for KSLA and our Academy can contribute to positive development by pooling expertise, producing data based on facts and by being proactive when decisions are to be made.

KSLA has recently celebrated 200 successful years and is continuing its efforts with the aim of focusing on the most important issues in the agricultural sciences and related fields.

The first major task for a new presidential pair is to work with the Academy Collegium within the framework of the Academy's activities over the next four years from 2017 to 2020. The specific content of the activities is formulated on a yearly basis and is based on the initiatives taken by our sections and their committees.

KSLA's strategy for 2017–2020 is based on the Academy's Portal Article, which reads: *The Role of the Royal Swedish Academy of Agriculture and Forestry is, with the support of science and practical experience and in the interest of society, to promote agriculture and forestry and associated activities.*

Starting from this article, the Academy has clarified and supplemented its focus by formulating a Vision and a Mission.

The Vision, which is new, is:

We strengthen the green industries for a sustainable future!

The Mission is:

For the positive development of society, the Academy will promote the sustainable use and management of land, water and air, as well as plants and animals for our sustainable livelihood and habitat. We do this by being an active meeting place for science and practical experience, and where, through the exchange of ideas and advocacy, influence and knowledge dissemination, we identify and strengthen the green industries to meet the challenges.

The new sustainable goals, the UN's Sustainable Development Goals, which affect us all, also provide an important platform for the Academy's activities. Agenda 2030 comprises 17 concrete goals whereby all states are bound to eradicate poverty and hunger, reduce inequality, ensure quality education, better health, decent work and sustainable growth. Basically, the vast majority of the goals are dependent on ecosystem services from our forests, farmland and water resources, which means that KSLA's activities are highly relevant for us here in Sweden, but also for the rest of the world.

We have identified three important overall activities for the Academy during the 2017–2020 period. We are setting up three new committees whose members are fellows from all sections, inclusive of the historical unit, as well as external experts where the need arises.

The first is the establishment of a committee for Research.

One of the new terms in 2015 was *fact resistance*. It stands for the approach that means you do not let yourself be influenced by facts that go against your own perception, which is instead based on, more or less, emotional standpoints. Now, at a time of growing resistance to facts, in order to raise confidence in science, a fundamental view is required that research and systematic study increase our body of knowledge and gives us greater opportunity to make wise decisions. For KSLA, this ethos is self-evident. One of our defining characteristics is that our activities are based on science and proven experience.

The research bill “Knowledge of interaction – for societal challenges and strengthening competitiveness” lays out the scientific fields in which Sweden wishes to invest over the next ten years. Commissioned by the Government, the remit of the Swedish Research Council Formas includes long-term investment in a research programme to promote a bio-based economy. The research covers a wide range of fields and includes the production and use of raw materials and biomass from forestry, agriculture and aquaculture.

Another initiative is that of climate research, where the Government is gradually increasing investment over a three-year period to 130 million kronor in 2020.

A further example where knowledge is required is “One Health” where the government’s initiative in the field of antibiotic resistance contributes to limiting the spread of disease and to developing new methods of diagnosis and treatment in human and veterinary medicine.

The changes facing the green industries require in-depth scientific knowledge at all levels – from individual molecules to complex ecosystems. Among other things, KSLA’s research committee can contribute to the formulation of important research fields, and the dissemination and application of research results for the promotion of sustainable development.

The second area is a committee for International Issues.

Our Academy has, with great interest, studied the “Policy framework for Swedish development cooperation and Swedish humanitarian assistance” which was submitted to the Swedish Parliament on 14 December 2016. We agree with the Government’s analysis of the state of the world today and are particularly interested in those parts of the framework that relate to the environment, climate and sustainable use of natural resources. Sustainable improvements in agricultural productivity are a prerequisite if we are to achieve food security and the accompanying sustainable economic development. Responsible investment to develop sustainable agriculture and sustainable forestry and fishing is a powerful instrument for poverty reduction, food security and sustainable economic development. The investments should naturally include research into and development of new innovations in poor countries.

KSLA has a long tradition of working internationally and between 2017 and 2020 it will establish an overall Academy-wide committee for international issues that will focus on how Sweden can contribute to the achievement of the Agenda 2030 goals. Sweden should once more become a country that contributes to knowledge development in poor countries, which is so important from the sustainability perspective. This includes strengthening, maintaining

and using a Swedish resource base for greater international commitment to sustainable global development in food security, energy and the environment. The issue is of the greatest importance, especially when it comes to supporting young scientists who are interested in an international career in development research.

The third overriding area is about young people.

KSLA wishes to highlight young role models and give them the opportunity to influence so that more young people become aware of our important issues. Many young people today are concerned about climate change and environmental issues and want to fight for a better world. KSLA wishes to nurture this commitment, turning concern into action and involving more young people in the efforts to develop the green sector.

It is already possible for young people to participate in various projects. Those who are studying subjects that fit within the green industries, or who are young practitioners, can take part in *mentoring programmes* under the auspices of the Young in KSLA project, otherwise known as UNIK, or challenge others through *case competition*. There are also opportunities to work together with Academy fellows on committees and projects through KSLA's *resource pool*.

By setting up a youth committee, we wish to invite young academics and practitioners to work together with our Academy fellows to research into today's and tomorrow's green industries. KSLA's youth committee is to have a proactive influence at several levels and will contribute with its perspective and experience of being young in Sweden today.

Since the Academy's inception, the agricultural industries have gone from being the mainstay of the economy to living a relatively economically vulnerable and obscure existence. BAHP – KSLA's unit for library, archive and historical projects – represents a valuable source of information for increasing our understanding of how the green sector has undergone a comprehensive transformation over time. But despite technological development, urbanisation, changed attitudes and life patterns, the green industries are now, as then, the very foundation of a sustainable future.

It is our ambition that KSLA's activities over the next four years will help to ensure that policymakers and society at large see the opportunities the green industries present and their importance for sustainable development. We also hope that the green sector's role in a global world will continue to attract interest and that we can raise Sweden's role and its influence in order to contribute to a sustainable and fair global system for water, food and energy.

The Academy's role has changed since its inception in 1813, but the main focus remains the same; indeed it is more important than ever. By serving as an active meeting place for science and practical experience, where, through the exchange of ideas and advocacy, influence and dissemination of facts, KSLA can highlight and strengthen the importance of the green industries for sustainable development.

Lisa Sennerby Forsse

Translation: Ian M Beck et al.



Academy Secretary Carl-Anders Helander

The Commemorative Meeting of the Royal Swedish Academy of Agriculture and Forestry, January 28, 2017

The Academy's 204th year of activity

Your Excellency

Madam Minister

Honorary Fellows

New Fellows

Laureates

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Distinguished Guests

2015 was the 203rd year of the Royal Swedish Academy of Agriculture and Forestry (KSLA) since its foundation in 1813. KSLA is a meeting place for the land-based industries, or, as we 2016 was the 204th year of the Royal Swedish Academy of Agriculture and Forestry (KSLA) since its foundation in 1813. KSLA is an active meeting place for the green industries. We are engaged through objective dialogue and independent analysis in issues that affect everyone, and interest many, such as food, climate, energy, forests and nature.

In 2016 we organised no fewer than 40 very well attended activities for the public. I will take some examples from each of our sections;

The General Section hosted a seminar entitled *Fifty shades of green – biotechnology in plant cultivation*. The seminar took its departure point from the valuable and successful work carried out by a dialogue group looking at gene technology and GMO. The work has been published in the Royal Swedish Academy of Agriculture and Forestry's Journal, our own series of reports, both in Swedish and English. The report was also presented in September at the Union of European Academies for Sciences applied to Agriculture, Food and Nature's congress in Paris.

The seminar *Without money, no pastures or meadows!* dealt with another highly topical subject. The seminar tackled the fact that those farming pastures and meadows need additional financial support, in addition to income from grazing livestock, to maintain landscapes open through the use of grazing animals.

In March the **Agricultural Section** organised an Academy assembly entitled *Animal welfare and competitive advantage: how do the market and policy interact?* The talks and discussions focused mainly on how Sweden's animal producers should be able to compete with imports from other countries where animal welfare standards are lower.

An exciting and much appreciated seminar looked at how patterns of consumption can be directed towards better attitudes towards food: *Nudging: conscious strategies for changing consumer behaviour in relation to food and sustainability*. It was also a good example of how we would like to work with the entire food production chain.

I would like to highlight the **Forestry Section's** seminar *Forests, Bioenergy and the Global Climate*, which was organised together with the research programme Future Forests. The background to the seminar was the debate that arose after an article was published in the journal Science at the start of the year, in which several scientists claimed that forestry in Europe has not been counteracting climate change but rather has a negative impact on the environment. One conclusion was that differences of opinion are due to researchers starting with different basic assumptions in their studies and that they are looking at different time perspectives.

In September the Committee for forest ecosystem services ran a workshop that focused on the issue of how different ecosystem services in the forest can be valued and how trade-offs between different interests and ecosystem services can be handled in a positive way.

The Unit for Library, Archive and Historical Projects, which is abbreviated to BAHP, focused during the year on developing new practices for the Academy's historical activities and took steps to improve interaction with the other sections of the Academy.

The seminar *Between theory and practice: agricultural expertise and Swedish aid during the second half of the 1900s* is a good example of how the Academy ties history together with the future.

During the year BAHP, together with the Sections, set up a working group with around a dozen agricultural advisors. The result of their activities provides a good platform for when the Government draws up guidelines for a new proactive Swedish food strategy.

I would like to mention that among the other activities that took place during the year, we carried out our annual KSLA Wallenberg Seminar in the spring under the title *Whole-Rotation Carbon Budgets in Swedish forests*, and the Academy's second Wallenberg Professor Dan Binkley, was the principal speaker.

Every second year the Bertebos Conference is held in Falkenberg in collaboration with the Bertebos Foundation and the Bertebos Laureate from the previous year. This year's conference with the title *Additives and enzymes in food: past, present and future from a global and consumer perspective*, attained a very high quality and was truly enjoyed by the participants.

Several years ago the Academy took the initiative to coordinate national efforts around landscape issues, an initiative with a direct link to the European Landscape Convention. The conference Landscape Forum 2016: Collaborating networks on the landscape: possibilities and challenges was held in April.

During the past year we further developed the positive work we do with our sister Royal Academies.

Together with the Royal Swedish Academy of Sciences, the Royal Society of Naval Sciences, the Royal Swedish Academy of War Science and the Royal Dramatic Theatre in April, we organised a performance at the Royal Dramatic Theatre on a Baltic Sea theme. This was our joint contribution to His Majesty, the King of Sweden's 70th birthday celebrations.

A number of fellows of KSLA and the Royal Academy of Fine Arts have worked together, for a number of years, on the theme "Art, people and the landscape in change". The idea is that our two Academies' different types of knowledge can provide us with a new and more subtle view of the landscape.

Together with The Royal Swedish Academy of Letters, History and Antiquities we are running a four-year garden history project with the aim of publishing a book in two volumes about gardens and garden cultivation in Sweden from a cultural historical perspective.

During the year a new joint project was started, which is the latest in a series of joint academic projects. This is a series of lectures *Vingslag över Haga (Wingbeats over Haga)* which the six Academies are organising together in spring 2017.

Plenty has taken place this year on the Academy's two donation estates, Enaförsholm and Barksätter.

Bosse Berglund and Ingalill Samuelsson, our hosts for many years, have left Enaförsholm Fjällgård. Therese Örnerkrans has been appointed new CEO for the company and site manager for the estate. She starts officially on 1 March but is here tonight to acquaint herself with the Academy and its fellows.

At Barksätter the board of management has worked intensively investigating the potential to build new housing for grazing livestock on the estate. The Collegium took the decision in December to invest in a new building and if everything goes as planned a new building can be in place by the time the animals are brought inside in the autumn.

During the year the Academy received a large donation from one of our former fellows, Carl-Gustaf Åkerhielm and his wife Viveka Åkerhielm. The donation will be managed in a separate foundation, whose income, in accordance with the wishes of the donors, is to be used for two specific purposes: aquaculture and ownership rights.

KSLA is also pleased to have received several very generous gifts that contribute much needed financial resources to our activities and for the renovation of our premises on Drottninggatan.

The Academy's activities are financed in large part by income from our capital and from some of the foundations we manage. We have relatively high yield requirements, which we must balance against a not excessive risk, and this requires active asset management. At today's extremely low interest rates it is difficult to achieve a high return; however we can state that in 2016 we achieved a good result on our asset management. We have earned a return well above comparable indices.

We often claim that “our fellows are the Academy’s most important resource”. Our organisation is also structured to run fellow-driven projects. During their first year our new President and Vice-President have carried out the traditional task of developing a new four-year activities and strategic plan, which the President just spoke about. The basis for the plan was developed at a planning conference in the spring in which staff from the Collegium as well as the Secretariat participated.

“Out of sight, out of mind”, as the saying goes. We have delegated the main task of communication to our committees and working groups. In this way they take responsibility for reaching out to our target groups by integrating communication into their activity plans.

In conclusion_I would like to take the opportunity to thank all of the fellows who give so much of their own, unpaid time to serve on the committees, advisory committees, sections, the Collegium and in many other ways. I would also like to thank everyone else, non-fellows, who contribute their time and capabilities for the good of the Academy. Naturally, I owe a warm debt of gratitude to my co-workers in our secretariat for their valuable and devoted work on behalf of the Academy.

Time flies when you are having fun! It is already the fifth commemorative meeting in which I am taking part as Secretary General of the Academy, and it will also be the last, as I am retiring in the summer. I would like to wish my successor, whoever it may be, a warm welcome to a fantastic and enjoyable role.

Thank you!

Carl-Anders Helander

Translation: Ian M Beck et al.



The Principal Speech, Professor Sverker Sörlin

The Commemorative Meeting of the Royal Swedish Academy of Agriculture and Forestry, January 28, 2017

Six Characters in Search of an Author: Academies as actors

Your Excellency

Madam Minister

Honoured Assembly

Half the task of delivering a speech is to have a title; the other half is to fill the speech with content. This title is based on intuition. So the question is what the content can be.

“Six Characters in Search of an Author” is a play written in 1921 by the Italian author and Nobel laureate Luigi Pirandello. Pirandello came from a small village near Agrigento in southern Sicily. A lone pine tree stands by the road up to his house overlooking the majestic Mediterranean – I have been there once and seen it on an evening when the sun was setting over the yellow-scorched landscape where people lived on onions, garlic and bread, and some tomatoes now and then. Hippocrates, the ancient master of medicine, came from the same place.

Pirandello received his prize in 1934 and paid tribute to it by dying on Nobel Day two years later.

I really do not mean to draw any closer parallel between the academies and the play, which is an early example of the absurdist tradition, and in which most things are turned upside down. A rehearsal of a play by Pirandello is in progress when six characters burst into the theatre unannounced and demand to be performed. The Director is furious and refuses them at first, but after listening for a while to some of the characters he agrees to give them a chance.

The characters make their way forward by trial and error but their attempt are constantly being interrupted as the actors need to deliberate how to develop the play. And, in this tottering, confused but also rather interesting debate as to how the play is to be performed and the characters do it justice, the play stumbles forward right up to the chaotic dissolution in the garden where The Little Girl drowns in the fountain, The Boy commits suicide with a revolver and The Stepdaughter runs away while The Son, The Mother and The Father are left on stage and The Director is confused, concluding that he has wasted a whole day.

This is still one of the most frequently performed plays in the world. For that's the way art is; it speaks to us through time and space, from the shadow of the pine tree by the Mediterranean it still affects us with the same force that there is no stone unturned in the world, and that the plays we perform from force of habit perhaps need to be interrupted and a manuscript written up.

That said, the parallels with Sweden's scientific academies should not be exaggerated. It is not six academies that I am thinking of just now. Instead, I am thinking about the roles academies may play, of academies as actors. And, I am thinking that we, for a moment here this evening, can carry out an intellectual experiment. Let us imagine that we have a job as a director of one of the academies' theatres in which we will endeavour to get these roles to present a play that gives meaning and perhaps does not end with us thinking that we have wasted our time, but instead think that we have achieved something we can be proud of.

In a way, these roles are as classic and inescapable as Pirandello's family members that we have just met.

Reward – academies award scholarships and prizes to highlight what they consider to be valuable effort. This can be referred back to the early Renaissance academies. The finest rewards may well be the eulogies, which are still held over the deceased fellows of many academies.

Promotion – academies promote their disciplines' purposes and want to receive the support of society's institutions and of powerful benefactors. That is why they form opinion and make strategic elections. From the dawn of time academies have sought royal or state protection. Sweden is an excellent example. Many academies also have their origins in the culture of the court and can be regarded as an offshoot of this.

Tradition – as institutions often do, academies cherish their traditions. They have their roots in orders and societies with origins that are secretive to some extent. The Royal Society in London had many fellows with a background in the Rosicrucian Order, with roots in Christian mysticism and alchemy. Therefore the meetings were exclusive and ritualistic in character and many of their traditions survived long after the academies had become more open and begun directing their activities to a wider public.

Guidance – academies have sought influence. From the very beginning there has been a conviction in the academies that the knowledge they have stood for was of importance to society, which often meant industry and commerce, but which could also apply to all areas of society. This has meant that they have done their utmost to come close to power so that they could exert influence. In some parts of the world the academies are part of the state-organised sciences and perform much research, mainly in Eastern Europe, but also in China. In other parts of the world, they are more a part of civil society, but often with more, or less, formalised functions as an advisory body or at least as a consultative body with special weight and experience.

Debate – academies promote scientific discussion and also participate in the debate on science's place in society. One of the very oldest rituals is to allow fellows or invite guests to hold lectures and then debate the content; this is linked to the fact that the open discussion could not always be held in the universities, which answered to the church or the state.

Innovation – within the academies there is a stated desire to advance science and in order to do so debate and transparency were necessary. At certain times academies have been at the forefront in creating scientific institutions. The Royal Swedish Academy of Sciences contributed actively to the development of research stations, in Vassijaure and Abisko, for example, and the Kristineberg Zoological Station in Bohuslän, and the Kiruna Geophysical Observatory. It also created the Cabinet of Natural History, which became the Swedish Museum of Natural History. The Royal Swedish Academy of Agriculture created the Experimental Field in Frescati. Science was conducted thus in the academies, often in the form of institutions, which at their inception were pioneering.

Six roles

You could of course discuss whether this way of classifying the roles of the academies is the best. The academies, including the Royal Swedish Academy of Agriculture, have done more than that. They have at times engaged in teaching, they have acted as financial sponsors and as the early forerunners of the research councils. They have been engaged in standardisation activities and nomenclature issues, and they have organised research expeditions.

What is today the Swedish meteorological service operated under the auspices of the Royal Swedish Academy of Sciences between 1872 and 1919. The Academy also handled nature conservation until the Swedish Environmental Protection Agency was created in 1967.

In practice, the Swedish Academy of Agriculture was a government authority in the 1800s and its remit included the supervision of courses at Alnarp and Ultuna. What is today the Swedish Research Council Formas functioned from 1945 as a council for agricultural research under the auspices of the Royal Swedish Academy of Agriculture.

You can keep on like this. For a long time the Royal Swedish Academy of Sciences published almanacs and kept official track of the time; for a long time it was its main source of income. The almanac licence was abolished in 1972.

Incidentally, it may be noted that a government-commissioned inquiry the following year discussed the future of the then remaining institutions under the Academy's auspices – including the solar research institute, which at that time was on Capri, the Nobel Institute of Chemistry and Physics, and the aforementioned institutions in Lapland and Bohuslän. Not a single one of these remains under the Academy's auspices today.

It may seem as if I am dwelling on a sombre theme, but it is difficult to escape the fact that academies of the type we have in Sweden have seen their roles contracting for some considerable time. Research, teaching and, recently, closer cooperation with other parts of society are also becoming increasingly important and have achieved fantastic growth.

Colleges and universities are the major growth sector here. The inquiry from 1973 contains the following words, whose meaning is quite clear: “Generally speaking, it would appear obvious that an institution of such a nature, which has direct counterparts in the university system, can best fulfil its duties if it is integrated with this.”

What it all boils down to is quite clear; the state will take over. And it has.

The academies have had time to adapt and have done so skilfully and creatively. On occasion, new research institutes have been set up, such as the Beijer Institute of Ecological Economics at the Royal Swedish Academy of Sciences or the Centre for the History of Science at the same academy, but not at the same pace as institutions have been spun off.

Academies have developed forums for international co-operation. By means of national committees and working groups, they have succeeded in breathing life into international organisations. They have started journals and publications – but have lain at least as many to rest.

The single most important change a Swedish academy has made was when the Royal Swedish Academy of Sciences met the cold hand of the State at the beginning of the 1970s. It was then that the Royal Swedish Academy of Sciences took the radical step to become an academy for environmental sciences, just when Sweden and Stockholm were playing a key role as hosts for the UN's environmental conference in 1972. The Academy started the AMBIO journal and discontinued its nature conservation committee and started a new environmental working group. With Bert Bolin leading the way, the Academy also took on the climate as one of its main disciplines.

Other initiatives that have given the academies a role have come from outside. In the 1990s, when the employee funds were set up, the Government gave the academies the task of evaluating them. At one stage, the Royal Swedish Academy of Sciences had some hope that it would be allowed to handle the distribution of the funds, but this proved to be a pipe dream. In recent years the Wallenberg foundations have been collaborating with the Royal Swedish Academy of Sciences for fellowships for young researchers at the academies. The Swedish Foundation for Humanities and Social Sciences, has allowed the Royal Swedish Academy of Letters, History and Antiquities to play a role in connection with research grants for certain institutions, e.g. at museums. There lies one of the academies' strengths; they can be expected to rise above the universities' party interests.

The Young Academy of Sweden is among these innovations. It was formed in 2011 and has its headquarters at the Royal Swedish Academy of Sciences, but it also overlaps other academies' areas of interest. The funding comes from the Söderberg foundations – for money is something the academies always have too little of. The Young Academy has quickly had a wide impact and is frequently consulted when research issues are discussed. To some extent this is surely due to its excellent fellows, but probably even more important is that it represents a young and rising generation of ideas and opinions. For many, including the media, this is at least as important as what the elite of today thinks, not least because today's elite, for reasons of age, will soon be gone.

All this suggests that the academies do not lack imagination or, above all, prestige, which can be attractive to some partners – and that they therefore, despite the blood letting on core tasks, remain alive and active. **But are they important? Have they found new roles that allow them to realise their full potential?** A word search of the Government's research bill from November 2016 shows in any case that they do not seem particularly important to research policy – academies does not occur at all in the text, except as referral bodies....

A discussion about the academies' roles is rarely heard. It may be rather difficult to approach these venerable institutions. Most of those elected to academies tend to be delighted with the honour this involves and are unlikely to *start* by questioning whether the assembly that they have just become a member of, is particularly important. We may think quietly about Groucho Marx's words of wisdom: "I wouldn't like to belong to a club which accepts me as a member". And when you have become established enough to dare ask uncomfortable questions, you perhaps have started to be quite happy with things as they are.

The Royal Physiographic Society in Lund has devoted symposia to the question, both in 2000 and 2006 and invited the other regional academies to attend. Two interesting papers from these meetings have been published:

Learned Societies and the New Millennium (2000) (*De lärda Sällskapen inför ett nytt millennium*)

Learned Societies and the Future (2006) (*De lärda sällskapen och framtiden*)

There is no lack of ideas as to what academies have done, but the ideas seem less thick on the ground when it comes to what should be done in the future.

The Author has been missing.

Nevertheless, my general impression is that the academies have not yet fully recognised all the implications of their new situation. They are awaiting a reformation, but no obvious Olaus Petri figure has been seen. We should remember that the academies have always been dependent on visionaries who were not satisfied with the state of things. A Linnaeus for the Royal Swedish Academy of Sciences, and an Edelcrantz for the Royal Swedish Academy of Agriculture and Forestry.

And now is the best time.

We live in an age in which science is being called into question by powerful forces. There are real enemies of knowledge among the world's most powerful. Research into climate deniers, to take one group, shows that surprisingly many of them are highly educated, albeit many years ago, and that their education has lulled them into a sense that their own perception is true and correct. Antiquated, false knowledge is worse than ignorance.

We are also living in an age where there are broad groups, particularly within the scientific community, who appear to believe that science suffices as a basis on which to make decisions. It needs to be evidence based, as the saying goes. Ideally, we should not need any politicians, and hardly any values. As if facts alone could tell us whether we should build the Stockholm bypass, how many refugees Sweden can take in, or if taxes should cut or raised.

These forces have seemingly opposing perspectives – one is a science denier, the other a science fanatic but surprisingly there is one thing they all agree about, which is that their opinion is superior to everybody else's. The first group would like to have a strong man, and now have one in a number of countries. The second group would like a strong committee ... experts who are chemically free of evaluations who can make decisions over people's heads.

What both these groups are lacking is humility.

Knowledge is at once strong and fragile, stable and unstable. Its reach is disputable. It should be used, but with respect. A bumptious person has no easy time in the seminar room; an authoritarian is lost.

Our society needs a broader use of knowledge and a broader discussion of knowledge.

If you continue a word search in the government's research bill you will find two words that, unlike academies, recur frequently: cooperation and responsibility. We are talking about hundreds of hits. Regardless of which government is behind a research bill – governments change now and then – these are valuable words whose entire meaning has not quite been interpreted, and even less so realised.

There is yet another important term that ought to be kept in mind if one wishes to understand the success of democratic governance in open and free societies. **That term is separation of powers.** When too much power gathers in one place there is danger afoot. This is happening in more and more countries nowadays and it is a terrible development.

When we claim, with Francis Bacon's famous words, that "knowledge is power" it is with a particular insight: that power for Bacon meant "capability" – the power to be able to do something. Not power over others. And above all not alone, elevated power.

Many of us think that knowledge ought to have greater significance in society, just as it is stated in the research bill. However for it to gain significance it needs to be fleshed out, by everyone.

Finally, we are also living in an age in which the forums for public discussion are changing at high speed. Responsible media are coming under pressure from all directions, from social media, from commercial forces, from misguiding preachers, but also from the highest powers themselves: from the Kremlin and the White House and everywhere in between undermining forces are pushing in with the will to destroy the orderly civil discourse that is the basis of all wise decisions and all progress. These forces do not believe in sharing power – and above all they do not believe in knowledge as one aspect of a sensible and balanced sharing of power. They believe in the dark voice of the one and only truth.

In times like these it is particularly desirable to ask ourselves what institutions we have that can be used to build a defence for a sound discussion and wise, power-sharing cooperation.

And since we are talking about academies, we ought to talk about their responsibility, their partnerships and their humility.

Already they are engaged in many of the things that are exactly what we need just now. Communication, debate, cooperation foster and build prestige around knowledge, they celebrate the desire for and meaning of knowledge.

Nevertheless they are also hampered by certain difficulties. It cannot be denied that they are top down: they do not come, as it is said in the good book “poor and unclad”, perhaps they do not always come with much humility either. They have grand origins and they are engaged in lofty matters and sometimes sit on high chairs.

These can be assets, if they are combined with humility and the trying and erring that are all part and parcel of science. Sometimes I think the academies make it harder for themselves than it needs to be. They represent all fields of science but their voices are often remarkably similar. When they speak in debates, for the most part, you already know what they think. They seldom surprise us less than the Swedish Trade Union Confederation or the Confederation of Swedish Enterprise. Wake the Royal Swedish Academy of Engineering Sciences in the middle of the night and they will say something about innovations. Meet the Royal Swedish Academy of Sciences in a dark alley and they’ll hiss: “basic research!”

I have no real idea about what the Royal Swedish Academy of Agriculture and Forestry would say if you met “her” in a thick and gloomy pine forest, but probably something about sustainability and that this one alone is wearing a cap. Or as Bo Dockered once put it when he gave the thank you speech at a Swedish University of Agricultural Sciences dinner in Uppsala Castle: he spoke about the wall hangings back home in his cottage and the beautiful landscapes in them – in “woodland and shrubland”. Nobody else could use this expression with its slightly lisping character with such passion as Bo Dockered could, so that you really understood that it must have been how Adam and Eve lived, surrounded by trees and shrubs in Paradise.

It is charming.

But it is also predictable.

Currently there is a movement within the knowledge society, and I think it seems more intensive than ever before. It is fed by the threats and dangers to knowledge’s freedom, which we are experiencing. It is a movement that seeks its forms, and wishes a broader collaboration, a more cooperative and perhaps simply humble view of the penetrating effect of knowledge on society. I can see a future where the academies participate in this movement and it could be a way of ensuring that these important institutions acquire the significance they deserve.

Ten years ago, in the UK, a network was formed by socially engaged historians, called *History and Policy*. It now has more than five hundred members and their impact in the British social debate is not insignificant. They carry out alternative inquiries, criticise poorly motivated decisions, take an informed look at problems. History and Policy is typical of our time. It is a bottom-up movement and, unavoidably, most of those with leading roles are young historians. Many are leading historians.

Almost everything belonging to the future comes from below.

This is a simple truth. One of the characters looking for an author is called “innovation”. This is perhaps the most important character. **For innovation, all the other characters are conditions.** Perhaps she is The Stepdaughter in the family of roles, and we do not want her to flee from the theatre to an existence elsewhere, where the future is more attractive. We need her, with all her diversity and perhaps sometimes her dangerous liaisons.

I believe that, for the academies, innovation means that they ought to welcome young people more. Currently there are often age limits in the statutes, where one must step down from a position to give way to new fellows. Perhaps it is time for another kind of statute reform, where one also introduced a limit further down, for example at forty, and then state that there should be a minimum proportion of fellows under forty, one third, maybe half; then you'd have to adjust the criteria for selection slightly so that the merit list did not have to be a thousand kilometres long.

Within ten years you would have a completely different academy. Less prestigious, some might say. I am not so sure about that. A lot more would happen, and it would not be as predictable. During the time a gender balance would also be created.

You could also become a host organisation for dynamic movements from beneath, such as History and Policy. Or support them at least; seek out their friendship and cooperation.

This time it is no longer the state that is hollowing out the core of the academies by moving activities to universities and government bodies. That era is over.

We are in another era now. The pressure to change is now coming from raging, blind forces around the world which want nothing other than to marginalise the role of knowledge in society or cut it down and misuse it through their simplifications. If we cannot take care of our institutions so that they remain relevant then I am scared that the successive shift away from the centre of events might continue.

Gudmund Hernes, the Norwegian sociologist and analyst of power, who became education minister during the 1990s, said in one of his signature speeches that he wanted the university to be the place "where the action is". His predictions came true. During the past twenty-five years universities have taken a place at the centre of society, they are the crown jewels of the regions, and they are the state's largest employer, despite being some of the oldest institutions in society.

My forecast is that this is just the beginning. Universities are going to become even more important, in particular in the face of dark global changes that are underway, and in a time when we really need institutions that we can trust. And we must meet enormous challenges in the form of the climate crisis and dramatically growing gaps and uncertainties, both globally and nationally. We cannot do it without knowledge, new knowledge, old knowledge, knowledge that is democratically spread and linked to responsible social development.

Universities are seeking to chisel out their roles in this changed world.

I believe the academies also have reason to do so.

Who, then, is the author? The author that the interesting characters need so that a new and important play can be written for them?

Well, it is not me. My role is only to stand here for a few minutes while you sit quietly and listen. I have to point out what is necessary. I am the jester, who tells the truth even if it is perhaps unpalatable.

The author is you yourselves. The responsibility rests on you. It is you who have the potential, yes you do actually have it!

This evening we celebrate the birth of an academy a long time ago. However on Monday it is back to everyday life and every day we celebrate work, so that the academy can remain an important force in society far into the future. It is not going to stay the way it has been. And it is that that is best of all.

Thank you for your attention!

Sverker Sörlin