

International Workshop
Engaging Society in Innovation and Creativity
Perspectives from Social Sciences and Humanities
CNRS - FFJ- JST / RISTEX

2-3 June, 2015

June 2, 2015, 9:00 a.m.- 6:10 p.m.

Venue : EHESS (190 Av de France 75013 Paris, Conference Room 638-640)

June 3, 2015, 9:00 a.m.- 6:10 p.m.

Venue : Institut d'études avancées de Paris (17 quai d'Anjou, 75004 Paris)



Speakers:

Sandra LAUGIER (CNRS and Paris 1 University), Sébastien LECHEVALIER (EHESS), Satoru OHTAKE (JST), Masahiro KURODA (Keio University), Dominique PESTRE (EHESS, Centre Koyre), Sayaka OKI (Hiroshima University), Sawako TAKEUCHI (MCJP), Bernd GRAMBOW (Ecole des Mines de Nantes, CNRS), Maki UMEMURA (Cardiff Business School & EHESS, Michelin Fellow), Mathias GIREL (ENS), Tadashi Kobayashi (Osaka University), Takehiro OHYA (Nagoya University), Laura MAXIM (CNRS, Institut des sciences de la communication), Arisa EMA (The University of Tokyo), Suzanne DE CHEVEIGNE (CNRS, Centre Norbert Elias), Patrice BOURDELAIS (CNRS), Roberto FREGA (CEMS-IMM, CNRS), Tadamasu KIMURA (Rikkyo University), Frédéric JOULIAN (EHESS, Centre Norbert Elias), Toshiya TSUJITA (Osaka University), Pierre-Cyrille HAUTCOEUR (EHESS), Gretty MIRDAL (IEA de Paris), Emiko OCHIAI (Kyoto University & EHESS, Blaise Pascal Fellow), Vanessa NUROCK (CRESPPA-Labtop, Paris 8 University), Takayoshi KUSAGO (Kansai University), Stéphanie RUPHY (Pierre-Mendès France University, Grenoble), Elise DOMENACH (ENS Lyon), Hiroshi TSUDA (JST), Marie-Françoise CHEVALLIER-LE GUYADER (IHEST), Shinichiro IZUMI (JST).

The workshop will be in English.

Pre-Registration is required : ffj@ehess.fr

<http://www.ffj.ehess.fr>

CONTENTS

ABOUT THE WORKSHOP3
PROGRAM.....4
ABSTRACT.....6
SPEAKER PROFILE17



L'ECOLE
DES HAUTES
ETUDES
SCIENTES
SOCIALES



RISTEX
Research Institute of
Science and Technology
for Society



TIFO
T o s h i b a
International
Foundation

**ENGAGING SOCIETY IN INNOVATION AND CREATIVITY:
PERSPECTIVES FROM SOCIAL SCIENCES AND HUMANITIES**

2-3 June 2015, Paris

International Workshop organized by
the Fondation France-Japon de l'EHESS, the CNRS and the JST/RISTEX

June 2nd 2015, 9:00 a.m.-6:10 p.m.

Venue: **EHESS**, 190 Avenue de France 75013 Paris, conference room 638-640 – 6th floor

June 3rd 2015, 9:00 a.m.-6:10 p.m.

Venue: **Institut d'études avancées de Paris**, 17 quai d'Anjou, 75004 Paris

**Advance registration is mandatory via e-mail to the following address:
ffj@ehess.fr**

ABOUT THE WORKSHOP

The trend of change from science and technology policy to science, technology and innovation (STI) policy becomes remarkable in Japan but also in Europe. Policymakers intend to break down the sense of economic and social stagnation by creating innovation driven by science and technology. In order to solve complex social issues, innovation is definitely essential. However, it is also obvious that creating “real” innovation needs some other elements than just the development of science and technology. Innovation needs integration of knowledge beyond disciplines. Recently the role of social science and humanities (SSH) in the innovation process is being highlighted and science, technology and innovation policy of many countries now expects SSH to play important role in conceiving, realizing and adjusting the policy.

Practical knowledge and involvement of the people is also important to create innovation. As an integration of diverse knowledge, the implementation of “Trans-disciplinary” research is requested to solve social issues in responding to social demand and create innovation that the society expects. “Trans-disciplinary” research requires involvement of non-academic sectors, namely co-design, co-production, co-delivery of research and its results with various stakeholders in society.

In this workshop, French and Japanese researchers mostly from SSH will discuss the role of society and SSH in innovation and in creativity.

The Fondation France Japon de l’EHESS is beneficiating from the support of the following organizations for this event: the École des hautes études en sciences sociales, the Institut d’études avancées de Paris and the Toshiba International Foundation.

Contact and information: Ken Daimaru (ken.daimaru[at]ehess.fr) & Shiho Hamada (shiho.hamada[at]jst.go.jp)

PROGRAM

Day 1 - June 2nd 2015, 9:00 a.m.-6:10 p.m.

Venue: **EHESS** (190 Avenue de France 75013 Paris, conference room 638-640 – 6th floor)

8:30–9:00 a.m. Registration

9:00–9:10 a.m. Opening remarks by Sandra Laugier (CNRS) and Sébastien Lechevalier (EHESS)

Keynote Speeches **Moderator: Satoru OHTAKE (JST)**

9:10-9:40 a.m. Masahiro KURODA (Keio University): “Redesigning “Science for Science, Technology and Innovation Policy” and “Roles of Social Sciences and Humanity””

9:40-10:10 a.m. Dominique PESTRE (EHESS, Centre Koyre): “The sciences between technology, economy and political regulations. Historical overview, current situation and normative principles”

10:10-10:30 a.m. Q&A with the audience

10:30-10:40 a.m. Coffee Break

Session 1: “Innovation: past and present”

Moderator: Sandra LAUGIER (CNRS and Paris 1 University)

10:40-11:00 a.m. Sayaka OKI (Hiroshima University): "Innovation and its intellectual history: The necessity of questioning our built-in framework"

11:00-11:20 a.m. Sawako TAKEUCHI (MCJP): "New equilibrium between robotization and human conscience– learning from Toyota’s experiences"

11:20-11:40 a.m. Bernd GRAMBOW (Ecole des Mines de Nantes, CNRS) : "Innovation, science and society facing the environmental footprint of large scale technologies, such as nuclear industry"

11:40 a.m. -12:00 p.m. Maki UMEMURA (Cardiff University & EHESS, Michelin Fellow): “Reforming innovation in Japan: On Science, Society, and paradigm shift in biomedicine”

12:00-12:20 p.m. Mathias GIREL (ENS): “Innovation, Progress and Acceleration”

12:20-1:00 p.m. Discussion and Q&A with the audience

1:00-2:30 p.m. Lunch Break

Session 2 - The role of SSH in science, technology and innovation

Moderator: Tadashi KOBAYASHI (Osaka University)

a. STI, social issues and risks

2:30-2:50 p.m. Takehiro OHYA (Nagoya University) : “To Do, or Not to Do: Function of Social Sciences toward Innovation”

2:50-3:10 p.m. Laura MAXIM (CNRS, Institut des sciences de la communication): “Policy for rescuing innovation: a Franco-American example on green chemistry”

3:10-3:30 p.m. Discussion and Q&A with the audience

3:30-3:45 p.m. Coffee Break

b. Interdisciplinarity: the contribution of SSH

3:45-4:05 p.m. Sandra LAUGIER (CNRS and Paris 1 University): “CNRS and University Paris 1 Panthéon Sorbonne): “SSH as the core of interdisciplinarity”

4:05-4:25 p.m. Arisa EMA (The University of Tokyo): “We’ve been down this road before: AI boom and the Role of SSH”

4:25-4:45 p.m. Suzanne DE CHEVEIGNE (CNRS, Centre Norbert Elias): "Practicing Interdisciplinarity Around Climate Change"

4:45-5:15 p.m. Discussion and Q&A with the audience

5:15-5:30 p.m. Short Break

Institutional presentations (part 1) **Moderator: Sébastien LECHEVALIER (EHESS)**

5:30-5:40 p.m. Patrice BOURDELAIS (CNRS)

5:40-5:50 p.m. Satoru OHTAKE (JST)

5:50-6:10 p.m. **General Discussion - Moderator: Sébastien LECHEVALIER (EHESS)**

Day 2 - June 3rd 2015, 9:00 a.m.-6:10 p.m.

Venue : Institut d'études avancées de Paris (17 quai d'Anjou, 75004 Paris)

8:30–8:50 a.m. Registration

8:50-9:00 a.m. Welcome by Gretty MIRDAL (Paris Institute for Advanced Studies)

Session 3: Society in innovation and creativity

Moderator: Maki UMEMURA (Cardiff University & EHESS, Michelin Fellow)

a. What societies expect from innovation

9:00-9:20 a.m. Roberto FREGA (CEMS-IMM, CNRS): “How democratic innovation can be? The case for democratic experimentalism”

9:20-9:40 a.m. Tadamasu KIMURA (Rikkyo University): “Rethinking “Information Society” as Discursive Imaginary to Probe Future in the Age of Artificial Intelligence or Posthuman”

9:40-10:00 a.m. Frédéric JOULIAN (EHESS, Centre Norbert Elias): “Between science and technology, the cultural technology revisited”

10:00-10:30 a.m. Discussion and Q&A with the audience

10:30-10:40 a.m. Coffee Break

b. Inter and Trans-disciplinary research, social change, and well-being

10:45-11:05 a.m. Sébastien LECHEVALIER (EHESS): “How taking into account social needs can contribute to the emergence of new industries. The case of personal robotics”

11:05-11:25 a.m. Toshiya TSUJITA (Osaka University): “Rethinking the Design Methods for Appropriate Technology: Some Implications for Japan”

11:25-11:45 a.m. Discussion and Q&A with the audience

11:45 a.m.-12:45

p.m.

Official Ceremony

12:45-1:15 p.m. Signature ceremony of the Memorandum of Cooperation between the JST and the EHESS in the presence of Satoru OHTAKE (JST) and of Pierre-Cyrille HAUTCOEUR (EHESS)

1:15-1:30 p.m. Visit of Hotel de Lauzun at the invitation of Gretty MIRDAL

b. Inter and Trans-disciplinary research, social change and well-being (continued)

Moderator: Sayaka OKI (Hiroshima University)

1:30-1:50 p.m. Emiko OCHIAI (Kyoto University & EHESS, Blaise Pascal Fellow) : “Social Innovation and the Innovation of World View: The True Contribution of SSH”

1:50-2:10 p.m. Vanessa NUROCK (CRESPA- Labtop, Paris 8 University): “Innovation, responsibility and care in nanomedicine”

2:10-2:30 p.m. Takayoshi KUSAGO (Kansai University): “Creating a Sustainable Local Society: a Case of Local Revitalization and Innovation in Minamata”

2:30-3:00 p.m. Discussion and Q&A with the audience

3:00-3:20 p.m. Short Break

c. Social change and participation

3:20-3:40 p.m. Stéphanie RUPHY (Pierre-Mendès France University, Grenoble): “Public Participation in the Setting of Research Agenda: Challenges from a Philosophical Perspective”

3:40-4:00 p.m. Elise DOMENACH (ENS Lyon): “Blindness and denial in films on the 311 nuclear catastrophe”

4:00-4:20 p.m. Tadashi KOBAYASHI (Osaka University): “How was people’s voice heard? : A Trial of Public Consultation on Energy Policy after Fukushima”

4:20-4:50 p.m. Discussion and Q&A with the audience

4:50-5:10 p.m. Short Break

5:10-5:40 p.m. **General discussion - Moderator: Sandra LAUGIER (CNRS) and Tadashi KOBAYASHI (Osaka University)**

Institutional presentations (part 2)

Moderator: Hiroshi TSUDA (JST)

5:40-6:00 p.m. Marie-Françoise CHEVALLIER - LE GUYADER (IHEST)

6:00-6:10 p.m. **Closing remarks by Tadashi KOBAYASHI (Osaka University)**

ABSTRACT

Masahiro KURODA (Keio University)

“Redesigning “Science for Science, Technology and Innovation Policy” and “Roles of Social Sciences and Humanity””

黒田 昌裕 (慶應義塾大学)

「“科学技術イノベーション政策の科学”の再構成と人文・社会科学の役割」

Alvin M. Weinberg has already written the message in 1974, “Many of the issues which arise in the course of the interaction between science, or technology and society hang on the answers to questions which can be asked of science and yet which cannot be answered by science.” We are really recognizing the meaning of his caution at this stage passed more than 20 years in 21st century. Is it due to the property of the modern science and technology or the complexities of the modern society? In order to solve these “trans-scientific issues”, we need to redesign the framework of science, technology and innovation policy theoretically and methodologically as a “science”.

Alvin M. Weinberg は、1974 年にすでに、その論文”Science and Trans-Science”の中で、「科学・技術と社会の係わり合いの中で生ずる多くの課題が科学に解決をもとめて回答を求める事はできるが、しかし科学によってのみでは、答えを見いだす事ができない。こうした課題に対して、トランス・サイエンスな課題という言葉で表現することを提案する。」と述べて、現代社会における科学の振興の難しさを説いている。われわれは、21 世紀の 20 年余を過ぎた今、その警告の重要性に漸く気づいている。これは、現代科学技術の特性からくるものだろうか？それとも、複雑化した社会の構造から生まれた必然なのだろうか？この問題に対処するために、もう一度、現代に科学技術イノベーション政策の構造と実装の意味を科学的に見直してみる必要がある。そして、そこでの人文・社会科学の役割を考えてみたいと思う。

Dominique PESTRE (EHESS, Centre Koyre)

“The sciences between technology, economy and political regulations. Historical overview, current situation and normative principles”

ドミニク・ペストル (フランス国立社会科学高等研究院、アレクサンドルコイレ研究所)

The aim of the paper is to spell out the tensions and synergies between technological development, economic logics and democratic demands. My choice has been to put the question in historical perspective and to conclude by drawing some principles that could underpin a normative attitude I will do that by looking at key historical moments – around 1800, around 1900, and around 2000 – and try to show changes and continuities.

I will then comment on the relationships between contemporary techno-science, expertise, economy and ‘civil society’, and on the multiplicity of social spaces in which assessments are made and decisions taken. Finally, I will become normative and propose some principles for the future.

Sayaka OKI (Hiroshima University)

“Innovation and its intellectual history: The necessity of questioning our built-in framework”

隠岐 さや香 (広島大学)

「イノベーションとその概念史: 考え方の枠組み自体を問題にし続ける必要について」

One of the most essential roles of humanities in society is making critical arguments about the meanings of words that we use often without reflexive analysis. Recent studies in the field of intellectual history on the term ‘innovation’ reveal that it has been a contested idea for most of its history, and has radically changed its connotation from the negative to the positive, as it came to be defined as utility or progress (For example, see Benoît Godin, *Innovation Contested: The Idea of Innovation Over the Centuries*, Routledge, 2015, and similar works by him on this topic). In the latter half of the 20th century, the word was firmly connected with technology and the market, and is now represented as an indispensable element to imagine a new order of society, especially a society driven by a knowledge-based economy. However, from some case studies, we know that today’s tendencies carry a potential risk toward an excessive inclination to industrial/market-centeredness in our science policy, as well as hasty adoption of a utopian vision of progress by technological innovation. Indeed there exist a series of important approaches, such as Responsible Research and Innovation (RRI), to avoid occurrence of morally or socially harmful outcomes of innovation (especially outcomes of technological innovation), but I find it also necessary to continue to analyze the concept itself to avoid its mystification and to be more aware of hidden epistemological contexts of our use of the term. From my own point of view, I am particularly interested in the semantic link between ‘innovation’ and the notion of ‘utility’. In fact, the latter has several versions and each one supports different types of creativity in science and technology.

「イノベーション」の概念史研究によれば、**Innovation** という言葉はかつて非常にネガティブな意味であったが、有用性や進歩のイメージおよび市場経済と結びつくことで、20世紀に急激によい意味を持つようになった。また、近年イノベーションは知識基盤経済社会のあり方そのものを構想する語彙ともなっている。しかしこのように意味の範囲が広がった状態で「イノベーション」が社会のあらゆる分野で用いられ続けることは、過度に産業・市場中心主義な発想や、技術発展による社会の進歩を無邪気に信じる傾向を強めるリスクもあるといわれる。概念が我々にどのような思考や行動の傾向をもたらさうのかを分析し、問題となり得る要素について考察するのが、社会における人文学にとっての重要な役目の一つである。

Sawako TAKEUCHI (MCJP)

“New equilibrium between robotization and human conscience – learning from Toyota’s experiences”

竹内 佐和子 (パリ日本文化会館)

「ハイテク、ロボット化と日本の手作業との最適バランスを目指して」

There are many past theories in line with production innovation since the Ford Moter’s mass production theory. But it is time to reconsider whether automation or robotization could contribute to cost effectiveness in the long term. Toyota experienced the management crisis in the 2008 Lehman shock which led to closing down a number of plants. Since then, we can see inside Toyota the reverse trend of production innovation with more emphasis on human conscience and less on robotization. This new model is now being applied to a production of most advanced hydrogen powered cars, “Mirai”. It can save 40% of investment and provides more flexible and effective solutions. In light of Descartes’s concept on “conscience” I have developed an alternative new idea, which can replace a conventional theory of automation and handmade production, by a new dynamic equilibrium between conscience and robotization. This word “conscience” signifies the judgement power of human being using correct inner sense, conduct and dexterity.

リーマンショックを機に、トヨタでは機械化のレベルを下げるプロセスが進行しており、全自動化はハイコストにつながるという反省から、さらなるバランス値の模索に入っている。自動化（ロボット化）イコール効率という図式はいったん崩れて、別の次元の方程式を追求しているのである。今回の水素自動車「MIRAI」の製造工程（特に組立）はほぼ手作業であるということはニュースでも取り上げられたが、これはまさに別次元であり、機械と人間の関係を作り出そうとするプロセスと言えよう。つまり、最高度の技術になればなるほど、人間の手を介することがきわめて有効かつ効率的という結論に達しつつあるということである。

Bernd GRAMBOW (Ecole des Mines de Nantes, CNRS)

"Innovation, science and society facing the environmental footprint of large scale technologies, such as nuclear industry"

ベルント・グラムボウ（ナント高等鉱山学校）

Large scale technologies as those engaged in nuclear industry are strongly regulated often by dedicated agencies, such as the nuclear safety authority ASN in France. Regulation shall be independent and shall assure that the various actors operate the nuclear installations (reactors, fuel cycle infrastructure, transports, waste disposal sites...) in a way as to minimize risk to operators, population and environment. Regulations evolve both in technical and in organizational terms and they set the bounding conditions for any innovation. In most cases innovation is only treated as a technical issue with societal bounding conditions. We argue for a much stronger direct involvement of social sciences in a dialogue with physical sciences in the innovation process in particular as far as the environmental footprint of nuclear energy is concerned.

Maki UMEMURA (Cardiff University & EHESS, Michelin Fellow)

“Reforming innovation in Japan: On Science, Society, and paradigm shift in biomedicine”

梅村真希（カーディフ大学、フランス国立社会科学高等研究院ミシュラン・フェロー）

Around the world, governments have targeted certain knowledge intensive industries for economic development. In Japan, part of the government’s recent Abenomics programme to “revitalize” the country includes support for the healthcare industry, with particular emphasis on regenerative medicine – a field in which Japanese scientists have pioneered research. Within this context, this paper examines the evolution of Japanese firms at the technological frontier in regenerative medicine.

Part of the aim of the paper is to consider whether the state – albeit often underplayed in the literature – continues to play a fundamental role in nurturing innovation and the development of emerging industries even as firms leverage institutional diversity at regional and international levels, and develop networks of innovation. Along with recent works, this paper questions the claim made by Hall and Soskice (2001) that certain institutional environments are necessarily to be associated with “radical” or “incremental” innovation. It suggests that high technology sectors may at times capitalize more on tacit rather than codified knowledge, and develop in institutional environments often associated with incremental rather than radical innovations.

Mathias GIREL (ENS)

“Innovation, Progress and Acceleration”

マチアス・ジレル（高等師範学校）

Building on Hartmut Rosa's analysis of acceleration as a global phenomenon, I will contrast the concurrent notions of progress and innovation, in a context where (a) references to progress (and with them all the meliorist perspectives it implied) are fading, and (b) where innovation becomes the key notion. I will offer a defense of an updated version of the first notion.

Takehiro OHYA (Nagoya University)

“To Do, or Not to Do: Function of Social Sciences toward Innovation”

大屋 雄裕 (名古屋大学)

「イノベーションに対する社会科学の積極的／消極的機能」

By introducing the project of legisprudence, or study on legislation to investigate how "good legislation" would be to generate social innovation artificially, explain its limit mainly derived from the difficulty in confirming and estimating social demand in advance. Also explain the recent trend to reestablish its goal as negative check to determine choices to be rejected, by investigating the conditions of "bad legislation". Referring to this experience, try to indicate that in relation to scientific and technological innovations, social sciences take the similar position, as to put their importance on the function to make negative check against scientific and technological research activities which tend to be recklessly driven by their own necessities and incentives, from the social viewpoint taking the form as research or life ethics. Also try to suggest that such negative check could have positive effects to remove obstacles for the developed technology to emerge social demand, or even enhance such process of emergence.

人為的な社会イノベーション創出のために「よりよい立法」のあり方を探究しようとした立法学の試みを紹介し、特に社会的な需要を事前に確認・予測することの困難に由来するその限界と、「悪しき立法」の条件を探究することで排除されるべき選択肢を確定しようとするネガティブ・チェックとしての課題再設定について説明する。そこから、科学技術領域におけるイノベーションとの関係においてもネガティブ・チェックとしての位置付けを中心とすることで、研究倫理・生命倫理など独走しがちな科学技術研究に対する社会的統制として働くべきことを示唆する。

Laura MAXIM (CNRS, Institut des sciences de la communication)

“Policy for rescuing innovation: a Franco-American example on green chemistry”

ラウラ・マキシム (フランス国立科学研究センター、情報科学研究所)

Based on interviews with scientists in France and the United States, the presentation aims at showing that understanding the role of research and environmental policies for greening chemistry is essential for sustaining this recent trend in chemical sciences and innovation over time.

Sandra LAUGIER (CNRS and Paris 1 University)

“SSH as the core of interdisciplinarity”

サンドラ・ロジエ (フランス国立科学研究センター、パリ第一大学)

The Interdisciplinary mission at the CNRS supports since 2012 various projects, many identified now as societal challenges (Energy, Risks, Gender...). CNRS is the only French research organization able to support innovative interdisciplinary projects in which its teams join forces across a broad range of scientific fields and can take into account the social dimension of science,

with the presence of HSS researchers. But these new challenges raise also the question of the competing conceptions of such sociality: is it the "impact" of science, as measurable consequences, or its responsibility to society and human beings, present and future? HSS should not only be "taken into account" but also involved at the outset in the development of scientific challenges and in the involvement of citizens in the construction of knowledge

Arisa EMA (The University of Tokyo)

“We’ve been down this road before: AI boom and the Role of SSH”

江間 有沙 (東京大学)

「AI ブームと人文・社会科学の役割：この道はいつか来た道」

Japan is currently facing overheating of the 3rd Artificial Intelligence boom with keywords “big data” and “deep learning” (1st boom around 1970s after the Dartmouth conference, 2nd boom around 1980s with the rise of “expert systems”). Along with expectations to potential of AI, ethical, legal and social implications (ELSI) has been raised and the collaboration with social sciences and humanities are required not only to prohibit dangerous technology but to promote innovation. However, since AI is very old and new words, the definition of AI is vague and its social implications range from long-term (the technological singularity hypothesize the moment in time when AI will have exceeded the human intelligence) to short term (such as responsibility problem on self-driving car). The presentation implicates organizational and structural problem (ex. difference in management style and community scale) and the role of STS researchers in the interdisciplinary project by introducing a case study that the presenter has been involved to link AI & SSH researchers since 2014.

現在、日本では第三次人工知能ブームが来ており、政策的にも SSH との連携や ELSI への配慮が重要と謳われている。そんな中、人工知能研究のコミュニティでは、シンギュラリティのようにならかなり先の問題と、自動運転車のように今もう目前にある問題が混在している。本発表では 1 年間の学際的な活動から見えてきた組織的な問題（情報系と社会・倫理系の規模の差）、構造的な問題（情報系が困る形になる）、研究サイクルの差（情報系のほうが短い）などを紹介することで、学際研究を橋渡しする存在としての STS 研究者が果たせる役割とは何なのかの事例を提供したい。

Suzanne DE CHEVEIGNE (CNRS, Centre Norbert Elias)

"Practicing Interdisciplinarity Around Climate Change"

スザンヌ・ドゥ・シェヴィーニュ (フランス国立科学研究センター)

The natural scientists working on climate change are beginning to realize, more and more clearly, that they need to collaborate with social scientists, to take on board the cultural, social, historical, ... dimensions of the problems they are analyzing. Based on two practical experiences, the Horizon 2020 Advisory Group on Climate Action, Environment, Resource Efficiency and Raw Materials and the Regional Group of Climate Experts recently set up by Provence-Alpes-Côte d'Azur Region, I shall discuss how the collaboration can be integrated into research policy.

Roberto FREGA (CEMS-IMM, CNRS)

“How democratic innovation can be? The case for democratic experimentalism”

ロベルト・フレガ (フランス国立科学研究センター)

Recent debates in political theory has shown the existence of an increasing troubling tension between efficacy, competitiveness, innovation on the one hand and the respect of democratic procedures and values on the other. The rise of expertise as a legitimate basis for decision making at several level of national and international policy making only confirm this. Yet democracy was traditionally praised not only for its legitimating power but also for its efficacy in dealing with social problem and, hence, in producing social innovation attuned with perceived needs. Democratic experimentalism provides a promising framework for combining legitimacy and efficacy in dealing with social problems, especially when seen as a theory of public institutions. In my talk I will introduce this approach and explore its potential for recombining democratic aspirations with social change in a time of deep transformations.

Tadamasa KIMURA (Rikkyo University)

“Rethinking “Information Society” as Discursive Imaginary to Probe Future in the Age of Artificial Intelligence or Posthuman”

木村 忠正 (立教大学)

「『情報社会論』再考～人工知能あるいはポストヒューマン時代における未来を模索する言説による想像として～」

In the 2010s, there has been a growing interest in artificial intelligence as a core technology to generate a great deal of innovation in the near future. Artificial intelligence, associated on one hand with neuroscience and brain science, and on the other hand with robotics, might well bring about a multitude of impact on society. Those agents and robots with artificial intelligence that think and behave as an autonomous entity will be diffused in society, so that industrial structure, job structure, social life and so forth will be transformed profoundly. The boundary between human and machine (non-human) is ambiguous, so we human beings may have to define ourselves in a radically different way. Some show great concern about what the race against the machines will cause to us; others point out the danger of the emergence of fully developed autonomous artificial intelligence beyond human’s capabilities. For science of science, technology and innovation policy, it is no doubt that artificial intelligence is among the most important issues to explore.

In this presentation, I will not discuss the issue of artificial intelligence and innovation in terms of technological forecast and evaluation. Instead, I scrutinize the issue in terms of a discursive imaginary of "Information Society." In fact, I assume our discursive practice concerning artificial intelligence is a state-of-the-art fashion of the discursive imaginary of "Information Society" in the Age of Posthuman. The concept of "Information Society" was set forth and became popular in the 1960s in Japan to seek for a future direction of Japanese society with an emphasis on industrial development. It became a discursive imaginary to formulate policy measures and curiously has survived for more than half a century. Its significant feature is that it claims that computer and digital technology will cause revolution and “Information Society” is a society to come due to this revolution. In Japan, we have had a huge amount of discussion of "information revolution", "multimedia revolution" "IT revolution", "broadband revolution" "ubiquitous revolution", and the like and “the advent of (advanced) information society.” Moreover, in the future image resulting from such revolutionary changes, there have been both rosy pictures and dark pictures; curiously, those pictures have been basically the same, though core technologies allegedly causing changes have been on the cutting edge of each era. The discursive imaginary of artificial intelligence could be considered to be the latest version of “(Advent of) Information Society,” which interpretation would shed different lights on current discussion of artificial intelligence and societal changes associated with its development.

2010年代に入り、次世代イノベーションの中核的技術領域として、人工知能への関心が高まっている。人工知能は、一方で神経科学、脳科学、他方でロボティクスと結びつき、社会に大きなインパクトをもたらすとの認識が拡がりつつある。自律的知能をもったエージェントやロボットが社会に普及することにより、産業のあり方、職種構造、社会生活は

もとより、ヒトと機械（非ヒト）との境界が曖昧になり、私たち人類も新たな自己規定を必要とするかもしれない。一部には、機械とヒトとの競争、ヒトを越えた知能の出現を危ぶむ声もあがっている。科学技術イノベーション政策のための科学にとって、人工知能はきわめて重要な領域といってよいだろう。

こうした人工知能とイノベーションに関する議論について、ここでは、技術的妥当性、予測、評価といった観点ではなく、「情報社会論」という 1960 年代から半世紀以上続く、コンピュータ、デジタル技術と社会との関係についての言説のポストヒューマン時代における展開という観点から議論する。「情報社会論」は、1960 年代、日本社会において、産業経済を軸とした社会の方向性を模索する言説として生み出された。この言説の大きな特徴の一つは、「情報革命」「マルチメディア革命」「IT 革命」「ブロードバンド革命」「ユビキタス革命」など、コンピュータ、デジタル技術が社会に根底的な変革をもたらし、「来るべき未来」として「情報社会が到来する」という想像的語りの構造をとるところにある。しかも、その変革をもたらす未来像には、バラ色論と暗黒論があるが、変革をもたらす中核技術はそれぞれの時代の最先端に移り変わっても、未来像はさほど変化しない。これは、「人工知能」という IT 技術の進化＝深化の最先端技術がもたらす社会イノベーションについても、多くの示唆を与えてくれることになる。

Frédéric JOULIAN (EHESS, Centre Norbert Elias)

“Between science and technology, the cultural technology revisited”

フレドリック・ジュリアン（社会科学高等研究院）

The aim of this presentation is to relate the cultural technology recent history (from Leroi-Gourhan first impulse during the sixties) and to describe this crucial moment of cristallization during the seventies, at a time the analysis of techniques means also an original dialogue between marxism, structuralism and a socio-technological approach.

In a second moment, I will try to describe the critical epistemology at stake (with Robert Cresswell work for example) to bridge the gap between “science” and “society”, through techniques and technology (in their economic, social, symbolic, and of course, reflexive acceptions).

I will tackle the innovation question through examples borrowed to craft making activities, focussing of the idea of know-how transmission and pleasure at work (raised by F. Sigaut), and illustrated by new public mediations explored with *Technique&culture* interdisciplinary journal.

Sébastien LECHEVALIER (EHESS)

“How taking into account social needs can contribute to the emergence of new industries. The case of personal robotics”

セバスチャン・ルシュヴァリエ（フランス国立社会科学高等研究院）

It is now widely recognized that the major condition for a new technology to give birth to a new industry is that it meets a market. To put it differently, technological developments alone are not enough to create growth and wealth. They need to be connected to social needs and this process is nothing but automatic. This may explain the following paradox regarding the deepening of the division of labor: it is necessary to lead to innovation in a context of increasing complexity of technologies but, at the same time it contribute to the increasing distance between engineers and the rest of the society. The purpose of this contribution is to investigate this paradox and its solutions by focusing on the difficult emergence of personal robotics as a new industry in Japan. It primarily lies on new technologies that may potentially create a breakthrough in the field of robotics by giving birth to robot that are mobile in random environments, in interaction with human being and with a capacity of learning. We argue that the major difficulty for this potential new industry to

emerge comes from a lack of attention to social needs.

Toshiya TSUJITA (Osaka University)

“Rethinking the Design Methods for Appropriate Technology: Some Implications for Japan”

辻田 俊哉 (大阪大学)

「適正技術創出に向けたデザイン手法の再検討：日本への含意」

Appropriate Technology (AT) has been known as a technological solution that aims to improve the lives and livelihoods of people who live in a very limited circumstance. Since this idea was introduced in the 1970s, there has been much discussion on how to design the methods for implementing AT, including the interdisciplinary approach. This presentation aims to explore the evolution of the AT concept, and seeks to identify what is and is not new in the latest trends in design methods for AT. It argues that the AT concept has evolved through four waves, and highlights the impact of ‘diffusion of power’ and the ‘digital fabrication revolution’ on implementing AT in the fourth wave. After describing the issues of design methods of the fourth wave, it examines the possibilities and challenges of implementing AT projects in ‘advanced issues’ country Japan that faces a mountain of social problems, such as aging population, urbanization and depopulation of rural areas.

適正技術とは、限られた環境の中で暮らす人々の生活の質的向上を目的とする技術的解決策のことを指す。1970年代以降、適正技術の実践に向け、学際的アプローチを含むデザイン手法のあり方について多くの議論が行われてきた。本報告では、適正技術の概念の展開を分析し、適正技術創出に向けたデザイン手法に関する新たな傾向を明らかにする。本報告では、適正技術の概念が四つの段階を経て変化し、近年の「第四の波」における情報通信技術の発展を背景とする「力の分散」とものづくり領域での「デジタル革命」が適正技術の実践にもたらした影響について論じる。最後に、「課題先進国」日本における適正技術の展開可能性について検討する。

Emiko OCHIAI (Kyoto University & EHESS, Blaise Pascal Fellow)

“Social Innovation and the Innovation of World View: The True Contribution of SSH”

落合恵美子 (京都大学、社会科学高等研究院ブレイズパスカルフェロー)

The current world is facing fundamental changes. Globalization and the tensions arisen from it is definitely a significant challenge in the world today. Population ageing is said to be an irreversible change that affects economy and requires deconstruction and reconstruction of welfare systems. The hegemony change in the world system is also a serious issue. The modern values created in the Enlightenment period are challenged by multiculturalism. The innovation of the world view is necessary to frame those changes and to find future directions. Then, social innovations are needed to adjust existent social systems to current changes and to create new ones. Technological innovations are important but it is risky to restrict the imagination and discussion about innovation within that area. This presentation reviews successful and unsuccessful examples of social innovations and the innovation of the world view to cast light on their huge impacts.

Vanessa NUROCK (CRESPPA- Labtop, Paris 8 University)

“Innovation, responsibility and care in nanomedicine”

ヴァネッサ・ヌロック (パリ第八大学)

Recent innovations in nanomedicine in general, and in research on diagnosis in particular, are often considered as a prototypical example of what is often called “the nano-revolution”. However, this “scientific revolution “ is in the same time a conceptual revolution. It transforms how we shape our world and some essential concepts, e.g. how we consider the concepts of “patient” in the medical field or of “responsibility”. For this reason, nanomedicine may be a good candidate for thinking afresh interdisciplinarity, social changes as well as the role of the Social Sciences in this process.

Takayoshi KUSAGO (Kansai University)

“Creating a Sustainable Local Society: a Case of Local Revitalization and Innovation in Minamata”

草郷 孝好 (関西大学)

「持続する地域社会創り：水俣の地域再生と地域イノベーションの事例」

Minamata, a local city in Kyushu, benefitted of prosperity of local economy through modern industrialization and then suffered severely of Minamata-disease problems for a long time. In 2008, however, the city was selected as one of the first six environmental model cities by the central government of Japan. Minamata, in its process leading to the model city, re-examined the meaning of affluence and made a shift toward a well-being society to improve the quality of life. In the modern world facing the daunting task of balancing economic development and environmental conservation, we can learn most from the case of Minamata’s revitalization. Thus, we will discuss, in the city of Minamata, why and how local people and the public sector started to collaborate for creating a sustainable local society and unique local environmental policy measures and a practical local innovation tool such as neighborhood study method from a view point of an action researcher.

九州の地方都市である水俣市は、近代産業化の恩恵を受け、地域経済の繁栄を享受したものの、水俣病という公害の苦難により長年疲弊した。しかし、水俣市は、2008年に、初めて政府が指定した6つの環境モデル都市の一つとなった。水俣は、モデル都市指定に至る過程において、経済成長による豊かさを問い直し、生活の質を重視する質の高い（ウェルビーイング）社会実現へと発展の方向性を切り替えていた。経済発展と環境保全の調和の課題に直面する現代社会において、水俣の地域再生の経験から実に多くを学ぶことができる。そこで、水俣において、住民と行政がなぜ協働して持続する地域社会創りを目指したのか、また、独自の地域環境政策や地元学という地域イノベーションについて、実践的研究者の視点から論じる。

Stéphanie RUPHY (Pierre-Mendès France University, Grenoble)

“Public Participation in the Setting of Research Agenda: Challenges from a Philosophical Perspective”

ステファニ・ルフィ (ピエール・マンデス・フランス大学)

Pleas for a democratization of the setting of research agenda are often made, and rightly so, on political and moral grounds. In a nutshell, citizens, it is argued, are affected in their daily life by scientific breakthroughs (genetic tests, nanotechnologies, GMO, etc.), and research is (at least partially) funded by their taxes, therefore, in a democratic society, they should have their say in the choices made about research priorities. I will investigate to what extent these pleas may be compatible with a defense, on epistemological grounds, of the autonomy of science and how they can be articulated with existing decision processes as regards science priorities.

Elise DOMENACH (ENS Lyon)

“Blindness and denial in films on the 311 nuclear catastrophe”

エリーズ・ドムナク（リオン高等師範学校）

In this presentation I will explore Philippe Rouy's Four Buildings Facing the Sea. And I will move from questioning the film's audience to reflecting on the issues of denial and blindness in Philippe Rouy's trilogy of films using Tepco's propaganda images of the crippled nuclear plan in Fukushima Daiichi. My aim will be to question the blinding and revelatory powers of the medium of film itself in relation to nuclear energy; to enlighten our fascination for the nuclear technology as well as the blinding effect of radiation itself. Using both Stanley Cavell's concepts of doubt and denial, I would like to suggest a way in which films can help changing our ways of thinking about the nuclear technology.

Tadashi KOBAYASHI (Osaka University)

“How was people's voice heard?: A Trial of Public Consultation on Energy Policy after Fukushima”

小林 傳司 (大阪大学)

「人々の声はどのように聞き届けられたのか：福島後のエネルギー政策に関するパブリックコンサルテーションの事例から」

Since the beginning of the 21th century increasingly stressed was the importance of dialogue between science and society. Actually advanced countries have tried many kinds of the dialogue using participatory methods such as the consensus conference, the planungszelle, the citizen jury and deliberative polling on many kind of scientific issues.

However such dialogues have been rarely utilized in the policy making and remained experimental. Japan being in like situation faced the radical challenge to the competency of the government after Fukushima. Especially reconsidering of the energy policy was understood a critical and urgent challenge. At this moment interestingly enough the word “public discussion” was invoked by many sectors in Japan and the government also announce to tackle the challenge through “national discussion”.

The deliberative polling (DP) on the energy policy in 2012 was the method for the public consultation Japanese government chose. In my presentation how the DP was carried out will be shown briefly and what impact the DP gave on the policy making will be examined. Then the achievements and challenges of the DP will be reviewed. Finally the third World Wide Views scheduled on 6th this June as another case of the public consultation will be compared with the DP in Japan.

科学技術と社会の対話の重要性は、21世紀になる頃からつとに強調されてきた。実際、先進各国では市民参加型のいくつかの対話の試みがさまざまな科学技術をテーマに行われてきた。手法としても、コンセンサス会議、計画細胞、市民陪審、討論型世論調査などが採用されてきた。

とは言え、その多くが社会実験にとどまり、現実の政策形成に用いられることはほとんどなかったと言える。同様の状況にあった日本は、しかし、福島後、政府の能力を巡るきわめて深刻な課題に直面することになったとりわけ喫緊の課題とされたのは、エネルギー政策の見直しであった。興味深いことに、そのとき、「国民的討論」という言葉が社会各方面から叫ばれたのであった。日本政府も、この課題に対しては「国民的議論」を通じて政策形成を行うと表明したのであった。

日本政府がパブリックコンサルテーションの手法として 2012 年に選択した手法が、討論型世論調査（以下、DP と表記）である。私の報告では、この DP の実施経過について簡潔に説明した上で、これがエネルギー政策に与えた影響を検討する。さらに、DP の成果と課題についての議論を行う。最後に、もう一つのパブリックコンサルテーション手法である、World Wide Views との比較を試みる。World Wide Views は今回が 3 回目であり、6

月 6 日に世界で開催が予定されている。

Marie-Françoise CHEVALLIER-LE GUYADER (Institute of Advanced Studies for Science and Technology)

« *About the Institute of Advanced Studies for Science and Technology* »

マリー・フランソワ・シュヴァリエール・グイヤデル (科学技術高等研究院)

IHEST's ambition is to create a network of leading figures attentive to the issues raised by research and keen to participate in an informed debate on science, technology and innovation, and their impact on society. As a forum for learning and reflection on the relationship between science and society, IHEST organises a one-year national training course from October to June for scholars nominated by ministerial decision. These scholars constitute a pool of top level actors from all sectors of social activity – whether or not they have a scientific background. Every year, a European Summer school brings together some 80 participants and speakers for a short, targeted course.

SPEAKER PROFILE

Satoru OHTAKE (JST)

大竹 暁（国立研究開発法人科学技術振興機構）



Satoru OHTAKE joined science and technology administration in the Government of Japan in 1984, after conferred Master Degree of Science in high energy physics in science administrations, he engaged in the policy planning and R&D management; establishment of Government's Science and Technology Basic Plans (in 1996, 2001 and 2011), establishing and running research programs and projects and engaging International Human Frontier Science Program in the HFSP Organization in Strasbourg in France. He used to work in international collaborations, both bilateral and multilateral programs like Global Science Forum of OECD, GEO/GEOSS, and the International Thermonuclear Experimental Reactor Project (ITER) In JST, he is in charge of science and technology information science communication programs, and to overall management of JST as a deputy to the president from 2013. He occasionally gives lectures on science, technology and innovation policy in universities.

Masahiro KURODA (Keio University)

黒田 昌裕（慶應義塾大学）



Masahiro KURODA is a Principal Fellow, Center for Research and Development Strategy, JST. Professor Emeritus of Keio University. Ph.D. (Business and Commerce). He was promoted to Professor in 1982. Through the Director of the Keio Economic Observatory and Vice President (provost) of Keio University during June 2001- May 2005, he moved on to President of Economic and Social Research Institute, Cabinet Office during June 2005-May 2008. In June, 2008 he affiliated with current position. He experienced President of the International Input-Output from 1997-1999; and Chairman, the Advisory Committee for Natural Resources and Energy, Energy and Supply Sub-committee from 1998-2010. (Awards): the Economist Award and the Japan Statistical Society Prize. (Publication) General Equilibrium Analysis of Japanese Economy (co-author, 1974); Introduction to Positive Economics (1984), Quantitative Analysis to General Equilibrium (1989) etc.

Dominique PESTRE (EHESS, Centre Koyre)

ドミニク・ペストル (社会科学高等研究院、アレクサンドル・コイレ研究所)



Dominique PESTRE is a social and political historian of 19th and 20th Century science and technology. He has also written on philosophical aspects and on quite contemporary topics. He has co-edited *Science in the Twentieth Century* with John Krige, and *Dictionnaire culturel des sciences* with N. Wittkowski and JM Levy-Leblond. He has published *History of CERN*, in collaboration, 3 volumes, *Heinrich Hertz*, *L'administration de la preuve* (PUF, collection Philosophies, 2002, with Michel Atten), *Science, Argent et Politique* (INRA 2003), *Les Sciences pour la guerre, 1940-1960* (EHESS, 2004), with Amy Dahan, *Introduction aux Science Studies* (La Découverte, 2007) and *A contre-science. Politiques et Savoirs des sociétés contemporaines* (Seuil, 2013).

Sandra LAUGIER (CNRS and Paris 1 University)

サンドラ・ロジエ (フランス国立研究センター、パリ第一大学)



Sandra LAUGIER is Professor of Philosophy at Université Paris 1 Panthéon-Sorbonne, Paris, France, and Senior member of Institut Universitaire de France. She has been the Deputy Director of the Institut des Sciences Humaines et Sociales, CNRS since 2010. Laugier is the translator of Stanley Cavell's work in French and is specialized in Ordinary Language Philosophy, Ethics, American Philosophy (Cavell, Emerson, Thoreau) and gender studies (Ethics of care). She is the author of many books in French, English, Italian, German, including: *Tous vulnérables, le care, les animaux et l'environnement* (Payot, 2012), *Face aux désastres, le care, la folie et les grandes détresses collectives*; co-authored with Anne Lovell, Stefania Pandolfo, Veena Das (Ithaque, 2013), *Why We Need Ordinary Language Philosophy* (U. of Chicago Press, 2013), *Recommencer la philosophie, Cavell et la philosophie américaine* (Vrin, 2014), and *Le principe démocratie*, with A. Ogien, (La Découverte, 2014).

Sayaka OKI (Hiroshima University)

隠岐 さや香 (広島大学)



Sayaka OKI is Associate Professor of History of Science & Technology at the Hiroshima University, Graduate School of Integrated Arts and Sciences. She is Member of Science Council of Japan (2014-present), Executive committee member of the Japanese Society for Science and Technology Studies (2013-present). Her research interests include History of Science & Technology in the 18-19th century of France, especially on the relationship between the government and academic institutions of Science, Science and Technology Studies, and Science Policy. Ph.D. in Arts and Sciences at the University of Tokyo, Graduate School of Arts and Sciences, Tokyo, Japan (2008). She is recipient of the JSPS Prize, Japan Society for Promotion of Science in 2013 and of the Japan Academy Medal, Japan Academy in 2013.

Sawako TAKEUCHI (MCJP)

竹内 佐和子 (パリ日本文化会館)



Sawako TAKEUCHI is President of the Maison de la Culture du Japon à Paris. Born in 1952. Ph.D. in Engineering and in Economics. Studied in Paris under Prof. F. Perroux of Collège de France. Taught at Pantheon-Sorbonne and Ecole Nationale des Ponts et Chaussées. In Japan, at the University of Tokyo & Kyoto. Worked for Prime Minister's Cabinet during Obuchi's administration. Served as Ambassador at the Ministry of Foreign Affairs. Others include Leadership Program for Social Value Creation at Nissan Science Foundation. Chevalier de l'Ordre national du Mérite and chevalier des Arts et Lettres. Main publications include "European integration", "Urban policy for 21st century", "Designing Urban culture" etc.

Bernd GRAMBOW (Ecole des Mines de Nantes, CNRS)

ベルント・グラムボウ (ナント高等鉱山学校)



Bernd GRAMBOW is a Professor of excellence at the Ecole des Mines de Nantes, France. He graduated at the Freie Universität Berlin, worked for one year at the Pacific Northwest National Laboratory (WA, USA) followed by research positions in Hahn Meitner Institute Berlin and Forschungszentrum Karlsruhe. He holds today the Chair on nuclear waste disposal in Nantes and is head of the Subatech laboratory in Nantes, France, a laboratory working on high energy nuclear physics, on nuclear medicine and radiochemistry. SUBATECH is a mixed research unit between the CNRS-IN2P3, the Ecole des Mines of Nantes and the University of Nantes. Coordinator of various European projects and former director of the national CNRS-academic/industrial research network NEEDS "nuclear: environment, energy, waste, society", his areas of scientific expertise are radiochemistry, nuclear waste disposal science, geochemical modeling, radionuclide migration in the environment, chemical thermodynamics, and dynamics of solid/liquid interfaces. He published 143 peer reviewed research papers. In 2008 he received the Grand Prix Ivan Pechès of the French Academie of Science and in 2013 he became Chevalier of the Ordre des Palmes Académiques.

Maki UMEMURA (Cardiff Business School & EHESS, Michelin Fellow)

梅村真希 (カーディフ大学、フランス国立社会科学高等研究院ミシュラン・フェロー)



Maki UMEMURA is lecturer in International Business at Cardiff University. Her publications include: *The Japanese pharmaceutical industry: its evolution and current challenges*, Routledge, 2011; «Crisis and change in the system of innovation: the Japanese pharmaceutical industry during the lost decades, 1990-2010», in *Business History*, vol.56 (5), 816-844, 2014. Dr Umemura is recipient of the 2015 Michelin Junior Research Fellowship at the Centre for French-Japanese Advanced Studies in Paris. She will conduct the research program titled «Building innovative competences through public innovation policies in Japan: Pushing technological frontiers in regenerative medicine and solar energy».

Mathias GIREL (ENS)

マチアス・ジレル (高等師範学校)



Mathias GIREL is Associate Professor at the Department of Philosophy at Ecole Normale Supérieure in Paris. His work centers on the pragmatist tradition, but also on the history and philosophy of science, and environmental and sanitary controversies. He has recently edited an issue of the *European Journal of Pragmatism* on the “Social Articulation of Doubt” and the French edition of Robert Proctor’s monograph on the Tobacco Industry, *Golden Holocaust*.

Tadashi Kobayashi (Osaka University)

小林 傳司 (大阪大学)



Tadashi KOBAYASHI is presently Professor and Vice Director of Center for the Study of Communication-Design, Osaka University. He is also a Director of Program for Education and Research on Science and Technology in Public Sphere (STiPS). His research interests include philosophy of science, science, technology and society (STS) studies. His publications include *University as a Research Site: What Knowledge is for?* (editor, Iwanami Shoten Publishers, 2013), *The Age of Trans-Science* (NTT Publications, 2007), *Science and Technology for Society* (The University of Air, 2007), *Who Should Consider on Science and Technology?* (Nagoya University Press, 2004). *Technoscience for the Public Sphere* (Tamagawa University Press, 2002). He also served as a member of organizers for Japanese first and second Consensus Conferences (1998/9), a member of organizers and a facilitator of the first Nation-wide Consensus Conference on GMOs (2000), the first President of Japanese Society for Science and Technology Studies (2001- 2003), a Director of “World Wide Views on Global Warming Project” in Japan (2009), and the Deputy Area Director of Research Institute of Science and Technology for Society (RISTEX), JST (2005-2013), and a principal fellow of RISTIX and an adviser of the Science Communication Centre JST since 2014. He is a junior member of the Science Council of Japan since 2008.

Takehiro OHYA (Nagoya University)

大屋 雄裕 (名古屋大学)



Takehiro OHYA graduated from the School of Law, the University of Tokyo, in 1997. After serving as Joshu (Assis. Prof.) there, he moved to Nagoya University Graduate School of Law as Associate Professor in 2001, to be full Professor in 2013. One of his main research interests lay in the influence of developing information technology to legal and political systems. He published 3 books, including *Give Me Liberty or Give Me Happiness: Three Models of Coming Society in the 21st Century* (Chikuma Shobō, 2014), and *What Liberty Means to "Person" in Surveillance Society* (Chikuma Shobō, 2007).

Laura MAXIM (CNRS, Institut des sciences de la communication)

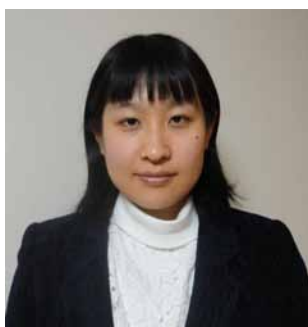
ラウラ・マキシム (フランス国立科学研究センター、情報科学研究所)



Laura MAXIM is researcher in Science and Technology Studies at the National Center for Scientific Research - Institute for Communication Sciences. Her research focuses on how scientific knowledge is produced, used and communicated, both in regulatory processes for chemical risks governance, and in innovation practices in the field of green chemistry.

Arisa EMA (The University of Tokyo)

江間 有沙 (東京大学)



Arisa EMA is an assistant professor of Science Interpreter Training Program, college of Arts and Sciences at University of Tokyo, and was previously an assistant professor of the Hakubi center at Kyoto University. With some colleagues she launched a study group “Artificial Intelligence with Responsibility: AIR” in 2014. She also promotes lifestyle-related diseases prevention game “Negotiate Battle” as a member of a board of directors of Citizen Science Initiative Japan (NPO).

Suzanne DE CHEVEIGNE (CNRS, Centre Norbert Elias)

スザンヌ・ドゥ・シェヴィーニュ (フランス国立科学研究センター)



Suzanne de Cheveigné is senior researcher (directrice de recherche) at the Centre National de la Recherche Scientifique (CNRS) and director of Centre Norbert Elias in Marseilles, France. She has also been a Visiting Senior Research Fellow with the London School of Economics. She carries out research on public problems in the areas of science, technology and the environment, with particular attention to the role of media and to the place of women in science. She is a member of the Editorial Board of Science Communication and Enquête and vice-president of the Scientific Committee of the PCST (Public Communication of Science and Technology) International Network.

Sébastien LECHEVALIER (EHESS)

セバスチャン・ルシュヴァリエ (フランス国立社会科学高等研究院)



Sébastien Lechevalier is Associate Professor at EHESS, President of Fondation France Japon de l'EHESS, and director of the French network of Asian Studies coordinated by the CNRS (GIS-Reseau Asie). Specialist of the Japanese economy, he is the author of several books and articles, including *The Great Transformation of Japanese Capitalism* (Routledge, 2014, Iwanami Shoten, forthcoming, 2015) and “Diversity in patterns of industry evolution: how an “intrapreneurial” regime contributed to the emergence of the service robot industry in Japan” *Research policy* (2014, 43 (10)).

Patrice BOURDELAIS (CNRS)

パトリス・ボードレ (フランス国立科学研究センター)



Patrice Bourdelais is directeur d'études at the EHESS and heads the Division of social sciences and humanities (INSHS) of the CNRS. As a historian and demographer, he has worked on public health in France in the last two centuries. He has notably published *Une peur bleue. Histoire du choléra en France* (1987), *L'Âge de la vieillesse. Histoire du vieillissement de la population* (1993), *Epidemics Laid Low. A History of What Happened in Rich Countries* (2006). He edited *Les Hygiénistes. Enjeux, modèles et pratiques (xviiiè-xxe siècles)* (2001) and, with Didier Fassin, *Les Constructions de l'intolérable* (2005), still, with John Chircop, *Vulnerability, Social Inequality and Health* (2010).

Roberto FREGA (CEMS-IMM, CNRS)

ロベルト・フレガ (フランス国立科学研究センター)



Roberto Frega (PhD Université Paris 8), philosopher, is researcher at the CNRS (French National Center for Scientific Research) in Paris. He has published two monographs on John Dewey's philosophy (*Pensée, expérience, pratique. Essai sur la théorie du jugement de John Dewey*, L'Harmattan, Paris, 2006; *John Dewey et la philosophie comme épistémologie de la pratique*, L'Harmattan, Paris, 2006), a book on political epistemology (*Voci della ragione*, Quodlibet, Macerata, 2009), a book on social theories of normativity (*Les sources sociales de la normativité*, Vrin 2013), a book on pragmatist moral and political philosophy (*Practice, Judgment, and the Challenged of Moral and Political Disagreement. A pragmatist Account*, Lexington, Lanhan, Md. 2012) and more than thirty articles on contemporary moral and political philosophy. Besides several edited volumes on pragmatist philosophy, he has also edited and translated a selection of Dewey's epistemological essays (*Filosofia sperimentale. Teoria naturalistica della conoscenza e del pensiero*, Quodlibet, Macerata, 2008). He is co-executive editor of the *European Journal of Pragmatism and American Philosophy*.

Tadamasa KIMURA (Rikkyo University)

木村 忠正 (立教大学)



Tadamasa KIMURA is a former Department Chair of Cultural Anthropology at the University of Tokyo and currently Professor of Communication and Media Studies at Rikkyo University. He graduated for his Master's degree in Cultural Anthropology at University of Tokyo and his Ph.D. in Cultural Anthropology at State University of New York at Buffalo. He is among those early Japanese scholars in SSH who anticipated the profound effects of the Internet on society and culture in the early 1990s and began to commit themselves to Internet Studies/Network Society Studies. Relying on both qualitative and quantitative research methodologies and a wide variety of frameworks such as virtual ethnography, social network analysis, comparative institutional analysis, cultural dimensions theory, and moral foundation theory, he has investigated the intertwined relationship between ICT and society and culture. Especially he is known for his study of digital divide as a systemic change of wealth/risk production and redistribution associated with social diffusion and diversification of ICTs and their globalization process, and his study of CMC and media choice among digital natives and their development of socio-communicative practices. He has also been a member of a number of governmental councils related to ICT policy in Japan.

Frédéric JOULIAN (EHESS, Centre Norbert Elias)

フレドリック・ジュリアン (社会科学高等研究院)



Frédéric JOULIAN is anthropologist. Associate Professor at the EHESS, Deputy Director of the Laboratoire d'anthropologie sociale at the Collège de France, he is responsible of the research team of the CNRS "Homme et Primates en Perspective", that gathers scholars studying on behavioral Relationships between animals (primates, in particular), prehuman and the mankind.

Toshiya TSUJITA (Osaka University)

辻田俊哉 (大阪大学)



Toshiya TSUJITA is specially appointed associate professor at the Center for the Study of Communication-Design (CSCD), Osaka University. From 2006 to 2008 he served as a special assistant (political affairs) at the Embassy of Japan in Israel. He received his Ph.D. in international public policy from Osaka University in 2011. His research interests include international security, conflict management, and international development.

Pierre-Cyrille HAUTCOEUR (EHESS)

ピエール・シリル・オークール（社会科学高等研究院）



Pierre-Cyrille HAUTCOEUR is Professor of Economics and President of the École des Hautes Études en Sciences Sociales. He is specialist in financial and monetary history and the Director of the High Quality Data Project for Financial History whose purpose is to build a complete historical database for the French Stock Exchanges from the nineteenth to the twentieth centuries.

Gretty MIRDAL (IEA de Paris)

グレッティ・ミルダル（パリ高等研究所）



Gretty MIRDAL is director of the Paris Institute for Advanced Studies, and Professor of Psychology at the University of Copenhagen, Denmark. She is specialised in clinical psychology and health psychology. She has researched the long-term impact of immigration and cultural integration on mental and physical health. She is currently working on a transdisciplinary project on the psychology of ageing, entitled “Ageing in Exile”. Dr Mirdal is also involved in research administration at the national and international levels. She has chaired the European Research Council’s group on “The Human Mind and its Complexity”, the jury of Institut Universitaire de France, the European Science Foundation’s Standing Committee for the Humanities, and the Agence Nationale de la Recherche’s Scientific Committee for Fundamental Research in the Humanities. She has also been a member of the CNRS’s Scientific Board.

Emiko OCHIAI (Kyoto University & EHESS, Blaise Pascal Fellow)

落合恵美子（京都大学、社会科学高等研究院ブレイズパスカルフェロー）



Emiko OCHIAI is Professor of Sociology and the Director of the Asian Research Center for the Intimate and Public Spheres at Graduate School of Letters, Kyoto University. She is a family sociologist and family historian who is also active in the field of gender studies. She has been involved in the comparative studies of care practices and care regimes in Asian societies since the beginning of this century. Her recent research projects combine family studies, welfare state studies, and migration studies to develop a framework to understand the on-going transformations in private lives and public institutions intermingled with each other, especially focusing on Asian societies. The outcomes of the projects are being published as a series *The Intimate and the Public in Asian and Global Perspectives* (from Brill), of which she is the series editor. Professor Ochiai is recipient of the 2015 Blaise Pascal International Research Fellowship of the Region Île de France at the Centre for French-Japanese Advanced Studies in Paris.

Vanessa NUROCK (CRESPPA- Labtop, Paris 8 University)

ヴァネッサ・ヌロック (パリ第八大学)



Vanessa NUROCK is a French philosopher. She is actually associate professor in the Department of Political Science of Paris 8 University and researcher at the CRESPPA . Initially trained in philosophy and cognitive science, her research deals with bioethics understood as two complementary issues : first, the biological constraints of our moral valuation and second, our moral evaluation of biology.

Takayoshi KUSAGO (Kansai University)

草郷 孝好 (関西大学)



Takayoshi KUSAGO is Professor, Faculty of Sociology, Kansai University. He obtained his PhD in Development Studies at the University of Wisconsin-Madison. Following posts that included the World Bank, Meiji Gakuin University, Hokkaido University, United Nations Development Programme, and Osaka University, he is currently a professor at the faculty of sociology, Kansai University. From the perspective of human development and capability approach, he has studied a variety of subjects pertinent to modernization and sustainable development. He places enormous importance on how local people can actively engage in creating own community/society where they can achieve higher level of well-being. He also pays careful attention to people's perceptions over their own life and community to understand what statistical data tend to miss. He provides technical assistance by travelling to Bhutan and Nepal (rural community development), to Minamata, Niigata and Fukui (community revitalization), and to Hyogo and Nagakute, Aichi (well-being index and policy). He involves in a research project on post-MDGs and SDGs by conducting citizen survey on environmental concerns and development issues. He has published research papers in academic journals such as the World Development, Social Indicators Research, and coauthored GNH (Gross National Happiness), 2011.

Stéphanie RUPHY (Pierre-Mendès France University, Grenoble)

ステファニ・ルフィ (ピエール・マンデス・フランス大学)



Stéphanie RUPHY holds a PhD in astrophysics (Paris VI University) and a PhD in philosophy (Columbia University). She is currently Professor in the Philosophy of Science and head of the research laboratory *Philosophie, Pratiques & Langages* at Grenoble-Alpes University. Much of her work has concerned the unity or plurality of science debate, computer simulations, the role of values in science and the democratization of the governance of science. Her recent publications include *Pluralismes scientifiques, enjeux épistémiques et métaphysiques* (Hermann 2013).

Elise DOMENACH (ENS Lyon)

エリーズ・ドムナク (リオン高等師範学校)



Elise DOMENACH is a philosophy and film scholar working on skepticism in films. Associate professor in film studies at Ecole Normale Supérieure Lyon. She is specialized in philosophy and film and the author of *Stanley Cavell, film and skepticism* (PUF, 2011). As a Japan Society for the Promotion of Science Scholar she has been working on philosophy of films on 3.11 at the University of Tokyo Center for Philosophy from 2013 until 2015. She is preparing a book of interviews with film directors on films on 3.11 (to appear at University of Tokyo Press, UTCP Booklets, in 2015).

Hiroshi TSUDA (JST, Research Institute of Science and Technology for Society)

津田 博司 (科学技術振興機構 社会技術研究開発センター)



Hiroshi TSUDA is Director, Department of Planning and Management, Research Institute of Science and Technology for Society (RISTEX) of JST.

Professional Experience:

Research Development Corporation of Japan (JRDC) 1992

- Department of International Affairs

Science and Technology Agency (STA), Prime Minister's office 1996

- International Affairs Division

Japan Science and Technology Corporation (JST) 1998

- Department of Contract R&D

Japan Science and Technology Agency (JST) 2003~

- Deputy Manager, Department of Promotion of Basic Research

- Director, JST Paris Office, France 2005-2008

- Fellow and Manager, Center for Research and Development Strategy (CRDS)

- Manager and Director, RISTEX 2011~

Shinichiro IZUMI (JST, Research Institute of Science and Technology for Society)

泉 紳一郎 (科学技術振興機構 社会技術研究開発センター)



Shinichiro IZUMI is Director-General, RISTEX of JST from 2013.

1977 Graduation: School of Engineering, University of Tokyo

1977 Employment: Science & Technology Agency(STA) of Japanese Government

1989 First Secretary, the Japanese Embassy in France

1995 Director, Nuclear Fuel Div., Atomic Energy Bureau, STA

1999 Director, Space Development Div. , Research and Development Bureau, STA

2004 Deputy Director-General for Higher Education Bureau, Ministry of Education, Culture, Sports and Science & Technology(MEXT)

2006 Vice President, University of Tsukuba

2008 Director-General, Science and Technology Policy Bureau, MEXT

2010 Director-General for Science, Technology and Innovation Policy, Cabinet Office

Marie-Françoise CHEVALLIER-LE GUYADER (Institute of Advanced Studies for Science and Technology)

マリー・フランソワ・シュヴァリエ・ル・グイヤデル (科学技術高等研究院)



MARIE-FRANÇOISE CHEVALLIER-LE GUYADER has been the Director of Institute of Advanced Studies for Science and Technology (IHEST) since it was established in 2007. She was previously in charge of the unit for information and science culture at the Ministry of Higher Education and Research. She was, in her early career, a researcher and teacher at the Higher Normal School in Fontenay-aux-Roses. She also taught in secondary schools. In parallel, she worked as a science journalist for general and specialised publications. She then joined the French Alternative Energies and Atomic Energy Commission (CEA) to develop communication about biology. She then became Director of information and communication at French National Institute for Research in Agronomy (INRA), and then at French National Institute for Health and Medical Research (INSERM). She created and is co-editor of the collection « Questions Vives » Actes Sud-IHEST, who reflects the reflections she leads with IHEST on the place of science in society: *La Science en jeu*, 2010 ; *L'Économie, une science qui nous gouverne ?*, 2011 ; *La Science et le Débat public*, 2012 ; *Partager la science. L'illettrisme scientifique en question*, 2013 ; *Sciences et société. Les normes en questions*, 2014