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The epistemological tradition in French sociology

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My talk is announced under a vast heading. Today's French sociology is most diversified. From a foreigners point of view much of it appears more American than French, which means that it is closely related to dominating sociological schools in the Scandinavian countries. I am, though, going to discuss the epistemological underpinnings of one distinctly French sociological enterprise, that of Pierre Bourdieu and his collaborators.¹ My aim is to demonstrate its intimate connections to the so called historical epistemology, i.e. the tradition in French philosophy of science represented by Gaston Bachelard, Georges Canguilhem, Jean Cavaillès and others. I will also make a few remarks on the reception of Bourdieu's work in the Anglo-Saxon sphere of influence.

The Durkheimians

Bourdieu's sociology is, however, also strongly related to a distinctly French tradition in sociology, that of the Durkheimians. By "the Durkheimians" I refer to the first generation: Durkheim, Mauss, H. Hubert, Hertz, Simiand, Halbwachs, H. Bourgin, Bouglé, Lapie, Parodi, Fauconnet, Davy, Granet, and (with certain reservations) Lévy-Bruhl.²

Except for the two last mentioned -- who were to make allies with the Durkheimian school at a later stage -- they were all main contributors to the first series (volumes I-XII, published 1898-1913) of *L'Année sociologique*. Next to Émile Durkheim himself the most industrious authors in *L'Année sociologique* were Marcel Mauss and Henri Hubert, founders of French anthropology as a legitimate scientific discipline. David Hertz was a younger collaborator to Mauss and Hubert. François Simiand, Maurice Halbwachs and Hubert Bourgin constituted a group of their own directed towards economic sociology, social morphology and statistical methodology. Célestin Bouglé, Paul Lapie and Dominique Parodi constituted another group oriented towards moral philosophy. Paul Fauconnet and Georges Davy, two of Durkheim's closest disciples, were engaged in sociology of law. These were

¹ For a more comprehensive demonstration cf. D. Broady, *Sociologi och epistemologi. Om Pierre Bourdieus sociologi och den historiska epistemologin*, HLS Förlag, Stockholm 1990, 2 ed. 1991.

² The detailed history of the first Durkheimian generation has during the last decades been explored by Viktor Karady and others, many of them connected to Philippe Besnard's "Groupe d'études durkheimiennes" which was constituted at Maison des sciences de l'homme in 1975.

the most important collaborators in the first series of *L'Année sociologique*.³ I wish to add one or two scholars who did not contribute to this series but who later on were to appear as prominent advocates for the Durkheimian school. This goes first and foremost for the sinologist Marcel Granet, who together with Mauss and Hubert was to establish a Durkheimian stronghold at the fifth section of École Pratique des Hautes Études. The philosopher Lucien Lévy-Bruhl, finally, is a boarder case. He was of the same age as Durkheim and is in contrast to the hitherto mentioned names not to be regarded as one of his disciples. However, since he came to serve as a Durkheimian ally and in his later writings mainly devoted himself to anthropological problems I prefer to count him in among the Durkheimians.

The Durkheimians dominated French sociology during the first third of our century to the extent that sociology became almost synonymous with Durkheimianism. Their position declined in the period between the wars, and a Durkheimian revival did not begin until in the late 1960's -- to a large extent thanks to the interventions of Bourdieu. It was in fact Bourdieu who initiated Victor Karady's comprehensive editions of Mauss' works published in 1968 and 1969, and of Durkheim's works published in 1975. More important, Bourdieu did in his own research and writings from the 1960's and onward demonstrate that the Durkheimian tradition offers alternatives and correctives to a wide range of shortcomings of the then dominating currents within French social science: American empiricism, orthodox structuralism, Marxism, etc.

What makes both the Durkheimians' and Bourdieu's contributions so French in a foreigner's eyes? There is, of course, the philosophical mood. From the Durkheimians to Bourdieu almost all dominating figures within French sociology were trained as philosophers: Durkheim himself as well as a large number of his disciples (half the contributors to the first series of *L'Année sociologique* were *agrégés* in philosophy), Celestine Bouglé who played a dominating role in the 1920's and most of the 1930's, George Davy during the 1940's, Raymond Aron from the mid 1950's. (One exception, also in other respects, was George Gurvitch who was an immigrant and loosely integrated in French academia.) It was not until 1958 that it became possible to pass higher exams -- licence, doctorat de troisième cycle -- in sociology. Before that date sociology formed part of moral philosophy and sociologists were autodidacts.

Because of philosophy's dominant position in the French academic hierarchy, French sociologists had to use their philosophical capital in order to gain academic recognition. Some of them made allies with the philosophers, others as Durkheim and Bourdieu challenged philosophy in order to conquer space for sociology on its own terms.

On the Bourdieu reception

In the case of the early Durkheimians and Bourdieu another "French" mark is the epistemological foundation. As a consequence misreadings might occur when their works meet with a foreign public. When selected pieces of Bourdieu's work -- mainly abstract and more programmatic texts -- begun to get known to the English and American social science community by means of a couple of translations in 1977, he was largely looked upon as a "theorist", almost as some Althusser's kid brother who juggled with abstract concepts and pronounced general propositions on society as a

³ I have besides a number of names of minor importance omitted Gaston Richard, sociologist of law. Albeit in his younger days a prominent and highly qualified member of Durkheimian group (regarded as at least as promising as Durkheim himself) and a productive writer in *L'Année sociologique* (he contributed to all issues of the first series), Richard did during this period desert to the Durkheimians' worst enemy, the camp of *Revue Internationale de Sociologie*, the leader of which he later became. (On this course of events, cf. William S. F. Pickering: "Gaston Richard : collaborateur et adversaire", *Revue française de sociologie*, vol. XX, n° 1, janvier-mars 1979, pp. 163-182.)

reproduction machine. Later on, after the publication of an English translation of *La distinction* in 1984, he was on the contrary often regarded rather as a French Thorstein Veblen, i.e. a collector of observations on peoples habits and lifestyles in contemporary society. This contradictory American reception⁴ of Bourdieu's works was no doubt determined by the strong social division of labour within the American social science community separating on the one hand the theorists who are supposed to take care of the thinking and on the other hand the empirists, either ethnographic observers or numbercrunchers.

It seems like the rules of competition in the American social science field impose upon you either of two strategies. The first is the "theory" strategy that forces you to write one or two books a year whether or not you have learnt something since the last one. There is no need for empirical anchorage, instead you engage in endless chains of commentaries on commentaries. The second strategy is the empiristic one in the form of easily administered survey studies and the like that allows you to publish one paper a month for just as many conferences or scientific journals. This social division of labour between essayism and numbercrunching is very noticeable in for example mass media and communications studies, a field with which many of this seminar's participants are familiar.

Bourdieu has thus been interpreted according to the scheme of categories dividing American social science. Theoretical discourse versus empiristic research is one of these oppositions. Other oppositions are macro versus micro, quantitative versus qualitative, structure versus agent, determinism versus intentionality, externalistic versus internalistic analysis, etc -- all of which often used to classify Bourdieu's works, in contrast to his own ambitions which is to break out of such fences by founding his work on quite another type of epistemology.

Many of Bourdieu's foreign readers have neglected the massive empirical research undertaken by him and his collaborators since the early 1960's and onward, and instead strained to extract an abstract "theory" on society or social behaviour. To me this seems as an moribund or at its best unfruitful interpretation. You do, however, in Bourdieu's oeuvre find a theory on the conditions, limits, and possibilities of sociological knowledge -- in other words an epistemology.

Historical epistemology

Bourdieu's project might, to put it very short, be characterised as an attempt to provide an epistemology for the social sciences, comparable (*mutatis mutandis*) to the renewal of the philosophy of the natural sciences and mathematics carried out some thirty years earlier by Bachelard, Canguilhem, Cavaillès and other representatives of the so called historical epistemology. This interpretation of mine is of course strained and simplified. Bourdieu's many-sided and extensive work⁵ invites to disparate readings. Within French sociology he has blown fresh life into the heritage from the Durkheimians -- among sociological traditions there is in my opinion no doubt that the Durkheimian is the one that have had the strongest impact on Bourdieu.⁶ But he has fetched tools from a wide range of traditions. The impact of French and British ethnology is striking in his first studies. German phenomenology has remained a strong under-current in his writings, and he was from the start occupied with Marxist traditions.⁷ He has used tools from the Weberian tradition.⁸ His

⁴ Cf. the bibliometric study in D. Broady, *op.cit.*, 1991, pp. 139-158.

⁵ In 1990 it comprised 10.200 pages, not counting reprints and translations.

⁶ More precisely, Bourdieu could profit from the legacy after the "research fraction" among the Durkheimians, i.e., Marcel Mauss, Henri Hubert, Maurice Halbwachs, François Simiand, Marcel Granet and others.

⁷ One way to characterise Bourdieu's earliest intellectual frame of reference is to say that he operated within an epistemic space defined by the two axes phenomenology and Marxism. (I borrow the expression *espace épistémologique* from Foucault, *Les mots et les choses*, Gallimard, Paris 1966, pp. 358ff.) This frame of reference was typical also for many other high-aspiring Parisian students in philosophy in late 1940's and early 1950's, as Foucault or Derrida.

works are of course related to the structuralist and so called post-structuralist currents.⁹ He has made massive and innovative use of the statistical techniques developed by the Benz  cri-school.¹⁰ He has contributed to the introduction in France of British analytical language philosophy, British and American sociolinguistics, Erving Goffman's micro sociology, etc.

However, if forced to point out one single tradition more important to Bourdieu than others, I would give prominence to historical epistemology. For many Scandinavian readers who in most cases are more used to the methodologies dominating within the North American sphere of influence, Bourdieu's texts might be difficult to digest. The mix of methods and above all the mix of theoretical reflexion and empirical findings might seem hard to overview. The flexible and "open" concepts are not fit for neither formal nor empiristic definitions. The ways of presenting data and validating hypotheses might seem unfamiliar. The difficulties start already with the terminology. The unprepared reader is tempted to give a home-made meaning to terms like "realism", "substantialism" or "intuitionism", "obstacle", "objectivation" or "construction", the significance of which within historical epistemology Bourdieu seems to suppose to be known by everybody. The misinterpretations of Bourdieu's endeavour in the American social science world system is to a considerable extent due to the underestimation of the importance of the epistemological underpinnings.

To judge from the meagre results from my searches in relevant databases, American social scientists have paid little attention to Bachelard's, Canguilhem's and Cavaill  s' works. Bachelard was introduced late in the United States. The first articles on his works appeared in US in the early sixties. Many art and literature scholars and critics are familiar with Bachelard's writings on poetic images and still today these texts are more well known than his epistemological works. Canguilhem's study on the history of the reflex concept is well known to the historians of medicine or physiology, who though seem more interested in what Canguilhem had to tell about the subject matter itself than in his epistemology. Cavaill  s is hardly known at all. By contrast Alexandre Koyr   -- about the same age as Bachelard and close to historical epistemology -- has thanks to the mediation of Thomas Kuhn¹¹ had considerable significance for American history and philosophy of science. Also Henri Poincar   and Pierre Duhem, grandfathers of historical epistemology, have for long been well known points of reference in the American theory of science debates. One example is Karl Popper's repeated attacks on Poincar  's and Duhem's conventionalism. Another example is the rehabilitation undertaken by Mary Hesse in *Models and Analogies in Science* and other writings from the 1950's and 1960's.

Although historical epistemology as such is thus not unknown to American scholars it has hardly informed the reception of Bourdieu's works.¹²

⁸ From the Weberian Tradition Bourdieu in particular has borrowed elements related to legitimacy problems. Bourdieu's concept field owes a great deal to Weber's analysis of religious phenomena.

⁹ Bourdieu's relation to structuralism is, though, rather complicated. His texts from a short period during the 1960's bear uncompromising structuralist traits which do not appear either in the earlier or in the later works. On the whole his project has been a parallel to, rather than an outgrowth of, the movement inaugurated by L  vi-Strauss. This parallelism can to a large extent be explained by the fact that Bourdieu in earlier traditions -- the Durkheimians, historical epistemology, the Marburgians -- did find theoretical positions corresponding to (and in certain respects transcending) those annexed by the orthodox structuralists.

¹⁰ Cf. D. Broady, *op.cit.*, 1991, pp. 473-527.

¹¹ In the preface to the first edition of *The Structure of Scientific Revolutions*, 1962, Koyr  's name was mentioned first of all in the account on sources of inspiration.

¹² To an American and Scandinavian public historical epistemology was for long mainly associated with the Althusserians. An astonishing Swedish phenomena was the massive importation of Althusserian theory in the late 1960's and early 1970's. In all a dozen books were translated during a few years, which is extraordinary when it comes to current French intellectual discussions. As a consequence the first Swedish reception of Bourdieu -- and of historical epistemology -- was over-determined by the reception of the Althusserians. Though Althusserianism reached the Anglo-Saxon world on a large scale almost a decade later, in late 1970's, the effect was the same.

I will briefly mention six features characterising both the historical epistemology and Bourdieu's sociology, and in some cases the sociology of the Durkheimians.

First principle: applied rationalism

A good starting point might be to return to the intertwining of empirical and theoretical work in Bourdieu's sociology. One reasonable way of characterising Bourdieu's position in this respect is by using Bachelard's notion applied rationalism.¹³ "Rationalism" is the head-word and "applied" is the adjunct: ratio is given priority, but scientific thought must be "applied" (by which Bachelard meant corrected and developed) through its confrontation with its object. According to Bachelard late 19th and early 20th century physics procured the exemplary model for this way of developing scientific thought as a dialogue between ratio and experience, or in Bachelard's words a dialogue between "applied rationalism" and "technical materialism". In the physics laboratory this dialogue was incarnated by the theoretical mathematician and the experimentator.¹⁴

When reading Bourdieu, you can in fact already in his first comprehensive sociological study *Travail et travailleurs en Algérie*, 1963, find hidden citations¹⁵ which point to Bachelard's general idea of "applied rationalism". You also find a parallel to Bachelard's model of the co-operating mathematician and experimentalist in the physics laboratories in Germany, although in Bourdieu's case the two partners are the sociologist and the statistician:

"statistics [...] is to the sociologist what experiment is to the physician: against the hypotheses statistics puts the resistance from data, thereby forcing the moulding of new hypotheses."¹⁶

Further he claimed that the classical opposition between explanation and understanding is surpassed in "the dialectics between hypothesis and statistical verification". Statistics is not merely a tool for verifying the sociologist's hypotheses, it also offers a protection against the "temptations of intuitionism", it destroys the "de immediately perceived totalities", it helps the sociologist to avoid being trapped by "the implicit presuppositions of immediate certainty", it "tears apart the fabric of relations spontaneously woven in everyday experience".¹⁷ All of these propositions are very similar to Bachelard's arguments and vocabulary.

This comparison between the sociologist's relation to statistics and the theoretical scientist's relation to experiment is to be found already in the writings of the Durkheimians. In their programmatic encyclopaedia article on sociology in 1901 Fauconnet and Mauss wrote:

¹³ Bachelard's own terminology was tottering. It was not until his last epistemological works in late 1940's and early 1950's that he settled for "applied rationalism" as the denomination of the most advanced scientific thought. It can, though, be shown (D. Broady, *op.cit.*, 1991, pp. 318-328) that this argument is rather consistent also in Bachelard's earlier writings, even and not the least in his first works, the dissertations defended in 1927 and published in 1928.

¹⁴ We must bear in mind that this way of performing research in physics at that time was a rather recent invention which had produced spectacular results in the German laboratories. The success of theoreticians like Max Planck in Berlin or Wilhelm Wien in Würzburg was founded on intimate co-operation with experimentalists. The other way around, after arriving to Munich in 1889 the at the time most renowned experimentalist, Wilhelm Röntgen, devoted considerable efforts and took great pains in order to recruit an outstanding theoretician as his partner. Eventually Arnold Sommerfeld was chosen and they did together create an extremely productive research environment.

¹⁵ P. Bourdieu, Alain Darbel, Jean-Paul Rivet and Claude Seibel, *Travail et travailleurs en Algérie*, Mouton, Paris/La Haye 1963, pp. 10-12, 248, 267.

¹⁶ *Op.cit.*, 1963, p. 10. In fact the whole book was the result of a co-operation between Bourdieu, who here appeared as sociologist, and a couple of young French statisticians who then held positions at the Faculty of Alger.

¹⁷ *Travail...*, 1963, pp. 10-12. The idea that statistical techniques prevent sociological analysis from falling victim to intuitionism reoccurs p. 267.

“Fundamentally a well pursued comparison within sociology might give results corresponding to those offered by experiments.”¹⁸ And young François Simiand, who was to become the Durkheimians’ most prominent authority on statistical methods, stated in 1904 “a general resemblance between statistical procedures [in social sciences] and experimental research in natural sciences”¹⁹. Simiand characterised the division of labour between economists and statisticians in the following manner:

“The statistician procures the economic science with the material it has to work with, if it is not to rely on pure speculation and if it wishes to keep contact with the facts. The statistician is like the chemist experimenting in the laboratory; the economist is like the chemist who builds theory in his chamber. Thus the statistician should collect and order data, not deduce. He should present experience but not draw conclusions, at least not in his capacity as statistician. It might though be an advantage if one and the same man is both an experimentator and a theoretician.”²⁰

Even if Simiand discussed the relation between economists and statisticians his argument was close to Bourdieu’s since Simiand at this moment immediately after the turn of the century still, in Durkheim’s spirit and arguing against the contemporary political economists, tended to consider economic science as a subspecies of sociology.

Later Simiand was to emphasise the distinctive character of economic science, and also to play down the significance of statistics as the necessary fundament of economics.²¹ In a similar way Bourdieu’s thrust in the exceptional importance of statistics as a tool in sociological research was to become weakened, or rather more precise, during the years to come. It might therefore seem somewhat unjust to cite these early writings; both Simiand and Bourdieu were about thirty years of age when they wrote the cited passages. However I wish to emphasise that Bourdieu already as early as in *Travail et travailleurs* aimed at something much more precise than a general comparison with the function of theory and experiment within the hard sciences. In spite that Bachelard’s name appears nowhere in this extensive volume (566 pages), there is a well of hidden citations and the affinities in argumentation and vocabulary are striking. For example Bourdieu’s attacks against “intuitionism”, “immediate conceptions”, “immediate certainty”, etc bear witness that Bachelard’s model for applied rationalism served as a most important source of inspiration. At this time Bourdieu himself hardly regarded himself as a sociologist. Some five years later, in late 1960’s when he definitely identified himself as a sociologist, he did in writings and radio emissions explicitly claim that social sciences were lacking an epistemology of the kind that had emerged accompanying the development of hard sciences, for example in the writings of Bachelard and his followers. It would be to over-hasty, though, to say that Bourdieu simply took over Bachelard’s positions; there were of course other sources of inspiration. At the turn of the century 1900 there were French philosophers who attacked the Cartesian heritage, as Octave Hamelin and Louis Couturat, from whom Bachelard and his allies a few decades later were able to draw inspiration and philosophical legitimacy.²² Pierre

¹⁸ P. Fauconnet och M. Mauss, “Sociologie” [1901], in Mauss, *Oeuvres*, 3, Minuit, Paris 1969, p. 170. The Durkheimians argued in a partly parallel manner on the relation between sociology and ethnology. Even during the period when Mauss was deeply involved in establishing ethnology as a legitimate university discipline with an autonomy of its own, he could emphasise that “There is a need for sociologists and for ethnologists. The former explains <éclairent>, the latter procure information <renseignent>. [...] Both have to co-operate, to assist each other, to be familiar with each others work.” (*L’Année sociologique*, 1925, repr. in Mauss, *Oeuvres*, 3, 1969, p. 389).

¹⁹ *L’Année sociologique*, vol. VIII, 1904, repr. p. 283 in F. Simiand, *Méthode historique et sciences sociales*, Éditions des Archives Contemporaines, Paris 1987.

²⁰ F. Simiand, *Op.cit.*, 1987, p. 284.

²¹ Cf. pp. 24-26 in M. Cedronio, “Présentation”. In: F. Simiand, *op.cit.*, 1987.

²² Fernand Turlot has showed that Bachelard was inspired by Hamelin (F. Turlot, “Bachelard et Hamelin”, *Gaston Bachelard, l’homme du poème et du théorème. Colloque du centenaire, Dijon 1984*, Éditions universitaires de Dijon, Dijon 1986, pp. 249-255). I believe that it in a similar manner would be possible to demonstrate that Bourdieu did learn something from Louis Couturat’s manner of putting up Leibniz against Descartes (L. Couturat, *La logique de Leibniz d’après des documents inédits*, Alcan, Paris 1901).

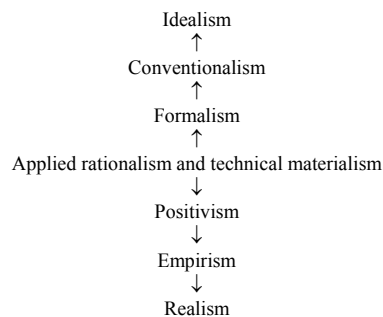
Duhem and Henri Poincaré did in many respects anticipate Bachelard's position. In France such anti-Cartesian currents have, though, been rather marginal and dominated by subject philosophy.

Second principle: the sciences on their own feet

According to Bachelard the philosopher is to follow the sciences, not the other way around. In other words: scientific thought must be autonomous -- strictly separated from both traditional philosophical doctrines and common sense knowledge.

Bachelard's trajectory and his position as a latecomer probably to some extent explain his ability to keep his distance with regards to academic philosophy. Bachelard was way up in his forties literally an outsider to philosophy of science. From a position far away from academia he had witnessed the spectacular progress of contemporary physics. He first served ten years as a postal servant, then as a secondary school teacher in physics in the province, passed his agrégation in philosophy 1922 at the age of forty, presented his dissertation five years later, was 46 when he began to serve in the university of Dijon in 1930, and had reached the age of 56 when appointed professor at Sorbonne in 1940.

This scheme²³ below, published in 1947 in the very first issue of the Swiss journal *Dialectica* illustrates his message. The new desirable philosophy that is consistent with the most advanced contemporary branches of science is positioned in the centre of the scheme ("applied rationalism and technical materialism") as opposed to the older doctrines: Cartesian idealism and Kantian conventionalism and formalism on the one side, and positivism in the French (Comtean) sense and primitive empirism and realism on the other.²⁴



It is easy to imagine this ambitious secondary school teacher's frustration when confronted with contemporary philosophy. Bachelard obviously eagerly followed the latest achievements and discussions reported in *Annalen der Physik* and other major publications from the most advanced physicist community, whereas the celebrated contemporary French philosophy still relied on the 19th or more often 18th century view on the physical world and mathematics, treating fundamental

²³ Gaston Bachelard, "La philosophie dialoguée", *Dialectica. Revue internationale de philosophie de la connaissance* [Neuchâtel], vol. I, n° 1, 1947, p. 14. The journal was co-edited by Bachelard.

²⁴ By "empirism" Bachelard most often designated the view that man's perceptive faculties, perhaps enhanced by observation tools, procure primary knowledge of the object. By "realism" he designated the view that the object *is* just as it immediately appears, as if the scientist were able to hold it in his hand before he starts his research. Bachelard's terminology was, however, not quite consistent. In his early writings of the late 1920's he tended to use the term empirism to signify what he was later to call realism. For our purposes it is, though, enough to establish that both realism and empirism represent an blind faith in the knowledge offered by the immediate encounter with the object.

concepts like cause, time, space, measure, mass etc in much the same manner as Kant did -- as if logic had reached its final state with Aristotle, geometry with Euclid and mechanics with Newton.

The traditional philosophical doctrines function in Bachelard's view as a strait-jacket to philosophy of science. He also noticed that the same traditional philosophies served as a strait-jacket to the scientists themselves. One of Bachelard's aims was to furnish the scientists with an up-to-date philosophy that kept pace with the progress of science. He did, though, always pronounce this message from within philosophy of science. He never claimed to be a physicist or mathematician.

Another strait-jacket is common sense. If sciences are to stand on their own feet each and every one of them has to develop its own concepts and tools and construct its own objects.

You find much of the same protectionistic attitude among the Durkheimians. There are important affinities between the Durkheimians' sociology of knowledge and the historical epistemology. According to Durkheim our common sense is the main obstacle that scientific sociology has to overcome. And Bachelard's efforts to position his "applied rationalism" between two opposite types of doctrines (aprioric rationalism and naïve empirism) each of which he deemed insufficient on their own, resembles the argument used by Durkheim a few decades earlier to justify the method used in his last major work, *Les formes élémentaires de la vie religieuse*, 1912:

"Up till today [that is, up till the appearance of Durkheim himself and his disciples] only two doctrines have established their claims. According to one doctrine [Durkheim was referring to the Kantians] the categories can not be derived from experience. From a logical point of view the categories precede experience and constitute the conditions of experience. One imagines the categories as a number of simple and non-reducible given entities, immanent in human mind due to its original constitution. That is why one says that the categories are *a priori*. According to the other [the empiristic] doctrine the categories on the contrary are constructed, put together by bits and pieces, and it is the individual who undertakes this construction."²⁵

Durkheim stated that both doctrines lead to difficulties. By ascribing to the mind a mysterious ability to transgress experience the apriorists overlook that the categories of human thought "incessantly are created, dissolved and recreated; they are changing according to time and location."²⁶ The empirists on their part fail to acknowledge the categories which exist outside of the control of the individuals and which "are not only independent from us but forced upon us."²⁷

So far Durkheim and the representatives of historical epistemology argued in the same vein. They pleaded for a scientific thought that installs itself between two doctrines which each on its own is sterile. Moreover Durkheim and historical epistemology had in common an asymmetric relation to rationalism and empirism. The latter doctrine, empirism, appeared so to speak as a more dangerous enemy to scientific thought than the former. Neither Durkheim nor Bachelard did mind being labelled rationalist²⁸.

²⁵ É. Durkheim, *Les formes élémentaires de la vie religieuse. Le système totémique en Australie* [1912], P.U.F., Paris, 6 ed. 1979, p. 18.

²⁶ *Op.cit.*, p. 21.

²⁷ *Op.cit.*, p. 19

²⁸ It is well known that Durkheim on his own behalf accepted the label "rationalist", cf. the foreword to the first book edition 1895 of *Les règles de la méthode sociologique*, where he decline being labelled "spiritualist", "materialist" or "positivist": "the only [denomination] that I accept is *rationalist*." (P.U.F., Paris, 20 ed. 1981, p. ix) In connection with the cited passage in *Les formes élémentaires* where Durkheim attacked apriorism and empirism, he did all the same stand up for the first mentioned doctrine: "In spite of the significance that is usually attached to the label apriorists, these are [by comparison to the empirists] more respectful towards facts. They do not accept as an obvious truth that the categories are fabricated out of the same elements as our sensual representations, and therefore they are not obliged to systematically impoverish the categories, to empty them of all real content, to reduce them to merely verbal artefacts. On the contrary, the apriorists allow the categories to retain all their specific characteristics.

I do not wish to argue that the affinities between the Durkheimians and historical epistemology are unique. There are other traditions which in pertinent aspects are close to historical epistemology. The Marburg school is already mentioned.²⁹ The kind of rationalism advocated by Cassirer was rather close to Bachelard's "applied rationalism". In the chapter on the genesis of exact science in the first volume of *Das Erkenntnisproblem*, 1906, Cassirer wrote : "In the modern world view reason has conquered a new place and a new claim. [...] the conception of reality goes via mediating links, which can only be verified by the thought and not by direct perception."³⁰

When developing his own epistemology Bourdieu could in this and other respects find support in the Durkheimian tradition, but his use of the Durkheimian heritage is selective. In short he accepted those parts in the Durkheimians that were compatible with historical epistemology.

It is easy to distinguish many parallels between historical epistemology and Bourdieu's attempts to escape from the preconstrued philosophical concepts, the false dichotomies of social science (theory vs. empirical research is already mentioned, as micro versus macro, structure versus agent, etc), and common sense ("spontaneous" thinking, as Bourdieu puts it). Bourdieu's attitude towards the social sciences' predefined doctrines shows, *mutatis mutandis*, a kinship with Bachelard's crusade against philosophical doctrines, closed rationalism on one hand and empiristic and realistic doctrines on the other hand. Within sociology what Bachelard called closed rationalism could for example be compared to "intellectualism", to use Bourdieu's denomination. Intellectualism means making the sociologist's own socially determined thinking the point of departure without asking for its social and historical conditions. One example -- not uncommon in cultural studies -- is the social scientist's tendency (determined by that his own professional task is the delivery of interpretations) to treat for example cultural phenomena as texts, to be read as if the world exists in order to be interpreted, thereby neglecting that most human beings rather use than interpret cultural artefacts. Further Bourdieu has attacked hidden empiristic and realistic assumptions within sociology. Especially the first hundred pages of his sociological coursebook from 1968 show that Bourdieu, at least at that time, on behalf of sociology explicitly advocated an "applied rationalism" à la Bachelard.³¹

The apriorists are rationalists." (*Les formes élémentaires* [1912], *op.cit.*, 1979, p. 20). Durkheim did, though, frequently express his distance towards Cartesian versions of rationalism: "If you are heavily penetrated by the conviction that things are simple or might be reduced to simple elements, you also believe that everything is clear or that everything might be translated into clear terms." (*L'évolution pédagogique en France* [1938], P.U.F., Paris, 2 ed. 1969, p. 316f).

²⁹ Let me add a few words on the Marburgian neo-Kantian school. In France historical epistemology could formulate its position against different forms of "intuitionism": Descartes' "intuition", that is the immediateness and infallibility of pure thought as distinguished from the sensual perception, Kant's "reine Anschauung", Bergson's "intuition", or Breuer's "intuitionistic" thesis on the foundation of mathematics -- everything could be classified as "intuitionism". This packing together was facilitated by the translation convention that the German *Anschauung* was to be replaced by French *intuition*. If we move to the home country of Kantianism the situation was different. There certain neo-Kantians embraced points of view that resemble those of historical epistemology. This goes first and foremost for the Marburg school: Hermann Cohen's emphasis on the mobile and unfinished character of thought, Paul Natorp's attempt to (within the framework of Kant's theory of knowledge) make justice to both the non-Euclidean geometry and Einstein's theory of relativity, and so on. Among the Marburgians Ernst Cassirer was the one whose work exhibit the most striking similarities with French historical epistemology. In Cassirer we find a constructivist and relationist way of thinking that is similar to historical epistemology. Further, we find essentially the same way of interpreting the importance of the new physics for the theory of knowledge, a similar critic of obsolete philosophical positions as empiricism and intuitionism, and the ambition to situate the scientific thought in its historical context. Since French historical epistemology was a rebellion directed against i.a. the dominating neo-Kantianism it might appear peculiar that it corresponds to a German movement within neo-Kantianism, the Marburg school. (They even had some enemies in common, as Bergson and certain French neo-Kantian philosophers.) The reason is that neo-Kantianism in the early 20th century was the apostolic all-embracing church of German philosophy, able to include positions which a few decades later in a French context could appear as anti-Kantian.

³⁰ E. Cassirer, *Das Erkenntnisproblem*, Bd I [1906], 2 ed., Berlin 1911, p. 318.

³¹ P. Bourdieu, J.-C. Chamboredon and Jean-Claude Passeron, *Le métier de sociologue*, Livre I, Mouton/Bordas, Paris 1968. It is noticeable that this is the only textbook for educational purposes in Bourdieu's oeuvre. Later on he

Third principle: the ruptures, the obstacles

The sciences have, according to Bachelard, to achieve ruptures with all habitual forms of thought which serve as obstacles to the progress of scientific thought, both philosophical doctrines and common sense.

Bachelard confessed that traditional philosophies served as a strait-jacket also for his own thinking. In 1940 he published two bar charts representing the “epistemological profiles” of his own personal conception of the concepts mass and energy.³² As indicated by the height of the bar in the middle of the charts he judged his own conceptions to be marked above all by “classical rationalism of rational mechanics”, which is the position of Newton and Kant³³. In Bachelard’s view this is normal and not at all a shortcoming. The obstacles are necessary and you have to work your way through them. According to Bachelard the struggle to overcome epistemological obstacles and errors is a *differentia specifica* for scientific thought. New knowledge does not arise because of a flash of genius that allows us to throw old knowledge away. The erroneous conceptions are no simple mistakes that can be removed by will. The sciences and the philosophies of science progress slowly and discontinuously by means of incessant new confrontations with old mistakes. “[...] the new experience says *no* to old experience,”³⁴ Bachelard wrote in the programmatic introduction to *Philosophie du non*. The obstacles and errors are thus inevitable in the progress of science, although the scholars themselves tend to imagine things otherwise. They believe that “knowledge springs forth from ignorance as light out of darkness” and do not realise that “the spiritual darkness owns a structure”, that there is no easy way of getting rid of the errors one by one. The errors are co-ordinated, “ignorance is a fabric of positive, stubborn connected errors “.³⁵

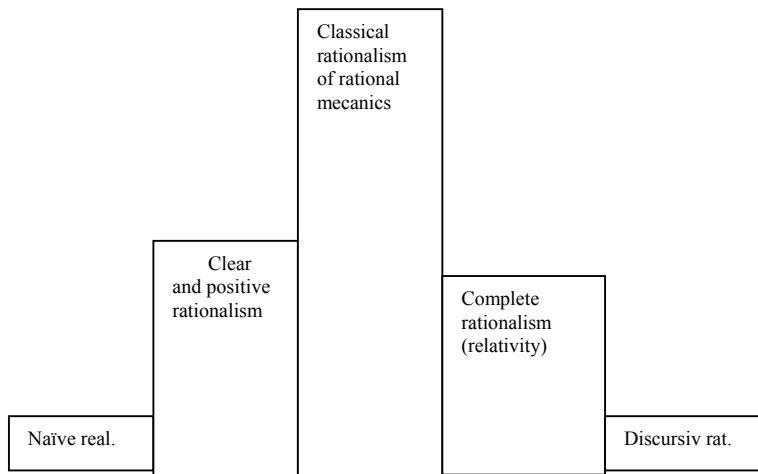
has preferred to present the epistemology implicitly in his own research and writings. The trivial fact that *Le métier de sociologue* was translated to Italian and Spanish in 1976 but only recently to English and German might be one explanation why Bourdieu’s epistemology seems to be better understood in southern Europe and Latin America than in the German and especially the English language area.

³² Bachelard, *La philosophie du non. Essai d’une philosophie du nouvel esprit scientifique* [1940], P.U.F., Paris, 8 ed. uppl. 1981, pp. 43, 45.

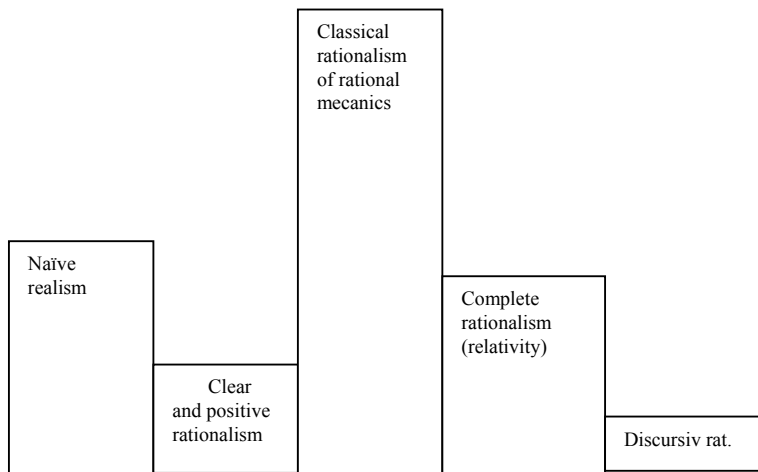
³³ Cf. *op.cit.*, pp. 27-30.

³⁴ *Op.cit.*, p. 9.

³⁵ *Op.cit.*, p. 8.



Bachelard's "epistemological profile" of his personal notion of mass



Bachelard's "epistemological profile" of his personal notion of energy

(Bachelard, *La philosophie du non*, 1940)

To understand the radicality of Bachelard's argument we must keep in mind that positivism still held a strong position within French philosophy of science. Comte's idea that the human spirit was eventually to reach the definitive positive stage was very much alive. Old times prejudices were the sooner the better to sink into oblivion, which ought to be easy enough since they were to explode like trolls in the sun when exposed to the light of modern science, which was procuring truths that from the perspective of the positivists had always been there, immanent in reality itself, only waiting to be revealed.

Among the worst obstacles are, according to Bachelard, the models borrowed from the outside and used as metaphors in the sense of analogous images. One of his reoccurring examples is when society be means of a model fetched from biology is perceived as an organism. Another example is Bohr's planetary model of the atom. Once again we meet with Bachelard's anti-realism.

This argument might, by the way, perhaps solve the enigma of the mysterious split in Bachelard's oeuvre between the epistemology of the hard sciences on the one hand and the writings on poetic images on the other. According to Bachelard the same imaginative and image-creating faculty and the same uses of metaphors are destructive to rigorous science and a blessing to poetry. Thus Bachelard contrasts two opposite poles in the realm of the spirit, both essential to the progress of mankind, but they must not be mixed. Further there is a common foundation for Bachelard's epistemology and his poetics, which is his anti-realism -- at least towards the end of his life. Initially he studied poetic images by collecting metaphors associated with the four elements water, air, earth and fire, but in his last three books, the three poetics, he reached the conclusion that images in poetry don't represent anything. They must not be understood as products of a pre-history, products of influences or products of perception. Thus the two seemingly incompatible halves of Bachelard's oeuvre were eventually connected by a radical anti-realism.

It is easy to observe an affinity between Bachelard's constant invitation to struggle with the obstacles and errors, and Bourdieu's insisting on the close combat with all the false antinomies and other hidden presuppositions of social science and his resistance against the importation of models and metaphors from outside. A less polemic scientific habitus would imply that you should first and foremost do your own thing. Not so for Bachelard or Bourdieu, for whom polemics constitutes a pertinent ingredient of the scientific work itself and not some external and dispensable social game.

One evident difference is that Bourdieu is a social scientist. He has during the years paid attention to the specific obstacles and errors of social science, for example the circumstance that this kind of scientific endeavour is itself part of the world it is investigating. He did already in the 1960's emphasise the permanent vigilance needed in order not to fall victim to the spontaneous conceptions produced within the realm of study: in the sociology of education the myth of inherit talent, in the sociology of art and literature the myth of the uncreated creator, etc.

Forth principle: the primacy of relations

I will very hastily touch upon some other affinities between Bachelard's programme and Bourdieu's work. One is the "relativism", that is the position that rigorous scientific work entails the analysis of systems of relations rather than the investigation of separate elements. In emphasising the primacy of the system of relations Bourdieu himself has more often pointed to Cassirer as a forerunner, but much of the same relationist conceptions are to be found in historical epistemology.

Bachelard's relationism had some connections to his critique of substantialism, by which he not only meant the search for a hidden simple substance or essence behind the appearances (in which case he could have stuck to the term "realism") but also the tendency to among various characteristics of a phenomena chose one and only one property which is then to represent all other properties. Among Bachelard's own examples are positivistic theories of the atoms where weight was regarded as the primary or even the only criteria for scientific knowledge of the elements, which in turn implied that the measurement results rather than the objects measured constituted the scientific reality. In contemporary social sciences concepts like race, class and gender are not seldom used in a substantialistic manner in this sense.

Fifth principle: constructionism

In Bachelard's view rigorously constructed objects are in a sense more "true", richer, more objective, than those given in the immediate experience. The objects may not be taken for granted nor imported from other disciplines or from common sense knowledge. Further, each science should constructs its own objects.

In Bourdieu's research you find a related emphasis on the necessity of rigorously construed objects, and many demonstrations on how to reach at construed social classes, construed trajectories, construed positions of agents, etc.

Sixth principle: regional epistemologies

Finally, Bachelard's late writings on "regional epistemologies" and the *culture* or *cité* of the scientists are somewhat related to his insisting on that the subject of scientific knowledge should always be located in a specific time and a specific place, and within the flesh and blood of scholars working in their relatively autonomous scientific disciplines. Bachelard rejected every transcendental notion of the subject of scientific knowledge and all dreams of a unified science.

Bachelard was by no means a sociologist. In comparison with his "regional epistemologies" Bourdieu has of course developed much more advanced demonstrations of the necessity of "socioanalysis" as an integrated part of the craft of the sociologist. The reflexion on the social conditions of scientific work, the analysis on the social positions of the scientists themselves and their strategies and the scientific field in which they are incorporated -- all of this is according to Bourdieu fundamental to sociological research itself and is not to be exiled to separate disciplines as theory of knowledge, sociology of knowledge, social history of science, etc.

Bourdieu on rhetorics, rhetorics in Bourdieu

We could talk for a long time on how Bourdieu's works could contribute to the themes of this seminar, that is the study of rhetorics, knowledge, and mediation. He has always emphasised the rhetoric dimension of culture, the "symbolic power" in his own terminology, that is i.a. the ability of language or cultural artefacts to produce effects on others. Symbolic capital is not a capital unless it produces effects, that is unless it is by others perceived and acknowledged as a valuable asset.

Beginning in the mid 1970's Bourdieu and his collaborators have also published numerous works on "fields" that should be of interest to specialists in rhetorics. Take for example Bourdieu's conception of "fields of cultural production" (i.e. art, literature, science, religion etc). Here he

suggests and demonstrates, most thoroughly in *Les règles de l'art*, a two-fold research strategy.³⁶ You should study on the one hand the social field and on the other hand the space of possibilities, while paying respect to the specific logic of each one of them. The first system is in the case of literature defined by the relations between positions occupied by authors, editors, critics, and institutions as publishing houses, literary journals, theatres, etc. The second system (in his lecture this morning Bourdieu used the term “semantic field”) comprises the works but also the genres, the styles, the effective rhetoric means, etc. The space of possibilities has its own logic which *as a whole* should be related to the social space. When analysing French literature of mid 19th century you should in other words avoid traditional externalistic short-circuits by connecting for example the novel *Madame Bovary* directly with its author, his family background or social conditions or the social characteristics of his audience. Simply put, if literature constitutes a fairly mature field with a sufficient degree of autonomy, then we might suggest that the relation between *Madame Bovary* and *La dame aux camelias*, as well as the relation between stylistic means used in each of these two works, will be homologous to the relation between the authors Flaubert and Dumas Fils as positioned in social competition with each other and other authors, for example Champfleury. Thus within the social field you find a system of relations between positions occupied by agents (Flaubert, Dumas Fils, Champfleury) homologous to the system of relations between literary schools (l'art pour l'art, bourgeois literature, realism). In the next step you might search for homologies to the broader social space and its divisions in a intellectual avant-garde public, a broader bourgeois public, and the political sphere.

This research strategy proposed by Bourdieu transgresses the oppositions between externalistic and internalistic interpretation, while at the same time preserving all the progresses accomplished by rhetoricians and other specialists in internalistic interpretation. The internal properties of the artefacts of the space of possibilities are to be respected. Bourdieu's method also might offer a possibility to come to grips with what Bourdieu calls “culturalism”, which he attacked already in the mid 1960's and which as far as I understand is rather wide-spread within media and cultural studies. Culturalism means the search for an over all principle -- today “the spirit of the 90's”, “postmodernism”, “postmaterialism” -- which penetrates culture as a whole. From Bourdieu's perspective the culturalist approach means a short-circuit since it connects the cultural artefacts directly with the audience and neglects the specific logic of and struggles within the fields of production where these artefacts are constituted.

In the context of this seminar, it seems appropriate to finish with a few remarks on the, if you wish, rhetorics of Bourdieu's work itself. Bourdieu's style, often criticised for being too complicated, is in his own opinion an appropriate tool not only because the objects under study are complex, but also in order to overcome many kinds of epistemological obstacles. In the preface to the German translation of *La distinction* in 1982 there was a long sentence, the form of which confirmed its content:

“[...] the style of the book, whose long, complex sentences may offend -- constructed as they are with a view to reconstituting the complexity of the social world in a language capable of holding together the most diverse things while setting them in rigorous perspective -- stems partly from the endeavour to mobilize all the resources of the traditional modes of expression, literary, philosophical or scientific, so as to say things that were de facto or de jure excluded from them, and to prevent the reading from slipping back into the simplicities of the smart essay or the political polemic.”³⁷

Or to cite from a German interview given by Bourdieu on the occasion of the publication of the same book: “My texts are filled with instructions aimed at preventing the reader from deforming or

³⁶ P. Bourdieu, *Les règles de l'art. Genèse et structure du champ littéraire*, Seuil, Paris 1992.

³⁷ P. Bourdieu, *Die feinen Unterschiede. Kritik der gesellschaftlichen Urteilskraft*. Suhrkamp, Frankfurt am Main 1982, p. 14. I here cite Richard Nice's English translation of the same passage (*Distinction. A Social Critique of the Judgement of Taste*, Routledge & Kegan Paul, London 1984, p. xiii).

simplifying”³⁸. Ten years after its publication Bourdieu in a French radio interview made clear that “to me the most interesting thing with *La distinction* is the upheaval of the form [---] In its style the book is an avant-garde book, that is I have combined five or six uses of language that are normally incompatible. Next to each other there are analyses that might be called theoretical or philosophical, descriptions that you might wish to call literary, and raw but construed documents in the form of interviews that mix direct, indirect and semi-direct speech, [...] statistics etc.”³⁹ In the same interview Bourdieu mentions the possibility to use a literary form in order to say something in a few worlds that in a scientific language would need complex discourses. You might find much of the same avant-garde character in his journal *Actes de la recherche en sciences sociales*, which when it comes to rhetorics was a rather revolutionary project when it was started in 1975.

Finally I wish to share a discovery with you. When I read *Les règles de l'art*, 1992, I suddenly realised that this is between the lines a book on Bourdieu's own sociological endeavour. While celebrating Manet's, Flaubert's, Virginia Woolf's or William Faulkner's revolution in art and literature, Bourdieu over and over again pays attention to their ability to master an extremely broad register of artistic and literary instruments, which gives them access to different points of view on one and the same object. Manet invented painting techniques to capture the objects under different conditions and from different perspectives. The novelists developed narrative instruments that allowed them to produce various points of view on the events and characters. This is fundamentally what Bourdieu's craft of sociology is about: to exploit all important instruments of objectivation inherited from philosophy, science, art and literature in order to establish a multitude of angles from which the object can be constructed and studied.

³⁸ P. Bourdieu, *Choses dites*, Minuit, Paris 1987, p. 67.

³⁹ Radio emission "Le bon plaisir de Pierre Bourdieu", France Culture, 23 June 1990.