

MISSION-ORIENTED RESEARCH ROUNDTABLE, 12.06.2017

Introduction

In the context of Europe facing increasing budgetary pressure and demands to demonstrate the impact/added-value of the EU budget to society and citizens, Copenhagen EU Office, on 12 June 2017, hosted an intimate roundtable discussion between professors and European Commission representatives, on how a mission orientation could help European funded research to deliver even greater societal impact for Europe. Annette Hjort Knudsen, CBS, guided the discussion.



Understanding the concepts of mission oriented research

The **European Commission** representative (Thomas Midtgaard, DG RTD) briefly outlined the ongoing work of the midterm evaluation of Horizon 2020 and preparations for a new research & innovation framework programme (FP9). In the foresight work part of this process, some of the challenges identified are how to better address recurrent challenges and adapt to rapid change. The internal current considerations reflect on what should be the key drivers for a mission oriented approach, and both how higher impact can be achieved and how this impact can be made more understandable to citizens. The Work Programme for 2018-2020 takes some initial steps in this direction, by ensuring each section explains what it aims to achieve. Importantly, a mission oriented approach in FP9 would be non-prescriptive, in the sense that no particular instrument or road is prescribed.

Following this, the invited four professors outlined their views:

Alan Irwin, CBS professor in science and technology policy spoke from the perspective of bringing citizens and broader society into science. Drawing on three past examples of more or less successful mission oriented policies, 1) Man on the moon, 2) Manhattan project (to build an atomic bomb), and 3) War on cancer; Irwin identified some crucial factors and recommendations. Both the Man on the moon and the war on cancer project had gained strong support. However, the latter suffered from addressing a complex issue causing a research hype, whilst in reality science was only an element amongst other essential factors such as organization of the health care system. Irwin therefore recommends that missions be formulated realistically as to what they and research can achieve. It is also necessary



to match the innovation systems to the mission set out, and to bring together relevant stakeholders.

Michael Huber, Bielefeld Universität, professor in sociology of regulation addressed the issue of regulation and knowledge at EU-level. Huber encouraged that when setting out missions, it would be helpful also to identify its alternative/opposite (as in applied and basic research). Huber warned, that in defining missions there is a risk of excluding part of science, i.e. social sciences/humanities, as these are not directly result/output oriented. Further, on the selection of missions, Huber encouraged that an element of ownership is established, i.e. who would take consequences of not delivering, to avoid that overly bold stories/missions would prevail in the selection.

Sverre Raffnsøe, CBS, professor of philosophy also drew on lessons learned from history, focusing on missions as perceived by military and diplomatic corps, and even earlier in form of the Holy Spirit. Raffnsøe noted that H2020 attempts to bring together knowledge across fields to respond to challenges. Mission orientation could draw together more elements and be more specific. Mission orientation may also indicate a more active/proactive approach. Raffnsøe stressed the need to define what key challenges are to be addressed, and where we want to go. In other words, to move from “*how*” questions to more challenging “*what*” questions, .e.g. what aspirations we have through research, and what positive difference we want to make. Raffnsøe warned that in warfare, business or research battles seldom are won by orders or strategy alone. He put in perspective that the grand challenges of our time, and indeed the globe, increasingly are humanly created or at least decisively humanly affected. The human factor has become decisive for innovation, productivity, sustainability and economic and social value. Acquiring expert knowledge of human behaviour and perception has become a key issue, as human beings has become not only the major cause of present predicaments but also the creatures that must attempt to find solutions. Raffnsøe encouraged reflecting this perspective in the conception of mission, by avoiding the idea of “mission accomplished” and by making room for human co-creation.

Anne Eusterschulte, Freie Universität Berlin, spoke from a philosophical and transcultural perspective. She urged a critical historical view on the concept of mission orientation warning that the concept may place too strong an emphasis on progress and success, and too little on humanity. This would tend to cause a short term perspective, leaving little room for research that may in the first instance be “useless”, but which in the longer term would bring greater benefits. Eusterschulte argued the need to keep a plurality of approaches and alternatives as well as continuous reflection, referring inter alia to the German philosopher Hans Blumenberg’s essay on “*Nachdenklichkeit*”. Finally, Eusterschulte stressed the need for impartiality and independent thinking.

Discussion

The presentations were followed by some reflections by the Commission participants, and a lively discussion between all parties.

The Commission representatives (Tomellini, Midtgaard), outlined the process and context it operates in, stressing that a) mission orientation would only apply to around 1/3 of the new framework programme (i.e. equivalent to the challenged based pillar of H2020), and b) the role of the EU is to address the bottlenecks, holding back delivery on defined objectives. This means the analysis cannot stand alone, but needs also definition of options and operational conclusions, meeting the demands and needs for accountability, better regulation etc.

The Commission representatives (Stierna, Midtgaard) tested the feasibility of a number of ideas for a mission oriented approach:



- A novel combination of top-down direction and free method for delivery. **Irwin** emphasised the relevance of the backcasting approach in setting a long term goal (mission), and then walking back from there to identify priority actions including for research while maintaining openness in the choice of solutions, and methods to reach these. Similarly, **Raffnsøe** noted that a business driven mission orientation would hold a tendency to tick boxes. Such a tendency could be helped by framing more realistic objective focused missions, i.e. “*making a difference in...*” or “*make progress towards*” or “*deliver positive contribution towards*”. **Eusterchulte** warned that despite good intentions, it would be difficult to ensure an open process beneath a politically defined mission.
- Missions as a driver for wider change processes and the role of research herein e.g. in delivering on the sustainable development goals (SDGs). **Huber** recognised the approach to missions as a change process but warned that one should be aware of the limitations of research. A change process would need to be politically driven whereas research can e.g. analyse the issues at stake and changes processes as well as facilitate reflections. Change processes require trans-disciplinary and open approaches but universities and scientific career patterns lack adequate incentives and structures to support it. Thus, the legitimacy of mission-oriented research among universities and researchers requires those who set the missions not only to consider the demand, but also the supply side. **Irwin** noted that social sciences typically would study how missions are framed and also present a series of different options. **Raffnsøe** added that one could also envisage more active contributions and interventions from researchers. If one were to undertake the mission to raise the level of trust in the EU or towards the EU, researchers having an expertise in trust would certainly be able to offer counsel or advice concerning how to execute this mission.
- Preconditions for ensuring legitimacy of mission orientation. The Commission used an ice plate metaphor mission orientation – wanting to set a direction towards an objective /the other shore, and moving towards this by jumping from ice plate to ice plate, adapting to their moves on the way. The Commission representatives noted that both

trust and continuous learning are important elements. **Huber** suggested it would be helpful to identify the issue to be addressed and break it down into risk elements also setting out the consequences of not achieving the goal. This could also help increase transparency towards citizens, i.e. before jumping to next ice plate; verify which ice plates are more stable. **Raffnsøe** underlined that legitimacy requires openness for continuous renegotiations of missions, i.e. a process of co-creation.

- Mobilisation of citizens and stakeholders by creating open spaces for co-creation. **Irwin** saw potential benefits in using missions as a way for communicating the value of science to citizens. He noted the importance of public consultations framing questions on *what* is needed, *what* do people want, *what* risks are involved (e.g. what kind of agricultural system wanted), rather than focusing only on the underlying technologies (e.g. do you want GMO crops). **Huber** noted that public involvement in some instances becomes a “front”, rather than a true inclusion. It may also be difficult to determine who actually represents the public. Huber advised to draw on lessons from other fields than science policy, such as regulatory literature, participation or organisational studies.



Recommended further reading

- a) Mission orientation
 - Faguet, Guy. 2008. *The War on Cancer: an anatomy of failure*. Dordrecht, Springer.
 - Lezaun, Javier, Marres, Noortje and Tironi, Manuel. 2017. Experiments in participation. In Ulrike Felt (editor) et al. *The Handbook of Science and Technology Studies*. Fourth Edition. The MIT Press, Cambridge, Mass. 195-221,
 - Nelson, Richard R., 2011. The Moon and the Ghetto Revisited. *Science and Public Policy*. 38(9): 681-690
 - Sarewitz, Daniel. 2016. Saving Science. *The New Atlantis*. Spring/Summer. 5-40.
 - Weinberg, A.M. 1972. Science and Trans-Science *Minerva* 10.2. 1972. 209-222
- b) Philosophy
 - Blumenberg, Hans. 1980. *Nachdenklichkeit*, Neue Zürcher Zeitung. 22.11.1980

Mission Roundtable Participants

Professor Sverre Raffnsøe, Copenhagen Business School

Sverre Raffnsøe holds a doctoral degree (Habilitation) in philosophy and a position as Professor of Philosophy at the Department of Management, Politics and Philosophy, Copenhagen Business School. Professor Raffnsøe is editor-in-chief of Foucault Studies and PI of the research programs *Management of Self-Management (MAS) – The Significance of Self-Management for Subjectivity. Value-Creation and Social Coherence in the Modern Work Place* (2008-11), *Well-being, Self-leadership and Productivity* (2008-11), *The Human Turn (HUMAN)* (2012-15). Fellowships and visiting professorships at *The Danish Institute for Advanced Studies*, Copenhagen, *Institute of Advanced Studies, Durham University*, *Linköping University* and *The Danish University of Education*.



Most recent books are: *The Aesthetic Turn* (2017, forthcoming), *Michel Foucault. Philosophy as Diagnosis of the Present* (Palgrave 2016), *Philosophy of the Anthropocene. The Human Turn* (Palgrave 2016), *Den humane vending* (Aarhus Universitetsforlag 2015). In addition to his doctoral dissertation *Coexistence without Common Sense*, vol. I-III (2002), he is the author of books and articles on recent French and German philosophy, philosophical aesthetics, management philosophy and social philosophy.



Professor Alan Irwin, Copenhagen Business School

Alan Irwin is Professor at the Department of Organization, Copenhagen Business School and also the CBS Vice-President of Entrepreneurship and Innovation. From 2007-2014, he was Dean of Research at CBS. His PhD is from the University of Manchester and he has held previous appointments at Manchester, Brunel and Liverpool universities. Professor Irwin has published over a number of years on issues of science and technology policy, scientific governance, environmental sociology and science-public relations.

His books include: *Risk and the Control of Technology* (1985), *Citizen Science* (1995), *Sociology and the Environment* (2001) and (with Mike Michael) *Science, Social Theory and Public Knowledge* (2003). He was co-editor (with Brian Wynne) of *Misunderstanding Science?* (1996). In 2009 Professor Irwin was awarded the David Edge prize for best paper in science and technology studies. He was part of the group which received the John Ziman prize in 2014 for the ESF report *Science in Society: caring for our futures in turbulent times* (chaired by Ulrike Felt).



Professor Michael Huber, University of Bielefeld

Michael Huber, Professor of Sociology at the University of Bielefeld, Germany, worked and studied at the European University Institute (EUI) in Florence, where he earned his PhD under the supervision of G. Majone, the Universities of Vienna, Hamburg, Aarhus Copenhagen and the London School of Economics and Political Science. Currently, Professor Huber conducts research the context of the Open Research Area (ORA) in the field of “risk based regulation” (*How States account for failure (HowSAFE 2013-17)*) and “quantification” (*Quantification, Administrative Capacity and Democracy (QUAD, 2016-2019)*). He is Principal Investigator at the

Bielefeld Graduate School in History and Sociology, financed by the German Excellence Initiative. He published on higher education policies, climate change, nuclear power regulation, comparisons and regulation and organisational studies more generally.

Current publications comprise an edited book on regulation and governance (Paul, R.; Mölders, M.; Bora, A. M. Huber & P. Münte (eds.) (2017) *Society, Regulation and Governance: New Modes of Shaping Social Change?* Cheltenham: Edward Elgar) and articles on risk and regulation (Rothstein, H., Huber, M., & Gaskell, G. (2006) *A Theory of Risk Colonisation: the spiralling logics of societal and institutional risk. Economy and Society* 35 (1): pp. 91 -112), risk and organisation (Huber, M. & H. Rothstein (2013) *The Risk Organisation. Or how organizations reconcile themselves to failure. Journal of Risk Research* 16 (6): 651-675), and work on risk-based regulation, comparing risk-based regulation across four European countries (Rothstein, H. Borraz O. & Huber, M. (2013) *Risk and the Limits of Governance: Exploring varied patterns of risk-based governance across Europe. Regulation and Governance* 7 (2); 215-235).



Professor Anne Eusterschulte, Freie Universität Berlin

Anne Eusterschulte holds a professorship for the history of Philosophy at the Department of Humanities, Institute of Philosophy, at the Freie Universität Berlin. She is also Visiting Lecturer at the University of the Arts (Universität der Künste) Berlin. Her research field and scientific focus are history of philosophy and transcultural conceptualizations of episteme, medieval and early modern philosophy, transfer of ancient philosophy, aesthetics and contemporary social philosophy/critical theory. She is member of different interdisciplinary research networks and graduate schools, i.e. board member and principal investigator at the *Friedrich Schlegel Graduate School of Literary Studies*; board member at the *Collaborative Research Center (CRC 980) "Episteme in Motion"*; associated member of the *DFG Center for Advanced Studies "Cinepoetics"*; associated member of the *DFG Humanities Center for Advanced Studies "BildEvidenz"*. *History and Aesthetics*.

She has published books and articles in the field of intellectual history, focussing processes of knowledge transfer: *Zur Erscheinung kommen: Bildlichkeit als theoretischer Prozeß* (ed. with W.-M. Stock), Sonderband der Zeitschrift für Ästhetik und Allgemeine Kunstwissenschaft, ZÄK 14, Hamburg: Meiner, 2016. *Videographierte Zeugenschaft: Ein interdisziplinärer Dialog*. (ed. With S. Knopp and S. Schulze), Weilerswist: Velbrück Wissenschaft, 2015. *Anthropological Reformations – Anthropology in the Era of Reformation*. Göttingen: Vandenhoeck & Ruprecht, 2015.



Renzo Tomellini, European Commission

Renzo Tomellini is a chemist. His further education includes management and business administration, European law and regulations. After being visiting researcher in Germany and France, he started in 1987 as a researcher at a centre for the development of materials (Centro Sviluppo Materiali, CSM), at that time the research corporate centre of the Italian steel industry. Joining the European Commission in 1991 and up to 1999 managed European Coal and Steel Community (ECSC) steel research and the related development programme. In 1999 becoming assistant to the director of "Industrial Technologies", he prepared the end of the ECSC Treaty and the new

research fund for coal and steel. Since 1999 he promoted initiatives in nanotechnology, and was Head of Unit for "Nano- and Converging Sciences and Technologies". 2008-2013, Tomellini was Head of the Unit "Materials". 2014- Sept. 2016 he was Head of the Unit for "Strategy" in the Directorate "Climate Action and Resource Efficiency" in the DG for Research and Innovation before he became Head of Unit for "Horizon 2020 Policy and Foresight". It addresses Horizon 2020, preparing the proposal for the possible successor framework programme, and the foresight activities. Tomellini gives lectures on knowledge management and currently teaches "*Management of Enterprises in the European Union*" at the University of Bergamo, faculty of economics. He has been advisor to HRH Prince Philippe of Belgium, now King of the Belgians. He was member of the Scientific Council of the Italian National Council of Research (CNR), and is treasurer of the association of the reserve officers of the Italian Armed Forces (UNUCI) and member of the Belgian military circle Prince Albert.

Publications: He "held the pen" for 3 official policy documents of the European Commission, has launched and carried out successful activity in international (i.e. extra-European) cooperation. 4 patents (a new source for atomic spectroscopy and some innovative sensors), 50+ articles, 4 standards on analysis and measurements, 12 books as editor and 2 as co-author, 2 newsletters and 3 web-pages, and 5 movies on science and research issues.



Thomas Midtgaard, European Commission

Thomas Midtgaard is a seconded national expert at the European Commission, Directorate General for Research and Innovation. Previously, he worked as special adviser for the Danish Agency for Science, Technology and Innovation with the responsibility of coordinating the Danish Participation in Horizon 2020 Programme committee configurations. He has previously worked for the European Commission and the UNDP in the Gambia. He has a master in political science from the University of Copenhagen, a master in European Political administration from the College of Europe in Bruges and a Bachelor degree in Business Administration from the Copenhagen Business School.



Carla Matias dos Santos, European Commission

Carla Matias dos Santos holds a degree in International Relations and Master in International Relations (focused on Science Diplomacy) from the Technical University of Lisbon; specialization in science and technology management by the Portuguese National Institute of Administration in 1995 and by the Organization of Ibero-American States (OEI) in 1998. She became Head of Division of European Relations at the Ministry of Science and Technology in October 2001; was Adviser for international relations to the Portuguese Ministers of Science, Technology and Higher Education from January 2003 until October 2008; and Counsellor for Research, Space and Information Society at the Permanent Representation of Portugal to the European Union from October 2008. Since October 2015 she is a seconded national expert in DG for Research and Innovation.



Johan Stierna, European Commission

Dr Johan Stierna is a senior policy officer of the European Commission, heading the RISE secretariat in DG Research and Innovation. He has been responsible for the use of economics of innovation for EU policy development over the last 12 years, covering EU policies on science, system innovation, business and social innovation, including public sector innovation. Previously, Dr Stierna was responsible for the development of EU policy and evidence-based policy dialogue in the field of global development and higher education. He has a background of researcher in economics and social sciences at the University of Lund, Sweden and at the Universidad Autonoma of Madrid, Spain.

Mission roundtable hosts



Annette Hjort Knudsen
Copenhagen Business School



Anne Meidahl Petersen
Copenhagen EU Office



Karin Hyldelund
Copenhagen EU Office