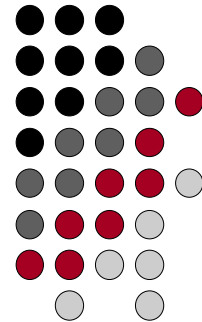


**Note de recherche  
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**Naming without necessity:  
On the genealogy and uses of  
the label “historical epistemology”**

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## Abstract

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The recent discussions of the label “historical epistemology” in the field of (anglo-saxon) history and philosophy of science provide us with an interesting example of branding. It is striking that within a few months, two conferences were devoted to the question “What is historical epistemology”, as if there was a substance (what *is...*) to be found behind those words. Given this recent interest in the meaning of the expression “historical epistemology”, a detailed analysis of its genealogy seems particularly worth pursuing. In addition to providing some conceptual clarification it also shed light on the international and interdisciplinary circulation of ideas (or lack thereof).

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## Introduction

In his classic book titled *Naming and necessity*, Saul Kripke analyzed the logical and ontological properties of proper names.<sup>1</sup> For him, the basic characteristic of a proper name is that it is a rigid designator attached to the person or object named in all possible worlds. Constructing on this work, the French sociologist-turned-philosopher of social sciences, Jean-Claude Passeron, proposed that the concepts of social sciences (history included) like those of Capitalism or Feudalism for example, are semi-rigid designators and thus situated mid-way between universal concepts completely detached from local situations (as often found in the physical sciences) and proper names whose indexicality is maximum and are thus completely rigid.<sup>2</sup> Historical and sociological concepts keep an indexicality that limits their universalization; their meaning cannot be completely divorced from the particular cases that led to the formation of the concept.

To this philosophical analysis, I would like to add a sociological dimension which relates the activity of naming to the person doing the naming and its social context, based on the observation that some scholars have the curious habit of thinking that giving a name, a label, to a practice is sufficient to transform it into a concept and serves an important analytical purpose or even “explain” the practice itself.<sup>3</sup> If labels function as proper names, then they tend to be rigidly attached to the persons who create and promote them. Labels can aim at naming (and defining) theories, concepts or methods. Hence the concept of « paradigm » in history of science is spontaneously associated with Thomas Kuhn and the concept of « habitus » is, in sociology, likewise attached to Pierre Bourdieu. Other kinds of label like “cultural history” and “microhistory” and “historical epistemology” to name only a few examples, attach to methods or, more vaguely, “approaches” rather than concepts.

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<sup>1</sup> Saul A. Kripke, *Naming and necessity* (Cambridge:Harvard Univ. Press, 1980).

<sup>2</sup> Jean-Claude Passeron, *Le raisonnement sociologique* (Paris : Albin Michel, 2006).

<sup>3</sup> That trend seems to be more frequent since the 1980s and maybe related to the overproduction of Ph.D. in many fields with the consequent rise in competition on the academic market pushing many to a rhetorical promotion of supposedly “new”, “bold”, “radical” and “original” approaches where they offer in fact interesting, useful but standard contributions to their discipline. But only a detailed empirical research on that topic could confirm or not that sociological hypothesis.

One negative effect of the rigid association between labels and persons is that it is often difficult to criticize the intellectual value of a given label without being seen as criticizing or even attacking the person who happens to promote the label. This problem does not seem to exist with the semi-rigid designators studied by Passeron. Though ‘Capitalism’ does suggest the name of Karl Marx, one is more hard pressed to see a face when one hear ‘Feudalism’ or even for that matter “cultural history”. Maybe the passage of time does help in erasing the original signature, thus leaving us free to use the concept or criticize it without being seen as impolite or associated with a rival « school ».

Well chosen or not, a label is also a way to introduce a brand into the market of ideas. The promoters can edit special issues of journals, organize conferences, summer schools or colloquium devoted to the new label.<sup>4</sup> The recent discussions of the label “historical epistemology” provide us with an interesting example of branding in the field of (anglo-saxon) history and philosophy of science. It is striking that within a few months, two conferences were devoted to the question “What is historical epistemology”, as if there was a substance (what *is...*) to be found behind those words. Not surprisingly the first was organized at the Max Planck Institute for the history of science, which, as we will see below, is in fact the very source of the idea that we need a new name to characterize a supposedly new practice of history and philosophy of the sciences. The second was held, three months later, at Columbia University, in October 2008.<sup>5</sup> Given this recent interest in the meaning of the expression “historical epistemology”, a detailed analysis of its genealogy seems particularly worth pursuing. In addition to providing some conceptual

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<sup>4</sup> For an analysis of the case of the « Triple Helix » label, see Terry Shinn “The Triple Helix and New Production of Knowledge: Prepackaged Thinking on Science and Technology” *Social Studies of Science*, 2002, 32(4): 599-614.

<sup>5</sup> The present paper is a revised version of a communication presented at this Columbia conference on historical epistemology. I thank the organizers for their kind invitation and the participants for their comments. I also thank Ian Hacking, Dominique Lecourt, Camille Limoges, Sophie Roux, Jutta Schickore and Friedrich Steinle for their comments and suggestions on an earlier draft. I have often, but not always, took their suggestions on board and I of course remain the sole responsible for the views expressed in this essay and the remaining errors it might still contain.

clarification it also shed light on the international and interdisciplinary circulation of ideas (or lack thereof).<sup>6</sup>

## 1. The French beginnings of “historical epistemology”

As everyone acquainted with the history of French philosophy of science in the 20<sup>th</sup> century should know, the French expression “épistémologie historique” is a label that clearly identifies a French tradition in epistemology where reflections on the nature of science is done in close relation with the analysis of historical cases. This conception of epistemology as an historical enterprise distinguished from and even opposed to the kind of analysis of science then typical of logical positivism, and thus ahistorical, is usually identified with the works of Gaston Bachelard on the philosophy of science.<sup>7</sup> As Foucault himself wrote, this tradition “not only asks to rational thinking the question of its nature, its foundation, its power and its rights but also of its history and geography”.<sup>8</sup>

As far as Bachelard is concerned, the emergence of the expression itself is not a case, now frequent, of a scholar creating a label to position his own point of view in a given discipline since he never used it, though it is now rigidly attached to his name in the French intellectual field. In fact, the expression “épistémologie historique” appears for the first time in the title of a little book by Dominique Lecourt in 1969 in which he tried to characterize the kind of philosophy of science practiced by Gaston Bachelard: *L'épistémologie historique de Gaston Bachelard*.<sup>9</sup> Since the publication of that book, the expression “épistémologie historique” simply refers to Bachelard’s practice of

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<sup>6</sup> Pierre Bourdieu, “The Social Conditions of the International Circulation of ideas”, in R. Shusterman (ed), *Bourdieu. A Critical Reader* (Oxford, Blackwell Publishers, 1999), pp. 220-228.

<sup>7</sup> For an excellent introduction to Bachelard, see Stephen W. Gaukroger “Bachelard and the problem of epistemological analysis”, *Studies In History and Philosophy of Science Part A*, 1976, 7(3): 189-244; Mary Tyles, *Bachelard: science and objectivity* (Cambridge: Cambridge Univ. Press, 1984); Jean Gayon, Jean-Jacques Wunenburger (Eds), *Bachelard dans le monde* (Paris, Presses Universitaires de France, 2000); Pascal Nouvel (Ed), *Actualité et postérité de Gaston Bachelard* (Paris: Presses Universitaires de France, 1997).

<sup>8</sup> Michel Foucault, « La vie, l’expérience et la science », *Revue de métaphysique et de morale*, 1985, 90 (1): 5.

<sup>9</sup> Dominique Lecourt, *L'épistémologie historique de Gaston Bachelard* (Paris: Vrin, 1969); second edition with a new preface (Paris: Vrin, 2007). The book has been translated into English in D. Lecourt, *Marxism and Epistemology: Bachelard, Canguilhem and Foucault* (London: New Left Books, 1975).

epistemology as well as that of those influenced by his work such as Canguilhem and his followers. The expression, still used today in French discussions of history and philosophy of science, is thus most often used without any need of detailed explanation. For example, Peter Dews titled a 1992 paper “Foucault and the French tradition of Historical epistemology” but never thought necessary to define the expression itself in any detail beyond noting in the introduction that “the keystone of the French epistemological tradition is the assumption that knowledge can only be adequately understood if studies in its historical development, as a situated dialectic of theory and experience” and again in the conclusion that “the central emphasis of the French tradition of historical epistemology has been on the interdependence of the history and the philosophy of science as internally related components of a single project”.<sup>10</sup> So, the question “what is historical epistemology”, much debated recently in small circles of English-speaking historians of science without even knowing about this tradition, never really emerged in France since the expression became rapidly taken for granted as referring to a well-defined tradition.

## 2. The Marxist sources of “historical epistemology”

Now, one could ask: why “épistémologie historique” and not “histoire épistémologique”? That is why “historical epistemology” and not “epistemological history”? The question is not trivial and an anecdote told by Dominique Lecourt has it that when he suggested the former title to Georges Canguilhem, his thesis director and successor of Bachelard as the Director of the Institut d’histoire des sciences, he responded: “No! Not ‘épistémologie historique’ but ‘histoire épistémologique’”.<sup>11</sup> So, why did Lecourt choose the first and not

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<sup>10</sup> Peter Dews “Foucault and the French tradition of Historical epistemology”, *History of European Ideas*, 1992, 14(3): 347-363, quotes on p. 348 and p. 359 respectively. In his book *The Emergence of Sexuality. Historical Epistemology and the Formation of Concepts* (Cambridge: Harvard Univ. 2002), Arnold A. Davidson uses the expression “historical epistemology” explicitly in the French tradition, more specifically in the footsteps of Michel Foucault.

<sup>11</sup> Jean Gayon, “Bachelard et l’histoire des sciences”, in J. J. Wunenburer (ed), *Bachelard et l’épistémologie française* (Paris: Presses Universitaires de France, 2003), p. 53. Since I am usually skeptical about oral history, I am glad to note here that Lecourt, in a book published in 2008 writes that: “he owes to Canguilhem the locution historical epistemology as applied to the philosophy of science of Bachelard”; D. Lecourt, *Georges Canguilhem* (Paris: Presses Universitaires de France, 2008), p. 51. Whatever the case maybe this does not really affect my analysis.

the second preferred by Canguilhem? I think I found a convincing answer when I searched for the origins of the English uses of the expression “historical epistemology”. As far as I could find, the Marxist philosopher Marx Wartofsky first published a paper in 1973 with a title containing this expression as a program: “Perception, representation and the forms of action: towards an historical epistemology”. He argued, essentially, that “the forms or modes of perceptions, its structures themselves are historically variant; that this variation is related to *historical* changes in the forms or mode of human action (or *praxis*)”. As a consequence, one must replace “traditional philosophical characterization of epistemological questions” by an “*historical epistemology*”.<sup>12</sup> Clearly here the argument is about a kind of epistemology, not a kind of history.

I also found a book by another Marxist philosopher, the Polish professor of Logic and Methodology of Science Jerzy Kmita whose book, published in 1980 (and translated in English in 1988), bears the title “Problems in Historical Epistemology”. The author also used that expression in a 1977 paper.<sup>13</sup> In both of these cases the authors proposed an analysis embedded in historical materialism. But Lecourt also was trained in the Marxist tradition of Louis Althusser and thus the expression “*épistémologie historique*” is a natural counterpart to “*matérialisme historique*”. Moreover, Lecourt published a book in 1972 in the collection “Theory” directed by Althusser which contains a chapter titled: “From Bachelard to historical materialism”. This book was translated into English and published by New Left Books under the telling title: *Marxism and Epistemology: Bachelard, Canguilhem and Foucault*.<sup>14</sup> The fact that the expression has been suggested independently by (at least) three different authors during the 1970s gives weight to the hypothesis that its very form (“*historical epistemology*”) is prompted by its connotations and analogy with the expression “*historical materialism*” that puts the emphasis on history and historicity, a

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<sup>12</sup> Marx W. Wartofsky, “Perception, representation and the forms of action: towards an historical epistemology”, reprinted in Robert S. Cohen and Marx W. Wartofsky, *A Portrait of twenty-Five years. Boston Colloquium for the Philosophy of Science 1960-1985* (Boston: D. Reidel Pub. 1985), p. 216.

<sup>13</sup> Cited in Edward Swiderski, “Practice and the social factor in cognition : Polish marxist epistemology since Kolakowski”, *Studies in East European Thought*, 1980, 221(4): 341-362.

<sup>14</sup> D. Lecourt, *Marxism and Epistemology: Bachelard, Canguilhem and Foucault* (London: New Left Books, 1975).



central tenet of Marxist philosophy. Like Lecourt and Wartofsky, Kmita used the expression to characterize an intervention in the field of philosophy, not in the field of history.

Interestingly, when Michel Foucault refers to the French tradition of epistemology he used Canguilhem's expression of "histoire épistémologique", that is "epistemological history". Lecourt in fact uses both of them as he thinks that the first imply the second. For Lecourt "if epistemology is historical, then history of science is necessarily epistemological".<sup>15</sup> For him, there is an engaging reciprocity between the two that can explain why both expressions are often used by French historians and philosophers of science. Given that I have often observed the tendency to confuse a relation with an identity, it maybe useful to recall here that the very fact that there can be a *relation* between history and epistemology or philosophy of science does not imply that the two are identical either in their object or method. After all, it is the job of philosophers to make distinctions in the mess of reality. And here the syntax and grammar of language help us: strictly speaking, the two expressions are not synonymous and express different directions in the relations between history and epistemology. For Lecourt "epistemology *is* historical" by essence and the "discipline which takes scientific knowledge as its object must take into account the historicity of that object".<sup>16</sup> So, using the expression "historical *epistemology*" gives more emphasis on philosophy than on history and is thus more adapted to Bachelard, a *philosopher* who proposed a philosophy of science and not a *historian* who really practiced history of science.

By contrast, more historically oriented authors should prefer the expression "epistemological history" if their work provides a detailed history of scientific theories, problems, concepts or categories of thought and not only a stylized history used for philosophical reasons as usually found in Bachelard for example.<sup>17</sup> Lecourt was consistent in his use of these two expressions and a chapter in his 1972 book is titled: "The

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<sup>15</sup> Lecourt, *L'épistémologie historique*, (cit. n.9), p. 9. Note that the implication holds only if one takes it as axiomatic that "science" equals "epistemology" thus putting aside as secondary all of its social aspects.

<sup>16</sup> *Idem*, p. 9.

<sup>17</sup> On Bachelard as historian of science, see Jean Gayon, "Bachelard et l'histoire des sciences", (cit. n. 11).

epistemological history of George Canguilhem” which is of course the dialectical counterpart to his essay on Bachelard. This subtle (but important) difference of emphasis is supported – in French as in English – by the syntax and grammar of the language: the name (here history or epistemology) is *qualified* by an adjective that specifies the *kind* of history or epistemology it is. So, if we use the language correctly, “*historical* epistemology” is a kind of epistemology and not a kind of history and “*epistemological* history” is a kind of history and not a kind of epistemology. Lecourt was right to talk about historical *epistemology* for Bachelard for he was doing a kind of philosophy and never really applied his trade to write a full epistemological *history* except once in his second thesis *Étude sur l'évolution d'un problème physique: la propagation thermique dans les solides* published in 1928 but never translated in English.<sup>18</sup>

### **3. The wrong label for an old program**

This detour through a brief discussion of the social function of naming and a longer one on the origins of the expression “historical epistemology” in the 1970s was necessary, I think, to help us understand the context of “reinvention” of that label and its circulation in the field of anglo-saxon history of science, since the beginning of the 1990s. For it seems that all the fuss about “what is historical epistemology?” started around 1994, when Lorraine Daston and Jurgen Renn, directors of the then newly created Max Planck Institute for the History of Science (MPI), followed later by Peter Damerow also from the MPI, published programmatic papers, on “historical epistemology” as a “new” research program. Hence, Lorraine Daston writes in 1994 that this expression seemed to her to be “the best label” for what she attempted to do in her work, which was to “understand the *history* of the categories that structure our thought, pattern our arguments and proofs, and certify our standards for explanation”.<sup>19</sup> From what I have said earlier, it should be quite obvious that since Daston refers here to a kind of history and not a kind of epistemology, the expression

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<sup>18</sup> Contrary to his works on literature and imagination, Bachelard’s three major books devoted to the philosophy of physics (published between 1949 and 1953) have not yet been translated into English.

<sup>19</sup> L. Daston, « Historical Epistemology », in James Chandler, Arnold I. Davidson, and Harry D. Harootunian (Eds), *Questions of Evidence. Proof, Practice, and Persuasion across the Disciplines* (Chicago : The Univ. of Chicago Press, 1994), p. 282, emphasis added.

used cannot be adequate to its object as its content refer to a kind of epistemology, not a kind of history. Ian Hacking, having understood that the label was already taken up for a (possibly) different program, suggested another one: “historical meta-epistemology” but without really explaining what he meant by that expression.<sup>20</sup> Of course, one could say that, after all, everything is in everything, that history is also epistemology and vice-versa, but that is not a strong argument and can only help those who think that using fuzzy ideas is a good strategy to always win an argument.<sup>21</sup>

What Daston proposed in her paper is in fact pretty clear: we should *historicize* our categories of thought. In that case, and to be consistent with the structure of English language, it is not *history* that is epistemological but the epistemological categories that are *historicized*. The motto (for those who need or like them) should then be: “epistemology historicized”, which, by the way, is in keeping with previous “reforms” of epistemology promoted under the banner of “epistemology naturalized”.<sup>22</sup> And recalling here the different meaning of “epistemology” in French or English would not help here as the authors discussed directly provide a definition of “historical epistemology” albeit often a vague and all-encompassing one<sup>23</sup>.

Limiting the extension of the expression “historical epistemology” to the French tradition and using “epistemology historicized” for the program promoting the historicization of categories could bring some clarity to our field. But that would be neglecting other peculiar uses of the banner “historical epistemology” by other historians of science at the Max Planck Institute who seem to put under that expression a very broad research program, so broad in fact that it loses any specificity it may have under a limited definition. In a paper also published in 1994, Jurgen Renn writes that “since the emergence of scientific disciplines is a process involving both social and cognitive factors, only an historical theory of scientific cognition which comprises both the social and the cognitive structures of

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<sup>20</sup> Ian Hacking, *Historical Ontology* (Cambridge : Harvard Univ. Press, 2004), p. 9.

<sup>21</sup> I analyze this rhetorical strategy in Yves Gingras, “‘Please, Don't Let Me Be Misunderstood’: The Role of Argumentation in a Sociology of Academic Misunderstandings”, *Social Epistemology*, 2007, 21(4): 369-389.

<sup>22</sup> See for example Hilary Kornblith (Ed), *Naturalizing Epistemology* (Cambridge : MIT Press, 1994).

<sup>23</sup> For a discussion of the different meaning of the term « epistemology » see Robert Nadeau (Ed), *Philosophies de la connaissance* (Quebec, Presses de l'Université Laval/ Paris, Vrin, 2009), pp. 10-12.

science will be able to cope with the challenge to our understanding of science. [...] Such a theory, he continues, which [he] would like to call “historical epistemology” -- following a suggestion by Marx Wartofsky – exists, however, if at all, only in very rudimentary forms”.<sup>24</sup> This program of “History of science as historical epistemology” is thus explicitly linked to Wartofsky’s, though, curiously, the latter was talking about *philosophy*, not *history*. In using the expression “historical epistemology”, Renn never defined it explicitly as if its meaning and content were directly obvious to everyone. In a later paper on “Historical epistemology and the advancement of science” he tells us that “historical epistemology, as we pursue it in my department of the Max Planck Institute for the History of Science, attempts to open up a space for exploring the relationships between all relevant dimensions of the development of scientific knowledge”.<sup>25</sup> Though this is already pretty general, the content of the expression “historical epistemology” is even more elastic under the pen of Peter Damerow, also a permanent researcher at the Max Planck Institute. In his 1999 paper on “The Origins of Writing as a problem of historical epistemology” we learn that “Historical epistemology poses the questions of when, where, why and how writing was invented in view of the broader perspective of studying writing as a means of representation and the historical transmission of knowledge that may or may not be intimately linked to language as a means of oral communication”.<sup>26</sup> With such a “definition” it seems obvious that the expression itself has lost any specific content and become conceptually empty and thus useless.

A more explicit definition of the expression “historical epistemology”, again without any reference to its French origins,<sup>27</sup> can be found in the research report 2002-2003 of the Max

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<sup>24</sup> Jurgen Renn, “Historical Epistemology and Interdisciplinarity”, Max Planck Institute for the History of Science Preprint 2, 1994, p. 2.

<sup>25</sup> Jurgen Renn, “Historical Epistemology and the Advancement of Science”, Max Planck Institute for the History of Science Preprint 36, 1996, p. 4.

<sup>26</sup> Peter Damerow, “The Origins of Writing as a problem of historical epistemology”, Max Planck Institute for the History of Science, Preprint 114, 1999, p. 3.

<sup>27</sup> Among those at the Max Planck Institute for the History of Science who use the expression, only Hans-Jörg Rheinberger explicitly mentions the French source of historical epistemology. See his “Reassessing the Historical epistemology of Georges Canguilhem”, in Gary Gutting (Ed), *Continental Philosophy of Science* (Oxford: Blackwell Pub, 2005), pp. 187-197; and also his *Historische Epistemologie zur Einführung*, (Hamburg: Junius Verlag, 2007). I leave to the reader the question as to why scholars from the same institution use the same expression in such different manners without even referring to each other.

Planck Institute for the History of Science titled, again like Wartofsky's paper 20 years earlier: "Towards an Historical Epistemology: ten years of Max Planck Institute for the History of Science 1994-2004":

The premise of this "historical epistemology" is that not only specific scientific theories and empirical findings, but also the categories that make new kinds of knowledge possible have a history, one that is best studied comparatively, across cultures and historical epochs. This is an ambitious undertaking which must draw on the competence of many disciplines in the humanities and sciences and which also must exploit a spectrum of historical sources, from texts to images to material artifacts.<sup>28</sup>

Though it is not clear in all these declarations whether "categories" also include "concepts", this "ambitious" program proposes nothing less than the total history of science along the lines Fernand Braudel's old and impossible dream of writing a total history<sup>29</sup>. As Renn wrote in 1996, "historical epistemology requires an integration of social, cultural and cognitive studies of science".<sup>30</sup> This is indeed the kind of grandiose program that can only make sense – if it does at all outside a positivist view of science – as part of an institutional strategy. As I said in the introduction, labeling is indeed often a necessity for institutions that need to justify their existence, their resources and their specificity on the "competitive" market of ideas where they make everything possible to be "visible". Using a specific label may not only attract attention but also give the impression of a strong group cohesion inside the institution around a "school of thought" and facilitate the circular circulation of circular concepts in circular conferences.<sup>31</sup> In fact, looking at the presentations and abstracts of these conferences makes clear that the label is now given so many different meanings that it

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<sup>28</sup> Jurgen Renn, "Towards an Historical Epistemology: ten years Max Planck Institute for the History of Science 1994-2004", *Research report 2002-2003*, Max Planck Institute for the History of Science, p. 4.

<sup>29</sup> Hugh Prince, "Fernand Braudel and total history", *Journal of Historical Geography*, 1975 1(1):103-106; On the impossibility of a "total history" see, Reinhart Koselleck *The Practice of Conceptual History Timing History, Spacing Concepts* (Stanford: Stanford Univ. Press, 2002), pp. 22-24.

<sup>30</sup> Renn, "Historical Epistemology and Interdisciplinarity" (cit. n. 24), p. 4.

<sup>31</sup> In fact, a third conference on "Historical Epistemology" also co-organized by the Max Planck Institute for the History of Science was convened in December 2009 at Leuven University.

has become an empty catch-all umbrella for anyone vaguely thinking about the relations between history and philosophy of science<sup>32</sup>.

#### 4. Rediscovering the sociology of knowledge

I think it is fair to consider that, dismissing the trivial definitions of historical epistemology as an approach that 1) “poses the questions of when, where, why and how” something happens, and that 2) it has to do with writing a total history of science, we are left with the more specific program according to which, as already quoted above, “not only specific scientific theories and empirical findings, but also the categories that make new kinds of knowledge possible have a history”. Though, as we said above, it is never clear whether “categories” is meant to include “concepts”, it is less vague and less all encompassing than the two other ‘definitions’ of historical epistemology. However, this project, which proposes to write the history of categories, and even appeal to the “competence of many disciplines in the humanities and sciences” in order to implement it, curiously feigns to ignore the social sciences and the existence of a very old, very fruitful and very well-known program of historicization of the categories of thought: that of the sociology of knowledge since the beginning of the 20<sup>th</sup> century, not to talk about its reemergence in the 1970s in the form of a sociological theory of scientific knowledge.

It should be obvious to all scholars in social studies of science that making visible the historicity of categories of thought like causality, space, time and force, was the explicit program of the sociology of knowledge as explicated by Emile Durkheim and his nephew Marcel Mauss first in their 1901 paper on “Primitive forms of classifications”, and then in 1912 in Durkheim’s book on the *Elementary forms of religious life*. In these works he explicitly wants to historicize, and thus sociologize, what Kant considers as fixed *a priori* categories. And through Durkheim, one can in fact go further back in the French tradition of philosophy of science.

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<sup>32</sup> For an interesting analysis of the changing uses of labels in history of science, see Paul Forman, “From the Social to the Moral to the Spiritual: the Postmodern Exaltation of the History of Science”, in Kostas Gavroglu and Jurgen Renn (Eds), *Positioning the History of Science*, (Dordrecht : Springer, 2007), pp. 49-55.

As Canguilhem and many others have noted, the French tradition of a philosophy of science *embedded in a historical understanding of the emergence of science* finds its roots in the philosophy of Auguste Comte who considers that “we do not know completely a science if we do not know its history”.<sup>33</sup> Beyond this well-known general program, it seems less often noted that in his classification of knowledge, history of science is a section of “dynamic sociology”.<sup>34</sup> Once this fact comes back to mind, it should not come as a surprise that it is Durkheim who provides the basis of the program of a history of the categories of thought.<sup>35</sup> For him, as for Comte, sociology is historical in its method since everything in society is a product of history. Comte “positivism” is in fact a *historicism* as Juliette Grange noted in her book on his philosophy.<sup>36</sup>

In addition to acknowledging the fact that the program of historicizing categories of thought is ancient, one should also note that there is nothing intrinsic to the usual methods of history of ideas, or history in general for that matter, that would exclude or limit the analysis of the genesis of *any* particular subset of ideas or events. The contingent fact that most studies have been devoted to the history of theories, concepts and problems does not imply that the same methods cannot be applied to the history of categories of thought.<sup>37</sup> So, there is no new *kind* of history (or even methodology) involved in the historical analysis of categories instead of concepts. As the case of Durkheim shows, he was just extending the empire of his sociology when he tried to show the historicity of the categories of space, time, force or causality. Until then the reserved area of philosophers who, Durkheim tells

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<sup>33</sup> Auguste Comte, *Cours de philosophie positive*, (Paris : J.B Ballière et Fils, 1869), deuxième leçon, p. 65; my translation.

<sup>34</sup> See Laurent Clauzade, “Histoire des sciences et philosophie des sciences dans la philosophie d’Auguste Comte”, in Michel Bitbol , Jean Gayon (Eds), *L’épistémologie française, 1830-1970* (Paris: Presses Universitaires de France, 2006), pp. 197-212.

<sup>35</sup> One could name other philosophers who thought about the historicity of the categories of thought, like William Whewell’s history of “fundamental ideas”, but my objective here is not to provide a complete history of the problem of the historicity of categories but to question the recent uses of a label by noting that this program was not only well-defined but also in part implemented in the sociology of knowledge. On Whewell, see Jutta Schickore “A Forerunner? – Perhaps, But not to the Context Distinction. William Whewell’s Germano-Cantabrigian History of the Fundamental Ideas”, in Jutta Schickore & Friedrich Steinle (Eds.): *Revisiting Discovery and Justification: Historical and philosophical perspectives on the context distinction* (Dordrecht: Springer, 2006), pp. 57-77.

<sup>36</sup> Juliette Grange, *La philosophie d’Auguste Comte* (Paris: Presses Universitaires de France, 1996), p. 81.

<sup>37</sup> For my own take on historicizing the category of “explanation” see Yves Gingras, “What Did Mathematics Do to Physics?”, *History of Science*, 2001, 39 : 383-416.

us, either considered these categories *a priori* (like Kant) or the product of sensations (like Locke and Hume), the sociologist interposed society between these two extremes and proposed the Comtian approach of tracing their *historical* origins in different societies. For the father of French sociology, “it is the rhythm of social life that is at the basis of the category of time; it is the space occupied by a society that provides the matter to the category of space; it is the collective force that is the prototype of the concept of efficient force, itself an essential element of the category of causality”.<sup>38</sup> Durkheim sees the evolution of humanity as a gradual complexification process of the categories of thought moving through Comte’s three stages from a religious to a metaphysical and, finally, a positive level of thought. His evolutionist view of the history of thought and society explains why his historical sociology of knowledge is to be found in his book on religious life. For him, there is no antinomy between science and religion. In fact the first finds its roots in the second. Even logic has a history and, for Durkheim, if logic has got rid of its original subjective traits and become abstract, the reason behind this process is to be found in the development of international contacts between different societies which then formed more universal beliefs. It is this basic social process that progressively differentiates the logical organization from the social organization and gives the former its autonomy from the latter. For Durkheim, “impersonal reason is but another name given to collective thinking”.<sup>39</sup> Durkheim’s program was applied to Chinese thought by Marcel Granet and later to the emergence of rationality in Ancient Greece by Jean-Pierre Vernant.<sup>40</sup> More recent examples could be given, like the work of Geoffrey Lloyd on Greek science,<sup>41</sup> Jean Piaget and his genetic epistemology<sup>42</sup> or even Pierre Bourdieu in his *Pascalian Meditations*,<sup>43</sup> but these examples should be sufficient to show that the program and also

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<sup>38</sup> É Durkheim, *Les formes élémentaires de la vie religieuse* (Paris: Presses Universitaires de France, collection Quadrige, 1985), p. 628, my translation.

<sup>39</sup> *Ibid.*, p. 636.

<sup>40</sup> Marcel Granet, *Chinese Civilization* (New York : Alfred A Knopf, 1930); Jean-Pierre Vernant, *The origins of Greek thought* (Ithaca: Cornell University Press, 1982).

<sup>41</sup> Geoffrey Lloyd, *Magic, Reason and Experience* (Cambridge, Cambridge University Press, 1979).

<sup>42</sup> Jean Piaget and Rolando Garcia, *Psychogenesis and the History of Science* (New York : Columbia University Press, 1989). Interestingly, Wartofsky has written a paper on Piaget : Marx W Wartofsky, « Piaget's genetic epistemology and the Marxist theory of knowledge ». *Revue Internationale de Philosophie*, vol. 36, nos 142/3), 1982, 470-507.

<sup>43</sup> Pierre Bourdieu, *Méditations pascaliennes* (Paris : Seuil, 1997).



the practice of *historicizing* the categories of thought is hardly new and does not need a new label which serves only the function of giving the appearance of innovation while shortchanging important previous works promoting the historicization of epistemological categories. The difference between the authors mentioned here is one of approach – history for Lloyd, psychology for Piaget, sociology for Durkheim and Bourdieu – but they all agree on the basic postulate of historicizing thinking.

## Conclusion: Historicizing everything

The problem with the recent promotion of the label “historical epistemology” is double. First, it is not adequate to the problem or method it wants to name for it should then simply be a program of historicizing epistemological categories. Second, and more importantly, beyond grandiose claims – often limited to introductory and concluding sections of papers or books – that program essentially consists in applying to particular objects like “progress”, “fact” or “objectivity” the usual methods of history. For the only thing that should be taken for granted by any historian is that everything has a history and thus should be historicized when, for whatever reasons, that has not already been done. Historicizing a particular object (question<sup>44</sup>, problem, method, concept, theory category, etc) is always a worthwhile enterprise though it may lack the excitement of the “radicality” associated with grandiose statements.<sup>45</sup> For it should go without saying that one can take a concept or a category as an object and analyze its historical conditions of emergence, transformation and disappearance (when that is the case). This has been done long ago and many times without fanfare for example with the idea of progress<sup>46</sup> and, as I said, it can be extended to any category, word, concept or problem<sup>47</sup>.

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<sup>44</sup> For an example of historicization of a *question*, see Gingras, Yves, « The Collective Construction of Scientific Memory: The Einstein-Poincaré Connection and Its Discontents, 1905-2005 » *History of Science*, vol. 46, no 1, mars 2008, pp. 75-114.

<sup>45</sup> For an analysis of such “radicality effects”, see Y. Gingras, ‘Please don’t let me be Misunderstood’ (cit. n. 21).

<sup>46</sup> I am thinking here of the very old 1932 essay by J. B. Bury, *The Idea of progress. An inquiry into its origins and growth* (New York: MacMillan, 1932). See also G. Canguilhem, “La décadence de l’idée de progrès”, *Revue de Métaphysique et de Morale*, 1987, 92(4):437-454; English translation in *Economy and*

Of course, most historians do not any more buy the implicit evolutionism of Comte and Durkheim but one can most of the time easily separate the historical method itself from the manner in which the narrative is written. For example, it is obvious that a new book on “progress” published after the 1980s would not be called “A history of progress” but rather “The invention of progress”, in order to make clear that the author does not want to be associated with an evolutionist or even realist philosophy of history. In fact, Peter Bowler did publish in 1989 a book under that very title: *The invention of progress: the Victorians and the past*.<sup>48</sup> The year before, we had *The invention of Africa* and, even better maybe, *The invention of George Washington*.<sup>49</sup> Books with “inventions” in the title exploded in the 1990s with titles like *The Invention of physical science*, *The invention of heterosexuality* and *The invention of infinity*, to take random examples. It is also worth stressing that changing *words* does not automatically implies that the “new” narrative will be very different from the older ones stigmatized as more “traditional” or even “naive”. And given the logic of distinction that pervades the academic field – which is exacerbated by the growing competition between young scholars in search for academic positions – one could even predict the publication of a book (or at least a paper), by a witty or even cynical historian convinced that reflexivity is a big thing, on “the invention of invention”. In fact, a split second after writing this sentence I suddenly had a doubt: in our so-called “postmodern” world in which many scholars think faster than their shadow, that prediction has probably already been realized! So I searched on Google and found it! In a book

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*society*, 1998, 27(2-3): 313-329 and Reinhart Koselleck, “‘Progress’ and ‘decline’: An Appendix to the History of Two Concepts”, in *The Practice of Conceptual History* (cit. 29), pp. 218-235.

<sup>47</sup> One could also mention the works of Reinhart Koselleck on the history of concepts (Begriffsgeschichte); in addition to his book cited in note 29, see his history of the concept of « crisis » in *Journal of the History of Ideas*, vol. 67, No 2 (April 2006), pp. 357-400 and more generally, Otto Brunner, Werner Konze, and Reinhart Koselleck (eds), *Geschichtliche Grundbegriffe: Historisches Lexicon zur politisch-sozialen Sprache in Deutschland*, (8 volumes; Stuttgart: Klett-Cotta, 1972–97).

<sup>48</sup> Peter Bowler, *The invention of progress: the Victorians and the past* (Oxford: Blackwell, 1989).

<sup>49</sup> Paul K. Longmore, *The invention of George Washington* (Berkeley : University of California Press, 1988); V.Y. Mudimbe, *The invention of Africa : gnosis, philosophy, and the order of knowledge* (Bloomington : Indiana University Press, 1988).

published in 2000 on *Nietzsche's middle period*, Ruth Abbey devoted a chapter to “The invention of invention” in which she argues that the “image of Nietzsche as an autonomous and wholly individual thinker is accepted partly because we are held captive by the picture he draws of himself, for in his later works Nietzsche repeatedly invents himself as inventor rather than legatee. [...] Only with a knowledge of the works of the middle period it is possible to see how Nietzsche has constructed this image of himself as the radical critic, independent of tradition”.<sup>50</sup> Notwithstanding the usual rhetoric pointing the *naïveté* of previous scholars who supposedly believed in the total autonomy of Nietzsche as a thinker<sup>51</sup>, we have here a nice example of a historicization of the presentation and representation of self or “persona” to use a more faddish word. No need to label that method as it is just plain good “old” history and sociology, two disciplines that should not be separated as their aim is the same: understanding change, be it conceptual, social, cultural or institutional.<sup>52</sup> For above and beyond the naïve dream of an all-encompassing “total” history of science, these analytic distinctions remain useful as they focus on different aspects of science as a social and cognitive phenomena.

History is in fact the best method we have to make contingency visible behind apparently timeless questions, ideas, identities, problems and categories. Be it in the form of a natural history like Darwin or a sociological history like Durkheim, history is the only method in town to understand the origins of anything. And as Comte rightly observed, it is a chapter of sociology submitted to the general mode of exploration he calls “the historical method” which is a means of observation applicable “to all orders of scientific speculations”. This method urges us to “conceive each discovery, whatever it is, at the time it is accomplished, as constituting a true social phenomena, being a part of the general series of human

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<sup>50</sup> Ruth Abbey, *Nietzsche's Middle Period*, New York, Oxford, 2000, p. 141. Read in electronic form on : <http://www.questia.com/PM.qst?a=o&d=64581258>. Accessed 21 July 2009.

<sup>51</sup> It is worth noting that sociologists had already studied the social construction of Nietzsche as a ‘philosopher’, see Louis Pinto, *Les nouveaux de Zarathoustra. La réception de Nietzsche en France* (Paris: Seuil, 1995).

<sup>52</sup> On the links between these disciplines, see Pierre Bourdieu, “On the Relationship between Sociology and History in Germany and France”, in F. Engelstad, R. Kallenberg (Eds), *Social Time and Social Change* (Oslo: Scandinavian University Press, 1999), pp. 157-186.

development”.<sup>53</sup> According to Comte, the historical method was destined to dominate all other methods of scientific investigations and give them their complete rationality. But this will only be done, he warned us, if one never considers each science in isolation from the total progress of human spirit as well as the fundamental evolution of humanity.

Ironically, it could be that the most faithful label for a truly *historicist* (and even “total”) research program should be, when stripped of its evolutionism, “Comtian history of science” or “Durkheimian history of science”! But that would be naming without necessity, so let us agree to simply call it “good history of science”, that is: a history true to the precepts of the “historical method”.

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<sup>53</sup> Auguste Comte, *Cours de philosophie positive*, 49<sup>e</sup> leçon, in *Leçons de sociologie* (Paris : Garnier-Flammarion, 1995), p. 229; my translation.