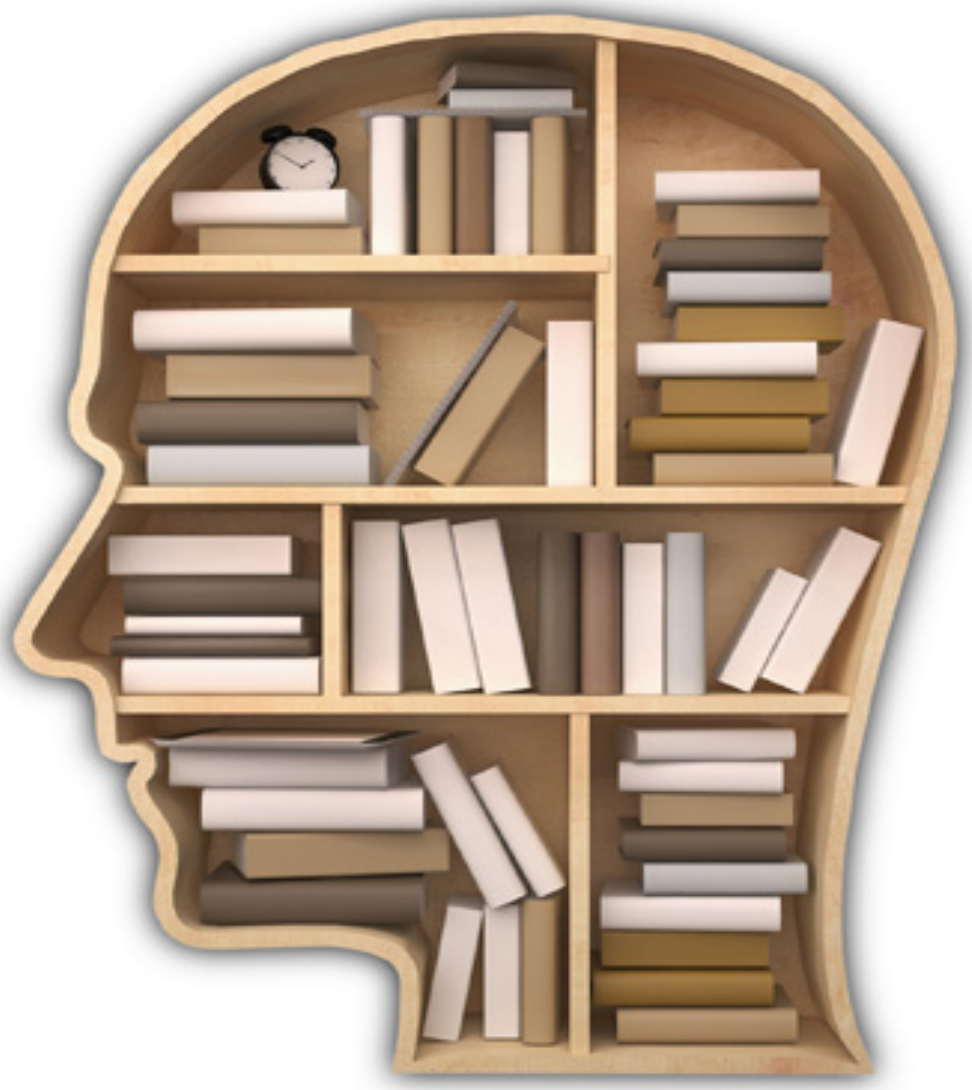
PETER BURKE

What is the History of Knowledge?



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Peter Burke

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Dedication

For Juan Maiguashca

Remembering half a century of friendship and dialogue

1
Knowledges and their Histories

If the history of knowledge did not already exist, it would be necessary to invent it, especially in order to place the recent ‘digital revolution’ in perspective, the perspective of changes over the long term. At a few moments in the past, humans have lived through major changes in their knowledge systems, thanks in particular to new technologies: the invention of writing, for instance, in Mesopotamia, China and elsewhere; the invention of printing, especially block printing in East Asia and printing with moveable type in the West; and now, within living memory, the rise of computers, especially PCs, and the rise of the Internet. Changes of this kind have unpredictable consequences, both for better and for worse. As we are coming to realize in the case of the Internet, the new medium of communication offers threats as well as promises. In order to orient ourselves at a time when our knowledge systems are under reconstruction, thanks to globalization as well as to new technologies, we are well advised to turn to history.

Fortunately, the history of knowledge does exist and contributions to it are growing rapidly in number. In the early 1990s, when I began work on my book *A Social History of Knowledge*, I believed that I was more or less alone in this interest. In today's world of scholarship, however, in which the international ‘republic of learning’, once a few thousand strong, now contains millions of citizens, it can almost be guaranteed that if you think of a promising topic for research or an approach that seems to be new, you will soon find that other individuals and groups in different places have already had the same idea, or

something rather like it. In any case, it soon became obvious that studies of the history of knowledge formed part of a trend.

It is true that until quite recently, the history of knowledge – unlike the sociology of knowledge, of which more later – was regarded as an exotic or even an eccentric topic. 'There is no history of knowledge' declared the management theorist and futurologist Peter Drucker in 1993, predicting that it would become an important area of study 'within the next decades'.[1] For once he was a little slow in his prediction, for the rise of interest in the history of knowledge was already under way at that time, including books with titles such as *Knowledge is Power* (1989), *Fields of Knowledge* (1992) or *Colonialism and its Forms of Knowledge* (1996).[2] From the 1990s onwards the history of knowledge moved from the periphery of historical interest towards the centre, especially in Germany, France and the English-speaking world. Books on the subject have been appearing more and more frequently in the last decades, as the Timeline to this book suggests, including collective studies such as *The Organisation of Knowledge in Victorian Britain* (2005).[3]

The most impressive collective study produced so far is the one in two massive volumes (with the promise of two more to come) edited by Christian Jacob, entitled 'realms of knowledge' (*Lieux de Savoir*) on the analogy of Pierre Nora's now famous 'realms of memory' (*Lieux de Mémoire*). While Nora's volumes are confined to France, Jacob's are concerned with a global history over the long term, more or less the last 2,500 years.[4]

Originally the product of a number of independent initiatives, the subject is becoming institutionalized. Academic groups for the study of the history of knowledge include one at the University of Munich and another at

Oxford, both concentrating on the early modern period. Chairs have been established, including one at Erfurt University (2008) entitled ‘Cultures of Knowledge in Early Modern Europe’. Centres have been founded, such as the *Max-Planck Institut für Wissenschaftsgeschichte* in Berlin (1994) and the *Zentrum Geschichte des Wissens* in Zürich (2005).[5] There are courses in the subject, including one at the University of Manchester entitled ‘From Gutenberg to Google: A history of knowledge management from the Middle Ages to the present day’. Collective projects are under way or have already been completed, among them one on the history of ‘Useful and Reliable Knowledge’ funded by the European Research Council.[6] Conferences on aspects of this large subject are becoming increasingly frequent. The history of knowledge is becoming a kind of semi-discipline with its own societies, journals and so on. Like knowledge itself, its history has exploded, in the double sense of rapid expansion and of fragmentation.

Historiography

Although the emergence of an organized history of knowledge is a relatively recent phenomenon, it is salutary to remember that, in past centuries, a few scholars already dreamed of a history of knowledge and even attempted to write one. In his book *The Advancement of Learning* (1605), and its longer, later Latin version, *De Augmentis Scientiarum*, the philosopher, lawyer and politician Francis Bacon expounded a plan for the reform of knowledge, an ancestor of what we now call ‘science policy’. He argued that reform would be assisted by a history of the different branches of learning, discussing what was studied when and where (in what ‘seats and places of learning’); how knowledge travelled, ‘for the sciences migrate, just like peoples’; how it flourished, decayed, or was lost; and even what Bacon called the ‘diverse administrations and

managings’ of learning, not only in Europe but ‘throughout the world’.[7]

Three hundred and fifty years before Drucker, Bacon complained that such a history of knowledge had not yet been written. Although he inspired the ‘history’ (more exactly, a description) of the newly founded Royal Society written by a young clergyman, Thomas Sprat, and published in 1667, Bacon's plan was first put into practice by a number of eighteenth-century German scholars, writing what they called *historia literaria* (in the sense of a history of learning rather than a history of literature), a few decades before the rise of a self-conscious cultural history, once again produced by German scholars.[8] In France, the marquis de Condorcet, a leading figure in the Enlightenment, emphasized the growth of knowledge in his ‘Sketch for an historical picture of the progress of the human mind’ (*Esquisse d’un tableau historique des progrès de l’esprit humain*, 1793–1794).

In the nineteenth century, there was a movement to historicize knowledge in the sense of emphasizing its development or evolution, often viewed as ‘progress’. Not only the human world but also the world of nature was now presented as subject to systematic change. This was the common message of Charles Lyell's *Elements of Geology* (1838), distinguishing different periods in the history of the earth and of Charles Darwin's *Origin of Species* (1858), organized around the idea of evolution via natural selection. Karl Marx argued that what people know and what they think is the result of their position in society, their social class, while the philosopher-sociologist Auguste Comte was interested in the history as well as in the classification of the different disciplines and tried to persuade the French minister of education to establish a chair in the history of science (he failed).

In the early twentieth century, the history of science that Comte had advocated was introduced in some universities, especially in the USA. German-speaking scholars established what they called the ‘sociology of knowledge’ (*Wissensoziologie*), concerned with who knows what and with the uses of different kinds of knowledge in different societies, in the past as well as in the present.[9] The history of the natural sciences has been taken as a model for other histories: the history of the social or ‘human’ sciences, the history of the humanities, and finally the history of knowledge in general. In German, it is possible to speak of a shift from the more academic *Wissenschaftsgeschichte* to the more general *Wissensgeschichte*.[10] In English, we might call it a shift from the history of the sciences to the history of knowledge.

This shift is quite recent. Why should this be? Changes in the present have often prompted historians to look at the past in new ways. The study of environmental history, for instance, is driven by debates about the future of the planet. In similar fashion, current debates about our ‘knowledge society’ or ‘information society’ have encouraged an historical approach to the topic.[11] Historians have made only a relatively small contribution to the general discussion, less than they could or should have made, since one of the social functions of historians is surely to help their fellow-citizens to see the problems of the present in a long-term perspective and so to avoid parochialism.

Parochialism in space is well known: a sharp division between Us, the members of one's community, and Them, everyone else. However, there is also parochialism in time, a simple contrast between ‘our’ age and the whole of an undifferentiated past. We need to try to escape this limited view, in this case to see the digital revolution that we are

experiencing today as the latest in a whole series of knowledge revolutions. A few historians have responded to this challenge, the challenge of historicizing the knowledge society.[12] One scholar has written about what he calls the 'early Information Society' of eighteenth-century Paris, while two others have claimed that 'Americans have been preparing for the Information Age for more than three hundred years.'[13]

We shall return to the problem of continuity and revolution in Chapter 4. Here it may be sufficient to note that the history of knowledge has developed out of other kinds of history, two in particular. The first is the history of the book, which has developed in the last few decades from an economic history of the book trade to a social history of reading and a cultural history of the spread of information.[14] The second is the history of science, where the turn to a broader history of knowledge has been driven by three challenges.

One challenge is a consequence of the awareness that 'science' in the modern sense of the term is a nineteenth-century concept, so that to use the term about knowledge-seeking activities in earlier periods encourages what historians hate most, anachronism. The second challenge has come from the rise of academic interest in popular culture, including the practical knowledges of artisans and healers. The third and most fundamental challenge has come from the rise of global history and the consequent need to discuss the intellectual achievements of non-Western cultures. These achievements may not fit the model of Western 'science', but they remain contributions to knowledge.

What is knowledge?

To sum up so far, the last few decades have seen what might be described as an epistemological turn, both inside and outside the academy. This collective turn, like other turns in the humanities and social sciences (the linguistic turn, the visual turn, the turn to practice and so on), raises a number of awkward questions. The most obvious of these questions is What is knowledge? A philosophical question, but one that historians of knowledge cannot simply abandon to the philosophers, who in any case disagree. For one philosopher, for instance, knowledge is any state in an organism that bears a relationship to the world.[15]

Before trying to answer this question, it is worth noting that some historians, especially in the USA, prefer to speak about 'information', as in the case of books like *A Nation Transformed by Information* or *When Information Came of Age*.[16] In similar fashion, two sessions at the American Historical Association's annual conference in 2012 were entitled 'How to write a history of information' and 'Secret state information'. The choice of the term 'information' rather than 'knowledge' illustrates the empiricist culture of the USA, contrasting in particular with the German concern for theory and *Wissenschaft*, a term often translated into English as 'science' but referring more widely to different forms of systematically organized knowledge.

In my view, both terms are useful, especially if we distinguish between them. 'We are drowning in information', we are sometimes told, but 'starved of knowledge'. In his play *The Rock* (1934) T. S. Eliot already asked the questions, 'Where is the wisdom we have lost in knowledge?' and 'Where is the knowledge we have lost in information?' Borrowing a famous metaphor from Claude Lévi-Strauss, it may be useful to think of information as raw, while knowledge has been cooked. Of course, information is only relatively raw, since the so-called 'data'

are not objectively ‘given’ at all, but perceived and processed by human minds that are full of assumptions and prejudices. However, this information is processed again and again in the sense of being classified, criticized, verified, measured, compared and systematized, as Chapter 3 will illustrate. In what follows distinctions will be made between knowledge and information whenever this is necessary, although the term ‘knowledge’ will sometimes be used to refer to both elements, especially in the titles of chapters and sections.

Some scholars have focused on the history of belief (in French, *histoire des croyances*), generally concentrating on religious belief. Believers, on the other hand, consider their beliefs to be knowledge. As for historians, they are well advised to extend the concept of knowledge to include whatever the individuals and groups they are studying consider to be knowledge. For this reason, beliefs are not discussed separately in this book.

Knowledges in the plural

Despite the title of this study, it might be argued that there is no history of knowledge. There are only histories, in the plural, of knowledges, also in the plural. The current explosion of the history of knowledge makes this point all the more obvious – as well as making an attempt to fit the pieces together all the more necessary. Hence this book will follow the example of Michel Foucault, who often wrote of *savoirs* rather than a single *savoir*; the management theorist Peter Drucker, who suggested that ‘We have moved from knowledge to knowledges’; and the anthropologist Peter Worsley, who declared that ‘there are knowledges, not simply Knowledge with a capital K’.[17]

Even within a given culture, there are different kinds of knowledge: pure and applied, abstract and concrete,

explicit and implicit, learned and popular, male and female, local and universal, knowing how to do something and knowing that something is the case.

A recent study of the scientific revolution of the seventeenth century contrasted 'what was worth knowing' in 1500 and in the eighteenth century, emphasizing the shift from 'knowing why' to 'knowing how'.[18] What is considered worth knowing varies a good deal according to place, time and social group. So does what is taken for granted: the doctrine of the Trinity, for instance, the efficacity of witchcraft or the roundness of the earth. Equally variable is what counts as the justification for belief: oral testimony, written evidence, statistics and so on. Hence the recent rise of the phrase 'cultures of knowledge' or *Wissenskulturen*, including practices, methods, assumptions, ways of organizing and teaching and so on.[19] The phrase is a helpful one, provided that we remember that different knowledges may coexist, compete and conflict within a given culture: dominant and subjugated knowledges, for instance, as a recent study by Martin Mulsow of the clandestine circulation of unorthodox ideas in eighteenth-century Germany reminds us.[20]

Even the concept of knowledge varies with place, time and above all with language. In ancient Greek, there was a division of labour between *techne* (knowing how), *episteme* (knowing that), *praxis* (practice), *phronesis* (prudence) and *gnosis* (insight). In Latin, a distinction was made between *scientia* (knowing that) and *ars* (knowing how), while *sapientia* (derived from *sapere*, 'to know') meant wisdom, and *experientia* referred to knowledge derived from experience. In Arabic, *episteme* was translated as '*ilm* (plural *'ulum*, 'the sciences', so that scholars used to be known as the '*ulema*). The equivalent of *gnosis* was *ma'rifah*, and the equivalent of *sapientia* was *hikma*.[21] In

China, *zhi* meant knowledge in general, while *shixue* referred to knowhow.

In German, a distinction has developed between *Erkenntnis* (knowledge from experience, formerly *Kundschaft*) and *Wissenschaft* (academic knowledge). In English, the words ‘scientist’ and ‘expert’ both emerged in the early nineteenth century, a time of increasing specialization. So did a word for the knowledge possessed by ordinary people: ‘folklore’, often implying an inferior form of knowledge. In French, the best-known distinction is that between *savoir*, a general term for knowledge, and *connaissance*, referring to specialized knowledges. In similar fashion, different groups of knowledgeable people have been described in French as *intellectuels* (who play a public role), *savants* (who are mainly academics) and *connoisseurs* (who know about art or wine).

Conflicts between different kinds of knowledge have often arisen. When Milan cathedral was under construction at the beginning of the fifteenth century, for instance, a dispute between the local master masons and the French architect in charge of the project was formulated in terms of the relative importance of practical knowledge (*ars*) and theory, especially geometry (*scientia*). In the seventeenth century, professional physicians ridiculed the practical knowledge of midwives and unofficial healers. In the late eighteenth century, a French miller went into print to criticize the ‘doctors’, in other words the *savants*, for their arrogance in presuming to tell millers and bakers how to do their jobs.[22]

As a result of these variations and conflicts, there has been much work on the history of knowledge in these different senses and there remains still more to do. Books have been published about practices such as observing and describing and attitudes such as objectivity. If any kind of knowledge

is timeless, it is surely wisdom, but as I write, a forthcoming book is announced concerned with its history, or perhaps with the history of what has been thought to be wisdom in different places over the centuries.[23]

History and its neighbours

A plain or general historian who sets out to study the history of knowledges soon becomes aware that valuable contributions to this subject have already been made by scholars coming from a variety of disciplines, close and more distant neighbours. For this reason a brief discussion of what have been described as ‘academic tribes and territories’ is in order, so as to insert the research conducted by historians into a bigger picture.[24]

Unsurprisingly, many disciplines take knowledge as an object of study as well as their goal. The neighbours of the history of knowledge include sociology, anthropology, archaeology, economics, geography, politics, law and the histories of science and philosophy (further away is the multidisciplinary field of cognitive studies, to be discussed in Chapter 4). Communities beyond the university must not be forgotten either. Archivists, librarians and the curators of museums have all made valuable contributions to what we might call ‘knowledge studies’.

Of these neighbouring tribes, the closest is the history of science, which has moved from a focus on the great ideas of great scientists to the study of institutions such as scientific societies, of practices such as experiment and observation and of places such as laboratories and botanical gardens. A number of contributions to the history of knowledge might be described as history of science (of this new kind) under another name. Philosophy is another close neighbour. From the ancient Greeks onwards, philosophers have been concerned with epistemology (from

the Greek term, *episteme*), asking questions such as What is knowledge? How do we come to know anything? Is our knowledge reliable? One leading figure in the renewal of epistemology was Michel Foucault, who moved from philosophy to the history of medicine and from studies of madness and clinics to more general reflections on the relation between knowledge and power (*savoir* and *pouvoir*), including the lapidary statement that 'The exercise of power perpetually creates knowledge and conversely, knowledge constantly induces effects of power.'[25] Francis Bacon, who knew that knowledge empowers, or, as he put it, 'enables' government, while governments manage knowledge, could not have made the point more succinctly.[26]

The social factors that influence knowledge, or what is considered to be knowledge in a particular milieu, have long been the concern of sociologists. In the 1920s, in the first wave of what was coming to be known as the 'sociology of knowledge', Mannheim launched the idea of the 'existential binding' or 'situational binding' (*Seinsverbundenheit*, *Situationsgebundenheit*) of thought, in other words the 'affinity' between 'thought-models' and 'the social position of given groups'. This idea was a milder or more open version of Karl Marx's claim that thought was determined by social class. As Mannheim wrote, 'By these groups we mean not merely classes, as a dogmatic type of Marxism would have it, but also generations, status groups, sects, occupational groups, schools, etc.'[27]

From the 1970s onwards, a second wave of the sociology of knowledge became visible.[28] In important respects, the contributions of Pierre Bourdieu to the sociology of knowledge continued Mannheim's work. Bourdieu studied the French university system or, as the author called it, the academic 'field' or 'battlefield', analysing the conditions of

entry and the relation between individual positions in the field and different strategies and forms of academic power. Mannheim had praised scholars who had the courage to subject their own point of view, as well as that of their adversaries, to social analysis. Bourdieu actually wrote what he called ‘reflexive sociology’, turning his penetrating gaze on his own work and that of his colleagues as well as on the natural scientists.[29] Meanwhile, the so-called ‘Edinburgh School’ of the sociology of science put forward what they called a ‘strong programme’ that attempted to go beyond Mannheim and explain successful theories in the natural sciences as well as unsuccessful ones.[30]

The idea of situated knowledge was itself situated. Mannheim, for instance, was a young man at the time of the outbreak of the First World War and the collapse of the Austro-Hungarian Empire in which he had grown up, a collapse that led many people to question beliefs that they had formerly taken for granted. The second wave of the sociology of knowledge, from Foucault to Bourdieu, followed the famous ‘events’ of May 1968 in Paris, when students not only fought the police in the streets but also questioned the academic system. At much the same time, the rise of feminism encouraged the analysis of the obstacles to the careers of female scholars and, more positively, of studies of female ‘ways of knowing’, to be discussed in Chapter 4.[31] A third element in the situation in the 1970s was the rise of ‘post-colonial’ thinkers, responding to the process of decolonization – or, more exactly, to the perceived limitations of that process. Offering a case-study of the relation between power and knowledge in the style of Foucault, Edward Said argued that Western studies of ‘the Orient’ were essentially a means of dominating that region.[32]

The work of Pierre Bourdieu, who studied Algeria before he studied France, may equally well be described as contributing to the sociology or the anthropology of knowledge. Once upon a time the two disciplines were relatively distinct. Sociologists studied whole societies and they offered explanations of what they described in terms of varieties of social structures. Anthropologists, by contrast, did their fieldwork in villages and offered cultural explanations of what they observed, including what they used to describe as ‘ethnoscience’. Just as linguists recorded endangered languages before they died out, anthropologists, especially the group calling themselves ‘cognitive anthropologists’, recorded what might be described as ‘endangered knowledges’, including the knowhow of builders, smiths and carpenters. The idea of knowledges or ‘cultures of knowledge’ in the plural, like the idea of cultures in the plural, came from anthropologists. One of the leading figures in anthropology today, the Norwegian Fredrik Barth, has devoted much of his long career to studies of knowledge in different societies ranging from Bali to New Guinea.[33]

More recently, the differences between sociology and anthropology have become blurred. Bruno Latour, for instance, a French scholar who straddles anthropology and the history of science and plays a leading role in Science and Technology Studies, has carried out ‘fieldwork’ in laboratories (a biochemical laboratory in his case), in order to observe scientific knowledge in the making, thus placing Western science on the same footing as the knowledge of peoples such as the Trobrianders, say, or the Azande, both of whom were the subject of classic anthropological studies in the 1920s and 1930s. Latour went on to produce what he called an ‘ethnography’ of the French supreme court, the *Conseil d’État*. This cheeky move by anthropologists raises