

ROAR, the University of East London Institutional Repository: http://roar.uel.ac.uk

This paper is made available online in accordance with publisher policies. Please scroll down to view the document itself. Please refer to the repository record for this item and our policy information available from the repository home page for further information.

To see the final version of this paper please visit the publisher's website. Access to the published version may require a subscription.

Author(s): Derek Robbins

Article Title: John Stuart Mill and Auguste Comte: a trans-cultural comparative epistemology of the social sciences.

Year of publication: 2011

Citation: Robbins, D. (2011) 'John Stuart Mill and Auguste Comte: a trans-cultural comparative epistemology of the social sciences. Journal of Classical Sociology, 11 (1) 57-74

Link to published version:

http://dx.doi.org/10.1177/1468795X10391456

Information on how to cite items within roar@uel:

http://www.uel.ac.uk/roar/openaccess.htm#Citing

John Stuart Mill and Auguste Comte: a trans-cultural comparative epistemology of the social sciences.*

Introduction.

In La formation de l'esprit scientifique (1938), Gaston Bachelard outlined a 'psychoanalysis of knowledge', suggesting that there had been an historical progression in modes of scientific thinking from 'prescientific' and 'scientific' states to the 'new scientific spirit' which emerged in 1905, coinciding with Einsteinian relativity. He elaborated his view of the new scientific spirit in Le rationalisme appliqué (1949). The legacy of these two texts is ambivalent. The question is open whether the new scientific spirit is founded on an applied logic of scientific discovery (to borrow from Popper's title) or is the product of a developmental social psychological history of rationalism. This ambivalence is at the core of the tensions between the positions of Pierre Bourdieu and Jean-Claude Passeron, as they were concealed in Le métier de sociologue (Bourdieu, Chamboredon, & Passeron, 1968) but subsequently revealed in, respectively, Méditations pascaliennes (Bourdieu, 1997) and Le raisonnement sociologique (Passeron, 1991). The issue in the present is whether social scientific epistemology should be grounded in logic or ontology. What kind of comparative epistemology of social science might be possible depends on the answer to this question, and, a fortiori, whether social science has universal validity and applicability or only relates to the socio-cultural conditions which generate it.

The purpose of this paper is to examine comparatively the philosophy of social science in England and France at about 1850, exploring, in other words, the rival traditions during Bachelard's 'scientific state'. The intention is that this should provide the foundation for future consideration of the relations between philosophy, politics, and social science in the two countries during the period of the 'new scientific spirit' and beyond, to the post-scientific present. My starting point, in other words, is the ambivalence of *Le métier de sociologue* (1968) and its deployment of Bachelard's ambivalence. I then use the conceptual apparatus which Bourdieu elaborated after the publication of *Le métier de sociologue* to analyse comparatively the work of John Stuart Mill and Auguste Comte. In doing so, I shall be hoping to use Bourdieu's concepts strategically in such a way that they will clarify the issues at stake in the opposition between Mill and Comte and simultaneously locate the orientation which I am deploying.

The logic of the social sciences as perceived in the 1960s.

In the same year, 1967, in which Habermas first published his *Zur Logik der Sozialwissenschaften* [On the Logic of the Social Sciences] (Habermas, 1970, 1988), Bourdieu and Passeron published (only in English) an article entitled "Sociology and Philosophy in France since 1945: Death and Resurrection of a Philosophy without Subject" (Bourdieu & Passeron, 1967). What all three authors had in common was that they had not been trained to be social scientists. Habermas had undertaken doctoral research on the 19th century German idealist philosopher Schelling which was reflected in his inaugural professorial lecture, subsequently appended to his *Knowledge and Human Interests* (Habermas, 1971). Bourdieu had produced a *diplôme d'études supérieures* on Leibniz's critique of Cartesian philosophy of knowledge under

_

^{*} I am indebted to Jean-Louis Fabiani and Emmanuel Pedler for their invitations to France to explore the ideas of this paper in sessions at the Ecole des Hautes Etudes en Sciences Sociales in Paris and Marseille; and I also acknowledge that the paper reflects work which has been undertaken with the assistance of funding from the ESRC for a project on the work of Jean-Claude Passeron (Ref: RES-000-22-2494).

the supervision of Henri Gouhier, for whom the history of philosophy was a form of philosophical engagement. Passeron had gained his diplôme d'études supérieures with a philosophical/psychological enquiry on mirror images and identity formation under the supervision of Daniel Lagache who had been one of the famous cohort of entrants to the Ecole Normale Supérieure in 1924 which also included Aron and Sartre and who had become a significant competitor to Lacan in controlling the development of French psychiatry. Habermas had been research assistant to Theodore Adorno and had been appointed to the Chair of Social Philosophy at the University of Frankfurt. Raymond Aron was the mentor of both Bourdieu and Passeron. Aron had written his doctoral theses before the war – seeking to establish a non-Hegelian philosophy of history – and it was only after his appointment to the Chair in Sociology at the Sorbonne in 1955 that Aron began to define himself as a sociologist and to take steps to institutionalise sociology as a discipline within the French higher education curriculum. As part of this process of institutionalisation, Aron established a research centre in the Ecole des Hautes Etudes en Sciences Sociales in 1960, subsequently known as the Centre de Sociologie Européenne. He appointed Passeron as his research assistant at the Sorbonne and Bourdieu as the secretary of his research centre. Aron generated American funding for empirical research and he needed a new generation of young researchers to undertake work which would complement or confirm his philosophical perspective. He was to find that Bourdieu, in particular, exhibited a disconcerting independence such that, after the May events of 1968, Bourdieu took control of the research centre while, in 1970, Aron was appointed to a Chair at the Collège de France where he was able to devote himself to the study of war and international relations and prepare his critical analysis of the work of Clausewitz. Like Aron, Passeron was involved in the institutionalisation of sociology. In the late 1960s he founded and headed a department of sociology at the University of Nantes and was then appointed head of sociology at the experimental university of Vincennes (subsequently Paris VIII) when it was founded in 1969 by governmental decree as an innovative pedagogical response to the student unrest of the previous year.

Habermas, Bourdieu and Passeron were not trained to be social scientists but, rather, could be said to have been trained philosophically. However, their training within different philosophical traditions meant that they sought to generate very different philosophies of social science. Habermas began his *On the Logic of the Social Sciences* with a clear articulation of what he took to be the contemporary problem:

"The once lively discussion initiated by Neo-Kantianism concerning the methodological distinctions between natural-scientific and social-scientific inquiry has been forgotten; the problems that gave rise to it no longer seem to be of contemporary relevance. Scientistic consciousness obscures fundamental and persistent differences in the methodological approaches of the sciences. The positivistic self-understanding prevalent among scientists has adopted the thesis of the unity of the sciences; from the positivist perspective, the dualism of science, which was considered to be grounded in the logic of scientific inquiry, shrinks to a distinction between levels of development. At the same time, the strategy based on the program of a unified science has led to indisputable successes. The nomological sciences, whose aim it is to formulate and verify hypotheses concerning the laws governing empirical regularities, have extended themselves far beyond the sphere of the theoretical natural sciences, into psychology and economics, sociology and political science. On the other hand, the historical-hermeneutic sciences, which appropriate and analyze meaningful cultural entities handed down by tradition, continue uninterrupted along the paths they have been following since the nineteenth century. There is no serious indication that their methods can be integrated into the model of the strict empirical sciences. Every university catalogue provides evidence of

this actual division between the sciences; it is unimportant only in the textbooks of the positivists.

This continuing dualism, which we take for granted in the *practice* of science, is no longer discussed in terms of the *logic* of science. Instead of being addressed at the level of the philosophy of science, it simply finds expression in the coexistence of two distinct frames of reference." (Habermas, 1988, 1-2).

Bourdieu and Passeron, together, would have agreed with Habermas's essential representation of the problem, but there are elements of Habermas's opening statement which signal the respects in which, together, Bourdieu and Passeron would have differed. Notably, they would have been in agreement with each other in resisting Habermas's contention that the lack of communication between the 'humanities' and the 'sciences' had to be 'addressed at the level of the philosophy of science'. In collaboration with Jean-Claude Chamboredon, Bourdieu and Passeron published Le métier de sociologue in 1968. The text was sub-titled 'préalables épistémologiques' [epistemological preliminaries]. The introduction – 'Epistemology and methodology' – had a sub-section entitled 'epistemology of the social sciences and epistemology of the natural sciences' in which the authors reflected on the dualism identified by Habermas. Bourdieu et al. argued that the supposed philosophical dualism amongst social scientific practitioners between hermeneutics and positivism was a construct designed by both camps to establish their distinction. At each distinctive extreme there was a lack of awareness 'of the exact philosophy of the exact sciences' (Bourdieu, Chamboredon, & Passeron, 1991, 7). The way to escape the situation in which caricatures and counter-caricatures were mutually reinforcing, consolidating division, was, consequently, to undertake an analysis of social science in practice rather than a detached exploration of its logical status. As Bourdieu et al. put it:

"The way to move beyond these academic debates, and beyond the academic way of moving beyond them, is to subject scientific practice to a reflection which, unlike the classical philosophy of knowledge, is applied not to science that has been done – *true* science, for which one has to establish the conditions of possibility and coherence or the claims to legitimacy – but to science in progress." (Bourdieu, Chamboredon, & Passeron, 1991, 8)

To take this step involved moving from what Bachelard had characterised as the 'scientific state' towards an acceptance of what he called the 'new scientific spirit', in that it involved a renunciation of science as static cognition and an acceptance, instead, of its dynamic instrumentality. It is not surprising that Bourdieu et al. cite Bachelard in elaborating what is required to develop an epistemology of the social sciences which is in accord with the 'new scientific spirit':

"This specifically epistemological task consists in discovering, within scientific practice itself, which is constantly confronted with error, the conditions in which one can extract the true from the false, moving from a less true to a more true knowledge, or rather, as Bachelard puts it, an 'approximated, that is to say, rectified knowledge'. Transposed to the social sciences, this philosophy of scientific work as the 'unceasing polemical action of reason' can yield the principles of a reflection capable of inspiring and controlling the concrete acts of a truly scientific practice, by defining the specificity of the principles of the 'regional rationalism' characteristic of sociological science." (Bourdieu, Chamboredon, & Passeron, 1991, 8).

There is no evidence in *Le métier de sociologue* to lead us to suppose that Bourdieu et al. were aware of Habermas's work in 1967/8, but their common opposition to the position which he

represented as advocate of 'academic', 'philosophical', 'logical', 'detached', or 'idealist' philosophy of social science concealed the extent to which Bourdieu and Passeron differed from each other. In 1966, Bourdieu had singly published "champ intellectuel et projet créateur" (Bourdieu, 1966) [intellectual field and creative project, Bourdieu, 1971]. Here his argument was predicated on a model which was to pervade all of his thinking. Authors of all kinds, whether novelists or scientists, produce work which has its motivating origin in their social conditions, shaped by their inherited attitudinal dispositions, but communicate that work within 'fields' which are socially constructed, institutionalised discourses. The process of production or publication is one of struggle whereby the author either seeks to retain the integrity of his intention, resisting the anticipated reception of the 'field' and therefore risking all recognition, or accepts the subordination of his intended meaning to the meaning imputed by the 'field', thereby securing success and reputation. Bourdieu argued that all intellectual production is situated on a continuum between these extremes, but the important point is that, from an early stage in his career, Bourdieu operated with a model which assumed that work is generated as a result of a process which operates on two levels: indigenous experience is expressed in the language of objectified fields of discourse. This is not conceived of as a static relationship. There is a continuous reciprocity between the two levels and some authors contrive to constitute the fields within which they place their works, but the underlying assumption is that activities within the intellectual field are driven by primary, experiential orientations. Intellectual activity is strategic in the interest of fulfilling non-intellectual goals. Intellectual superstructure does not reflect socio-economic substructure but they are in constantly changing correlation.

In "Sociology and Philosophy in France since 1945" Bourdieu and Passeron had attempted to apply the intellectual field/creative project framework to their own situations. In recognizing the opposition between American neo-positivism and humanistic structuralism they supplied sociohistorical explanations, accepting, for instance, that the humanistic strain in the work of Lévi-Strauss was a consequence of the influence of existentialism which itself had been the product of the experience of resistance and liberation of a generation of French intellectuals. They knew that they were philosophers-turned-sociologists who were seeking, as a consequence, to propagate a philosophically sensitive sociology in opposition to 'professional' American sociologists who claimed that their neo-positivism was a-philosophical. However, Passeron chose, in the end, not to subject intellectual distinctions to socio-historical scrutiny. He had been sceptical of Bourdieu's attempt to analyse the development of photographic practice by reference to the emergence of photographic clubs, preferring, instead, to explore the language developed by discreet social groups to articulate their responses to photographic images, in comparison with the consecrated aesthetic discourse of art appreciation. La reproduction (Bourdieu & Passeron, 1970) was a text which papered over the cracks between their positions as much as had Le métier de sociologue. Bourdieu's immediate representation of the message of the book in his "Reproduction culturelle et reproduction sociale" (Bourdieu, 1971) was one which Passeron did not share in that, again, cultural transmission was 'reduced' to a matter of social position-taking, deprived of its autonomy. The same divergence is apparent, certainly retrospectively, in Le métier de sociologue. They both signed up to the notion that Bachelard's 'applied rationalism' should be the methodological formula for unifying social science within a self-criticising and reflexive epistemic community, but Bourdieu was more interested in developing the social conditions which would enable such a community to exist whereas Passeron became steadily more interested in analysing the concepts deployed in sociological discourse. Perhaps mediated by the influence of Aron, Passeron became more interested in the boundaries between plural, applied rationalisms, whilst Bourdieu sought to develop an ontologically grounded positivism, more in accord with Bachelard's psychoanalysis of knowledge. Habermas argued that the contemporary 'scientistic consciousness' was intent on emphasizing the unity of the sciences and was, in the process, de-differentiating between

discourses. In this sense, *Le métier de sociologue* deployed Bachelard's formula to unify social science and to de-differentiate between disciplines and ideological positions in a way which was alien to Passeron's later attempts to identify the practical logics of history, sociology, economics, or anthropology. It could, therefore, be said that Bourdieu's dominant input to *Le métier de sociologue* was Durkheimian, in the tradition derived from Comte, whereas Passeron's orientation had an affinity with the non-idealist logic of social scientific explanation introduced by John Stuart Mill.

The early 19th century contexts of the production of philosophies of social science.

The philosophical positions which I have attributed to Habermas, Bourdieu and Passeron correlate with the ideologies or presumed social functions of intellectuals and universities as they developed in Germany, France and England from the beginning of the 19th Century, and these need to be summarised before giving particular attention to the thinking of Comte and Mill. An unavoidable starting-point is in a comparison between the responses to, and effects of, Kantian philosophy. Kant taught throughout the second half of the 18th Century in Königsberg within a system in which a new nation state (Prussia) saw the primary purpose of the university as being to deliver trained and obedient state functionaries. He taught in the lower faculty which, since medieval origins, was thought to be subservient to the dominant faculties and where instruction was thought only to be preparatory to the dogmatic instruction which took place in these higher faculties (of Law, Theology, and Medicine). Within the lower faculty, Kant developed a philosophy of knowledge which emphasized the a priori structural determinants of all forms of knowledge. In other words, he developed a position which was not just one amongst other possible philosophical positions but one which argued that the essential raison d'être of philosophy was to explore the limits of all forms of knowledge and their claims to truth. The importance of *The Conflict of the Faculties*, one of Kant's last works (Kant, ed. Gregor, 1992), was that, in it, Kant sought to institutionalise the a priorism of his critical philosophy. The philosophy faculty was to embody proactive consideration of the grounds of knowledge of everything communicated in the university and, as such, was to challenge the authoritarianism of the prescribed curriculum sponsored by the state. The different reactions to the Kantian legacy mainly arise from the distorting effects of Napoleon's domestic and imperial policies. Within France, there were no universities in the 19th century until 1896. The 22 universities which had previously existed before 1789 were abolished by the Revolution. Instead, Napoleon instituted specialised écoles to offer professional and technical training and the old universities were fragmented into independent faculties. Professors and teaching staff were state appointments and servants of the state. The 1795 Convention had placed education under local control, but, instead, Napoleon established the Imperial University. By this was meant the entire system of administrators and teachers at primary, secondary and tertiary levels, all employed and supervised by the state. The system was run by the Grand Master and the Conseil de l'Université, and the country was divided into administrative districts called academies headed by rectors, with two inspecteurs d'académie. Napoleon's laws were aimed to establish a monopoly of education to combat the competition of religious schools for students. Teachers not employed by the state were allowed to teach, but confessional schools were required to be incorporated into the University and to pay a yearly fee into its treasury. The Imperial monopoly was essentially a mechanism of surveillance whereby the state could keep control over the activities of the Church. The idea that universities were institutions dealing with the whole of human knowledge was abandoned. The elements of the former universities were fragmented into independent 'faculties' which were designed to provide professional training. They were closely associated with secondary schools, both by assessing the work of students in lycées and by accrediting future school teachers. In mid-19th century France, 16 towns had

faculties. All of these towns had, minimally, faculties of sciences and letters (but not necessarily, for instance, faculties of medicine or theology).

Napoleon's military aggression had an unintended opposite effect on the development of German universities. In the settlement of the Treaty of Tilsit of 1807, Prussia lost the territory which contained the University of Halle. Plans were immediately made to establish a new university in Berlin and there was sophisticated debate about what should be the nature and function of the new institution. Those most involved in the debate were a younger generation of post-Kantian philosophers, notably Schelling, Fichte, Schleiermacher, von Humboldt and Hegel. These transformed the Kantian notion of a critical faculty within the university. The post-Kantians undermined Kant's commitment to rationality and emphasized, instead, the primacy of identity, either of the self or of the state, discovered through historical and cultural research. Their influence contributed to the consolidation of an ideology of a liberal university which, as a total institution, performed the critical function for society which Kant had only envisaged for philosophy within the institution. It was this ethos which dominated throughout the 19th Century in Prussia and generated German historical and cultural scholarship. At the end of the 19th Century, it generated the alternative, hermeneutic, philosophy of social science which we associate with Dilthey, Simmel and Weber.

The effect of the Napoleonic wars on English society was to reassert pre-revolutionary privileges. In introducing his *A History of the English People in 1815*, Elie Halévy commented that in 1748 Montesquieu had praised the English constitution, associated with Whig governments, for the way in which it secured the liberty of the subject, but that, in 1815, there had been over thirty years of government by the Tories – the 'supporters of the Royal Prerogative'. For Halévy, this raised a 'delicate' problem which was

"... to understand the development by which a theory elaborated to defend a constitution regarded by the Whigs as essentially a free constitution served fifty or sixty years later to defend a constitution denounced by the Whig Opposition as oppressive and reactionary." (Halévy, 1987, 3)

By 1850 there were 4 main university institutions in England – Oxford (12th Century); Cambridge (13th Century); University College, London (1826) and King's College, London (1829) affiliated with the University of London, chartered in 1836; and Durham (chartered in 1832), but, in 1815, the two traditional universities remained bastions of social privilege, performing functions still essentially subordinate to the Church, offering neither training for state functionaries nor generating a critical intellectual elite. It was only after 1850 that the influence of the legacy of 18th century Evangelicalism, combined with the introduction of contemporary German philosophy, led to the emergence of a particular philosophical position which absorbed and re-legitimated the traditionally exclusive patronage of Oxford education. The prime mover was T.H. Green who became a student at Balliol College, Oxford in 1855 at the age of 19. Green spent summers in Germany in the early 1860s and gradually developed a moral philosophy which entailed an impulse towards benign social philanthropy. It was a philosophy which articulated a non-theological moral imperative for the benevolence which was an inherited disposition of evangelicalism. It was a philosophy which became a substitute for the ethos of classical education which had underpinned Oxford's production of the ruling classes of the British empire. This substitution was achieved by the alliance between the form of philosophy teaching advocated by those most responsible for the reform of Oxford education – Jowett and Pattison – and the *content* advanced by Green. The autonomisation of the teaching of 'philosophy', identified as 'Philosophical Idealism' or 'Oxford Idealism' was the consequence of an anti-clerical strategy. It was "to conquer Oxford and most other British Universities through the efforts of Green and his students" (Richter, 1964, 14.)

Comte's intellectual project.

Born during the Revolution, Comte was sympathetic to the central control exercised politically by Napoleon. Comte registered at the Ecole Polytechnique (founded in 1794/5) in October, 1814, and was one of the student leaders who supported Napoleon's return from Elba during the '100 days'. In his life of Comte, Henri Gouhier summarised Comte's naïve enthusiasm during this period in the following way:

"...everything was clear. The emperor had renounced the ambitious and despotic ideas which had been so harmful during the first part of his reign; how he had only one desire: to govern a free people and to work for civilisation; ..." (Gouhier, 1931, 60. my translation¹)

Comte's enthusiasm was for a reformed and reforming Napoleon. When, after the defeat of Napoleon and the restoration of the Bourbon monarchy, the Ecole Polytechnique was closed down, Comte founded an Association des Elèves de l'Ecole Polytechnique with cells throughout France and wrote an anti-government manifesto, dated June, 1816, addressed to the 'French people', entitled: "Mes Réflexions. Humanité, Vérité, Justice, Liberté, Patrie. Rapprochements entre le régime de 1793 et celui de 1816". The contention of the manifesto, which was implicit in its juxtaposition of a moment in the historical past and the present, was that, as Gouhier summarises, "les peuples jugent beaucoup mieux le passé que le présent et c'est ce qui explique la durée des plus affreux régimes" [people judge the past much better than the present which explains the durability of the most frightful regimes] (Gouhier, 1931, 69). Comte's goal became to subject contemporary events to the same kind of scrutiny as had traditionally been applied, too late, to those of the past. "Il faut dissiper le mirage du présent" [we have to dispel the mirage of the present], as Gouhier paraphrases (Gouhier, 1931, 69). This is not the place to explore in detail Comte's intellectual development. For this discussion, the important point is that Comte set himself a mission in which he would attempt to integrate the curricular orientation of the Ecole Polytechnique, as established, with his interpretation of its specific socio-political function. The government re-opened the Ecole in August, 1816, on terms which Comte found unacceptable. Within a year he had been introduced to Saint-Simon and became secretary to the group responsible for the publication of L'Industrie.

Comte was initially a devoted follower of Saint-Simon. In May, 1822, Comte wrote his *Plan des travaux scientifiques nécessaires pour réorganiser la société*. It was published that year with a limited circulation under the name of Saint-Simon and under the title of *Système de Politique Positive*. By 1824, Comte had decisively broken away from Saint-Simon. The *Plan des travaux scientifiques* offered Comte's first articulation of the relationship between the two tasks of reviewing the condition of the whole extent of human knowledge and of rebuilding a new social order. In 1826, Comte gave the first 'public' lectures of his projected *Cours de Philosophie Positive* in his own apartment in Paris. Illness caused an interruption to his scheme, but Comte gave the first lectures again in 1829, first of all in his own apartment and then, from December onwards, in a larger auditorium. The first volume of the *Cours de Philosophie Positive*, comprising the first three lectures, was published in 1830, and subsequent volumes were published in 1835, 1838, 1839, 1841 and 1842, making a total of 60 lectures. It was only between 1851 and 1854 that Comte published the four volumes of what was actually called the *Système de Politique Positive*, and he reprinted the early *Plan des travaux scientifiques* in

^{1 &}quot;... tout est clair. L'Empéreur a renoncé aux idées ambitieuses et despotiques qui furent si nuisibles pendant la première partie de son règne; il n'a plus qu'un désir: gouverner un peuple libre et travailler pour la civilisation; ..."

Volume IV, in order to try to establish that there had always been consistency of purpose from his earliest to his latest texts.

In the author's notice to the publication of the first volume of the *Cours de Philosophie Positive*, dated December 18th, 1829, Comte pointed out that the fundamental ideas contained in this first volume had been outlined in the *Plan des travaux scientifiques*. In his introduction of 1975 to a re-edition of the first 45 of Comte's lectures, published under the title *Philosophie première*, Michel Serres insisted that "... le positivisme n'est pas seulement une épistémologie, une théorie des sciences et de la science, il est une politique, une politique des sciences et par les sciences" [positivism is not only an epistemology, as theory of the sciences and of science. It is a politics, a politics of the sciences and by the sciences](Comte, int. Serres, 1975, 1) and he argued that the first lecture introduced an historical narrative whilst the second constructed a classification of knowledge. Although the sequence of lectures seemed to culminate in the recommendation of a positivist epistemology of social science, Comte's analyses of the state of knowledge in all the sciences and of their historical development were predicated on his prior commitment to social and political transformation. Countering what he regarded as prevalent misreadings of Comte, Serres summarised this position by asserting that:

"... positivism is not simply an objectivist epistemology with a neutral correlative and situated prior to our scientific activity, knowledge purged of illusion, rigour with ideology strained out, precision separated from metaphysical chat. It is, additionally and on the contrary, the historical and cultural analysis of the accretions of all kinds which for thousands of years have attached to this discipline called science and have fertilized it. It must be clearly stated: social practices are here the motors of the production of knowledge and its laws." (Comte, int. Serres, 1975, 11-12, my translation²).

That this is a correct reading of Comte's thought is more evident in his first work than in the sequence of publications which, cumulatively, constituted the Cours de Philosophie Positive. From the outset of the *Plan des travaux scientifiques*, in the first paragraph of the Introduction, Comte made assertions about the current state of society. Two systems are co-existing, one which is dieing out and the other which is tending to constitute itself. In conformity with this state of affairs, there are two movements in conflict – one of 'disorganization' and the other of 'reorganization'. In isolation, the first is tending to deep political and moral anarchy. By the second movement, society is led "vers l'état social définitive de l'espèce humaine, le plus convenable à sa nature" [towards the definitive social state of human kind, the one most suited to its nature] (Comte, ed. Grange, 1996, 235). Even though the old system, now described by Comte as the 'feudal and theological system' (236), is as enfeebled as it can be, the dominant tendency to be 'critical' still inhibits change. The only way to put an end to the current anarchy is to persuade civilised nations to "quitter la direction critique pour prendre la direction organique, ..." [renounce the critical direction in order to take the organic] (236). This is the primary need of the current period and such also in brief is 'le but général de mes travaux' [the general goal of my work] (236). There then follows an account of the attempts at reorganization made both by 'les rois' [kings] and by 'les peuples' [peoples]. The attempts made

pratiques sociales sont ici motrices de la production du savoir et des lois."

^{2 &}quot;... le positivisme n'est pas seulement une épistémologie objectiviste d'un corrélat neutre et posé là devant notre activité scientifique, savoir purgé du songe, rigeur filtrée de l'idéologique, précision séparée des causeries métaphysiques. Il est, aussi et au contraire, une analyse historique et culturelle des adhérences de tous ordres qui collent depuis des millénaires à cette formation nommée science et la fécondent. Il faut le dire en clair: les

in good faith by kings to restore social harmony have failed and the decadence of the system has been the 'necessary consequence of the march of civilisation' (238). The error of the people is no less vicious but it is more excusable because they are seeking to align themselves with progress whereas the kings were blatantly reactionary. The people are setting about reorganization in the wrong way: "L'opinion dominante dans l'esprit des peuples sur la manière dont la société doit être réorganisée, a pour trait caractéristique une profonde ignorance des conditions fondamentales que doit remplir un système social quelconque pour avoir une consistence véritable." [the dominant opinion in the mind of peoples on the manner in which society should be reorganized has as its characteristic trait a deep ignorance of the fundamental conditions which any social system whatever must fulfill to have a true consistency (241). The people have set about reorganizing society by criticising previous social organization rather than by determining the new needs which are consequent on changing social circumstances. They have emphasized freedom from governmental authority in a way which sustains the assumed relationship between individual and state which typified monarchical structures. The 'dogma of the unlimited freedom of conscience' has the effect of preventing "l'établissement uniforme d'un système quelconque d'idées générales, sans lequel néanmoins il n'y a pas de société, en proclamant la souveraineté de chaque raison individuelle" [the uniform establishment of any kind of system of general ideas, without which nevertheless there is no society, by proclaiming the sovereignty of each individual reason] (242). The apparent liberty of thinking in political affairs simply shows that political science has not yet reached the level of certainty achieved in these other sciences, but it would be a mistake to convert this transitory shortcoming into an absolute and eternal dogma. To make a fundamental maxim of liberty of conscience, concludes Comte in this part of his argument, "c'est évidemment proclamer que la société doit toujours rester sans doctrines générales. On doit convenir qu'un tel dogme mérite, en effet, les reproches d'anarchie qui lui sont addressés par les meilleurs défenseurs du système théologique." [evidently is to proclaim that society must always remain without general doctrines. We have to agree that such a dogma does, in effect, merit the reproach of anarchy which are levelled at it by the best defenders of the theological system] (243).

The new organic direction which has to be taken in effecting social reorganization demands, instead, that the scientific method which has secured authority for scientists in the natural sciences should now be deployed in respect of social and political phenomena such that change can be planned with comparable authority. On reflection, Comte says, his conclusion can be summarised in this one following idea: "les savants doivent aujourd'hui élever la politique au rang des sciences d'observation" [scientists today must raise politics to the level of the sciences of observation](272).

It is significant that Comte takes a very long time providing the social historical context for the kind of thinking that is now required before he offers his guidelines about precisely how that thinking should proceed. The important 'generalisation' which Comte introduced at this late point in the *Plan des travaux scientifiques* is his famous characterisation of the 'three states' of human knowledge.. He introduced this 'generalisation' boldly in the following way:

"By the very nature of the human mind, each branch of our knowledge is necessarily compelled in its progress to pass successively through three different theoretical states: the theological or fictional state; the metaphysical or abstract; and, finally, the scientific or positivist state" (272, my translation)³

³ "Par la nature même de l'esprit humain, chaque branche de nos connaissances est nécessairement assujettie dans sa marche à passer successivement par trois états théoriques différents: l'état théologique ou fictive; l'état métaphysique ou abstrait; enfin, l'état scientifique ou positif."

In considering politics as a science, Comte said that it had already passed through the first two stages and was ready for the third, but his proof is initially expressed in terms of his earlier periodisation of history. It appears that the prerequisites for the introduction of positivist political science are both intellectual and social. Comte argues that the other sciences had to have become dominantly positivist to allow for the positivist analysis of human behaviour in society whilst it was also necessary for the march of civilisation to have reached the point at which the implementation of positivist political thinking would be possible. That time had now come and Comte messianically announced the three series of works to be undertaken. The second and third were, respectively, the foundation of an educational system to reinforce the positivist perspective and the explanation of how collective activity should develop to enable men to modify nature for the benefit of all. The rest of the *Plan des travaux scientifiques*, however, was devoted entirely to the first series of tasks which had as its object

"... the development of the system of historical observations on the general progression of the human mind, destined to be the positivist basis of politics such that it will lose entirely both its theological and metaphysical character to become imprinted with the scientific character." (277, my translation⁴

In the remainder of the *Plan des travaux scientifiques* Comte devoted himself to a consideration of the development of political science, giving, for instance, detailed critiques of the work of Montesquieu and Condorcet. In other words, Comte embarked already here upon the analyses which were to be the culmination of the lectures given in the *Cours de Philosophie Positive*.

What was presented in the *Plan des travaux scientifiques* rather late in the argument as a 'generalisation' was offered firmly at the outset of the *Cours* as a 'law' which exemplifies in action the 'science positive' of both social statics and social dynamics. The method of Comte's proposed Cours is an exemplification of the method which the Cours seeks to legitimate. Comte proceeded to elaborate the characteristics of the three states and then repeated the evidence for the law, the first of which was an argument by analogy with individual intellectual development and the second of which was pragmatic. The most important pragmatic benefit of the law of the three states 'consiste dans le besoin, à toute époque, d'une théorie quelconque pour lier les faits, combiné avec l'impossibilité évidente, pour l'esprit humain à son origine, de se former des théories d'après les observations.' [consists in the need, at every epoch, for a theory of any kind to link facts, combined with the evident impossibility for the human mind at its origin to form theories on the basis of observations (55) In the first lecture Comte wanted to argue that the crucial lacuna in the development of knowledge is in respect of social phenomena. All that remains is to find the laws of social phenomena, to conclude, as he puts it, 'le système des sciences d'observation en fondant la physique sociale' [the system of the sciences of observation by establishing social physics (64). The first goal of his lectures would be to contribute to this crucial endeavour, but he was anxious to insist that this is not the same thing as the second, general goal, which is to offer 'un cours de philosophie positive, et non pas seulement un cours de physique sociale.' [a course of positivist philosophy and not just a course of social physics] (65)

⁴ "... la formation du système d'observations historiques sur la marche générale de l'esprit humain, destiné à être la base positive de la politique, de manière à lui faire perdre entièrement le caractère théologique et le caractère métaphysique, pour lui imprimer le caractère scientifique."

It is important to register, in other words, that positive social science is only the final piece in the jigsaw which constitutes the positivist system and, crucially, that the 'positivist' epistemology of the social sciences which appears to be articulated in the later lectures of the Cours is thought only to be possible in as much as it functionally requires the a priori input of the theory of philosophical positivism as a surrogate theology. When the study of social phenomena is committed to the positive approach, Comte argues that all possible phenomena will then have become subjected to a homogeneous conceptualisation – one which rejects explanation in terms of first causes. New observations in relation to all phenomena will develop our knowledge, but the fundamental principle of organization will have been achieved. The development of positive social science is the final piece in the jigsaw which achieves the universality of positive method in all sciences. Whilst there were still some hangovers of theological or metaphysical thinking in some sciences, the development of positive social science will make the system of positive thinking complete. It is the 'philosophie positive', the whole positive system which is realised as a result of the development of positive social science, the whole system 'deviendra capable de se substituer entièrement, avec toute sa supériorité naturelle, à la philosophie théologique et à la philosophie métaphysique, dont cette universalité est aujourd'hui la seule propriété réelle, et qui, privées d'un tel motif de préférence, n'auront plus pour nos successeurs qu'une existence historique.' [will become capable of being substituted entirely, with all its natural superiority, for theological and metaphysical philosophies whose universality is today their only real property and which, deprived of this advantage, will have no more than an historical existence for our successors (65). A dogmatic philosophy of science is to become the basis of a system of thinking which will generate a substitute religion having the same social effects as did the combined intellectual and ecclesiastical forces of medieval scholasticism. Comte finally summarised four fundamental properties of the 'philosophie positive' which he considered to be its main advantages. The first of these emphasized that the study of the forms which intellectual activity has taken is the best way, in fact 'le seul vrai moyen rationnel' [the only true and rational means [(70)], to expose the laws of logic of the human mind. Comte's approach here was almost phenomenological and he proceeded to criticise psychology as fiercely as Husserl was to do in his Logical Investigations. Comte outlined the procedures to be adopted in analysing 'social statics' and 'social dynamics' and stated categorically that "On voit que, sous aucun rapport, il n'y a place pour cette psychologie illusoire, dernière transformation de la théologie, qu'on tente si vainement de ranimer aujourd'hui, ..." [we see that under no circumstances is there any place for this illusory psychology, the last transformation of theology, the revival of which is so vainly attempted today] (71). Comte rejected any notion of internal observation and considered any psychology which sought to explain behaviour by reference to psychic essence to be operating metaphysically. The second and third properties of 'philosophie positive' related to education and to the artificiality of discipline boundaries, but the fourth needs some elaboration. Comte commented that he felt able to assume that his audience would agree that 'les idées gouvernent et bouleversent le monde' [ideas govern and overthrow the world] or, in other words, that 'tout le mécanisme social repose finalement sur des opinions' [all the social mechanism rests ultimately on opinions [(80). He pushed this anti-materialist assumption further in saying that all would be agreed that 'la grande crise politique et morale des sociétés actuelles tient, en dernière analyse, à l'anarchie intellectuelle' [the great political and moral crisis of contemporary societies relates, in the final analysis, to intellectual anarchy](80). Hence, for Comte, the overriding need to supply a coherent intellectual system to consolidate the achievements of the Scientific Revolution. Reverting to the law of the three states of knowledge, Comte claimed that the intellectual anarchy experienced by his contemporaries arose from the simultaneous use of the three philosophies which are radically incompatible – the theological, metaphysical and positive. 'Philosophie positive' is 'destined' to prevail and its absolute domination is almost accomplished. For Comte, there was no question of admitting co-existing spheres of meaning and he boldly concluded: "Complétant la vaste

operation intellectuelle commencée par Bacon, par Descartes et par Galilée, construisons directement le système d'idées générales que cette philosophie est désormais destinée à faire indéfiniment prévaloir dans l'espèce humaine, et la crise révolutionnaire qui tourmente les peuples civilisés sera essentiellement terminée." [Bringing to a conclusion the vast intellectual operation begun by Bacon, Descartes and Galileo, let us construct directly the system of general ideas which this philosophy is henceforth destined to make eternally prevalent in human kind so that the revolutionary crisis which tourments civilised peoples will be essentially ended] (82)

In summary, the epistemology of the social sciences which Comte articulated in his late lectures was inextricably linked with the realisation of a new form of social organisation. In her 'presentation' of extracts from Comte's work, entitled "philosophie des sciences", Juliette Grange insisted on describing Comte's philosophy of the sciences as 'positivisme historique' to differentiate his position from that of the positivist tradition. She argued that:

"It will be appropriate to understand Comte's project precisely, which was to prolong the history of metaphysics by a philosophy of science which is also a theory of knowledge" (Comte, int. Grange, 1996, 9, my translation)⁵

Comte's blueprint for positivist social science, as advanced in the last 15 lectures of his *Cours* (46-60), has been extrapolated from the historical progression within which it acquired its meaning as, paradoxically, a prolongation of a metaphysical frame of thinking. In particular, the 48th Lecture, containing an introduction to 'social statics and dynamics' and to research methods involving 'observation', 'experimentation' and 'comparison', has been taken out of the context set for it by the 46th lecture in which Comte re-emphasized the positivist political programme and the 47th Lecture in which he elaborated his contention that 'the notion of progress must necessarily precede the constitution of social science', concluding with a section on 'the indispensable historical foundation of sociology'. Comte's account of 'observation' makes it clear that his systematic understanding of the progress of human knowledge constituted the substance of his *a priori* organisation of observed facts. In introducing the 48th Lecture, Comte argued explicitly that the practice of social science should be seen to be embedded within the historical progression of human knowledge and should not be thought to be the operationalisation of an abstract logic of science:

"... in sociology as elsewhere, and even more than elsewhere, the positivist method will only be essentially appreciated after the rational consideration of its principal uses, in proportion to their gradual accomplishment: such that there can be no question here of a true, logical treatise preliminary to method in social physics." (Comte, int. Enthoven, 1975, 101, my translation⁶)

The articulation of a methodology of the social sciences is dependent on the elaboration, by analogy, of what has been learnt historically about the development of other sciences. The advance of social science has been especially retarded as a consequence of the malign influence

⁵ "Il conviendra de comprendre précisément la tentative de Comte, qui est de prolonger l'histoire de la métaphysique par une philosophie de la science qui soit aussi une théorie de la connaissance".

⁶ "… en sociologie comme ailleurs, et même plus qu'ailleurs, la méthode positive ne saurait être essentiellement appréciée que d'après la considération rationnelle de ses principaux emplois, à mesure de leur accomplissement graduel: en sorte qu'il ne peut ici être nullement question d'un vrai traité logique préliminaire de la méthode en physique sociale."

of metaphysical philosophy. Without engaging specifically with the work of any one philosopher, Comte contended that the emphasis on simple and practical observation had been undermined by philosophical scepticism:

"The anarchic social influence of the metaphysical philosophy of the last century, extending from doctrine to method, tended, by a blind destructive instinct, to prevent in some way every further intellectual reorganisation, by destroying in advance the only logical bases on which truly scientific analyses could rest, through this absurd theory of historical pyrrhonism, which still maintains today its pernicious action. Although its principle is no longer openly upheld. Exaggerating to the most excessive degree in respect of social events the general difficulties which are common to every exact observation of whatever kind, ..., these sophistical aberrations either wittingly or unwittingly have often been pushed to the point of dogmatically denying every true certainty in social observations, even direct ones." (Comte, int. Enthoven, 137, my translation⁷)

Whilst, for instance, in the Faculty of Letters at the Sorbonne, Victor Cousin was, in 1819 and 1820, presenting his course of lectures on 18th century moral philosophy, part of which was to be published in 1842 as the *Philosophie de Kant* (Cousin, 1842), considering Kant's 'critical' response to earlier metaphysical speculation, Comte resolutely sought to reject all forms of academic epistemology as intrinsically metaphysical and to recommend, instead, a practice for social scientists based on practical precedents established in all other sciences.

Mill's project.

John Stuart Mill's famously precocious intellectual formation was grounded in precisely the kind of philosophical metaphysics which Comte determinedly sought to discredit. The growth of 'philosophic radicalism', classically analysed by Elie Halévy, was, as his title suggests, the advancement of a reforming social and political programme, mainly associated with the recommendations of Jeremy Bentham, based on philosophical principles articulated by his collaborator – James Mill, father of John Stuart. In most of his book, Halévy paid attention predominantly to the work of Bentham, but in the third volume, devoted specifically to the philosophical underpinning of Bentham's proposed reforms, there is more consideration of the work of James Mill. Considering the views of both on the 'laws of thought and action', Halévy wrote that:

"The true aim which James Mill set before himself in working at the theory of the phenomena of the human mind was to arrive at the practical, and to make possible a new logic, a new morality and a new pedagogy. It was only after his death that Stuart Mill, his son and pupil, wrote out the logic of associationism. But Bentham and James Mill had already laboured to establish the pedagogy and the morality of the Utilitarians: ..." (Halévy, 1928, 455)

_

⁷ "L'anarchique influence sociale de la philosophie métaphysique du siècle dernier, s'étendant de la doctrine à la méthode, a tendu par un aveugle instinct de destruction à empêcher en quelque sorte toute ultérieure réorganisation intellectuelle, en ruinant d'avance les seules bases logiques sur lesquelles pussent reposer des analyses vraiment scientifiques, par cette absurde théorie du pyrrhonisme historique, qui prolonge encore aujourd'hui son action délétère. Quoique son principe ne soit plus ostensiblement soutenu. Exagérant, au degré le plus désordonné, au sujet des événements sociaux, les difficultés générales communes à toute exacte observation quelconque, ..., ces aberrations sophistiques volontaires ou involontaires ont été souvent poussées jusqu'à dénier dogmatiquement toute vraie certitude aux observations sociales, même directes."

As evidence of James Mill's 'true aim', Halévy referred to chapter 25 of his *Analysis of the Phenomena of the Human Mind*, published in 1829. It was in this text that James Mill developed further the 'associationism' which the movement had inherited from David Hartley's mid-18th century materialisation⁸ of Locke's 'way of ideas' advanced in the *Essay Concerning Human Understanding*⁹. Bentham and James Mill remained committed to the associationist view that social policy should be produced by working with the consequences of a human psychology which we would label 'behaviourist'. The education to which James Mill subjected his son was designed to equip his son to continue to follow through the 'necessarian' or determinist implications of associationist psychology for human action. It was as a part of James Mill's enactment of his associationist principles in the field of pedagogy that he sought systematically to engineer the development of his son's intellect. John Stuart Mill's *Autobiography* (the 'early draft' written in 1853-4) records, what is most known, how he was taught Greek from the age of three and Latin from the age of eight. Less known, perhaps, is Mill's recollection that:

"From about the age of twelve I entered into another and more advanced stage in my course of instruction – in which the main object was no longer the aids and appliances of thought, but the thoughts themselves. This commenced with Logic, in which I began at once with the *Organon* and read it to the Analytics inclusive, ..." (J.S. Mill, ed. Robson & Stillinger, 2006, 20)

It was about this time that Bentham wrote his *Essay on Logic*, which was only published posthumously in 1838 – 1843 (Bowring, volume viii, 213-293). The consequence of the father's introduction of the son to the study of logic was, however, in the end that the son would resist elaborating a metaphysically associationist logic and, instead, would devote himself to the articulation of the autonomous laws of logic.

In the year of his introduction to logic, 1818, John Stuart Mill proof-read his father's *History of India* which was a book which was 'saturated ... with the principles and modes of judgement of democratic radicalism then regarded as extreme' (J.S. Mill, ed. Robson & Stillinger, 2006, 28). In spite of the father's critique in his book of the actions of the East India Company, the father was appointed a year later to be one of the assistants to its Examiner of Indian Correspondence. In May, 1823, J.S. Mill was to be appointed to be under his father in the same position, remaining in the same post, apart from promotion, until retirement. J.S. Mill spent May,1820-July, 1821 in France as a guest of Jeremy Bentham's brother, Samuel, and he attended winter courses of lectures in the Faculty of Sciences at Montpellier, including a course on logic. On his travels, he encountered Jean-Baptiste Say whom he retrospectively described as "a man of the later period of the French Revolution, a fine specimen of the best kind of old French republican, one of those who had never bent the knee to Bonaparte though courted by him; ..." (J.S. Mill, ed. Robson & Stillinger, 2006, 62). Say was 'acquainted with many of the chiefs of the Liberal party' and, retrospectively again, J.S. Mill commented that "The chief fruit which I carried away from the society I saw, was a strong interest in Continental Libralism, of which I always afterwards kept myself au courant as much as of English politics" (J.S. Mill, ed. Robson & Stillinger, 2006, 62).

It is important constantly to emphasize the retrospective status of Mill's *Autobiography* because, as we shall see, it was in the 1820s, before commencing what was to become his *A system of*

_

⁸ Hartley, D., 1966.

⁹ Locke, J., 1961.

Logic, that J.S. Mill shook off the deterministic orientation of the associationist legacy of Bentham and his father, becoming convinced that it denied individual liberty. On returning to England from France, he was introduced to the work of Condillac by his father and persuaded by his father that Condillac's Traité des Sensations and Cours d'Etudes were works which were inferior to Hartley's Observations on Man. Whilst J.S. Mill's theoretical thinking was still dominated by that of his father, he claimed, nevertheless, to have reflected for the first time on political events in France during the previous thirty years and, at the time at which Comte was adapting the Napoleonic legacy for the new age, to have conceptualised those events as a process of removing 'absolute monarchy' and then falling 'under the despotism of Bonaparte' (J.S. Mill, ed. Robson & Stillinger, 2006, 64) such that 'the greatest glory I was capable of conceiving was that of figuring, successful or unsuccessful, as a Girondist in an English Convention' (J.S. Mill, ed. Robson & Stillinger, 2006, 66). James Mill commenced his Analysis of the Phenomena of the Human Mind in 1822. J.S. Mill read drafts in the years preceding its publication in 1829 and he read other writers on 'mental philosophy' but, in the Autobiography, he took 1822 as the starting point for his individual intellectual development, connected with the founding, in the winter of 1822/3, of the 'Utilitarian' Society and, at the same time, of the Westminster Review, which James Mill inaugurated with an introductory critique of the Edinburgh Review in which he exposed the 'thoroughly aristocratic composition' (J.S. Mill, ed. Robson & Stillinger, 2006, 94) of the British constitution. It was a time, as J.S. Mill recalled, 'of rapidly rising Liberalism' in Britain, when 'Radicalism, under the lead of the Burdetts and Cobbetts, had assumed a character which seriously alarmed the Administration' (J.S. Mill, ed. Robson & Stillinger, 2006, 100) and when, consequently, the 'Benthamic type of radicalism' received attention which was out of proportion to the number of its adherents. J.S. Mill's account renders 'liberalism' and 'radicalism' almost synonymous. The motor for reform seems to have been a common opposition to aristocratic privilege. J.S. Mill recollects that 'in the first two or three years of the Westminster Review, the French philosophes of the eighteeenth century were the example we sought to imitate ... '(J.S. Mill, 2006, ed., Robson & Stuillinger, 2006, 110), and it was in a subsequent grouping of young men – the Society of Students of Mental Philosophy – convened by George Grote from 1825, that J.S. Mill had the opportunity to pursue his study of logic. They first read political economy together, then logic, followed by analytic psychology through the study of Hartley. It was in this context that J.S. Mill first 'formed the project of writing a book on Logic, though on a much humbler scale than the one I ultimately executed' (J.S. Mill, ed. Robson & Stillinger, 2006, 124). This was a period of transformation in J.S. Mill's thinking which he was to call 'a crisis in my mental history' and, ceasing to write for the Westminster Review in 1828, he found the opportunity to redefine his position. J.S. Mill detailed the depression which affected him in the autumn of 1826 in a chapter of that title in the published edition of the Autobiography. It is well known that J.S. Mill considered that the education of his 'feelings' had been deficient and that he found solace in the work of Coleridge and Wordsworth. More importantly for our purposes, he attributed the impoverishment of his education to the inadequacy of the theory of associationism. Macaulay's critique of James Mill's Essay on Government, published in the Edinburgh Review in March, 1829, helped J.S. Mill to define more clearly the nature of the theory's error. Macaulay argued for 'the empirical mode of treating political phenomena against the philosophical' (J.S. Mill, ed. Robson & Stillinger, 2006, 164). J.S. Mill recalls that it was his reflection on the opposition between his father and Macaulay which merged at the time with the commencement of his systematic work on Logic to enable him to articulate the fundamental argument of his A System of Logic and, in particular, that of Book VI on the 'Logic of the Moral Sciences'.

Writing in 1853-4 (after the publication of *A System of Logic*), J.S. Mill expressed the conclusion which he derived from the debate between Macaulay and his father in the following way:

"... it appeared that both Macaulay and my father were wrong; the one in assimilating the method of philosophizing in politics to the purely experimental method of chemistry; while the other, though right in adopting an a priori method, had made a wrong selection of one, having taken, not the appropriate method, that of deductive branches of natural philosophy, but the inappropriate method of pure geometry, which not being a science of causation at all, did not require or admit of the sumation of effects." (J.S. Mill, ed. Robson & Stillinger, 2006, 166 and 168).

It seems likely, however, that, at about 1830, this was not yet the true nature of J.S. Mill's thinking. There are some cancelled sentences of the 'early draft' at this point in the text, the first of which states that "I did not at this time push my logical speculations any further" (J.S. Mill, ed. Robson & Stillinger, 2006, 168n), followed by recollections of his contemporary acquaintance with the work of the Saint Simonian school which are restored to the full text a few pages later. J.S. Mill had met Gustave d'Eichthal, a prominent Saint Simonian, in the middle of 1828, and had been given a copy of Comte's Traité de Politique Positive (even though Comte was no longer a Saint Simonian). In October, 1829, Mill wrote to d'Eichthal, indicating that he was impressed by Comte's treatise. He was most impressed by the Saint Simonian theory of history and by Comte's version of it. In the 'early draft' of the autobiography, J.S. Mill writes that he 'was greatly struck with the connected view which they for the first time presented to me, of the natural order of human progress; ...' (J.S. Mill, ed. Robson & Stillinger, 2006, 170). Iris Mueller has pointed out that only a little earlier, in 1827, J.S. Mill had given a speech on the 'Use of History' in which he had repeated the Benthamite contention that knowledge of human nature is 'more important than knowledge of history in determining the type of institutions needed by any society' (Mueller, 1956, 58). Mill seems immediately to have imbibed the Saint Simonian and Comtean view that there are alternating critical and organic ages in history with corresponding forms of critical and organic thought. He seems to have made a shift away from direct, critical involvement in politics towards organic prescription for future development. Whereas, following his first reading of Bentham in 1821, he had had only one object in life – 'to be a reformer of the world' (J.S. Mill, ed. Robson & Stillinger, 2006, 136) - which had animated his writing and actions, by October, 1831, he was writing to Sterling that the "only thing which I can usefully do at present, and which I am doing more and more every day, is to work out *principles*; which are of use for all times, though to be applied cautiously and circumspectly to any. ... The only thing that I believe I am really fit for is the investigation of abstract truth, and the more abstract the better. ..." (quoted in Mueller, 1956, 61). He had reached the conclusion, in other words, that his role as an intellectual within history was to clarify the means by which a-historical verities might be attained. Mill's gradual disappointment with the aftermath of the French revolution of July, 1830, consolidated this new stance. The July Revolution had failed to destroy the power of a privileged class minority and Mill was initially attracted by the idealism of the Saint Simonians and Comte who sought to argue for the reorganization of society in the interests of all the people, but Mill did not see himself as an active participant in this change. Whereas Comte's presentation of his lectures of the Cours de Philosophie Positive during the 1830s was designed to actualise conceptually his political vision, Mill conceived his intellectual role in the same period to be that of detached facilitator.

Contrast between Mill and Comte.

What Mill began to write on Logic between 1830/1 and 1837 is separately published as the "Early Draft" in Appendix A of volume 8 of *The Collected Works of John Stuart Mill* (J.S. Mill, ed. Robson, 2006). This corresponds quite closely to what was subsequently published, in 1843,

as the Introduction, and Books I and II. After reading volumes I and II of Comte's *Cours de philosophie positive*, Mill wrote three chapters of Book III in the autumn of 1837 and it seems likely that he completed the rest of Book III, Books IV and V, and probably Book VI, between that autumn and the summer/autumn of 1840. As was his custom, Mill re-wrote his drafts before publication, and he began the rewriting of the *Logic* in April, 1841. He submitted his final draft to the publisher in mid-1842 but there were delays in production which enabled Mill to insert some late revisions. Volume VI of Comte's *Cours de philosophie positive* was published in 1842 and, as Robson puts it:

"Mill, having in the interval read Comte's fourth and fifth volumes, was immensely impressed by the sixth, which led him, in January, 1843, into a 'remaniement complet' of the concluding chapters of Book VI." (J.S. Mill, ed. Robson, 2006, lxviii-lxix)

It is not possible here to unravel the complexities of the amendments which Mill made to his final draft as a consequence of his reading of the sections of Comte's *Cours* devoted to 'Physique sociale'. I simply want to re-iterate the general point which has informed my background commentary on the work of the two thinkers.

By the time that Mill commenced work on his *Logic*, he had rejected the metaphysical necessarianism which had informed the work of his father. In his Introduction to *A System of Logic*, written in the early 1830s and relatively unchanged thereafter, J.S. Mill was insistent that his consideration of logical processes was entirely separate from metaphysical explanation of mental activity. He assigned to 'a perfectly distinct branch of Science: the higher or transcendental metaphysics' all questions such as:

"Whether our emotions are innate, or the result of association: whether God, & duty, are realities the existence of which is manifest to us *a priori* by the constitution of our rational faculty; ..." (J.S. Mill, ed. Robson, 2006, 964).

J.S. Mill would attempt to analyse reasoning itself as an associationist process, but he explicitly turned his back on the metaphysical associationism which had pervaded his father's Analysis of the Phenomena of the Human Mind. J.S. Mill rejected the proto-behaviourist orientation of the associationist legacy. In doing so, he deprived his philosophizing of any ontological base. Although, for a time, he was struck by the Saint Simonian/Comtist theory of historical progression, he did not insert his own agency within that progression. Between writing the opening books of A System of Logic and the final writing, J.S. Mill had been impressed by de Tocqueville's De la Démocratie en Amérique which he reviewed shortly after its publication in 1835. De Tocqueville celebrated the democratic de-centralisation and voluntary associationism opposed by the Saint-Simonians and Comte. Coming, therefore, to Comte's last volumes of the Cours de philosophie positive in the late 1830s and early 1840s, Mill was disposed towards a liberal accommodation of the position which, for Comte, integrated positivist scientific practice with an ontogenetic conception of historical progression. In spite of the civility of the exchange - and Mill's deference - the correspondence between Mill and Comte which developed for several years, commencing on November 8th, 1841, highlights the nature of the impasse. In the first letter of self-introduction, J.S. Mill indicated that he had been brought up – almost born – as a Benthamite and he continued:

"Although Benthamism has, doubtless, remained very far from the true spirit of the positivist method, this doctrine still seems to me at present to be the best preparation which exists today to true positivity, applied to social doctrines; either by its tight logic,

and by the care it takes always to understand itself, or especially by its systematic opposition to every attempt to explain any phenomena whatever by means of ridiculous metaphysical entities, of which it taught me from my earliest youth to feel the essential worthlessness". (Lévy-Bruhl, ed., 1899b, 2. Written by Mill in French¹⁰, my translation)

In his reply of three weeks later Comte agreed that, 'surtout pour l'Angleterre', Benthamite doctrine was the best preparation for 'positivité sociologique'. However, Comte insisted that his own education had obviated the need for such a preparation and that Bentham had not understood the implications of his theory. Whilst Comte seems to acknowledge that methodological or philosophical differences are the consequences of culturally different formations, nevertheless he insists that his positivism is an intellectual phase which supercedes precursors. Referring to Benthamism, Comte replied:

"... if I myself have avoided this phase, that doubtless arises from the personal circumstances of my education which, imbibing me from my infancy with the rudiments of the true positivist method, enabled me to feel in time how much Bentham had imperfectly understood this method in spite of his evident tendency to make it prevail everywhere." (Lévy-Bruhl, ed., 1899b, 7, my translation¹¹)

In introducing, in 1899, his edition of the hitherto unpublished full correspondence between Mill and Comte, Lévy-Bruhl made two extremely pertinent observations. He commented, firstly, that:

"Mill proposes to Comte that they should discuss together their 'opinions' on certain points. But Comte does not have 'opinions' in Mill's sense of the word. He has a body of doctrine, a system. He has constructed this system quite specificially to bring to an end the ebb and flow of 'opinions' between which the minds of our time float and which prevent the establishment of firm convictions." (Lévy-Bruhl, ed., 1899b, xiii, my translation¹²).

Lévy-Bruhl rightly noted that Mill fundamentally misunderstood, or sought to resist, Comte's contention that thoughts are embedded in the process of socio-historical change and cannot be extrapolated from that process to become the basis for detached, liberal scrutiny. Lévy-Bruhl's second observation makes the same point rather differently:

"In the course of the letters which we are publishing today, Mill avoids discussing Comte's political and social ideas. In general, he raises only purely philosophical questions, in the hope of removing the 'several secondary differences' which remain

12 "Mill propose à Comte de discuter ensemble leurs 'opinions' sur certains points. Mais Comte n'a pas d''opinions', au sens où Mill prend ce mot. Il a un corps de doctrine, un système. Il a construit ce système tout exprès pour mettre un terme au flux et au reflux des 'opinions' mouvantes entre lesquelles flottent les esprits de notre temps, et qui empêchent les convictions fermes de s'établir."

_

^{10 &}quot;Quoique le Benthamisme soit resté, sans doute, très loin du véritable esprit de la méthode positive, cette doctrine me paraît encore à présent la meilleure préparation qui existe aujourd'hui à la vraie positivité, appliquée aux doctrines sociales: soit par sa logique serrée, et par le soin qu'elle a de toujours se comprendre elle-même, soit surtout par son opposition systématique à toute tentative d'explication de phénomènes quelconques du moyen des ridicules entités métaphysiques, dont elle m'appris dès ma première jeunesse à sentir la nullité essentielle" "... si j'ai moi-même évité cette phase, cela tient sans doute à des circonstances personnelles d'éducation, qui, m'ayant imbu, dès mon enfance, des rudiments de la vraie méthode positive, m'ont permis de sentir à temps combien Bentham avait imparfaitement compris cette méthode, malgré sa tendance évidente à la faire partout prévaloir."

there between them. But far from weakening these differences, the discussion aggravates them." (Lévy-Bruhl, ed., 1899b, xxiii, my translation¹³)

Again, Lévy-Bruhl rightly saw that Mill attempted to autonomise his philosophy of social science, detaching it from changing social and political conditions, in a way which was, for Comte, unacceptable and impossible.

The letters of Comte to Mill had already been published in France in 1877. It is significant that Lévy-Bruhl chose to edit the exchange of letters between the two men. Lévy-Bruhl had already written two books on German philosophy of the 18th Century and the social conditions of its production (Lévy-Bruhl, 1890 and 1894), and was publishing, in English in the same year, his History of Modern Philosophy in France (Lévy-Bruhl, 1899a). His work on Comte was to be published the following year (Lévy-Bruhl, 1900). Lévy-Bruhl was, therefore, precisely interested in whether philosophical 'discourse' transcends the socio-cultural conditions of its production or whether philosophical 'discourses' are always integrally specific to those conditions. This interest became more fully realised as Lévy-Bruhl subsequently investigated anthropological evidence in order to determine whether different 'mentalités' function differently in different societies, notably, of course, in his much maligned Les fonctions mentales dans les sociétés inférieures (Lévy-Bruhl, 1910) and La mentalité primitive (Lévy-Bruhl, 1922). Mill and Comte had both been hostile to metaphysical speculation, condemning the epistemological skepticism of Hume, and both had been relatively indifferent to the epistemological endeavours of Kant. Neither worked within academic contexts nor accepted the academic ideology which was the corollary of Kantian idealism. Nevertheless, Mill sought to offer an universally valid logic which was primarily based on an analysis of English language usage, whilst Comte sought to base a theory of universal socio-political progress on his perception of transitions primarily in French history. The challenge in our contemporary global context is to consider whether international intellectual exchange can establish and apply a homogeneous logic of social science or whether homogenised socio-cultural practices should emerge ontologically from the shared development of an universal historical consciousness. Mill versus Comte remains a potent reference for articulating our choice.

¹³ "Au cours des lettres que nous publions aujourd'hui, Mill évite de mettre en discussion les idées politiques et sociales de Comte. Il ne soulève, en général, que des questions purement philosophiques, dans l'espoir d'effacer les 'quelques divergences secondaires' qui subsistent là entre Comte et lui. Mais, loin d'atténuer ces divergences, la discussion les aggrave."

Bachelard, G., 1938, La formation de l'esprit scientifique, Paris, Vrin.

Bachelard, G., 1949, Le rationalisme appliqué, Paris, P.U.F.

Bentham, J., ed. Bowring, J., 1838-43, Works, 11 volumes, Edinburgh, Tait.

Bourdieu, P. 1966 "Champ intellectuel et projet créateur", *Les temps modernes*, 246, November, 865-906. – translated as Bourdieu, P (1971) in M.F.D. Young, ed.,

Bourdieu, P. 1971 "Intellectual field and creative project", in Young, M.F.D., ed., 1971.

Bourdieu, P., 1971, "Reproduction culturelle et reproduction sociale", *Information sur les sciences sociales*, X, 2, 45-99. – translated as Bourdieu, 1973.

Bourdieu, P., 1973, "Cultural Reproduction and Social Reproduction" in Brown, R., ed.

Bourdieu, P., 1997, Méditations pascaliennes, Paris, Seuil. – translated as Bourdieu, 2000.

Bourdieu, P., 2000, Pascalian Meditations, Oxford, Polity.

Bourdieu, P., Chamboredon, J.-C., & Passeron, J.-C.,1968, *Le métier de sociologue*, Paris, Mouton-Bordas. – translated as Bourdieu, Chamboredon, & Passeron, 1991.

Bourdieu, P., Chamboredon, J.-C. & Passeron, J.-C., 1991, *The Craft of Sociology*, New York, Walter de Gruyter.

Bourdieu, P., & Passeron, J.-C., 1967 "Sociology and Philosophy in France since 1945: Death and Resurrection of a Philosophy without a subject", *Social Research*, XXXIV, 1, 162-212.

Bourdieu, P., with Passeron, J.-C., 1970 *La Reproduction*. *Eléments pour une théorie du système d'enseignement*, Paris, Ed de Minuit. – translated as Bourdieu & Passeron, 1977.

Bourdieu, P., with Passeron, J.-C., 1977 *Reproduction in Education, Society and Culture*, London-Beverley Hills, Sage Publications.

Brown, R., ed., 1973, Knowledge, Education and Cultural Change, London, Tavistock.

Comte, A., ed. J.-P. Enthoven, 1975, *Physique sociale. Cours de Philosophie Positive, Leçons 46 à 60*, Paris, Hermann.

Comte, A., ed. Serres, M., 1975, *Philosophie première*. Cours de Philosophie Positive, Leçons 1 à 45, Paris, Hermann.

Comte, A., ed. Grange, J., 1996, *Philosophie des sciences*, Paris, Gallimard.

Cousin, V., 1842, *Philosophie de Kant*, Paris, Ladrange.

Gouhier, H., 1931, La Vie d'Auguste Comte, Paris, Gallimard.

Habermas, J., 1968, *Erkenntnis und Interesse*, Frankfurt am Main, Suhrkamp – translated into English as Habermas, 1971, and into French as Habermas, 1976.

Habermas, J., 1971, Knowledge and Human Interests, Boston, Beacon.

Habermas, J., 1976, Connaissance et intérêt, Paris, Gallimard.

Habermas, J., 1970, *Zur Logik der Sozialwissenschaften*, Frankfurt am Main, Suhrkamp – translated into English as Habermas, 1988.

Habermas, J., 1988, On the Logic of the Social Sciences, Oxford, Polity.

Halévy, E., 1904, *La Formation du radicalisme philosophique*. Vol III: *Le Radicalisme Philosophique*, Paris, Alcan.

Halévy, E., 1928, The Growth of Philosophic Radicalism, London, Faber & Faber.

Halévy, E., 1987, A History of the English People in 1815, London/New York, Ark Paperbacks.

Hartley, D., 1966, [first published, 1749], ed. Huguelet, T.L., *Observations on Man, his Frame, his Duty, and his Expectations*, Gainesville, Florida, Schoplars' Facsimiles & Reprints.

Kant, I., ed. Gregor, M.J., 1992, The Conflict of the Faculties, New York, Abaris Books.

Lévy-Bruhl, L., 1890, L'Allemagne depuis Leibniz. Essai sur le développement de la conscience nationale en Allemagne, 1700-1848, Paris, Hachette.

Lévy-Bruhl, L., 1894, La philosophie de Jacobi, Paris, Alcan.

Lévy-Bruhl, L., 1899a, *History of modern philosophy in France*, Chicago-London, Open Court-Kegan Paul, Trench, Trübner & Co.

Lévy-Bruhl, L., 1899b, Lettres inédites de John Stuart Mill à Auguste Comte publiées avec les réponses de Comte et une introduction, Paris, Alcan.

Lévy-Bruhl, L., 1900, La philosophie d'Auguste Comte, Paris, Alcan.

Lévy-Bruhl, L., 1910, Les fonctions mentales dans les sociétés inférieures, Paris, Alcan.

Lévy-Bruhl, L., 1922, La mentalité primitive, Paris, Alcan.

Locke, J., ed. Taylor, R., 1961, [first published, xxxx], *An Essay Concerning Human Understanding*, New York, Dolphin Books, Doubleday & Co.

Mill, J.S., ed. Robson, 2006, Collected Works of John Stuart Mill, Volume 8: *A System of Logic, Ratiocinative and Inductive, Books IV-VI, Appendices*, Indianapolis, Liberty Fund.

Mill, J.S., ed. Robson & Stillinger, 2006, Collected Works of John Stuart Mill, Volume 1: *Autobiography and Literary Essays*, Indianapolis, Liberty Fund.

Mueller, I.W., 1956, John Stuart Mill and French Thought, Urbana, U. of Illinois Press.

Passeron, J.-C., 1991, *Le raisonnement sociologique*, Paris, Nathan. – revised edition, 2006, Paris, Albin Michel – translated as Passeron, 2010 (forthcoming).

Passeron, J.-C., 2010 (forthcoming), Sociological Reasoning, Oxford, Bardwell Press.

Richter, M., 1964, *The Politics of Conscience. T.H. Green and his age*, London, Weidenfeld & Nicolson.

Young, M.F.D., ed., 1971, *Knowledge and Control. New directions for the Sociology of Education*, London, Collier-Macmillan