



CSI  
**CENTER FOR THE  
SOCIOLOGY OF  
INNOVATION**

## CSI: SOCIOTECHNICAL ANALYSIS TO FOSTER UNDERSTANDING OF CONTEMPORARY CHANGES

The Center for the Sociology of Innovation (CSI) at Mines Paris – PSL is an internationally recognized pioneer in the study of science and technology. Since the 1980s, CSI researchers have advanced understanding of innovation processes and the evolving role of

expertise in contemporary democracies. Research at the CSI combines academic excellence with partnerships with a wide variety of socioeconomic actors, including industry, public bodies, local authorities, and associations.



Crack inspection. © J. Denis

CSI is one of 18 research centers at Mines Paris – PSL. It is part of the Economics, Management & Society department, one of five departments structured around the major themes and key future challenges prioritized by Mines Paris – PSL.

As a component of PSL University, Mines Paris – PSL provides CSI with the ideal

structure for integrating education, ranging from civil engineering to doctoral studies, with academic research and partnerships.

CSI is part of the Interdisciplinary Institute on Innovation (i3), a CNRS joint research unit (UMR 9217) created on the initiative of Mines Paris – PSL, Télécom-Paris and École Polytechnique.

## CSI IN FIGURES

# 15

**research staff members**

12 researchers, 2 research engineers,  
and 1 administrator

# 19

**Ph.D. students  
in 2025,**

including 5 on Cifre grants

# 2

**master's and specialized master's courses**

- Economic and Social Sciences (Master's in IOES, PSL)
- Analysis of Environmental Controversies ("Environmental Engineering and Management" specialization, part of ISIGE's EEDD Master's program)

# 1

**elective offered  
in the Civil  
Engineering  
curriculum**

Public Affairs  
and Innovation  
(PAI)

# 2

**courses in the  
Civil Engineering program**

- Description of controversies
- Sociopolitical and Environmental Issues

# 2

**specialized courses in the  
Civil Engineering curriculum**

- Politics, Capitalism, and Uncertainty
- Sociology of Technology

CSI offers a PhD program in the social sciences with a specialization in STS (Science, Technology, and Society). The PhD is awarded by Université PSL and is prepared at Mines Paris – PSL within the SDOSE 543 doctoral school, Sciences of Decision, Organizations, Society and Exchange.

## CSI'S RESEARCH AREAS

### Experimentation as a modality of collective action

CSI explores how experimentation has become a key tool in addressing emerging public issues. This research sheds light on the participatory devices and collaborative investigations that allow diverse actors—including the public, associations, scientists, and companies—to confront contemporary crises collectively.

### Markets in society: dynamics of concern and valuation processes

The approach developed at CSI analyzes the plurality of forms of the political inscription in market exchange. It emphasizes the dynamics of “concern” leading to the integration of political and moral issues into the functioning of markets and the valuation processes, which extends the world of economy to new entities.

### Knowledge policies in worlds facing crises

The epistemic ruptures of climate change, health crises or the proliferation of “big data”, on the one hand, the growing distrust of certain governments and political movements towards scientific institutions, on the other hand, call for the reinvestment of questions in the core of Science and Technology Studies on the production of knowledge and the socio-political inscription of expertise.

### Beyond innovation: maintenance and forms of valuation of the future

Issues of sustainability, continuity of activity, and the lifespan of things and people have gradually emerged as a counterpoint to the obsession with innovation and the omnipresent figure of disruption. CSI is one of the leading academic institutions in the emerging field of *Maintenance and Repair Studies*, an interdisciplinary research area exploring the variety of activities dedicated to the maintenance of technical objects, from small objects of daily consumption to the most complex infrastructures. CSI's research into the history and the use of the accounting technique of actualization of the future (*discounting*) show how duration and long term have progressively been problematized from an investment perspective.

## COMPETITIVE ACADEMIC PROJECTS



COP 2022: central square. © Béatrice Cointe CC-BY-NC-SA

### CoProExpert (Emergent Diseases, Patient Activism and the Co-Production of Expertise) - ANR T-AP [2024-2027]

CoProExpert examines contestations and collaborations between patient organizations and medical and scientific institutions regarding Long Covid in Brazil, France, and the United States. The project explores how different formats of participatory science mitigate or exacerbate the crisis of trust in public health and scientific experts.

### ANTICIP (Anticipation: Building scenarios for the use of the French subsoil platform) - PEPR The subsurface, a common good [2023-2028]

Actors involved with the subsoil, whether scientists, politicians, industrialists, or citizens, anticipate its future uses in different ways. ANTICIP's objectives are to analyze the anticipation practices of these actors, the knowledge on which these practices are based, and their political consequences.

### Value threads (Tracing the economy as technology and culture in an emerging 'value economy') - funded by the Research Council of Norway as part of the FRIPRO program [2020-2026]

Value Threads aims to gain a better understanding of the valuation practices and technologies that support the transformation of our economy into a sustainable, post-carbon bioeconomy. The objectives are not only to examine the knowledge regimes, tensions, and modalities that accompany the emergence of a *value economy*, but also to take a fresh look at the issue of value, approaching it not as a predetermined or closed internal logic, but as a set of cultural practices that can be studied empirically.

## RECENT PARTNERSHIP RESEARCH PROJECTS

### **Partnership with La Fabrique de l'industrie, as part of the Public Affairs and Innovation elective.**

In partnership with La Fabrique de l'Industrie, students enrolled in the Public Affairs and Innovation (PAI) elective carried out research into controversies surrounding industrial development in France. Four sites under strain were the subject of field investigations: the extension of a chemical production unit in Pierre-Bénite amid media scrutiny of the risks associated with PFAS; the conversion of a coal-fired power plant into a biomass plant in Gardanne; the development of a photovoltaic park to produce hydrogen on ponds in Fos-sur-Mer; and the abandonment of a Viennese pastries freezing mega-plant in Liffré.

### **Road asset management in small French towns - in partnership with IREX, Routes de France, and the Institute for Sustainable Mobility.**

This research program, of which Roman Solé-Pomies' doctoral thesis formed a key part, involved evaluating road infrastructure asset management in France. The aim was to examine current reconfigurations and identify the main opportunities and challenges that these developments present for local authorities in rural and sparsely populated urban areas. It provided insight into how the various organizing authorities envision the future of their road infrastructures in the light of changing forms of mobility, as articulated through their maintenance and upkeep practices.

### **Feasibility first: Trials and tactics of feasibility in the implementation of social impact bonds, a Cifre PhD thesis by Mathilde Pellizzari in partnership with FAIR and under the supervision of Liliana Doganova.**

Mathilde Pellizzari studied the implementation of social impact bonds. She highlights how practitioners account for and justify their activities, and demonstrates that the establishment of SIBs is driven by the issue of project 'feasibility.' When tested in periods of collective uncertainty, this involves specifying not only the technical but also the political and moral contents of SIBs.

### **Dealing with biodiversity. Operators sensitive to non-human life in urban and architectural project, Cifre PhD thesis by Léone-Alix Mazaud, in partnership with PCA-STREAM, under the supervision of Jérôme Denis.**

This PhD thesis focuses on tools designed to account for biodiversity in the practices of urban producers (architects, urban planners, etc.). It questions the forms of quantification and how data and indicators are used to make living things sensitive. The findings of the research show how these tools shape multi-species urban worlds through cognitive, emotional and aesthetic motives.

## MAJOR CONTRIBUTIONS FROM RESEARCHERS

### PUBLICATIONS

CSI's high-profile publications contribute to its international visibility. Some recently published books include:

- Liliana Doganova, *Discounting the Future: The Ascendancy of a Political Technology* (Zone Books, 2024)

Liliana Doganova's pioneering book explores the links between valorization and temporality through a historical sociology of techniques for actualizing the future.

- David Pontille et Vololona Rabeharisoa, *Une journée avec Bruno Latour* (Presses des mines, 2024)

The book is a tribute to Bruno Latour, featuring conversations with his work by colleagues and longtime companions, and researchers he has inspired or baffled.

- Fabian Muniesa, *Paranoid Finance* (Polity, 2024)

Contemporary conspiracy discourse about money, banking and wealth does not constitute a delusional misunderstanding of the meaning of finance: rather, it exacerbates the paranoid potential already contained in the dominant financial imagination.

- Jérôme Denis et David Pontille, *Le soin des choses : Politiques de la maintenance* (La Découverte, 2022), *The Care of Things: Ethics and Politics of Maintenance - English translation* (Polity, 2025).

The book highlights the importance of maintenance activities in a world obsessed with disruptive innovation and introduces the richness of the emerging research field of Maintenance and Repair Studies.

- Brice Laurent, *European Objects: The Troubled Dreams of Harmonization* (MIT Press, 2022)

This book provides an insight into European governance through an analysis of interventions in the field of objects such as drinking water, financial products, chemicals, and consumer goods. It opens the way to rethinking the constitutional force of European integration.

### EXAMPLES OF THESES IN PROGRESS

Orso Roger, *Designing and managing the future: foresight practices as a strategic "dispositif"*, Cifre thesis with Vinci. Supervisors: Liliana Doganova and Benjamin Cabanes.

Mariam Beure d'Augères, *What are durable jeans?* Supervisors: David Pontille and Francesco Delloro.

Guillaume Louvet, *Investing for "mineral sovereignty". France's critical metals supply policies.* Supervisors: Brice Laurent and Béatrice Cointe.

Hafid Ait Sidi Hammou, *The role of data in the sustainable maintenance of public networks*, Cifre thesis with Fédération Nationales des Collectivités et Concessions et en Régie. Supervisor: Jérôme Denis.

## A NETWORK OF COLLABORATIONS IN SUPPORT OF INNOVATION

CSI has a solid and diverse network of academic, industrial, and institutional partners. These collaborative endeavors not only enhance the rigor of its research but also illuminate hitherto unexplored avenues, thereby fortifying the nexus between scientific discovery and practical applications.

### Socio-economic partners

<b>Institute for Sustainable Mobility (Renault)</b>	<b>AFM - French Muscular Dystrophy Association</b>	<b>SCAU (architectural agency)</b>
	<b>French Rare Diseases Alliance</b>	<b>Électricité de France (EDF) R&amp;D</b>

### Academic partners

**INRIA – French National Institute for Research in Digital Science and Technology**

<b>UiO - Universitetet i Oslo, Norway</b>	<b>Universität Wien, Austria</b>	<b>Technische Universität München, TUM, Germany</b>
	<b>University of Oxford, England</b>	

**CIRED - International Center for Research on Environment and Development**

### Visiting Researchers: CSI's international outreach and collaborations

- Department of Political Science, Università di Pisa, Italy.
- Institute of Sociology, Research Group 'Biotechnologies, Nature, and Society', Goethe-Universität Frankfurt, Germany.
- Internet Interdisciplinary Institute (IN3), Universitat Oberta de Catalunya, Barcelona, Spain.
- Central European University, Vienne, Austria.
- Center For Design, Innovation, and Sustainable Transition – DIST, Aalborg Universitet Copenhagen, Denmark.
- Canada Research Chair in Science and Society, University of Ottawa, Canada.
- Urban Anthropology – Stadtlabor for Multimodal Anthropology, Humboldt Universität, Berlin, Germany.
- TIK-Centre for Technology, Innovation and Culture, Universitetet i Oslo - UiO, Norway.
- Department of Management Studies, Aalto Universitetet, Finland.

## SUPPORT FOR INNOVATIVE PROJECTS

**CSI mobilises the expertise of its research team to establish a variety of collaborations**

Support for debates on technological innovations

•  
Exploration of socio-technical ecosystems in society (new markets, regulations, controversies)

•  
Strengthening teams by integrating specialised skills (CIFRE theses)

•  
Access to funding and grants for collaborative projects

## DID YOU KNOW?

**CSI: a tight-knit team, a crucible of academic excellence, and a globally renowned research hub.**



**Béatrice Cointe**

CNRS Bronze Medal 2024



**Madeleine Akrich**

CNRS Silver Medal 2016



**Bruno Latour**

(1947 - 2022)  
Holberg Prize 2013  
(‘Nobel Prize’ for the social sciences and humanities)



**Michel Callon**

(1945 - 2025)  
CNRS Silver Medal 2007

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