

# Dr David Spearman

## Interviewed by Anne Buttimer

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David Spearman was born in Dublin, Ireland in 1937. After an undergraduate education in mathematics and physics at Trinity College Dublin he obtained his PhD in Cambridge in 1961. He served as Research Fellow at University College London and CERN during 1961 and 1962, Research Associate at the University of Illinois (1962–64) and Lecturer in Theoretical Physics at the University of Durham (1964–66). He returned to Trinity College Dublin as University Professor of Natural Philosophy, a position he held from 1966 to 1997. He was Vice-Provost of Trinity College from 1991 to 1997. He is currently a Pro-Chancellor of the University of Dublin. David Spearman was Ireland's delegate to the European Science Foundation in the late 1970s and served as Vice-President of the European Science Foundation from 1983 to 1989. In this capacity, he was involved in the events surrounding the creation of *Academia Europæa*, of which

he was a Founder Member, and was elected as its first Treasurer at the Foundation meeting in Cambridge in 1988.

Anne Buttimer (AB): Here we are in Dublin, January 2009, exploring some ideas about the origins of *Academia Europaea*. We have the great privilege of meeting Dr David Spearman, foundation member and first Treasurer of *Academia*. The aim is to shed light on the founding ideas and underlying visions of the Academy, how these have been implemented and what challenges it faces in the future. You are most welcome, David: I'm grateful that you have taken the time to come and listen to my queries. Can you recall the context in which *Academia Europaea* was founded?

David Spearman (DS): It is a pleasure to be here and thank you for asking me. I think this is a very appropriate project that you are initiating, to look back on the history and the founding visions of *Academia*. I think what one needs to recognise is that, in relation to the European concept, things were very different then, certainly where science was concerned. I remember, when I was involved in the European Science Foundation (ESF), it was observed that European academics met each other in the United States. They didn't meet in Europe. That was something which had to be changed. It has changed now. But that was the level we were at then. That was what motivated and led to the establishment of the ESF. At the time that *Academia Europaea* was established, I was Vice-President of ESF. And indeed it is fair to say that most of the people who were involved in the early stages of the *Academia* had been associated in one way or another with the ESF – with the exception of Arnold Burgen who was to become the central figure, but he didn't come in through the ESF route. But almost all the others came from ESF. First and foremost there was a feeling that this was an attempt to create a European community in science; and that meant science viewed in the broad sense, the German sense of *Wissenschaft*, to include the humanities and social sciences as well as the natural sciences.

AB: Do you recall the year in which the ESF was founded?

DS: It would have been late 1970s. The ESF was a body that involved scientific organizations, such as research councils and academies. I was appointed to the ESF by the Royal Irish Academy and the other Irish member organizations. I know I succeeded Jack Grainger around 1980, and ESF had been in operation for two or three years before that. Brian Flowers was its President. Then I was Vice President of ESF from 1983–1989. Now if we come to the *Academia*.

AB: Yes, please, let's talk about Academia Europaea.

DS: There was a meeting of European Research Ministers in Paris, convened and chaired by Herbert Curien, in 1985. Curien was a central figure at the beginning.

AB: He was the French Minister for Research?

DS: Yes. He was a scientist of very high standing and had been drawn in to positions of high responsibility within the French administrative system and became Head of the *Centre National de la Recherche Scientifique* (CNRS). Then he was asked to take charge of the French space effort and he led on that. That was, of course, spectacularly successful. Thus, he came to know Mitterand, who developed a very high regard for Curien. Mitterand, just like Napoleon before him, used to take scholars and scientists along with him as he travelled around the world, so Curien was frequently with him on these journeys. So he came to know Mitterand quite well. And then Mitterand appointed him as Minister for Research. That meant that he was an extremely influential figure, and contributed to the shaping of scientific research in Europe. Curien was a committed European. But he was apolitical, in the sense that there was no evidence of his association with any one political party – he didn't think in those political terms. But at the same time he could be effective in achieving his goals. He was very much a leader in science in Europe. It was as Minister for Science that he convened the meeting in Paris and he worked very closely with the German Minister for Science, who was called Riesenhuber. I was there, having been invited because of my position within ESF. I remember it well because one primary item on the agenda was to establish research networks: this was Curien's proposal and it got substantial support from the other Ministers.

AB: And these networks were to be constituted by individual scholars, rather than by academies or research councils?

DS: Yes, they would be networks of individuals. The proposal was to introduce a structure that would encourage networks. And of course, over the years since then networks have been promoted by ESF and by the various Commission programmes; networks are now very much part of the framework schemes of the EU. But at the time, this was a new idea. And while the debate on this was going on, the British Minister, Peter Brooke, got up and said 'What you really want is a European Academy'. Now from the point of view of the agenda of our discussion today, of an Academia, that could be seen as a positive thing, and indeed it did speed up the

process of setting up the European Academy. At the time, however, it struck me as something of an obstructionist intervention on the British part.

AB: Why, in what way?

DS: Well, Britain was not so enthusiastic about European things really. Particularly if the initiative had come from France with the support of Germany, then – maybe I’m a little biased here – this wasn’t seen as something to be encouraged. So my interpretation of Brooke’s intervention – I may be right or wrong here – was to move attention away from the notion of networks.

AB: What strikes me about it is that given the differences in definitions of science on the continent and definitions of science in Britain, the notion of an academy might have been one that could include scholars from all fields, not just the sciences as defined in Britain.

DS: No, I don’t think that this was a factor because the European view was one that embraced the humanities and the social sciences. This was certainly the position of the ESF. But the ESF was structured in a way that had nothing to do with individual scientists: it was an organization of organizations. It involved research councils and academies and provided structures within which they could act more effectively in consort. And it did this rather well. The Academia idea was quite different. Its members would be individual scientists who were elected on the basis of scientific merit. Of course, this had been spoken of before. It was an ideal that everyone looked up to and was regarded as something we should eventually have, as in the United States, where you have a National Academy of Science comprised of individual elected members. The complication in Europe is that scientists are already affiliated with their own respective national academies and even today individuals could be torn in their loyalties; in some ways, the national academy would be more important for them than an Academia Europaea. But it is a way of coming together collectively, getting to know each other and being involved together in the context of a European Academy.

AB: And at this time, it was pre-1989, the idea of bringing scholars from countries east of the Iron Curtain to meet scholars in Western Europe must have also been an important motivation in the discussions at the Paris 1985 meeting.

DS: That was made clear. If I take the step on after that – I’ll return to your question later – the next step, in relation to the Academia, took place in

Britain. And Arnold Burgen was drawn into it at this stage. He was the Foreign Secretary of the Royal Society. Now I'm not sure whether the initiative came from the Royal Society, or whether it came from the Government Department. The Permanent Secretary at the time, I think, was a man called Robin Nicholson, but I'm not too sure about whether it was Nicholson who approached the Royal Society, or vice versa. They took this forward and the Royal Society set up a committee under Arnold Burgen's chairmanship to explore the possibility of establishing an Academy. Arnold convened a meeting, which was held in London around 1986. He had a small group of people there. Curien was there, Brian Flowers, David Magnusson, Robert van Lieshout, then Head of the Dutch Research Organization, and I'm not sure who else.

AB: Was Torsten Hägerstrand at that meeting?

DS: Torsten may or may not have been at that meeting. But Torsten was certainly drawn in, at a very early stage. And Torsten was a member of the first Council. Well, at that meeting, they more or less agreed that it would be appropriate to go ahead with the establishment of an Academy. They set down various guidelines, including the provision that this should be extended to include Eastern Europe. And it was recognized that there would be certain practical difficulties with travel across different jurisdictions, of financial contributions and so on. They also decided that the way to go forward was to decide on an initial membership – I think the term 'foundation membership' was used – and they came up with a list of about 100 names.

AB: So the initial members were selected or nominated by this initial small group?

DS: No. It was that small group that met, consulted with colleagues and decided on a core membership to start off with and then elected something like one hundred 'foundation' members. I think that in selecting these names, of course, the primary concern had to be about people with academic standing, but beyond that they were also looking for people who had some established European commitment and known European connection.

AB: Did they consult national academies in this search?

DS: As far as I know, they didn't. But, of course, Arnold was Foreign Secretary of the Royal Society and he would have had direct connections with national academies.

AB: So then?

DS: So then, a meeting of the foundation members was held in Cambridge in 1988.

AB: This was the 'Foundation meeting', was it not?

DS: I suppose you could say that. I think that about 52 of those foundation members attended. I wasn't able to be there. But you could say that this was the Foundation meeting. Things really moved on from that. A mechanism was in place to propose further names, and each of the foundation members was encouraged to propose additional names. There was a preliminary sort of a process of scrutiny following that, and then in 1989 the first annual meeting as such was held in London. And by that time we were up to a few hundred members. Arnold Burgen was elected as the first president. This was totally appropriate as it was Arnold who had been the primary mover in bringing all this about. His continuing commitment and dedication was crucial to the successful subsequent development of the Academia Europaea.

AB: 1989 was a dramatic year, politically, with the fall of the Berlin Wall and other events.

DS: Yes, indeed.

AB: So now tell me about the initial design of Academia's agenda: was it oriented toward promoting both interdisciplinary as well as international collaboration among individual scholars?

DS: I would say that it was definitely committed to promoting interdisciplinary effort.

AB: And the symbol of Academia Europaea is the tree. It evokes images of various kinds of birds coming to perch on its branches: who designed the symbol?

DS: I don't know.

AB: But it is a very powerful symbol.

DS: Yes it is. It's an oak tree.

AB: Academia does not have the capacity to fund projects. Could it rely on ESF for financial support on its projects?

DS: No, the Academia would never have seen itself as becoming a major funding organization. Funding has always been one of its problems. I know this very well, being its first treasurer. It was at the initial meeting in Cambridge – and I was not there – that I was elected as Treasurer. And I remained as Treasurer for about 15 years. Of course, it was an ongoing struggle to try to keep things afloat. I think we all had the confidence that this was too good a thing to be allowed to collapse. It was a continuing struggle to have even the necessary funds to keep it afloat. An administration was put in place. Craig Sinclair was appointed as first Secretary General. He was a well qualified professional scientist, with a PhD in Physics, and considerable experience in international organizations, with OECD and with the European Commission as well as the NATO scientific programme. Craig made a major contribution to the establishment and building up of the Academia in its early years.

AB: What was his nationality?

DS: He was Scottish. An Edinburgh graduate. Teresa McGovern, a young Irish woman, was his assistant and she still functions at the Headquarters of AE in London. Teresa is the only one of the original staff members who has stayed with the administration right up until today. And we also had Choong-Kar Chan and Betty Lim on the staff.

AB: What actually are the sources of funding for Academia Europaea? Apart from individual contributions/subscriptions to *European Review*, what other sources of support are available?

DS: Funding has come primarily from national sources, either through national governments, or through national academies. This has been very much on an *ad hoc* basis. The countries that had significant representation among Academia members made major contributions. The other sources would be from Foundations. In the early years we got a lot of support from the Nuffield Foundation in the UK and others.

AB: And *Riksbankens Jubileumsfond* in Sweden?

DS: Yes indeed, Swedish foundations were very supportive.

AB: But tell me, now, David, how do you feel about the progress that has been achieved over the years since its foundation? You have been associated with the *Academia* since its birth. Has it really accomplished those tasks it set out to do? To what extent has it reached those initial goals?

DS: I suppose you should ask what its initial aims and aspirations should have been. And you also have to recognize what the constraints were and are. I think it has achieved a great deal. There are now several thousand members, a broadly-based membership which includes many if not most of the leading academics across Europe. It has structure, too, through its subject committees so that people can group within their own disciplines and initiate programmes in those subjects. Some subject committees have been more successful than others. I would say that in that area the success has been mixed. But there are many problems facing the Academy. I mentioned the comparison with the National Academy of Sciences in USA. The NAS doesn't have to compete with individual State Academies; for Americans, there is only really the one Academy. So there is no serious division of loyalty. Also, I suppose mobility is that bit easier: academics are more used to moving around easily there. I think there is not quite the same level of commitment in Europe. Although people do find it an honour to be elected to *Academia Europaea*, perhaps there would not be the same feeling of commitment. The other practical thing is for people to get together for annual meetings. You have been to some of these. I have been to most of them and I have found them to be impressive academic occasions with presentations usually of a very high standard. Some of the greatest interest has been across the disciplinary divide: scientists attending sessions in the humanities and vice-versa. But although these have been very good meetings, they are unlikely to draw more than a few hundred participants, only a tenth of the membership.

AB: But the 'Sections' – the 'subject committees' – conduct their own specific agenda in between the annual meetings and from what sources could they draw support for those activities?

DS: There are only very modest resources from the *Academia* itself. Of course the Sections could seek outside support for their projects.

AB: In terms of other scientific affiliations, how does *Academia Europaea* rank in comparison with the more specialized international scientific organizations that are affiliated with ICSU, ISSC, even UN-related other umbrella bodies? For an aspiring young or mid-career scholar, might it not be more advantageous to participate in discipline-specific international ventures rather than in *Academia Europaea*?

DS: Yes, But that is probably not any different from what you would have at a national level. In Ireland, you could be a member of the Royal Irish Academy and at the same time a member of the Institute of Physics or



some other specialist organization. That's the normal and accepted pattern. Of course a lot of the European organizations have different kinds of structure. As I said, the European Science Foundation deals with research councils and academies. I was for a while a member of the European Assembly, which the Commission set up as an Advisory body on science and technology. Again that's a different sort of role. So there are these different bodies. And I think the role of the *Academia* is distinctly defined.

AB: How do you see the future challenges for the *Academia*?

DS: Well, in a sense, it is more of the same. I think there is still some work to be done in building up the membership. What one really needs to do is to heighten the profile of the *Academia*. There are some new members who come along and say that they have never previously heard of the *Academia Europaea*. It should have a higher profile. I think one should also encourage members to play a more active role.

AB: I was particularly curious about the rationale for the *Academia*, as opposed to ESF, in terms of research orientation. Was there a position taken at the beginning about 'pure' versus 'applied' orientations? Today, EU Commission Framework programmes put a lot of emphasis on societal relevance in their research projects. This is becoming more emphasized in ICSU programmes. As you know, the traditional view in science was that it should not become too involved in public affairs, that it should remain objective, laboratory-based, etc. Was there any discussion on these issues at the beginning?

DS: I'm not sure that there was specific discussion on this. But it would have been part of the thinking. The fact that the Commission framework programmes were very much application oriented, with concern about economic consequences and so on was well acknowledged. In contrast, the ESF had a strong commitment to basic research. And there is no doubt that the *Academia* gave encouragement to scholars following their own interests and pursuing knowledge for its own sake. The promotion of knowledge for its own sake was an essential part of its territory. In fact, I would say that most of the academies that were involved at the beginning would have assumed this stance.

AB: But this makes the interdisciplinary challenge even more daunting, does it not? If one looks back on the Liverpool meetings in 2009, for example, the success of the programme stemmed largely from the societal relevance of the topic 'migration and slavery': historians, social and physical scientists and others found a common focus of concern. But the pursuit of

‘knowledge for its own sake’ is probably best pursued within the context of specialized disciplines, *ceteris paribus*, no?

DS: I don’t think that I agree with this from my own experience. Much depends on the community you find yourself in. I should think that an academy, such as the Academy we have here in Ireland, could give the opportunity for people from across the disciplines to know each other and to form a community. And I think it is through personal interaction that ideas can be shared. I think it facilitates the transfer of ideas. It is more difficult in a body as large as *Academia* to facilitate this kind of exchange. But this is what we should try to achieve.

AB: And I’m sure that if any of us could do even half as much as you have done, David, to facilitate scholarly collaboration, we will be advancing on that road. I agree with you totally that the building up of a community is vital for cross-disciplinary communication and mutual understanding; and this could be facilitated by people sharing not only their knowledge in diverse fields but also their lived experiences, and the role of applied knowledge in societal policy.

Thank you again, David!