Agnotologie, genèses de l'ignorance

Agnotology, Geneses of Ignorance

Colloque international organisé par
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Université Paris-Sorbonne /École normale supérieure - PSL*
(Paris Sciences et Lettres, Sorbonne et Maison de la Recherche)

Colloque organisé avec le soutien de l'Université Paris-Sorbonne, la FRE 3593 Sciences normes décision (CNRS/Paris-Sorbonne), l'Université Bielefeld / DFG et le projet exploratoire soutenu par l'université de recherche Paris Sciences et Lettres « Les sciences, le doute instrumentalisé et l'ignorance produite » (porteur : M. Girel, 2012-2013)

L' « agnotologie » est l'étude des processus de production et de maintien de l'ignorance. Ce domaine, créé par Robert Proctor il y a une vingtaine d'années, a donné lieu à une première série de travaux motivés par la volonté de débusquer et de dénoncer la fabrication délibérée et la perpétuation intentionnelle de l'ignorance. L'accent, dans une première phase, était mis sur les manœuvres de monde de l'entreprise et de groupes de pression destinées à alimenter le doute sur certaines découvertes scientifiques, en sorte de faire obstacle à l'action politique et à favoriser des habitudes de consommation (tabac, sucre…) ou des pratiques industrielles (amiante, dioxine…) aussi profitables que nuisibles. Les secrets industriels ou militaires sont un autre mécanisme d'ignorance volontaire dont l'étude relève de l'agnotologie.

L'agnotologie est l'envers de l'épistémologie : elle étudie les bases conceptuelles et la genèse socio-historique de l'ignorance, ce que fait l'épistémologie à l'égard du savoir. La symétrie n'est cependant pas parfaite, car les producteurs d'ignorance sont rarement amenés à produire du savoir, alors que les producteurs de savoir sont entourés de vastes étendues d'ignorance, qu'elles soient restées hors de la portée de l'enquête ou qu'elles aient été créées par elle. C'est ainsi que la coupable industrie de l'ignorance intentionnelle profite de la production « naturelle » d'ignorance pas la science,

Le colloque international organisé par Martin Carrier au ZiF de Bielefeld en juin 2011 était surtout consacré à la thématique et à la motivation originelles de l'agnotologie. L'intention qui préside au présent colloque, deux ans plus tard, est d'élargir la perspective aux genèses de l'ignorance, qu'elles soient ou non accompagnées d'intentions pernicieuses, et d'enrôler les ressources de la philosophie pour clarifier le statut et la dynamique de l'ignorance, à l'heure où un tel accent est mis sur la production et la dissémination du savoir. Parmi les questions que l'épistémologie a clairement dégagées, et qui dictent une partie de l'ordre du jour de l'agnotologie, on peut mentionner : les relations transcendantales (au sens kantien), les limitations cognitives, l'incommensurabilité sémantique. L'épistémologie sociale suggère d'autres questions, telles que les fonctions sociales de l'ignorance et le droit à l'ignorance, ou encore l'« ignorance de terrain », conçue comme l'état épistémique appauvri inhérent à la situation de l'agent en fin de ligne — enseignant, médecine, agriculteur, homme politique, entrepreneur, engagé dans l'action : comment gérer cette sorte d'ignorance ? La science et la société peuvent-elles résoudre ce problème et comment ?

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"Agnotology," the study of the production and preservation of ignorance, is a field identified by Robert Proctor twenty years ago. The pioneers of agnotology were keen to uncover and denounce the intentional manufacture and purposeful perpetuation of ignorance. The original focus of the field concerned the maneuvers of corporate or political bodies aimed at nourishing doubt concerning scientific findings so as to block political action and to facilitate profitable yet deleterious consumption (tobacco, sugar..) or industrial practices (asbestos, dioxin…). Trade or military secrets constitute yet another mechanism of willful ignorance.

Agnotology is the downside of epistemology: it studies the conceptual basis and social-historical genesis of ignorance, just as epistemology does with respect to knowledge. However, the symmetry is not perfect, for manufacturers of ignorance are seldom led to generate knowledge, while producers of knowledge are surrounded by pools of ignorance, both left out of their reach or generated in the very process of knowledge acquisition. Indeed, perpetrators of willful ignorance piggy-back on the 'natural' production by science of ignorance.

An international conference organized by Martin Carrier at ZiF Bielefeld in June 2011 was mainly devoted to the original theme and motivation of agnotology. The present proposal is to widen the perspective to the geneses of ignorance, with or without malign intent, and to enlist the resources of philosophy in order to clarify the status and dynamics of ignorance, in the social context of an increasing emphasis on the production and dissemination of knowledge. Some of the well-identified issues in epistemology are: transcendental relations (in the Kantian sense), cognitive limitations, semantic incommensurability. Social epistemology suggests further relevant issues, such as the social functions of, and the right to ignorance, or again "ignorance in the field", i.e. the impoverished epistemic state that is inherent to the situation of the engaged, hands-on end-user (school teacher, physician, farmer, politician, industrialist…): what is the appropriate handling of that sort of ignorance? Can science, and society, alleviate the problem, and how?

http://www.snd-sorbonne.org/activites/colloques-snd/agnotology/

Programme provisoire / *Provisional program*

Jeudi 13 juin (Amphithéâtre de Paris Sciences et Lettres, 62 bis, rue Gay-Lussac, 75005 Paris)

Matin

Président de séance : Sophie Roux
9h30 : *Accueil*
10h : Martin Carrier (Bielefeld, ZiF), *Agnotological Challenges: Selecting Research Topics and Assessing Hypotheses Objectively*
11h30 : Mathias Girel (ENS, Centre Cavaillès), *Reliability Assessments in Court: Undermining Scientific Certainty?*

Après-midi

14h30 : Fabien Mikol (Paris-Sorbonne, SND), *Williamson and the Fitch paradox : How knowledge affects the unknown*
15h30 : Jean-Baptiste Rauzy (Paris-Sorbonne, SND), *Entitlement, superassertability and ignorance*
17h15 : Catherine Laurent (INRA, SAD-APT), *Selective ignorance in research programmes and the weapon of junk science*

Vendredi 14 (salle de conférence, Maison de la recherche, 28, rue Serpente, 75006)

Matin

Président de séance : Francis Wolff
9h30 : Roy Sorensen (Washington University in Saint-Louis), *Contagious blindspots, Formal ignorance spreads to peers*
11h : Paul Hoyninghen-Huene (University of Hanover), *Incommensurability and opaque ignorance*

Après-midi

Président de séance : Jacques Dubucs
14h : Paul-André Rosental (Sciences Po & INED, Paris), *Never say 'never again'. Occupational diseases as a Sysiphean category*
15h30 : Jessica Riskin (Stanford University), *How the Mouse Lost its Tail: A Brief History of Lamarckophobia*
17h15 : Daniel Andler (Paris-Sorbonne, SND), *How dubious ignorance piggybacks on fragile knowledge: The case of neuromyths*

Samedi 15 (salle des Actes, Sorbonne, 54 rue St-Jacques ou Place de la Sorbonne)

*Session thématique/*Thematic session *:* L'ignorance en médecine */ Ignorance in medicine*
10h : Présentation des enjeux, par Daniel Andler
10h15 : David Teira (UNED, Madrid), *Managing ignorance for regulatory purposes in the pharmaceutical market*
Interventions d'Anne Fagot-Largeault (Collège de France, *sous réserve*) et Federica Russo (Université Catholique de Louvain)
12h30 : *fin du colloque*

*RÉSUMÉS /*ABSTRACTS
[à compléter / to be completed]

Daniel Andler (Paris-Sorbonne, SND) : ***How dubious ignorance piggybacks on fragile knowledge: The case of neuromyths***

The now standard dialectical situations on which agnotology has focused involve a hard-won scientific truth and a conspiracy aimed at discrediting that truth by producing irrelevant or anachronistic counterevidence. In this talk, I explore a rather different situation, one in which the best available scientific results are fragmentary and somewhat shaky, and in which the illegitimate moves consist in extrapolations and distortions caused by ulterior motives or sincere ignorance, with a deleterious impact on the public understanding of the relevant science and on practice, e.g. in education and law. I will attempt to show, on the example of 'neuromyths', how real ignorance is turned into false knowledge, by ways of disregarding or downplaying legitimate doubt.

Martin Carrier (Bielefeld, ZiF) : ***Agnotological Challenges: Selecting Research Topics and Assessing Hypotheses Objectively***

Agnotology is usually understood as a political notion. Yet the concept involves epistemological aspects as well in that ignorance may be created as an unintended side-effect of taking certain pathways in research. Seeking knowledge in a particular way or seeking particular forms of knowledge inevitably affects what is left unexplored. I argue that the mode of topic selection in science is different in epistemic research, application-driven research, and research in the public interest. Each of these branches generates a research agenda that is biased in characteristic ways. Accordingly, each branch overshadows research questions which, however, need to be tackled. For this reason, the agnotological challenge requires a pluralism of all three branches. In the second part I address the agnotological benefits of the appropriate amount of pluralism in judging the merits of a hypothesis, model, or theory. Again, the chief message is that a variety of different approaches is helpful for overcoming agnotological challenges in assessing hypotheses. But I also take up Proctor's political notion of agnotology so as to argue that cases of excess pluralism exist. Agnotological concerns are fueled by too little and too much pluralism alike.

Mathias Girel (ENS, Centre Cavaillès Paris) : **Reliability assessments in court: Undermining scientific certainty?**

Even if there are obvious intentions to cast doubt on scientific consensus and to "remove" knowledge", now well documented in the "Agnotological" literature (Proctor, Oreskes, Michaels), I argue that less obviously intentional processes might lead to the same effects in terms of public distrust of science. Drawing on the abundant literature on the Daubert Framework concerning the (American) Federal Rules of Evidence, I shall focus on (1) the official strategy: find a remedy against "junk science" in the courtroom; (2) the way "classical" (popperian, hempelian) philosophies of science are used in the very text of Daubert and its sequels (Haack), (3) the way these series of legal texts try and provide an answer to a question about reliability in terms of validity; (4) the tension between legal norms and scientific norms and the possibility that in this "legal deconstruction" of science (Jasanoff), a specific kind of agnogenetic processes is at stake.

Paul Hoyningen-Huene (Hannover) : ***Incommensurability and opaque ignorance***

Roughly speaking, "opaque ignorance" is a kind of ignorance in which one is not even aware of one's ignorance. It has already been observed by some authors that there are different kinds of opaque ignorance, among them the particularly interesting case of "thoroughly opaque ignorance" (T. Wilholt). In the paper, I shall explore this kind of ignorance by relating it to the concept of incommensurability. Does incommensurability imply the possibility or even necessity of thoroughly opaque ignorance? I shall discuss this question both on an abstract level and by means of several cases studies from the history of science and the history of medicine

Fabien Mikol (Paris-Sorbonne, SND) : ***Williamson and the Fitch paradox : How knowledge affects the unknown***

Dans le dernier chapitre de *Knowledge and its Limits* (Oxford University Press, 2000), Timothy Williamson se livre à une interprétation particulièrement stimulante du paradoxe de Fitch et de ses conséquences quant à l'existence d'une "inconnaissabilité structurelle" (*structural unknowability*). D'après Williamson, *"l'argument de Fitch nous rappelle que nous ne pouvons toujours séparer nettement l'inconnu du fait qu'il ne soit pas connu, car la position épistémique peut faire elle-même partie du sujet en question. Connaître peut faire une différence quant à l'inconnu"*. Nous tâcherons d'examiner dans le détail les exemples de ce genre de cas retenus par Williamson, notamment celui de *"la complète description de tous les événements neurophysiologiques en tous temps"*, inconnue et inconnaissable structurellement. Nous tenterons surtout de développer les conséquences de cette analyse pour une théorie de la connaissance ambitieuse d'incorporer ces cas limites. Nous verrons ainsi que l'enjeu concerne aussi bien le vérificationnisme que les théories causales de la connaissance.

Jessica Riskin (Stanford) : ***How the Mouse Lost its Tail: A Brief History of Lamarckophobia***

Lamarck has gotten a bad rap. For over a century, between the 1880's and the 1980's, he played the role of befuddled mystic and believer in the obviously false idea that the offspring of mice with amputated tails are tailless. Even now, biologists and philosophers of biology often cast “Lamarckism” as the principal threat to a rational, scientific understanding of evolution. But in fact, Lamarck himself was deeply committed to a materialist, mechanist and rigorously naturalist account of the development of species. He described living organisms as machines, fully material entities, but not as brute machines. Instead, Lamarck's living machines were agents of their own transformation: machines whose mechanical development and functioning had to be understood in historical terms, as mechanisms that emerged through their own historical activity. The paper examines Lamarck's alternative model of mechanist biology, let us call it “active mechanism," and the politics of its banishment from the halls of established science.

Roy Sorensen (Washington University) : ***Contagious blindspots: formal ignorance spreads to peers***

Logic prevents me from knowing `The test is on Friday but I do not know it’. But not you! No contradiction follows from the supposition that you know my blindspot.

You can know something that I cannot! However, your advantage erodes when we are epistemic peers. Given that we have the same evidence and reasoning abilities, we cannot differ in what we know. Since I cannot know, neither can you.

Conciliationists go further. They insist that rational peers will agree after they learn of their initial disagreement. (I am counting mutual suspension of judgment as a form of agreement.) News that at least one peer mishandled the evidence requires each peer to update his credence.

My present claim about contagious ignorance is weaker. I am silent about what peers should believe in light of higher order evidence.

My contagion thesis is stronger than conciliationism in another respect. I claim that ignorance spreads even if the peers are unaware of a divergence of opinion. When one man is infected by formal ignorance, all of his peers succumb – even when they are ignorant of his ignorance.

The surprise is that the apparently sterile ignorance imposed by logic is contagious to peers. This contagion will be used to refine the blindspot solution to the surprise test paradox.

David Teira (UNED, Madrid) : ***Managing ignorance for regulatory purposes in the pharmaceutical market***

During decades many drugs were discovered and developed without a clear understanding of the causal mechanism of their therapeutic efficacy. We could grasp parts of it in the laboratory and experimenting with animals, but there was great uncertainty about what they could do in humans undergoing regular treatments. Even if we couldn' understand how a drug worked, clinical trials should establish their efficacy and toxicity on purely statistical grounds. It seemed to work for several decades, but now that the pharmaceutical industry has learnt how to engineer them, on the one hand, and that translational medicine promises to deliver drugs based on serious causal knowledge, the pharmaceutical regulatory system is under attack. Do we have a better alternative to manage our pharmaceutical ignorance?