AGORAS
Amélioration de la **G**ouvernance des **O**rganisations
et des **R**éseaux d'**A**cteurs de la **S**ûreté nucléaire

«Lessons learned»?
Studying learning devices and processes in relation to technological accidents

December 13th & 14th 2018

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Second AGORAS conference

Beffroi de Montrouge,
2 Place Emile Cresp - 92120 Montrouge – France

How do organizations and sociotechnical systems "learn lessons" from accidents? After the Fukushima nuclear accident in March 2011, the immediate response by industry, governments and regulatory agencies was that they would learn from the accident. Such framing of accidents, disasters or crises as opportunities to improve the operation and regulation of sociotechnical systems has become an increasingly prominent feature of discourses following adverse events. This learning idiom is also taken up by social scientists who study accidents in different domains. Such studies claim to provide a more complex account of accident causes and consequences, compared to the narratives produced by institutional actors. Yet these scholarly works rarely address lesson learning itself, nor its role in transforming or maintaining social practices such as knowledge production, norms and regulations or the operation of sociotechnical systems.

The aim of this conference is therefore twofold.

First, we aim to understand and qualify lesson-learning processes by drawing on insights from sociology, science and technology studies, history, management, and political science. What actors participate in lesson learning discourses? Which processes and devices are set up in order to make learning possible? On what kinds of social practices is learning supposed to act? How and under which conditions do learning attempts actually transform social practices? How are they assessed and evaluated? What are the temporal dynamics of learning processes that aim to analyze the past in order to better anticipate the future?

The second aim of this conference is to foster a debate around the different methods and approaches through which scholars are understand learning processes, as well as the social and material conditions that render these studies possible. This includes methodological issues such as access to fieldwork and data, as well as the prospects, opportunities and limits of transforming social science research into operational lessons for government and industry actors.

The conference will be organized around three themes.
1. Learning devices and the production of knowledge and ignorance. Industry and regulatory agencies are increasingly engaged in R&D activities. These activities not only produce data on the way technological systems used in regulation and prevention activities work, but also provide blueprints for narratives following adverse events.
2. Organizational procedures and learning. Organizational procedures and devices like operational experience feedback, peer reviews or incident reporting systems aim to create vigilance, render signals of deviance visible and analyze incidents continuously. Lesson learning becomes an increasingly formalized and routine procedure in many organizations that may transform regular organizational practices and temporalities.
3. The politics of lesson-learning. Announcements of lesson learning after accidents and crises often lead to proposals for institutional and political reforms that serve to signal change and legitimate socio-technical systems, regulatory agencies and policy makers for events that might otherwise be framed as failures or opportunities for challenging actors on their industrial policies.

Thursday December 13th

9h15 – 9h30
Welcome and introduction
Valerie Arnhold & **Olivier Borraz** for the Agoras conference organizing and scientific committees

9h30 – 10h30
Key note
Bridget Hutter (London School of Economics & Political Science, Department of Sociology)
The Many Shapes of Regulatory Crisis: Competing Narratives, Competing Interests and the Importance of Embracing Chaos

10h30 – 10h45 - Coffee break

10h45 – 12h30
Session 1: Learning devices and the production of knowledge and ignorance (I)
Chair: **Olivier Borraz** (Sciences Po – Centre de Sociologie des Organisations)

Florent Castagnino (Télécom ParisTech - Institut Interdisciplinaire de l'innovation)
The critical potential of ignorance: (Re)Writing expertise reports on the Brétigny derailment (France)
Discussion: **N. Dechy** & **J.M. Rousseau**

N. Dechy, **J.-M. Rousseau**, **A. Largier**, **S. Tillement**, **J. Hayes** & **B. Journé** (IRSN, IMT Atlantique, RMIT University, Université de Nantes, LEMNA)
Using accident stories and knowledge for expertise in management of safety
Discussion: **B. Brocard** & **N. Lot**

B. Brocard & **N. Lot** (EDF LAB)
From external accidents analysis to their appropriation by operational staff: the example of the accidentology approach conducted at EDF
Discussion: **F. Castagnino**

12h30 – 13h30 - Lunch

13h30 – 15h15

Session 2: Learning devices and the production of knowledge and ignorance (II)

Chair: **Benoit Journé** (Université de Nantes)

Cécile Geoffroy (CNAM – Histoire des Technosciences en Société)
Testimony of Fukushima Daiichi's Director: What Lessons for Crisis Management?
Discussion: **O. Chanton**

Maël Goumri (Institut de Radioprotection et de Sûreté Nucléaire ; Université Paris Descartes – Centre de Recherche Medecine, Science, Santé et Société)
When the accident moves the barrier between hypothetical and possible: the consequences of nuclear severe accidents on core meltdown risk management
Discussion: **C. Geoffroy**

Olivier Chanton (Institut de Radioprotection et de Sûreté Nucléaire – Laboratoire des Sciences Humaines et Sociales)
What does the French nuclear regulatory system learn from extreme climatic events: A case study of the 2003's heatwave and drought?
Discussion: **M. Goumri**

15h15 – 15h30 - Coffee break

15h30 – 17h15

Session 3: Organizational procedures and learning

Chair: **Paul Schulman** (Mills College; University of California, Berkeley)

Aditi Verma (Department of Nuclear Science and Engineering, MIT)
The Fukushima accident and epistemologies of nuclear safety
Discussion: **S. Tillement**

S. Tillement, F. Garcias & G. Minguet (IMT Atlantique Nantes, Université de Lille)
Designing innovative nuclear reactor: a study of technological innovation in contested industries through learning and unlearning processes
Discussion: **M. Dupré** & **J.-C. Le Coze**

M. Dupré & **J.C. Le Coze** (Université Lyon II, Centre Max Weber ; INERIS)
Is learning a normative more than a descriptive notion?
Discussion: **A. Verma**

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Friday December 14th

9h30 – 11h15

Session 4: The politics of lesson-learning (I)

Chair: **Stéphanie Tillement** (IMT Atlantique, LEMNA)

Malka Older (Sciences Po – Centre de Sociologie des Organisations)
Normal and Exceptional: Disaster Response Evaluations by the State
Discussion: **E. Abdi**

Valerie Arnhold (Sciences Po – Centre de Sociologie des Organisations)
Lesson learning as a means of governing unforeseen events: The case of French lessons from Fukushima
Discussion: **M. Older**

Esmaeil Abdi (University of Teheran, Iran Research Institute for Science, Technology and Industry; Sharif University of Technology)
Iran Playing with Fire: The Crisis of Iran's Petroleum Industry
Discussion: **V. Arnhold**

11h15 – 11h30 - Coffee break

11h30 – 13h00

Lessons learned from Fukushima: Roundtable

Chair: **Christine Fassert** (Institut de Radioprotection et de Sûreté Nucléaire – Laboratoire des Sciences Humaines et Sociales)

Reiko Hasegawa (Lyon 3; Sciences Po Medialab)

Kentaro Funaki (Ministry of Economy, Trade and Industry, Japan (OECD-Nuclear Energy Agency))

Hideaki Shiroyama (Policy Alternatives Research Institute; University of Tokyo)

13h00 – 14h00 - Lunch

14h00 – 15h00

Conclusion & Future research perspectives

Chairs: **Valerie Arnhold** and **Olivier Borraz** for the Agoras conference organizing and scientific committees

Karena Kalmbach (Eindhoven University of Technology)

Benoît Pelopidas (Sciences Po – Centre de Recherches Internationales)

Paul Schulman (Mills College; University of California, Berkeley)

Access to the Beffroi de Montrouge

2 place Emile Cresp, Montrouge – France

Metro : Line 4, station Mairie de Montrouge
Bus : Lines 68, 126, 128, stop Mairie de Montrouge
Tram : Line 3, stop Porte d'Orléans
Car : Périphérique Porte d'Orléans /Porte de Châtillon

To register, please go to: http://urlz.fr/83ym

Please feel free to direct any question or comment to valerie.arnhold@sciencespo.fr

The research project AGORAS (*Amélioration de la Gouvernance des organisations et des Réseaux d'Acteurs pour la Sûreté nucléaire*: Improving the governance of organisations and networks of actors in charge of nuclear safety) studies contemporary modes of governance of nuclear risks in the post-Fukushima context. It is one of the 14 research projects financed by the French National Research Agency (Agence nationale de recherche - ANR) in the framework of the French public funding scheme Investissements d'Avenir relative to radioprotection and nuclear safety. It is the only project that conducts research exclusively in the field of human and social sciences. AGORAS brings together researchers in sociology and management working in academia, as well as in public and private institutions specialized on nuclear safety. Launched in 2014, Agoras explores the relations between organisations in charge of nuclear safety, both in terms of prevention and crisis preparedness.