CALL FOR PAPERS

International workshop

Dilemmas of choice
Responsibility in nanotechnology development

Rovigo, Italy, June 6-7, 2011

The **Centre for Environmental Law Decisions and Corporate Ethical Certification (CIGA) at the University of Padua** and the **Institute for Technology Assessment and Systems Analysis (ITAS) at the Karlsruhe Institute of Technology**, organize an international workshop titled ***Dilemmas of choice. Responsibility in nanotechnology development*, which is** aimed at presenting and debating contributions from different disciplines on several issues concerning the relationship between nanotechnology innovation and responsibility.

The workshop will be held in the Italian town of Rovigo on 6 and 7 June 2011.

The workshop scientific organization is supervised by an international Scientific Committee and will be composed of 4 sessions, of which **two are open to abstract submission,** while other two are devoted to the contribution of outstanding scholars on the topic of the workshop.

The two sessions open to abstract submission will focus respectively on: Session 1: topics concerning regulation and regulatory systems; and Session 2: topics regarding the role of responsibility in the management and the coordination of nanotechnology development. Abstract proposals should be sent to ciga@unipd.it **by March 31, 2011**.

Introduction and background for the workshop

Policies formulation, academic research, business strategies, and civil society campaigns agree that nanotechnology development should be responsible. However, the notion of *responsibility* is extremely diversified in the public discourse of nanoscale technologies, shifting from specialized meanings, e.g. close to liability of industrial producers, or narrower definitions, focusing on toxicological aspects to be tested experimentally, to broader interpretations, considering issues like human rights protection, social cohesion and inclusiveness. The variety of these meanings is apparently dependent on the different normative and epistemic, even disciplinary, perspectives represented in the debate, on the heterogeneity of the social actors bearing such perspectives, and on the stage of the (nano)products life-cycle that is considered, on the plurality of technical fields that are associated with nanoscale science and technology, on the more or less .

Also, these different meanings suggest to commentators and operators different *foci* of attention and policy measures, ranging from radical appeals to precaution, to the experimentation of new procedures for rule-making, to the implementation of public understanding and/or public engagement activities, and to the development of tests, standards, and measures of exposition for humans and the environment.

On the one hand, the formulation and implementation of these policies are affected mostly by our capacity to conjugate what “responsible development” means for us in the future tense, i.e. with regard to the consequences of our actions onto future generations, but also with regard to the assumptions about future situations

that influence our way of acting. On the other, assumption about individuals and their ties to broader social communities affect the solutions for developing nanotechnology responsibly: balancing safety and the legitimate pursue of knowledge or economic opportunities, individual freedoms and collective interests (in a stronger fashion, the "common good"), distributing costs and rewards, etc..

Goals of the workshop and thematic sessions

The workshop attempts to disentangle these complex meanings of responsibility in nanotechnology development by focusing on the following topics:

Session 1:
Responsibility and regulation under uncertainty

One of the most critical issues for regulation and governance consists in how to allocate the costs and burdens of the lack of scientific knowledge in term of responsibility. The use of the term "responsibility" instead of "liability" corresponds - to the aim of this session - to acquire a global regulatory view of the way technological and scientific progress in nanotechnology will impact on the assumptions of risks both at the individual and collective choices levels (here a broad meaning of the term "risk" is intended, including ethical risks; social risks; health risks; occupational risks; environmental risks, etc.).

On one hand, the well known logic of "no data, no market" has already been advocated in order to support the development of precautionary measures in the different regulatory frameworks affected by nanoparticles[1]. On the other hand, it has been noted that «without an adequate scientific framework there is no way to know what data to collect» while «progress in developing the necessary scientific knowledge often depends on having a lot of data on specific materials»[2].

These 'dilemmas of precaution' intersect the concept of responsibility, which extends beyond the usual framework on risks and benefits and which implicitly calls for a broad normative reflection on possible technological impacts and future visions. Therefore, the uncertainty that characterizes nanotechnology seemingly requires an analysis of hopes and seduction around nano to be able to grasp the epistemic and normative challenges posed by these technologies. In order to discuss the delineated framework, this session welcomes papers that, among others, will consider the following questions: How regulation and civil liability interact in order to allocate risks and costs of innovation? Is it possible a real «*coordinated approach*» in circumstances of uncertainty? Confronting exposure risks evaluation at work to uncertainty challenges is the existing workers health protection regulation safe enough? Do the nanotechnology risks invoke a safer and more specific revision of the existing duties to protect health? What is the role of public authorities (e.g. US and EU agencies) and international or national agencies for standardization (e.g. ISO) that interact for developing standards of safety and sustainability as well as approaches for the maintenance of the highest level of safety in nanotechnology? How to address consumers' safety expectationswhen an innovative product is used? Is the process of information sharing effective (that is, e.g., used in cosmetics regulation) an effective way? How are these values interrelated? How is it possible to integrate responsibility into the thinking of emerging technologies? How should responsibility be linked to technological future visions?

Session 2
Coordinating responsibility in nanotechnology development

Recently, a renovated regime in tecnoscientific governance "taking seriously" technology development as a collective experiment[3], has been proposed to democratize technoscientific expertise, as well as to take more robust and legitimate in a situation whose characteristic features are epistemic uncertainty, normative plurality, diverging interests, and public unease.

The public engagement strategy advocated by this model of 'collective experimentation' has to cope with the dilemma of inclusion/exclusion in (participatory) decision-making and the corresponding struggle to define the boundaries of what instances, groups, knowledge, values, behaviours are relevant for the purposes of the process and to transfer the legitimacy gained by decisions from the groups and constituencies involved in the deliberative processes to the groups of the ones that have not been involved[4].

This tension between 'insiders' and 'outsiders'[5] symmetrically applies to responsibility: Who is responsible? What is the extent of this responsibility? To whom? What are the criteria, arguments, and mechanisms tracing this boundaries and determining insiders and outsiders? What are the strategies to define and allocate tasks and duties? How do the meanings of responsibility change across product life-cycles, temporal horizons and sites of innovation? How are tasks and duties to pursue what is variably defined as 'responsible development', allocated? How do farther and closer temporal horizons dynamically interact? How do engagement mechanisms perform coordination? What is the influence of social representations in mutual relationships between actors participating to innovation processes?

References

[1] EU Parliament Resolution 24 April 2009, P6_TA(2009)0328, on regulatory aspects of nanomaterials

[2] Davies, C., *Oversight of Next Generation Nanotechnology,* Washington, DC, Woodrow Wilson International Center for Scholars, Project on Emerging Nanotechnologies, 2009, 20

[3] Felt U. (*rapporteur*) Wynne B.(*chairman*), *Taking European Knowledge Society Seriously*. *Report of the Expert Group on Science and Governance to the Science, Economy and Society Directorate, Directorate-General for Research*, Luxembourg, European Commission, 2007; MASIS Experts Group, *Challenging Futures of Science in Society. Emerging Trends and Cutting-Edge Issues*, Brussels, European Commission, 2009.

[4] Grunwald, A., 'Participation as a means of enhancing the legitimacy of decisions on technology? A sceptical analysis', *Poiesis & Praxis*, 3, 2004, pp. 106-122.

[5] Collins H.M., Evans R. 'The third wave of science studies: studies of expertise and experience', *Social Studies of Science*, 32, 2, 2002, pp. 235-296.

Submissions, deadlines and practicalities

Papers focusing on other emerging technological fields (e.g. Biotechnology, Bioinformatics, Energy technologies, Information technology, Material Sciences, Robotics) are welcome as they provide exemplary cases and valuable lessons for nanotechnology. All abstracts (maximum 1000 words) should be prepared and sent in electronic form (.doc or .pdf) to: ciga@unipd.it **by March 31, 2011.**

The file submitted should contain:

- Authors' identification (name, position, affiliation, postal and email addresses)
- Thematic session title
- Abstract title
- Abstract text (approximately 1000 words)
- Contact information of the corresponding Author (for co-authored abstracts)

After a blind review process, communication of **acceptance will be sent by April 15, 2011**.

Attendees are not required to pay any registration fee. Financial support for travel and accommodation is available for speakers in thematic sessions. Inquiries and applications for financial support to: ciga@unipd.it.

Important dates:

Abstract submission: March 31, 2011
Notification of Acceptance/Rejection: April 15, 2011
Workshop: June 6-7, 2011

For information on the workshop:

www.ciga.unipd.it or ciga@unipd.it

Venue

The workshop is held in the Italian town of Rovigo, an ancient town in the Veneto Region, strategically located 45 minutes from Venice and its airport. Further information on Rovigo are available on these websites:
http://www.veneto.to/web/guest/rovigo
http://www.rovigoturismo.it/changelang-eng.phtml

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