



Research Platform
Nano – Norms – Nature

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Book of Abstracts

GOOD **NANO**
BAD **NANO**
- WHO DECIDES?

Dec. 1–2, 2016
nano-norms-nature.univie.ac.at/conference
University
of Vienna

An Interdisciplinary Conference

Thursday, Dec 1

14:15 – 15:00

Pros and Cons of ENP regulation and ways towards a sustainable use

Juliane Filser

Center for Environmental Research and Sustainable Technology, University of Bremen

Deciding for the “good” or “bad” of engineered nanoparticles (ENP) in the environment is a very complex issue. Formal regulations are set up in REACH and other guidelines, yet hardly any of them are nano-specific. Moreover, they interfere with manifold pressure groups whose intentions are often contradictory – from scientists to media, environmentalists or industry lobbyists. Further difficulties are related to the complexity of processes in the environment, details of hazard assessment and disclosure of data. Based on examples from the literature and our own research I will demonstrate some of those problems and sketch potential solutions towards a transparent and fair development for sustainable applications of nanotechnology.

15:00 – 15:45

Ecocentric evaluation of nano-release

Angela Kallhoff

Research Platform Nano-Norms-Nature, Department of Philosophy, University of Vienna

This contribution explores an ecocentric evaluation of nano-release as a method to evaluate effects of nano-materials with respect to non-human nature. Starting with the assumption that nano-materials can both be beneficial and harmful to the environment, it discusses proposals to distinguish between both in the context of environmental ethics. I shall then outline major reservations against an ecocentric evaluation. In sum, I shall defend an integrative approach to assess nano-release, yet one that prioritizes environmental concern.

16.15 – 17:00

Toward an object-centred evaluation of nanotechnology

Bernadette Bensaude-Vincent

Université Paris 1, Panthéon Sorbonne

The developments associated with nanotechnology raise ethical, legal and societal issues that have been addressed within the framework of ELSI research by humanity scholars often embarked in the nanotechnology research programs. This prevailing approach has been the target of a number of criticisms that will be briefly mentioned in the paper before considering other relevant concerns that need to be addressed for a moral evaluation of nanotechnology. In particular, I would like to make the case for a research focus on the cultural meanings of nanotechnological objects in a broad anthropological perspective taking into account the

interdependence of human societies and technological objects. An example of the object-centred approach will be discussed with a view to point its potentials and limitations.

17.00 – 17: 45

First and third person's perspectives on morality

Tsjalling Swierstra

Maastricht University | Norwegian University of Science and Technology

The stated goal of the conference is to explore the role of evaluative processes and normative attributions with regard to nanotechnology. The interdisciplinary set-up of the conference suggests that different disciplines complement one another as they have different objects – e.g. ethicists establish goodness and badness, and social scientists explore civil society and citizen perspectives. But such a peaceful division of academic labour doesn't exist: social scientists compete with ethicists in understanding evaluative processes and normative attributions.

The social scientist tends to privilege the 3rd person's perspective of the outsider, uncovering patterns and environmental constraints/affordances that the agent may not be aware of. S/he tends to reduce moral controversies to a struggle between conflicting preferences/interests.

The ethicist, by contrast, sides with the agent's (first person's /phenomenological) perspective: how to think/feel/act in this particular situation? Seen from this perspective, the conference text is biased, as it black-boxes the moral experience of the agents themselves. 'Morality in action' may be wiser, and less negotiable, than it appears from this sociologist's perspective. For example: the agent is not 'negotiating' goodness or badness, but (at best) how these assessments are to be translated in practical decisions which necessarily involve value trade-offs. Similarly, moral 'essentialism' hardly exists in practice - except as a rhetorical strategy in public debates. Moral agents accept, or should accept, that in practice it makes little sense to absolutize moral values, as their relative importance has to be assessed in relation to conflicting values and conditions of feasibility. Both perspectives have to offer insights. Can they be combined?

Friday, Dec 2

09.30 – 10:15

Nanotechnology and the public sphere

Lotte Krabbenborg

Institute for Science, Innovation and Society, Radboud University, Nijmegen

Organizing and improving societal evaluation processes around emerging technologies like nanotechnology is a cross-cutting theme in current innovation policies. An important role in this respect is assigned to non-governmental organizations (NGOs). They are positioned as ‘voices of civil society’: knowledgeable in giving voice to concerns and wishes of society.

In this paper I argue that two problems arise when NGOs are positioned as ‘voices of civil society’. First, NGOs do not always see themselves as representatives of civil society. Second, such a positioning underestimates the socio-technical complexity that is involved. I will argue that the challenge is not how to involve more NGOs, but the challenge is how to create an active public sphere that includes emerging technologies as topic for deliberation and negotiation.

The public sphere, referring to an open, meta-topical deliberative system in democratic societies where people can engage in ongoing deliberations (reaching across space and time) through a variety of media in principle allows for continuous evaluation and articulation processes of what is at stake upon which better informed decisions can be made. There is as yet no tradition to include emerging technologies as a topic for deliberation. Moreover, in doing so, all parties concerned (e.g. companies, NGOs, scientists) should develop new skills and responsibilities.

By building upon empirical insights from four case studies, I will show whether and how nanotechnology developers and NGOs engaged in ‘public sphere type of interactions’ (or not) and the impact of these interactions on decision making processes regarding the development of nanotechnology.

10:15 – 11:00

The deliberative turn in nanotechnology policy

Franz Seifert

Independent Researcher, Vienna

There is something special about nanotech policy. Nanotech advocates, lawyers, journalists, civil society organisations, and ethicists typically converge in a call for ethical expertise and public deliberation on nanotech. This convergence among disparate actors and national discourses is not a trivial matter. Specifically, it cannot be attributed by some ‘anti-nanotech’ mood in the public/media. Nanotech has hardly ever been topical in the media, and very rarely has it been targeted by activists. So, why has this ‘deliberative turn’ in this technology field come to pass? How did it unfold over time and across countries? The presentation gives an overview over the analytic premises of a project which I just started. For the time being, it

focuses on the conceptual framework for the analysis of this process in three countries—France, Germany and the UK—over an observation period of 15 years. It combines three aspects—a domestic perspective, transnational diffusion, and policy-oriented learning. Domestic contextual conditions account for the fact that deliberative processes in various countries manifest themselves in characteristic ways. At the same time, the deliberative turn is a transnational phenomenon since experimentation with deliberative processes in technology policy has gained currency in a number of countries during the same period. This, in turn, can be explained through transnational diffusion—the transfer of policy models between states. The concept of policy-oriented learning describes the deliberative turn as a learning process from past collective experiences such as public controversies. The study crucially draws on the ‘Advocacy Coalition’ approach (Sabatier / Jenkins).

11.30 – 12:15

Creating objects of deliberation and governance

Christopher Coenen

Institute for Technology Assessment and Systems Analysis, Karlsruhe Institute of Technology

To researchers in the fields of technology assessment (TA) and science and technology studies (STS), the rise of nanotechnology has arguably revealed a new dynamics of emerging technoscience with regard to, inter alia, the configuration, contents and goals of contemporary science and technology governance discourse. A closer look at how nanotechnology emerged in the last century and politically materialised in the course of the 2000s, which comparatively takes into account discourse on fields of technoscience emerging in the same decade, may allow us to draw lessons concerning the role of normative evaluations and new stakeholder interactions in nano discourse and beyond.

14.15 – 15:00

Science - Democracy - Industry: Who is in charge of regulating nanomaterials?

Diana Bowman

School for the Future of Innovation in Society, Sandra Day O'Connor College of Law, Arizona State University

There are now, quite literally, hundreds of consumer products on the market that contain nanomaterials of one kind or another. Sunscreens in which the active ingredient is nano-titanium dioxide and/or nano-zinc oxide. Nano-silver particles in deodorants and nano-gold particles in toothpaste. Liposomes in anti-aging and moisturizing creams. And dendrimer-based drug delivery systems to name just a few. While these products have entered into the market with varying degrees of regulatory oversight, they have—for the most part—escaped critical evaluation by those who may engage with them on a daily basis. People just like you and me.

There are a myriad of reasons for this. Industry has not, until recently, been required to positively label products containing nanomaterials as such. And even now, there are only a few

product types, in limited jurisdictions, which require such labelling. As such, many of these products have entered the market under the radar. There has been no real “scandal” associated with nanotechnology; no casualties to speak of, and no real harms reported. But this could change. In an instant.

This presentation shall explore the contours of regulatory regimes that oversee the entry of nano-based products into the market. It will focus on the roles and power of different actors within these frameworks, including industry and individuals. In addition to exploring the question of “who is in charge of regulating nanomaterials”, the presentation will also consider the desirability of the arrangement.

15.00-16.30 Roundtable: Regulation meets public opinion

Defining nanomaterials | Iris Eisenberger

Institute of Law, University of Natural Resources and Life Sciences, Vienna

Labeling nanomaterials | Andreas Huber

Institute of Law, University of Natural Resources and Life Sciences, Vienna

Evaluating nano labeling | Claudia Schwarz-Plaschg

Research Platform Nano-Norms-Nature, University of Vienna

The European Union has legally defined nanomaterials and has established mandatory labeling for certain nano-enhanced products. In this roundtable session we will discuss these nano-regulations: Who defines nanomaterials? Why labeling? And do these provisions correspond to public expectations?

Iris Eisenberger will discuss who defines what for whom and for what purpose. Following up on this, Andreas Huber presents the mandatory labeling requirements. In general, labeling pursues three different purposes, namely consumer information, hazard control and risk management. Claudia Schwarz-Plaschg finally illustrates how members of the Austrian public imagine nano labeling. She inquires into whether a gap between labeling regulation and public opinion can be diagnosed.

After a follow-up discussion among the speakers, the audience will convene in small groups and exchange their views on the current state of nano-regulation: Does it meet public expectations? Together we will tackle the question if European nano-regulation can be considered “good” or “bad”? “Good” or “bad” to whom?