

STS forum – Science and Technology in Society forum

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Panel 202: **Dialogue between political leaders and scientists**

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Ladies and Gentleman

I firmly believe: the dialogue between political leaders and scientists is one of the critical success factors in dealing with all of the major challenges mankind faces.

Let me quote just two sentences from the fundamental concept of the STS Forum:

„Because the problems we face today are becoming increasingly complex against the backdrop of globalization and international competition, they are beyond the control of any single country.

These issues are also beyond the control of the scientific community alone, because many of the problems will find solutions through changes in social systems, international collaboration, global networks, and the building of common rules.”

I am a politician. Having served for almost twenty years on the Swiss Senate as a member as well as its speaker, I have reason to believe, I know and understand this particular variety of the homo sapiens very thoroughly.

In my political work and in my function as president of the Swiss Science Foundation I worked closely with scientists. I claim to have an understanding, limited I admit, of the way scientists think and work.

The dialogue between the political world and the science community is essential to the future of mankind. For it to happen, that is, for a successful dialogue, common ground between the two domains – politics and science is a precondition. And here lies the challenge: It is my experience that the thinking and working of politicians and scientists follow different, to some extent even opposing principles.

Scientists and politicians are very competitive people – but there are differences. Scientists compete for results, for students, for publications and for funding. The peer system makes for strong but objective judges, who base their judgment on common criteria of quality and verifiable facts. The result of their work is knowledge, scientific facts.

Politicians compete to be elected and then re-elected. They win by selling their political visions and promises to a majority of voters against the competition of

other visions and promises. Their daily business is it to find majorities for the realization of their political plans. In order to achieve this, politicians have to be pragmatic and find compromises.

Scientists produce the best results, if they are given as much freedom as necessary. One chooses the best scientists in a field, based on their track record in the scientific competition; but then you let them do their work. Their research, particularly in basic research is long term oriented. For a research endeavor to produce a negative result, that is a finding that refutes a particular thesis, is totally acceptable, because to understand what does not work leads eventually to the understanding of what does work.

Politicians have little freedom. Their constituency constantly monitors them. In order to be reelected they have to consider and stick up for their constituency's particular interests. Their orientation is pragmatic and short-term (the next election is coming up soon).

So, how can common ground be established despite these differences?

To put it very bluntly: the rules of politics and consequently the principles to which politicians adhere cannot be changed. In order to establish a successful dialogue politicians have to be ready to talk and listen to scientists. But it is the job of the scientists to bridge the gap between the two domains.

Understand me correctly: I do not ask scientists to change – they are perfectly adapted to their domain. I propose that scientists expand their competencies, and, to attune the range of their core business, that is teaching, research and knowledge and technology transfer in order to include political thinking.

You may ask, why should scientists change?

As a politician my answer is simple and straightforward: the public funds research and teaching. There is a clear understanding that research has to be free. But there is also a clear understanding that the public must in the long run benefit. Some of these benefits are highly skilled and qualified specialists or innovation through basic research. In other words: scientists have a responsibility opposite the public.

In the past decades knowledge and technology transfer was firmly established as the third column of a university's mission – besides teaching and research. As a consequence scientists had to add the competence to understand economy and to think entrepreneurial to their profile. They had to learn to integrate the economic and entrepreneurial way of thinking, yet to stick to their rigid scientific principles.

In order to establish a successful dialogue with politics and to have impact, scientists need to expand knowledge and technology transfer to include politics. They must learn to understand politics beyond the question of raisings funds. They must learn how to successfully transfer their findings in a responsible way

into the political discussion; they must learn to think politically – again without giving up the principles of science.

Another way in which scientist can improve the dialogue between scientists and politicians is to continue their outreach activities, to enlighten the public. Make them understand how science works and to understand the connection between basic scientific facts. Because an enlightened public means also enlightened voters, which in turn means another framework for the politicians.

If scientists add political thinking to their profile, they will be able to bridge the gap, to establish a common ground for a successful dialogue.

In fact, they will become the politician's guide dog. – And we certainly need that in order to overcome the big challenges we are facing.