Donald Winch

The Sciences of Man in Society during the Enlightenment

In the course handout you will find an introduction to the topic I want to cover in this lecture. There you will also find some illustrative quotations from the works of some philosophers of the Enlightenment designed to focus attention on some of the leading features of this movement, where these features can be described in terms of the title of this course: concepts, methods, and values. In this opening lecture I want to tackle two main questions. I want to show why it makes good sense to regard the Enlightenment as the proper place to begin any course on the historical development of the social sciences; and to outline where their ideas on science, and more especially the social sciences, approximate to our ideas and where they depart from them.

In its simplest usage, the word 'science', as derived from the Latin word, 'scientia', meant 'knowledge', where this could be contrasted with mere 'opinion' or beliefs based on prejudice. Science meant knowledge acquired by rules of some kind, by acceptable rule-based methods. It did not mean what it came to mean in English during the nineteenth century when speaking about 'scientists', namely those who cultivated the natural or physical sciences: it corresponds more with what in German is called wissenschaft and extended to all kinds of regular knowledge. Another important contrast was between science and 'art', where art or the arts did not mean simply painting and sculpture but all kinds of applied knowledge, including what we now call technology or the technocratic use of knowledge.

Science was also the kind of knowledge that philosophers were in the business of cultivating or acquiring: hence the interchangeability of science and philosophy in the eighteenth century. This contrasts sharply with our usage, where philosophy has now come to mean a concern with all those questions which cannot be solved by resort to the empirical methods of science. Hence we speak of the sciences escaping from philosophy as soon as the questions become amenable to empirical inquiry, when they become a matter of establishing causal or probabilistic relationships sometimes described as laws, sometimes simply as
empirical regularities or generalisations. It also means that eighteenth-century philosophers would not have understood our use of the term ‘philosophy of science’, though that does not mean they were unconcerned by the questions posed by the philosophy of science, namely what is the basis for our claim to know something scientifically. On the contrary, this was a major interest and is reflected in all the quotations in the handout.

The most common generalisation to be made about the Enlightenment is that it was a self-conscious attempt to extend to the moral or social sciences the methods of observation and experiment that had brought such obvious success in understanding the natural or physical world when employed by Newton. Hence we speak of a ‘naturalistic’ programme, of moral Newtonianism, of a search for regularities of human existence, psychological, social, anthropological, political, and economic, that was causal or law-like. As you will see, this naturalistic impulse, later sometimes called ‘positivism’, was essential to all the social sciences as they developed during the nineteenth century and beyond. Moral Newtonianism does describe a major feature of Enlightenment thinking which you will encounter at all stages.

In its most extreme or ambitious form it almost literally meant treating man as matter, subject to materialistic causes exactly like those operating in the natural world. It is also to be found in the form of a mechanistic analogy as signalled in works called *L’homme machine* by La Mettrie. Other examples of this materialist and mechanistic psychology can be found in other French authors such as Condillac and D’Holbach, with Locke’s sensationalist psychology being wedded to the Newtonian method. You see it in the quotation from Condillac on the handout, where he speaks of a ‘system’ or model being more perfect the more it can be reduced to a few principles, and ultimately to one. To materialism and mechanism, therefore, can be added a form of reductionism, where the reduction usually takes the form of attempting to identify a psychological principle or motivating factor capable of serving as the equivalent of Newton’s concept of gravity and mutual attraction. The most commonplace form of machinery often appealed to is that of a clock, which helps to explain why the eighteenth century often spoke of the ‘springs’ of human action, and treated such
complex social phenomena as political constitutions in clockwork terms, as in the case of the ‘checks and balances’ built into the American Constitution.

Having said all this, however, it is important not to be misled by the Newtonian and mechanical analogy as the clue to Enlightenment naturalism in the social sciences. Following the analogy would result in a highly individualistic interpretation of social science, an a-social, materialist view of man in which society is reduced to a form of atomistic interaction between individuals, each driven by one over-mastering impulse such as self-love or the lust for domination. Although there were versions of the Enlightenment project that approximated to this and added atheism to materialism, this was not the dominant impulse. Nor was Newton the sole inspiration. The later history of the social sciences is full of examples of attempts to ape the methods of the natural sciences, and we have come to think of this as a form of inferiority complex concealed beneath hubris or pride. In many ways it is more accurate to reverse the process by saying that what impressed the Enlightenment about Newton’s successes in astronomy and optics was the fact that his system or theory was an achievement of the human mind operating in a particular social setting at a particular juncture in history, as a humanistic triumph showing what it was capable of when guided by the right methodological principles and freed from all those influences which had retarded man in the past.

There was a tendency to regard these retarding agencies as connected with religion or what was often called ‘superstition’, ‘prejudice’, ‘enthusiasm’. It was the Enlightenment that coined the expression the ‘dark ages’ to describe the period when religion exerted a dominant influence over man’s capacity to understand, when faith as superintended by the Church blotted out the light of reason. This sometimes expressed itself in outright atheism and was certainly associated with anti-clericalism, with antagonism to the power exercised by the Church in political, social, and educational matters. Anti-clericalism was at its strongest in Catholic France, but you find similar ideas in protestant countries, where religious enthusiasm was the enemy, the kind of blind intolerance that had led to the civil war in England in the seventeenth century. One could also say that the Enlightenment entailed a revaluation of man’s secular or worldly achievements that was inconsistent with such religious
ideas as original sin or belief that life this side of heaven was worthless, merely a preparation for another life. Such ideas were incompatible with such leading features of the Enlightenment as the notion of progress, improvement, perhaps even perfectibility.

But anti-clericalism was entirely compatible with holding religious beliefs. Newton himself was a deeply-religious Calvinist who believed that the laws of the universe he had discovered were God’s laws. Hence it was possible for Christians to point to Newtonian science as an example of what God-given reason could achieve, and what wonders God had accomplished when designing the universe. One of the commonest forms of eighteenth-century belief was what is known as Deism, an optimistic notion that God, or Providence ruled over human affairs and that there was a basic design to the moral universe guaranteeing harmony, often in spite of appearances to the contrary: see the extract from Pope’s Essay on Man as an example of this.

In order to understand how this was compatible with the naturalistic interpretation of the social sciences you should bear in mind another eighteenth-century distinction, namely between ‘final’ causes and ‘efficient’ ones. If you wanted an answer about the ultimate source of the natural order in the moral and physical universe, the hypothesis of an all-powerful and basically beneficent God was a good one, even for those who might not subscribe to any specifically Christian ideas of religion. (Gaia) It is responsible for what is often described as a teleological element in Enlightenment thinking, the notion that there is a purpose or design, leading to a form of functionalist explanation. Nevertheless, it is on the level of efficient causation that most of their efforts were concentrated, where this meant a search for observable or inferential causal mechanisms at work. Thus in the case of Adam Smith’s famous phrase, the ‘invisible hand’, it was not necessary to regard this as the hand of God intervening in human affairs to produce order. It was a metaphor that described purely secular efficient causes at work, those that he was attempting to explain by means of his account of markets and prices. In other words he was using one of those systems, or mental machines which he speaks about in the quotation in the handout, where it is perfectly clear that the creation of such systems is the product of human imagination, designed to relieve
the mental discomforts that come from living in a world that seems chaotic, without rhyme or reason. This is also a good example of what I meant when I said that the philosophers of the Enlightenment were not simply aping Newtonian science. They believed that it was possible to discover, as Smith puts it, the underlying psychological ‘principles which lead and direct’ scientific discovery. Newton was a case study in their own field. Perhaps I should also mention the fact that when Darwin advanced his theory of natural selection, thereby achieving something in biology that was akin to Newton’s discoveries in physics, some of the basic ideas were derived from the social sciences, from Malthus’s theory of population in particular. Another case of the assumed relationship of model and copy in the natural/social sciences being reversed.

Let us look a bit more closely at the foundations in psychology of Enlightenment social science. How could the laws of the individual human mind, of the individual knowing and acting person, yield any understanding of what was truly social about human behaviour, about man’s membership of various groupings such as families, tribes, social ranks or classes, and nations? Did it have to lead in an atomistic and mechanistic direction? How do we discover these psychological principles, and if they are so fundamental to an understanding of the regularities of social, economic and political existence, why had they not been properly understood before? The answer given to the last of these questions was by the method of observation and experiment, but what does this mean in the case of the social sciences? Essentially, it meant a mixture of introspection disciplined by careful study of the historical, anthropological, and political record of mankind -- those ‘collections of experiments’ referred to in the quotation from Hume in the handout. Self-knowledge was one major advantage that those working in the moral sciences had over natural scientists: we are part of what we are studying; we know what it is like to be the subject of various instincts, motives, or what was usually referred to as the ‘passions’ or sentiments.

This may help to explain the confidence which is such a major feature of the Enlightenment project. They did have a sense of discovery, of standing on the brink of a world in which man would be capable of understanding Nature, including his own nature, and
hence, perhaps, of exercising wiser or greater control over the future. But the knowledge that would make this possible was readily available. Indeed, much of it could be found in the work of earlier philosophers, particularly those of the ancient world of Greece and Rome, where the ancient world had the great advantage of being pre-Christian and hence uninfluenced by centuries of dogma and superstition. It was simply a matter of clearing the mind of inherited prejudices, of allowing the skeins to fall from one’s eyes, of looking more carefully at the human record.

There were, however, some things which were part of the experience of the eighteenth century that were not available to earlier thinkers. For example, in politics the experience of the ancient world was largely confined to a few city-states in the Mediterranean world surrounded by what the Greeks called ‘barbarians’, about whom they knew little and cared less. For an eighteenth-century philosopher there was the discovery of the New World and the increasing knowledge of the great empires of Asia, China, Persia, and India. Africa was less well known, but even there European penetration through missionaries and the slave trade had furnished knowledge of new types of society, with novel systems of law and government, and novel social and religious practices. This knowledge of the non-European world was to become a major challenge to the first social scientists, and they were eager to find ways of relating it to European experience in the past and present.

This helps to explain one of the values I have listed in the handout, that of cosmopolitanism. Any explanation of human behaviour in society had to encompass all known experience: nothing human could be considered alien or beyond understanding, the subject of mere fable, of exotic or romantic extravagance. Earlier periods of European history, such as the one they labelled feudal, were particularistic in their understanding, incapable of perceiving man in general. This is where the long quotation from Hume comes in useful. You will see there that he is articulating another of the ruling concepts, namely the assumption of basic uniformity in human nature, wherever and whenever it is to be found. This assumption was one reason why the diversity of societies and cultures that were becoming known to eighteenth-century observers was not regarded as chaotic and disturbing. The evidence
concerning what were called ‘savage’ or ‘barbarian’ societies, hunter-gatherers such as the North American Indian, or the pastoral peoples of Africa, were simply versions of how men had organised their social and economic lives at an earlier stage of European history. They could be used to fill the gaps in the anthropological record left by the absence of written records.

There is another feature of Hume’s statement about the constancy of human nature that needs to be noticed. First, you should look at the list of basic human passions he mentions -- ambition, avarice, self-love, vanity, friendship, generosity, and public spirit’. There is no attempt to reduce all these motives to one overriding one as Hobbes had done when treating self-love as the clue to all behaviour and drawing some fairly extreme political conclusions from the consequences, namely that without obedience to a powerful sovereign life was a struggle of all against all. Hume is saying that the basic budge of human passions is common to all humankind, and he is acknowledging that the mixture of passions will vary within individuals and within different types of society. Although the statement was intended to steady the nerve of the historian or observer of cultural diversity, he was not, as his critics later alleged, attempting to deny diversity. The methodological inference was that you should not be over-impressed by it, allow yourself to think that it was strange and exotic. Start from the premise that they were human beings like ourselves, and look for the environmental circumstances that accounted for the differences in their institutions and behaviour. Hume put the matter in a nutshell when he pointed out that ‘The Rhine folows north, the Rhone south; yet both spring from the same mountain, and are also actuated, in their opposite diections, by the same principle of gravity’.

The second basically new evidence or insight available to the eighteenth century that had no real equivalent in the work of ancient and medieval social commentators was the that modern European societies such as France and Britain were becoming ‘commercial societies’; that modernity was intimately connected with new ways of organising the economic life of society connected with markets or commerce. Although the most dramatic way in which this manifested itself was trade with Asia and the New World, of greater
significance both qualitatively and quantitatively was the fact that the internal economies of European societies were being transformed by commerce, by production intended for sale rather than immediate consumption and subsistence. I shall have more to say about this when I give a lecture on Adam Smith later in the series, but one further idea needs to be put in play. Connected with commercial modernity was another potent concept, namely ‘liberty’, a term that has several distinct meanings. Let me mention three of them: personal liberty, meaning greater autonomy of action, freedom from legal, religious and other constraints; civil liberty meaning security under the rule of law; and political liberty meaning greater opportunity to exercise rights to participate in the political or governing sphere. Clearly, it is possible to enjoy personal and civil liberty without having political liberty, and this was the case in most European societies before the French revolution, though England’s mixed constitution had a representative dimension which made it the best embodiment of the general idea of liberty before the creation of the American constitution in the 1780s. The connections between commerce and liberty were one of the most important themes of Enlightenment debate on the nature of modernity and will recur in subsequent lectures. Equally significant were the connections between commerce and the process for which a new word had to be coined, namely ‘civil-isation’, where this connoted the process by which civil society, based on law and government, emerged as well as the process by which the arts and sciences of civilised existence and civility in the broadest sense were being created. The idea is connected too with something mentioned earlier, namely improvement and progress. the idea that history might no longer be subject to earlier vicissitudes and cycles. For the first time perhaps it was possible to envisage mankind as moving along an upward sloping path, opening up a prospect of indefinite improvement which no earlier age had contemplated. I do not want to exaggerate this feature of the Enlightenment because you will find examples, such as that of Rousseau, of those who deplored modern civilisation, and many more who were still attracted to the idea of cycles in human affairs. After all, the greatest ancient civilisation, that of Rome, had ultimately succumbed to some process of internal decay; and studies of the causes of the rise and fall of Rome were a common feature of Enlightenment
history. Even those who took the optimistic view were capable of registering that the gains of civilisation had to be paid for by losses along the way. And nobody believed that advances would be delivered deterministically, without fundamental changes in education and social and political institutions. In fact, one could say that those who were most optimistic about the future possibilities were also likely to be the most interventionist or reconstructivist in their aims. Examples of this mentality before the French revolution can be found in Condorcet, the subject of a later lecture.

This brings me to the normative or political implications of Enlightenment thinking. After the French revolution it became a common accusation that the philosophes in France had undermined the institutions of the ancien regime with their atheistic questioning of the established order. It would be more accurate to say that before the revolution provided opportunities for remodelling France most of philosophes were active in seeking reforms within the framework provided by absolute monarchy. That is certainly the case with Montesquieu and it is also true of Turgot who served as finance minister under Louis XVI. There was no single set of political ideas associated with the Enlightenment as a whole. In retrospect one might apply the label of ‘liberal’, but only in the sense that civil liberty was a shared goal.

It may be more important to notice that the Enlightenment conception of social science should not be confused with the nineteenth-century distinction between positive and normative propositions, indicative statements about what is, and imperative statements about what ought to be, where this could also be fortified by the notion that social science should be value-neutral. evaluation of the effects of those causal processes. The is/ought distinction appears in the work of Hume, but he is not saying that one cannot derive ought statements from is, merely that there are some illegitimate ways of so doing. The belief that human behaviour and its social consequences can be made the subject of naturalistic investigation does give priority to explanatory questions: how do such common social institutions as ranks or classes come into existence? how are the legal and moral codes to be found in all societies generated and maintained? why do some forms of government succeed in some types of
society but not others? how do nations become rich, while some remain poor? These sorts of questions were all tackled in a naturalistic spirit. But the purpose of seeking answers was ultimately so that lessons could be learned and normative recommendations made. This was part and parcel of the Enlightenment interest in making knowledge useful or turning it to practical use. The way in which the two tasks were combined can be illustrated by some of the meanings attached to the word that appears most often in their writings, namely ‘nature’ and ‘natural’. It could mean simply ‘normal’ or ‘usual’; it could be used to suggest what would have happened if ‘artificial’ measures or conditions had not been implemented, where natural usually implied ‘better’ or ‘preferable’. It could mean the best outcome when judged by some criteria such as public utility or happiness. In other words normative and positive meanings could live side by side in the same word. Perhaps I can best express the Enlightenment position as follows: Once the commitment to social science is accepted, it first becomes necessary to establish the causal connections before passing judgement on the results. You have to understand society before you can change it, or as it was sometimes put, ‘in order to command Nature she must first be obeyed’. In terms of another slogan one could say that while Is may not imply Ought, Ought certainly implies Can. There is no point in advocating a change which is outside the bounds of human possibilities. Moreover, what can be done to change society may either fall short of the ideal design or be accompanied by unforeseen and undesirable byproducts that are worse than allowing things to follow their ‘natural’ course.

The recognition that, unlike the entities studied by physical scientist, human beings have purposes and intentions raises the problem of determinism and free will. It also means that the concept of law when applied to human behaviour can be interpreted as having either or both normative and positive content. There is a sense in which I can ‘disobey’ or diverge from a social law which is not possible when dealing with physical laws. Moreover, social laws may not have the universal scope of some, but by no means all, physical laws. The social scientists of the Enlightenment were fully conscious of these differences, which is why you will notice that when generalising about aggregate social or economic behaviour, they made
clear that their generalisation or predictions were only true in a probabilistic sense. When they spoke about the operations of a particular passion, propensity, or motive, for example self-interested behaviour in economic or political settings, they were not making statements about specific individuals, but about what was most probable when taking men in large groups. This acceptance of probabilities as a valid procedure has no real equivalence in Newtonian physics, and is another way in which social science at this time can be distinguished from this natural science.

Another contrast centres on the role of prediction in the social sciences. Astronomy has high predictive value: the deductions made on the basis of initial conditions and universal law statements not only explain what happens each night but what will happen in the distant future. Astronomy is rather special in this respect: there are plenty of other natural sciences which do not support precise predictions. Biology for example, and even medicine, where, as in the social science, it is only possible to estimate the probable effects of a drug, the numbers likely to have an adverse reaction, and so on. There were some Enlightenment social scientists, notably Condorcet, who made predictions about the future shape of society, but the best examples of such ideas can be found in the nineteenth century, in the cases of Comte and Marx, both of whom felt able to predict the path and even the final goal that would be reached as a result of social development. In both these cases, however, it is noticeable that the time dimension was suitably vague; and in this respect they were more like prophecies than predictions. The scepticism that someone like Hume extended to religious beliefs did not stop there: it could be applied also to the knowledge we obtain of the physical and social world. Claiming that one had more knowledge than could be proved was a form of enthusiasm, and an error as much in social science as it was when practiced in religion. Predicting future social states that are much better than present ones is often best described as a form of utopian thinking, a way of spelling out normative values, but one that does not follow the rule about Ought implying Can. The exact route by which utopia will be reached remains vague. Such modes of thought can be found at all times, and a figure like Rousseau often went into utopian mode. On the whole, however, the naturalistic impulse discouraged such
thinking. The patterns of historical development which they traced did not support large-scale extrapolation into an unknown, possibly unknowable future. And the reason it was unknowable was precisely because it would depend on posited or existing patterns of human behaviour remaining constant over time. The examples of Rome or their observations of societies like China, a civilisation that had obviously been more dynamic at an earlier stage in its history, showed that societies could fall or stagnate for reasons connected with the human factor as well as natural disasters. Similarly, no one could have predicted that the French revolution would occur in 1789, or that it would take the course it did. Only in retrospect was it possible to interpret these events and suggest ways in which it might have happened differently.

In all these respects the social sciences today are no different from those projected and cultivated during the Enlightenment. We are still much better at retrodicting the past than predicting the future. You might be tempted to argue that there has been progress in other respects. Hume’s attitude towards experiments might seem rather casual to some modern social scientists, though controlled experiments are confined to some branches of psychology, where the range of behaviour under consideration is usually very narrowly circumscribed. The range and precision of the information at our disposal, especially statistical information, is far greater, and our methods of interrogating that evidence are more rigorous than most Enlightenment authors would have felt necessary or possible. But all these differences are only differences of degree. They do not prove that the basic enterprise has changed.

What has changed, however, is the degree of specialisation within the social sciences, and the rigidity of some of the borders that have been erected between the separate social sciences. By the time we reach the last figures dealt with in this course, Durkheim and Weber, it is already possible to see this modern division of labour emerging and hardening. One could begin to speak of economics, sociology, psychology, and anthropology as distinct disciplines, and far from seeing themselves as engaged in a common enterprise, they were often to be found in dispute with one another, each claiming to have discovered something more fundamental about society than their neighbours. This contrasts with the Enlightenment
when a single author could contribute to many different sub-branches of what was still seen as a holistic enterprise, in which a discovery in one area could be used to modify the findings in another.

A related contrast concerns the way in which the social scientists earned their livings and defined themselves. Almost all twentieth-century social scientists are employed in universities and research establishments. Even by the end of the nineteenth century they were mostly to be found in academic occupations, justifying their existence through teaching combined with writing and research. There are one or two examples of Enlightenment social scientists who were university teachers, notably Adam Smith. But that is not true of the rest, who were administrators, civil servants, journalists, men of private means, and so on. They might be professional writers, but they were amateur social scientists -- a judgement that is justifiable as long as you remember the literal meaning of amateur, one who loves. The amateur is often a more genuine seeker after truth than his professional counterpart.

In the lectures that follow Richard Whatmore and myself will be encouraging you to put some flesh and muscle on this skeletal account of the social sciences during the Enlightenment; and the only way in which this can be done is to get beyond the generalities by reading the actual texts of the authors we have chosen to illustrate different aspects of Enlightenment thinking.