

Postnormal Science and Ethics project – (online) seminar 19 November 2020

Participants

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Jorge Cardeno
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Mario Giampietro
Kim Min Hyung
Daniel Lanson
Gaston Meskens
Martin O'Connor,
Ângela Pereira
Jerry Ravetz

Background - rationale and aim

Nicolas Kønig, Claus Emmeche and Tom Børsen have established the so-called Post-normal library consisting of 374 postnormal science (PNS) publications. By searching the library we see that PNS and ethics as a topic that has gain little - and in our opinion too little — attention by the extended postnormal science family.

Hence, we now launch a project called “postnormal science and ethics”, initially consisting of a seminar and a book proposal

It was only recently suggested by Cristiano Codagnone at the PNS4 symposium in Barcelona to add a third axis, entitled 'ethics', to the postnormal science diagram. The additional new axis is: value conflict versus value consensus. It presupposes an ethical stance. The other two axes are in line with PNS definitions: 1st stakes are high -- in Codagone's model the presence or absence of institutional and strategic interest; and 2nd facts uncertain, in Codagone's model: high or low epistemic uncertainty

Hence, three out the characteristics of postnormal science are now covered in the extended postnormal science diagram: "facts [are] uncertain, values in dispute, stakes high and decisions urgent". Now only urgency is not represented by an axis in the extended postnormal science diagram.

As part of the digital journey to the 2021 PNS Symposium in Florence we would like to discuss how should we interpret the ethics axis in the extended PNS diagram. Hence, this is the topic to be discussed in a digital seminar and a resulting book we endeavor to edit (we are currently looking for a publisher).

The discussions at the seminar and in the book will address how postnormal science can embrace ethics:

- Should postnormal science map stakeholders ethical values and concerns? This is an endeavor that can be supported by the ethical matrix.
- Should researchers guided by postnormal science facilitate participatory ethical consultations or technology assessments? In this way postnormal science could help ethical issues to become debatable in society (PNS as a mediator of process).
- To what extent should postnormal science be normative and 'activist' as a prerequisite to be meaningful for society?

Why an ethical perspective on Post-Normal Science?

We know social challenges such as dealing with climate change and environmental pollution are complex challenges that need to take into account factual uncertainty and often conflicting value-based opinions. Especially for the area of public health, we have to realise that, in our contemporary society, living with low doses of fine dust, pesticides, food preservatives, trans-fats, hormone additives, radioactivity, electromagnetic radiation, and so on... is living with the scientific uncertainty troubling the understanding and prediction of their true health effects.

Experts who advice policy have to cope with multiple uncertainties and value-based opinions on what to do while being under pressure by politics, the public and the market to deliver evidence they cannot always deliver. And, obviously, the recent Covid-19 pandemic has put that challenge in even sharper contrast.

The way out is not only better models and calculations in the interest of better predictions but in the first place a different approach to science as policy advice based on ethical and holistic thinking, transdisciplinarity and public participation. In that sense, post-normal science can function and serve as a mediator of process at the science-policy interface in the way it can help to build trust by facilitating an ethical dialogue that starts with recognizing and embracing these factual uncertainties and value-based opinions in the first place.

Seminar programme:

1. Welcome by Tom Holmgaard Børsen and round of introduction of the participants
2. General introduction, rationale and aim – Tom Holmgaard Børsen
3. Why an ethical perspective on Post-Normal Science? – Gaston Meskens
4. Open discussion with all participants on the overall project aim and feasibility
5. Exploratory discussion based on the questions from the concept note:
 - Should postnormal science map stakeholders ethical values and concerns? This is an endeavor that can be supported by the ethical matrix.
 - Should researchers guided by postnormal science facilitate participatory ethical consultations or technology assessments? In this way postnormal science could help ethical issues to become debatable in society (PNS as a mediator of process).
 - To what extent should postnormal science be normative and 'activist' as a prerequisite to be meaningful for society?
6. Roundtable – participants' views on their own possible contributions
7. Practical planning

Synthesis from the discussions

Introduction

Tom Børsen

” Postnormal science has matured on both axes in the postnormal diagram: High decision stakes can be managed through ‘extended peer communities’ and system uncertainties through work with the NUSAP approach. Both elements are closely integrated with ethics and ethical reflections: Extended peer communities rests on ‘inclusion’ as a normative requirement. Uncertainty includes many levels, including ‘ethical uncertainty’. We see a nexus between postnormal science and the branch of ethics dealing with risk governance. Both perspectives can learn from each other: Postnormal science can explicate how ethics entangles decision stakes and uncertainty. Ethical risk governance has so far focused on participative processes, and it overlooks the ethical responsibilities of scientists and scientific institutions that from the beginning has characterized postnormal science. By addressing relating these two perspectives on risk governance, we believe that both fields will advance. ”

Mentions that he would like to contribute (together with Jorge Contreras) with a paper on Participatory ethical Technology assessment. Assessment of technological risks.

Gaston Meskens

Why an ethical perspective on Post-Normal Science? – see the text in the intro

Proposes to elaborate on the idea of an ‘ethics of reflexivity’ in PNS as contribution to the book, building further on a previous paper, *The Politics of Hypothesis – An inquiry into the ethics of scientific assessment*, which was published as a book chapter in ‘Ethics of Environmental Health Risks’, Routledge

Comments (see also the selection of comments from the chat)

Martin O'Connor

- Calls for multi-criteria analysis. Several matrices. stressing multicriteria analysis where ethics is one of them;
- Long discussion of the “Tragedy of change”. What does it mean? We work with futures that will never happen;
- We deal with different interpretations of “safe”;
- Discussion of what does ethics mean. OK to have an ethical position, but PNS is not a typical ethical position. Ethics in PNS is in an ‘existential crisis’. We should have (and are justified to have) an ethical position, but we also want to represent various other ethical positions and be respectful and recognise what other people have done;

- WHY and in what ways is it at stake? For WHOM is it at stake? The stakes being elevated, urgency being always the case, indeterminacy being at the heart of everything within & without... (see further comments on this in the chat section below).

Silvio Funtowicz

- PNS is not a doctrine. It is not an ethical theory. From the beginning, PNS was informed by morality (Jerry's book) and was always concerned with values / ideological commitments in science;
- As an example: trying to destroy our hypotheses to make them stronger (Popper) is essentially an ethical commitment;
- Advice to keep link to the history and tradition of PNS (the diagram) – recommendation to include a section on history in the book;
- 20 years ago, ethics was dead, but revived with developments in bioethics and technology ethics. However it became bureaucratic and reduced to checklists. We should be careful in talking about ethics;
- Takes a more 'conservative' position ('Jerry was the activist'), arguing that we should keep the diagram as it is, and explain how it evolved;
- Mediation of quality in policy advice;
- Are the values of the citizen scientists different from those of accredited scientists?
- Muki Hacklay has mapped different forms of citizen science to the PNS diagram. A possible contributor to the book? Made an interesting presentation on citizen science in relation to the PNS diagram during PNS5;
- We should organize a workshop on zoom where the papers could be presented. A call for papers should be made.

Mario Giampietro

- Science always integrated ethics, and negotiated its identity;
- Interested in biosemantics;
- Suggested an internal review process for the book, and that the book is split up in themes: History, Conceptualisations, Future;
- Mario edits a book series. Maybe this book can be published in that series?
- Likes Martin's idea that we are all living inside the tragedy of change;
- Humans have the possibility to assign an identity to themselves (we can even decide to kill ourselves);
- Process of renegotiation of identity.

Jerry Ravetz

- Popper's vision on science was profoundly ethical. Popper then moved to change that ethical insight into a methodology, and that was a complete mess. In PNS, there is no possibility of refutation
- Remarks about 'When pns becomes an ideology of resistance' (against normal science)

- We should be prepared that one of these days someone will say those PNS people are crypto deniers
- Jeroen van der Sluijs has done a toolkit for uncertainty assessment
- Proposes to use (to incorporate) ethical dimensions

Kim Min Hyung

- Would like to contribute to the book with a paper on COVID-19 management in S. Korea.
- Example of Korea covid management. The government managed to gain public trust, also with tools for the public to handle it voluntarily. Very clear from the beginning what they knew and wanted; also communicating changing insights ; good in separating what is the truth and what is a fact. Value prioritisation was very fast
- How do we relate ethics to what is the underlying way of seeing nature?

Dorothy Dankel

- Will contribute to the book with a paper on institutional pressure for not acting ethically. Deals with institutional change and institutional norms.
- Pns and the institutional process / institutional norms – often in contrast with the person's own morality
- A person or even a small group (inside) cannot change an institution
- Interesting to look at practical examples (ethnography)
- PNS as positive ethics such as in the area of sustainability
- To reflect about the ethics of research training – link to institutional ethics (speaking truth to power)

Daniel Lanson

- Will contribute to the book with a paper on Resistance in science. Ideology of resistance.
- Elaborates on the act of resistance ("Always when I try to explain PNS to my students, they are most sensitive to the political dimension")
- Refers to the idea of the co-construction of knowledge; refers to extended peer communities.

Ângela Pereira

- We worked on wearable sensors, the internet of things, how people identify with the normative in these objects and processes
- Will contribute to the book with a paper on ethics dialogues in the EU regarding Information Technologies.
- My relationship with ethics: study of information technologies (ethical aspects)
- Referring to the idea that ethics is a moving target
- Conducted some participatory processes

Comments from the chat during the seminar

From Martin O'Connor to Everyone: 02:15 PM

Notes on a perspective: Roger in a recent message insists that there can only be "governance IN complexity" (and not governance OF complexity. There is also SELF-governance WITHIN complexity. ... Mario and others have referred to the "ethical" Matrix. In fact it is a tensor in several dimensions. In this regard, as a synthetic statement, I would try to say that, being inside the "deliberation matrix" means the experience of being "inside the 'tragedy of change'" (Mario's term), ... which means experiencing being open/vulnerable/permeable to one's "identities" being transformed -- as in alchemy -- by the forces within and without... Thus: What are the ethical dimensions -- what are relevant ways of articulating these ethical dimensions? -- of this position/positioning??

From Martin O'Connor to Everyone: 02:31 PM

WHAT's at stake?

WHY and in what ways is it at stake?

For WHOM is it at stake?

(The stakes being elevated, urgency being always the case, indeterminacy being at the heart of everything within & without...

Caring and (up)holding were well-developed human considerations well before Latour...

From Martin O'Connor to Everyone: 03:12 PM

Notes to myself: 1/. In our PNS-type perspectives, we insist on a DIVERSITY of ethical perspectives, and we bring, each of us, our own ethical & existential perspectives. 2/. There is a challenge to articulate this double/reflexive character of the ethics/PNS, and to raise the question 3/. Whether, in what sense and to what extent there is a distinctive "ethical" position. (4/. My personal response would be: no, or at least not in a simple way... There is a challenge of a certain sort of awareness-of-complexity, it is difficult to seek more...) Then, 5/., if the positioning is adopted of being WITHIN the tragedy of change -- as articulated in a smorgasbord way via a Deliberation Matrix sort of array, then the further question arises, 6/., what are the key existential considerations of living in/with/through tragedy, and, 7/. what relevant ways/resources do we have for articulating the challenge being creative while in the process of abandoning one's "attachment" to prior identities...

From Ângela Pereira to Everyone: 03:37 PM

I would say that citizen science is not really in the top of the ladder. perhaps some ideas of diy science and maker movement and the deliberative democracy practices that are being experimented by many governments such as participatory budgeting etc

From Martin O'Connor to Everyone: 03:43 PM

Deliberative processes have the merit of making explicit many of the intrinsic challenges of living/working within complexity -- e.g., how to articulate a principle or purpose while knowing that "one view" will not prevail 100% ??? How to work into the challenges of compromise and reconciliation as a principled & reciprocal "giving away" [of aspects of identity...] by protagonists as the "price to pay" for living together? How to formulate notions of justice, fairness, equity in

this way? And, how to avoid that this slips into notions that there can be "compromises" about rigour and about the "quality of knowledge claims and about solutions...

From Jerome Ravetz to Everyone: 03:48 PM

I recall a conference long ago organised by the World Council of Churches, where participants had to make a very brief statement of their position, accompanied by a list of its weaknesses!