PACITA Conference, Berlin, 25th of February 2015

"Responsible Research and Innovation – Governance and Policies"
Contribution in the session organised by the Res-AGorA project

I will be giving my opinion on the prospects, opportunities and limits of RRI from a specific perspective and by a mixture of impressions, questions and comments.
I have more than 20 years experience in parliamentary work. What do I bring with me?

- Real-life experiences from representing the interests of the citizens in my constituency (citizen dialogues are part and parcel of most members of parliaments everyday life, at least in Germany)
- Political expertise related not only to science, research, innovation, technology impact assessment and sustainable development.

As many researchers and politicians I belong to a generation which was strongly influenced by the awareness of the limits to growth and events in Bhopal, Chernobyl and the poisoned Rhine.
These are all names and instances that stand for the unwanted consequences of technology and which were the impetus for taking seriously the principles of responsibility and precaution in our work – whether political or scientific.
And for us to work towards technology helping to solve problems instead of causing new ones.

Impressions

I first heard about RRI towards the end of 2012. And I can assure you that as the Committee's chairperson, I was quite well informed about trends in research and research policy. I heard that something was happening in Europe.
I made enquiries, but the topic was not known at the German Federal Ministry of Education and Research (BMBF), nor was there any response from the different scientific communities.
In the spring of 2013 I had discussions at the Commission in Brussels with the staff of the Commissioner for Research and Innovation and with the Deputy Director General of RTD, among others: my questions about RRI did not trigger any response!
So up to that point in time, René Schomberg's ideas had not made it through to the top.

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In the meantime, RRI holds a prominent position in the EU's Horizon 2020 programme. And we now have the Rome declaration, so it seems that RRI has made quite a career in Europe, at least at the policy-level.

I`m not convinced, based on my previous experiences, that this an extensive strategy designed for the long term.

More probably, RRI – at least to start with – is purely a supply-sided policy. In other words: the Commission takes every wish into account along the lines of, we can supply whatever is demanded.

In Germany, the TA-rapporteurs of the Bundestag Committee on Education, Research and Technology assessment commissioned a study at the Office of Technology Assessment at the German Bundestag(TAB) to find out what RRI is about (Fraunhofer ISI is still working on this).

And this means: RRI is still not a broadly recognized topic outside the TA and STS community, even in the responsible Ministry there are only traces of it.

I find Karl Marx's insight convincing: that an idea becomes a material force as soon as it has gripped the masses. I think RRI is still a long way away from this, at least in Germany.

Questions

Does the concept look like it will reach a critical mass in the research funding landscape? And is it really worth pushing the concept?

It seems like such a dazzling idea: open to all sides and almost all interpretations. For its promoters it stands for a new quality of the governance of research and innovation with social responsibility. But is this idea more than old wine in new bottles?

Knowledge of the ambivalence of technological progress and awareness of the unintended negative consequences of technologies were decisive for setting up the OTA in the US in 1972. With this office, Congress created its own scientific advisory body for prospective research governance.

Doesn't this have something in common with the anticipatory and reflexive elements incorporated in the RRI idea?

All the EPTA members follow this tradition. All have delivered projects on technologies with the strong potential to transform society such as nanotechnology, information and communication technologies, genetic engineering with all its facets. I am certain there isn't one that has not had its impacts assessed already.

Some institutions have long linked policy and public consultation with participatory elements.

Two years ago the Bundestag decided to expand the TAB's activities by this approach in its new contract term.

There are a large number of institutions, programmes and processes in the field of research and innovation in Germany that I believe encompass aspects of the RRI concept, both with regards to content and procedure. .

And research funding has also focused on major societal challenges when formulating large research programmes, most notably meanwhile Germany's High Tech Strategy.

In short: we're not talking about a desert here where people have been longing for the rains from Brussels, which is why it has not had a rapturous reception. But of course – if it is going to rain funds for projects, then seedlings will be planted and gardens planned.

Whether or not the term has a chance to catch on is not least dependent on its compatibility. Is RRI compatible? In theory, yes, you could draw this conclusion from the activities just described. But:

Two discourses have existed in the science and research arena in Germany for some time that claim the perspectives "social responsibility" and "participation" for themselves and want to see these embedded throughout funding policy:

1.The concept of **social innovation** understands itself to be a critical alternative to the technology-centred definition of innovation and refers to the social embedding of technical systems.

Above all, it takes a holistic perspective: the search for solutions to problems focuses on new social arrangements, practices, institutions etc. As a consequence, embedding the social sciences is considered to be essential.

I think this approach is more convincing because the RRI approach actually does start from the technology question when looking for solutions to problems. At least, it is possible to interpret Schomberg's definition in this way.

The ambient assisted living research in Europe, or even care robots in Japan are examples of how the perception of the problem is already not being adequately differentiated. Electric mobility is another one, because this only makes sense in holistic mobility concepts for cities and rural regions.

If the social sciences remain only on the sidelines or are even outsourced, then that doesn't leave much beyond the old acceptance research.

By the way, the research projects on social innovations are also being pursued at the same time by the EU.

2. I think the **transformation discourse** is even broader and has more impact. This concerns the changes to the science and research landscape that are necessary to be able to contribute effectively to the transformation of society that has to take place in order to cope with climate change and the other grand challenges.

The impetus came from scientists and research institutes that are involved in sustainability research which was established many years ago.

Meanwhile the German government's Advisory Council on Global Change made a reprt about the grand challenges. And at the moment, the transformation question is the first topic on the agenda of the German Council of Sciences and Humanities (Wissenschaftsrat).

This Council sets the course for the further structural development of the science system.

How serious is RRI? How comprehensively should it be applied?

Does the Directorate for Research and Innovation want to make RRI an inherent part of the governance of research and innovation? Its promoters may want this. I find it harder to believe that the Commission and GD Research really want to pursue this given the dominance of industrial interests and the interests of the member states. As the main target remains groth an competetiveness.

But now, you may argue, the Rome declaration sends a signal that has to be taken seriously. But as a German proverb says, "paper is patient". Remember the Lisbon strategy and all the resolutions about sustainable development. There are unnumerous responsibility friends whose expectations have been disappointed by the Commission, because the next Commissioner or the next crisis is always sure to come along.

When things get serious, for example concrete quantitative targets on CO_2 reduction, this does not concern social values but limiting values, mighty stakeholder interests and power issues. And what is happening at the current TTIP negotiations doesn't exactly spark confidence in how seriously transparency and citizen participation are being taken.

What role does basic research play in the RRI concept?

Should the ERC or other research funding bodies such as the German Research Foundation (DFG) replace the criterion of scientific excellence by problem orientation and participatory selection processes?

Will the concept do justice to the complexity of innovation governance?

The Directorate General for Research and the national ministries of research are not actually decisive for determining the application of technologies, or to some extent for their development. Innovation and technology policy decisions are mostly taken in the respective specialized department like transport, energy, health – and therefore have always been distinguished by fields of application. And regulation – whether enforced through bans or limits – is frequently a more significant stimulus of ideas than research funding.
This is another lesson we have learned in parliament from TAB and ISI.
If RRI is to be applied not only in research funding – and there the how, what and how much still seems relatively unclear – then the governance approach would have to be substantially extended and moved to a whole new level. It would be really interesting to discuss RRI in relation i.e.to EURATOM and the support of nuclear power.

Finally a comment

The normative seems to be at the core of RRI – who is responsible for what to whom and for whom? - and this is where the concept is frivolous. Does science claim to have the right to decide what is responsible and what not? If this were the case, it would have renounced one of its key functions since the Enlightenment.
And it would be arrogant of an expert group to make decisions in a democratic society which need legitimizing through elections. This is the task of parliaments. Their members usually make decisions based on broad debates involving stakeholders. And which are the result of a process of weighing up effects, interests and impacts - may be not enough.

Participatory elements can be a sensible supplement, but can also easily be abused as an alibi. Political science has not yet found an answer to the question of which conditions and which rules can create representativeness and legitimacy in complex decisions.

To finish:
1. RRI is an interesting concept among others.
2. A systematic view and comparison would be useful.
3. Key is where are the settings of the course to a sustainable society.
4. Bundling forces might be the chance to reach a critical mass for a sustainable STI-Governance all over Europe.