

## COLLOQUIUM

Organized by Paul-André Rosental (Sciences Po & INED) and David Rosner (Columbia University)

# FROM SILICOSIS TO SILICA HAZARDS: AN EXPERIMENT IN MEDICINE, HISTORY AND THE SOCIAL SCIENCES

24-25 September 2013  
Sciences Po



Miners' strike, South Africa (early 1900s)

From: Dorothee Kreutzfeldt, Bettina Malcomess, *Not no Place: Johannesburg Fragments of Spaces and Times*, 2013  
Extract from the exhibition *My Joburg* at maison rouge, Paris, 20 June-22 September 2013

Free entrance according to available places  
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Silicosis decimated tens of thousands of miners and other workers in industrialised countries throughout the 20<sup>th</sup> century and is now rampant in emerging countries. The official medical definition of the disease was reached in 1930 at an international conference in Johannesburg, organized with the ILO. The consequences of this pivotal moment have reverberated down the decades, and eighty-three years later are still hampering medical research.

Economic factors played a major role in the 1930 conference. The forum deliberately excluded from its frame of reference the analysis of certain modes of exposure to risk, of certain dangerous professional activities or environments, thereby neglecting a wide range of pathologies. To this day, the origin of a number of these pathologies remains disputed, but epidemiological results point to crystalline silica – the most common mineral component of the earth's crust – as a possible causal factor.

Researchers are increasingly taking an interest in these diseases, which are based on inflammatory processes and trigger systemic perturbations that are notoriously difficult to treat. This colloquium will contribute to this interrogation by bringing together different fields of research. It will return to the roots of our medical knowledge of silicosis in order to nourish contemporary medical research; and will use current medical issues to critically re-examine the historical sources.

This unprecedented interdisciplinary experiment will see medical experts, epidemiologists and historians unite with sociologists, biologists and physicists to rethink inherited diagnostic categories and question the very foundations of current medical knowledge of silica hazards.

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La silicose, qui décima des dizaines de milliers de mineurs et d'ouvriers dans les pays industrialisés au 20<sup>e</sup> siècle et sévit aujourd'hui dans les pays émergents, a reçu sa définition médicale en 1930 lors d'une conférence internationale organisée à Johannesburg avec le BIT. Quatre-vingt-trois ans après, la recherche médicale achoppe sur les conséquences de ce moment fondateur.

La conférence de 1930, où les enjeux économiques jouaient un rôle majeur, a en effet délibérément écarté de son champ d'observation des modes d'expositions au risque, des activités professionnelles ou environnementales potentiellement dangereuses, et du même coup toute une série de pathologies. De nos jours, leur origine demeure inconnue mais des résultats épidémiologiques pointent la silice cristalline, première composante minérale de l'écorce terrestre, comme l'un de leurs possibles agents causaux.

Or ces maladies, qui reposent sur des processus inflammatoires et déclenchent des perturbations systémiques difficiles à traiter, intéressent de plus en plus la recherche. Pour contribuer à cette réflexion, le présent colloque réunira deux voies de recherche. Il retournera à la racine du savoir médical sur la silicose pour nourrir la recherche contemporaine en médecine ; et il utilisera, sans anachronisme, les problématiques médicales actuelles pour réinterroger le matériau historique.

La réflexion sera menée par des médecins, des épidémiologistes et des historiens, des sociologues, des biologistes et des physiciens, soucieux de réaliser de concert cette expérience interdisciplinaire inédite pour repenser des catégories nosologiques héritées du passé.

## Tuesday 24 September 2013

9-9.30am: Welcome coffee

9.30am-12.30pm: CEVIPOF, salle Georges Lavau, 98 rue de l'Université, 75007 Paris

### **SESSION 1 – SILICA HAZARDS: HISTORICAL AND MEDICAL RELEVANCE**

Chair: Emily Spieler (Northeastern University & MIT)

David Rosner (Columbia University) & Gerald Markowitz (City University of New York)

**Silicosis: The Paradigmatic Disease of Modern Society**

Paul-André Rosental (Sciences Po & INED) & the *Silicosis* team

**Contextualising the international recognition of 'silicosis' in the 1930s to measure the effects of silica in the world today. A medical-historical cross-analysis**

Keith Breckenridge (University of Witwatersrand)

**Silicosis and the limits of colonial progressivism: a discussion paper**

12.30-2pm: Lunch

2-5pm: Salle Georges Lavau

### **SESSION 2 – OBSERVATIONS AND MEASURES: DECONSTRUCTING AND RECONSTRUCTING KNOWLEDGE**

Chair: Jean-Pierre Grignet (Centre hospitalier de Denain)

Catherine Cavalin (Sciences Po & Centre d'études de l'emploi)

**The International Conference on Silicosis, Johannesburg, 1930 – 'Tables' of Occupational Diseases, France, 2013: A Joint Reading**

Jean-François Sauvé (Université de Montréal)

**Then and now: historical and emerging workplaces affected by silica exposure**

Jean-François Bernaudin (Université Pierre et Marie Curie-Paris 6 & AP-HP - Hôpital Tenon Paris)

**Pathological aspects of silicosis in the records of the 1930 international conference held at Johannesburg**

8pm: Dinner at *Les Ministères*, 30 Rue du Bac, 75007 Paris

## Wednesday 25 September 2013

9am-1pm: Salle Georges Lavau

### **SESSION 3 - DUSTS AND TISSUE: 1930-2013 AND BACK**

Chair: Philippe Camus (Centre hospitalier universitaire de Dijon)

Michel Vincent (Centre hospitalier St Joseph-St Luc, Lyon & Sciences Po)  
**The 1930 Johannesburg conference revisited: the view from 2013**

Paul Blanc (University of California San Francisco)  
**'Acute' Silicosis in the 1930 Johannesburg Conference and its Aftermath**

Break for group photo

Cécile Chemarin & Mickaël Catinon (Laboratoire de minéralopathologie du Centre hospitalier St Joseph-St Luc, Lyon)

**The Johannesburg Conference revisited in 2013 from the point of view of materials science**

Marianne Kambouchner (Centre hospitalier universitaire Avicenne, Bobigny)  
**Major pathologic aspects of usual pneumoconioses**

Discussion: Isabella Annesi-Maesano (INSERM), Françoise Thivolet-Bejui (Hospices Civils de Lyon, Hôpital Louis Pradel) & Jocelyne Fleury (AP-HP - Hôpital Tenon Paris)

1-2pm: Lunch

2-5.30pm: Salle Georges Lavau

### **SESSION 4 – THE GHOSTS OF SILICOSIS PAST: REVERBERATIONS OF THE 1930 CONFERENCE**

Chair: Mathias Girel (École Normale Supérieure-Ulm)

Francesco Carnevale (Azienda Sanitaria di Firenze & Università di Firenze)  
**Characteristics, meanings, background and consequences of the 1930 Johannesburg Conference including the role played by the ILO and in particular by Luigi Carozzi**

Arthur McIvor (University of Strathclyde): [To be confirmed]  
**Miners and silica: the binational interplay between South Africa and the United Kingdom**

Eric Geerkens (University of Liège)  
**After-Care: from Johannesburg 1930 to the Sixties in Western Coalfield Societies**

Discussion of presentations, followed by general discussion, including perspectives for publication

6-7.30pm: Salle 404 (4<sup>th</sup> floor), 56 rue des Saints-Pères, 75007 Paris

### **KEYNOTE SPEECH - SILICOSIS ELIMINATION: OPPORTUNITIES AND ILLUSIONS**

Gregory Wagner, Senior Advisor to the Director of the National Institute for Occupational Safety and Health (NIOSH/CDC, Washington D.C.) & Adjunct Professor of Environmental Health at Harvard School of Public Health

7.30-8.15pm: Salle Goguel (5<sup>th</sup> floor), 56 rue des Saints-Pères, 75007 Paris

### **A MINER'S SONG**

8.15-9.15pm: Salle Goguel

### **COCKTAIL BUFFET RECEPTION**