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# Seminar
# SOCIAL SCIENCES FOR THE SCIENTIFIC AND TECHNOLOGICAL ADVANCEMENT

*Dialogue on governance and development policies of the European Research Area*

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## Contribution of

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As director of the Laboratorio di Scienze della Cittadinanza, I take pleasure in opening this seminar today and thank all of you for coming. It is with great satisfaction that I see some of the more diverse actors involved in the destiny of research in Europe here with us today, either among the audience or the speakers. It is with all these people – scientists, researchers, politicians, European officials, representatives of private enterprises and non-profit organisations – that we hope to achieve what we have called a "dialogue on governance and policies of the European Research Area". In particular, we shall try to highlight the specific contribution that social sciences can make to all this.

Our dialogue also aims to make a contribution to that reflection on the prospects of the European Research Area, promoted over the last few months on the initiative of Commissioner Potocnik, starting from the so-called "Green Book".

This new boost is a sign of the growing awareness – formulated in the Lisbon Strategy – of the importance of the relation between knowledge and development, as much in social life as in the political agenda. At the heart of this relation are science and technology, which are now acknowledged as the main factor of economic competitiveness and growth in today's knowledge society. Scientific and technological research can decisively influence the social fates of local, national or transnational communities.

At the same time, we can talk of a sort of "politicisation" process of issues connected to scientific and technological research. This has complex effects concerning such things as investments in research, the relations between the research community and business community, the way citizens can take part in decision-making on science and technology issues, the relations between researchers and decision-makers or the role of universities.

The Green Book also deals with the many critical aspects characterising the European Research Area, noting how it lags behind other research systems in the world. In this regard, I also recall the conclusions of the recent EC report "Key figures of science, technology and innovation". The

weaknesses of the European Research Area, indicated in the Green Book, not only include a lack of investment, but also a lack of a favourable environment and the excessive fragmentation of activities and resources. Alongside the fundamental issues of an economic nature, I think it is important to also stress the factors calling into question the social organisation as a whole and, within it, the scientific field itself.

In my view, at least two levels must be considered in order to face these challenges.

The first level is that of the very modalities of scientific and technological production which have so deeply changed also with respect to a fairly recent past, that Helga Nowotny, President of the European Research Advisory Board, is induce to speak of "new production of knowledge" and to emphasise the need for "Re-thinking Science".

We are witnessing a differentiation in the places where research is produced (universities, non-university institutions, government agencies, industrial laboratories, non-profit organisations, etc.); research is becoming markedly more trans-disciplinary and is being conducted through increasingly more complex and far-reaching networks; research sees the increasing involvement of actors other than researchers (such as project-designers, mediators, evaluators, communicators, policymakers, etc.); there is increasing social pressure in the direction of both greater transparency and greater public control over research and, at the same time, a more conscious economic and social valorisation of its results. Moreover, the traditional barriers between theoretical research and applied research are tending to fall.

The latter consideration is connected to the second level of my reflection, and namely the relationship between science and society or, rather, the relationship of science *in* society. This is an even more detailed and complex relationship than the one put forward in the approaches of Public Understanding of Science or Public Engagement with Science and Technology.

As I said before, one of the weaknesses of the European Research Area is the lack of a favourable environment, and Commissioner Potocnik has even called for a "restructuring of the European research fabric". We must therefore question ourselves on the social substance of this fabric and on what are the factors, also of a social nature, that make the European environment favourable or not to scientific research.

While scientific and technological research is taking on the features of a complex social undertaking, then –in order to be achieved – it requires vast social consensus, a broad sharing of responsibility and more effective and sophisticated governance mechanisms, which we propose calling "socialisation".

The main question to face thus seems to be that of the risk of limited socialisation – or "hypo-socialisation" – of scientific and technological research in Europe.

Despite its increasing importance, large sections of the population and many political, economic and cultural leaders still continue to see scientific and technological research as something quite alien to social life, as something in some way isolated or whose management can simply be delegated to a small group of specialised institutions. The consensus enjoyed by research generally remains disproportionately low compared to its importance. Even the mobilisation of civil society in support of scientific and technological research appears very limited, especially when compared to the more substantial one geared to reducing its field of action for ethical or environmental protection reasons.

By holding this Seminar, we wanted to start from this very assumption that links the critical factors hindering the strengthening of the European Research Area to the limits and delay in the socialisation of scientific and technological research.

In this regard, a first contribution that social sciences can make to the development of the European Research Area may be that of using their own scientific investigation tools in order to provide reliable knowledge elements on processes and actors enabling or limiting the rooting of scientific and technological research in the social fabric, so as to put forward strategies and policies favouring research socialisation processes and to remove the obstacles. It is in this perspective that LSC and its partners are carrying out the project "Social Sciences and European Research Capacities - SS-ERC".

To this can be added the responsibility, for us social scientists, to appropriately meet the demand – I seem to note as a qualifying feature of the 7th Framework Programme – for placing our disciplinary knowledge within the main research lines envisaged for the coming years.

In this regard, I am thinking of themes that are multidisciplinary by nature, such as sustainable development which – for Jean Michel Baer – is the element qualifying the Lisbon strategy itself for a European knowledge society. Other areas, too, like the environment, energy (measured with a view to an energy transition, also in terms of a "post carbon society"), health and transport all appear to call for a greater contribution of social sciences, in the broadest sense, alongside the one of natural sciences. On this, I feel that the 7th Framework Programme establishes the conditions for a mainstreaming of social sciences and humanities that has its boosting element in the direction of "Science in Society", but that encourages the social scientists' community to also take part in other working programmes in what are called "transversal areas".

In this regard, I am pleased that representatives of various European Commission directorates are taking part in our dialogue and whose views on this are particularly interesting.

This is a process that is perhaps still at an initial stage and fraught with difficulties, but the prospect seems to be that of a common undertaking. We are thus proposing a sort of "pact" between social scientist communities and natural scientist communities in order to overcome their mutual suspicions or communication difficulties and to find the best ways to exercise their responsibilities in the overall field of scientific knowledge with respect to fundamental issues like the sustainable development of contemporary societies. Let me also recall, here, that the LSC is one of the partners of the MINET project (Measuring the Impossible Network) within the Nest Pathfinder programme, which gave rise to an interdisciplinary network of centres dealing with the question of measuring holistic and complex phenomena.

Before concluding, I would like to suggest three strategic prospects.

The first is that of experimenting the desirable "pact" between social scientists and natural scientists not only on specific research programmes, but also within a common effort to find, so to speak, the thread of the hypo-socialisation of research. This effort should be based on an awareness both of the effects of scientific and technological research on the fates of societies, and of the risks that the research itself can run.

The second prospect is that of involving politicians and decision-makers at local, national and European Union level. This involvement should go beyond the mere issue of investing in research and lead to an

overall reflection on the aims and instruments for mobilising collective wills and energies for the development of Europe as a knowledge society.

Finally, a positive relationship between natural scientists and social scientists, and a greater capacity for vision on the part of decision-makers, may make it easier to involve citizens – all citizens, even scientists themselves – in taking on greater responsibility with regard to scientific research, the conditions for its implementation, the use of its results, and the construction of its questions.

A taking on of responsibility that we tend to call "technological responsibility": a concept that still needs further development and better articulation, but which is justified by the consideration – underlying my speech today – that if scientific and technological research has so much to do with the development of contemporary societies, then it must necessarily be the object of the full exercising of those responsibilities which are the prerogative of every citizen. This must be done not so much, and not only, in the sense of denouncing and controlling the possible dangers stemming from research activity, but must be a responsibility geared to favouring solutions promoting development. Technological responsibility may thus be found in all those occasions where citizens mobilise around issues linked to science and its outcomes, and may be considered an important sphere of socialisation and governance of scientific and technological research.

I am quite aware that I have made many suggestions which need further study and critical analysis, but I think this is not necessarily a bad way to start a dialogue on the role of social sciences in the governance and development of the European Research Area. I am looking forward to your contributions.