Ordering without a system: Roman knowledge order(s).*

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ABSTRACT

In the first volume of his *Social History of Knowledge* Peter Burke suggested that the curricula, libraries and encyclopaedias of early modern Europe constituted "a sort of intellectual tripod " from which some general assumptions about the organization of knowledge might be reconstructed. This paper will draw on work recently conducted for the Leverhulme *Science and Empire* project on ancient libraries and premodern encyclopaedism to propose a contrasting picture of knowledge orders in the world before Gutenberg. Ordering of knowledge, it will be argued, was a constant rhetorical and intellectual concern. But no single taxonomy of academic knowledge emerged from this activity, with profound implications for the trajectory followed by ancient scholarship.

Introduction

In the first volume of his *Social History of Knowledge* Peter Burke suggested that the curricula, libraries and encyclopaedias of early modern Europe constituted "a kind of intellectual tripod " through which the classification of academic knowledge entered into everyday practice in European universities.[1]

My aim today is to make use of the results of a recent research project that

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[1] (Burke 2000, 87)

has, among other things, produced collective volumes on both ancient libraries and pre-modern encyclopaedias,[2] to ask some questions about the ordering of knowledge under the Roman empire. That project, entitled *Science and Empire in the Roman World* was sponsored by the Leverhulme Trust and it is appropriate here to gratefully acknowledge their support and also the many contributions of my co-director, Dr Jason König.

My investigation today is not quite the same as Burke's since he was examining the dissemination and stabilization of a *pre-existing* knowledge order through the life of a key institution, the mediaeval and early modern university of western Europe. Nothing similar really existed in classical antiquity even if the term is occasionally used to describe the late antique pedagogic environments described for the fourth century CE by Augustine, Libanius and Gregory of Nazianzen.[3] Characteristic of the largest cities of the ancient world – among them Rome, Athens, Carthage, Alexandria, Constantinople and Antioch - these revolved around a small number of imperially supported chairs in rhetoric and philosophy (and occasionally law), and they comprised a mass of privileged adolescent males following the lectures and discourses of charismatic teachers of their choosing. The latter were not exactly secular in outlook, but they had no links to civic cult and the discursive universes they inhabited offered little space either to traditional notions of the gods or to new movements such as Christianity.

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[2] (König, Oikonomopolou, and Woolf 2013; König and Woolf 2013). A third volume, entitled *Authority and Expertise in the Roman World* is in preparation.
[3] (McLynn 2005). On Antioch, Libanius *Oration* 1 with Norman's commentary. (Cameron 1997) provides an excellent introduction to the field.

These "university communities" had virtually no institutional existence – neither faculties nor degrees, no examinations and no curricula, no dedicated buildings nor libraries. The municipal rhetors of smaller towns were simply salaried teachers. A few, like Ausonius, did compose literary works, but scholarship and disputation was never central to their role.

Yet even if the intellectual world of classical antiquity was structured quite differently to that of mediaeval and early modern Europe, there were libraries, and encyclopaedic projects and also pedagogic traditions. My aim today is to see whether through them we can discern anything like an agreed academic classification of knowledge. My answer will be, mostly, in the negative. I hope, however, to show *en route* that ordering knowledge was a constant preoccupation of ancient intellectuals even if they did not in the end produce an agreed classical knowledge order.[4]

Naturally there are many other contrasts between classical antiquity and the early modern world that Peter Burke describes. Let me pick out just two salient ones before turning to the classical material.

First, Burke begins with Gutenberg and so the knowledge orders he explored were overwhelmingly those made physically present by printed texts. That meant a small number of books could have enormous influence, an a much larger number could be widely available, creating what he properly describes, after Benedict Anderson, as an imagined community. By

[4] The project owes a great deal to (König and Whitmarsh 2007).

contrast in antiquity very few ancient texts existed in very many copies, and some may even have existed in few no more than one copy. The exceptions were those works central to ancient educational systems to which I shall return. But they were few in number and individually each copy remained expensive. Mass production introduced no economies of scale when it was carried out by copyists rather than printers.

The second key difference follows from the nature of this imagined community reading and discussing the same group of early printed works. Burke, following Gellner, termed this a “clerisy” by which he means each age’s specialists in knowledge, whether the teachers in mediaeval universities later termed *scholastici* or the *humanistae* who defined themselves against them, or their counterparts in the Islamic and Chinese world, the *’ulama* and *shen-shih* respectively.[5] Each clerisy was interdependent with a particular knowledge order, and Burke’s social history of knowledge is very much a history of the rise and fall of successive clerisies and their associated regimes of socialized of knowledge. After Foucault and Bourdieu this sort of approach is very familiar of course. There is much more to Burke’s analysis than this but much of it – for example on the successive institutionalization of clerisies – has no real relevance to the classical world. But it does directs us immediately to the question of who constituted the Roman clerisy? This will turn out not to be as easy a question to answer as we might wish. I will argue that the indeterminacy of the Roman clerisy is linked to the absence of an agreed ordering of

[5] (Burke 2000, 19-20) preferring the term to intelligentsia.

knowledge.

First however, I shall consider in turn libraries, encyclopaedic projects and (more briefly) educational curricula in the Roman world.

Libraries

Collections of texts are as old as texts themselves but we commonly distinguish collections of documents (archives) from collections of literary, religious or technical texts (libraries). Libraries in this sense originate around the palaces and temples of the Ancient Near East. For the classical world the first collections are those of philosophical schools in the fourth century BCE although there were quite likely small private collections almost as soon as books began to circulate. Systematic collecting of texts is usually traced back to the activities of Hellenistic monarchs, especially the creation of the libraries of Alexandria by the Ptolemies. It is not possible to connect this activity with the royal libraries of Assyrian, Hittite and other Near Eastern monarchs but a link is not fanciful. Greek and Macedonian monarchs also patronized intellectual activities in the generations before Alexander. Perhaps it is simplest to note that papyrus books were prestige objects, expensive to produce and difficult to obtain, and as such were just as likely to be objects of collection, thesaurization and display as were paintings, statuary and other *objets d'art.* Certainly Roman generals, when returning in triumph from eastern campaigns, brought back libraries with among other booty. Back in Rome they then used them to display their cultured credentials. The scant testimony we have on ancient libraries is

overwhelmingly concerned with the creation, theft, transfer and loss of specific collections.[6] The fate of Aristotle's books and rise and fall of the library of Alexandria in particular have been much mythologized.

What our ancient testimony has less to say about is the use of libraries and their organization. Even their physical form is a bit mysterious until the beginnings of the principate when purpose built libraries were created, first in Rome and then in a large number of Italian and provincial cities.[7] Beginning in the dictatorship of Caesar a series of grandiose monumental libraries were planned, and many were constructed in the centre of the city, typically part of forum complexes and often linked to temples. The forum of Trajan for example included enormous libraries, and those on the Palatine remained important well into the third century CE. Built by the emperors they were claimed to be public, that is for the benefit of the *populus Romanus*. These projects sat alongside the creation of public bath complexes – the imperial *thermae*; public gardens; permanent theatres; and porticoes in which statuary was displayed. The broad context is the opening up to the masses of amenities that in a previous generation had been available only to aristocrats and their friends.

Indeed earlier Roman book collections were typically lodged in a few rich villae, especially those constructed in Latium and Campania in the last century BCE. That of Lucullus at Tusculum is the best attested.[8] Perhaps a

[6] Jacob in *Ancient Libraries*
[7] (Dix 1994; Dix and Houston 2006). Nicholls in *Ancient Libraries*
[8] (Dix 2000)

part of this was based on spoils from the Mithridatic Wars, but Lucullus had a life long interest in Greek literature and philosophy and probably acquired a numebr of books through purchase or through having copied works owned by his various connections. The villa did not only lodge a collection: it also provided at least some space for his friends, Greek and Roman, to read there and perhaps to have the sort of learned discussions portrayed in Cicero's dialogue named after him. Cicero too developed part of his property in the same hilltown as a sort of philosophical space - his Academy - equipped with statuary and presumably books. The Villa of the Papyri at Herculaneum provides archaeological support: as well as an extensive book collection including, but not limited to, works by the philosopher critic Philodemus of Gadara,[9] it included a peristyle garden equipped with Hellenistic themed statuary. We know it in its state at 79 CE when the burial of the city in volcanic mud seems to have interrupted a planned evacuation of both people and texts. But it was certainly operational in the 50s BC, at roughly the same time as the villa library of Lucullus and Cicero's Tusculan retreat. Late Republican grandees had multiple residences of course, and Cicero at least had books at several of his homes.

The appearance of monumental municipal and imperial libraries in the early principate should not distract us from the persistance of private collections. Vitruvius already envisaged villae as equipped with bibiothecae alongside their other amenities, and Pliny the Younger certainly possessed

[9] Houston in *Ancient Libraries*

collections. William Johnson has suggested that one reason we know so little of the way public libraries were used is that the elite – whose lives we know best of all – made little use of them, prefering to collect and borrow, lend and make copies of their books as part of the elaborate routines of gift exchange through which their cultured collective identity was fostered.[10] Pliny's personal collections may, then, have been rather different to those with which he stocked the municipal library he endowed in his home town of Comum, which seems to have been linked to his promotion of education, and of his own image a leading orator and nephew of a celebrated polymath.[11] Likewise the library given by Celsus to the city of Ephesos, parts of which have survived, was certainly a monument to a particular view of paideia and - lest self-representation be forgotten – the donor was buried inside it. Endowing libraries in municipia, in other words, may have been less about extending aristocratic reading culture to fellow citizens so much as doing in Italy and the provinces what the emperors were ostentatiously doing in Rome. If so, then library building fits within a well established pattern of aristocratic self-representation during the early principate.[12]

If I seem to have lost sight, for a moment, of the ordering of knowledge encapsulated in these libraries this is no accident. Literary testimony and monumental epigraphy, along with notices of the careers of imperial librarians, make little mention of the organization or contents of libraries. A

[10] Johnson in *Ancient Libraries*
[11] (Dix 1996)
[12] The classic study is (Eck 1984). But the activity was not confined either to the senatorial order or the Augustan age.

series of modern studies have shown how far we have filled the gaps with anachronistic assumptions of what a library *normally* has. What we can actually attest is more limited. Were there tables to sit at? Could one borrow? Who had access? Was it possible to copy books in the library? We can only guess at the answers to these and other questions.

First, it seems likely that papyri were often stored by author. Labels attached to them identified books. Rudimentary lists of book titles and authors are attested as early as the Alexandrian library – the famous *pinakes*- and for some Roman libraries. Did private collections have or need such catalogues? Perhaps a small philosophical school owning only a few dozen books had no need of this sort of aid? But bibliographic research and resources must have been extremely rudimentary. There is certainly no sign that in any period it was possible to know what was contained in any given library except by visiting it in person. Specialized slave staff could no doubt give advice on holdings, and experienced users - whoever they were - would doubtless get to know their way around. Gellius and Galen both assert that they knew exactly where to find particular texts and the best copies of them.[13] But this is a testament to their self-representation rather than the systems of the library.

There is no sign at all that books were classified or stored by genre – no battered copies of the ancient novel, and no dusty shelves of pristine technical literature then. Most likely in some Roman libraries Greek texts

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[13] (Houston 2003). ** ADD Nutton in Gill et al ed.? and Nicholls in JRS?**

and Latin ones were stored separately[14]. But even this is not certain, not least since Greek books would have greatly outnumbered Latin ones, and a bicameral library design would only have emphasized this. Libraries did have a reputation as great storehouses of information. Several enormous texts adopted the title *Bibliotheke*, and the figure of a learned person as a 'walking library' is a familiar one.[15] But the value placed on people of memory is itself a reminder that ancient libraries were not thought of as places from which knowledge might easily be accessed by just anyone.

Encyclopaedism

Let me turn now to encyclopaedism, the second leg of Burke's tripod. This story may be related more quickly. It is broadly accepted that encyclopaedias in the modern sense of compendious and authoritative reference works, ordered according to some system that allows readers rapidly to access particular data, did not exist before the fifteenth century and were in some ways a product of Enlightenment.[16] A range of ancient works including the works of Pliny the Elder, Solinus and Isidore have at various stages been treated as encyclopaedias. For Aude Doody this reading tactic has led to serious misunderstandings of them.[17] Early in our project we refocused our efforts on looking at encyclopaedism as an intellectual activity rather than for ancient encyclopaedias.

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[14] (Nicholls 2010)
[15] (Too 2000) and more generally (Too 2010).
[16] Blair in *Encyclopaedism…*
[17] (Doody 2010) see also (König and Whitmarsh 2007).

The encyclopaedic urge, we argued, like the appearance of libraries, was a response to the expansion of the number of books being produced and circulated. It was therefore a secondary activity like the production of epitomes, *florilegia* and miscellanistic writings. The latter took many forms – dialogues and sympotica are especially prominent in the Roman period – and some miscellanies were clearly huge in scale.[18] Athenaeus' *Deipnosophists* and Gellius' *Attic Nights* give some idea of a what is lost: both are relatively late examples since Pliny the Elder already lists a number (mostly with Greek titles such as *The Meadow* and *Cornucopia* but also the Latin *Lucubrationes*) in the preface to his *Natural History*. All these works were produced by reading, note taking, excerpting and then compilation, compilation that including direct quotation, paraphrasing and sometimes a mixture of quotation and comment. For Pliny at least we know a little of the mechanisms of this process which involved slave readers, dictation and the preparation of multiple preliminatry notebooks. Presumably similar processes went into the creation of universal histories, periegetic works and large geographic compendia. The art – itself drawing on skills inculcated in a rhetorical education – was in selecting and arranging the pieces to form a larger whole. The arrangment of some miscellenies is difficult to fathom beyond a vague sense that works like the *Attic Nights* offered a varied, pleasant and educational experience for an imagined reader of voracious and polymathic tastes? Plutarch's *Sympotica* and the *Deipnosophists* also offer narrative orders of this kind. Up to a point they

[18] ADD Oikonomopolou in *Encyclopaedism.* Also (Oikonomopolou and Klotz 2011)

are mimetic of social deployments of erudition, so reading the Attic Nights is in some ways like walking around the forum of Rome with Favorinus listening to his unpredictable but always enlightening remarks, and sympotic literature presents an alchohol free version of the idealized philosopher's banquet.

Pliny lists these predecessors, however, not as models but as examples of what he was not writing. Quite apart from his explicit concern to align his own work with an emerging canon of Latin classics (in verse as well as prose) the distinguishing feature of the *Natural History* is that the material he had gathered in 160 notebooks from reading 2000 works was subjected to systematic ordering. The first book – in the guise of a lengthy table of contents – order the bibliographic universe, the second offers an account of the physical cosmos, books 3-6 conduct the reader on a tour of the world, book 7 examines 'the human animal' and successive groups of books examine the animal kingdom, trees, crops and other plants, and finally the animal and material world. (There are of course other organizing principles, overarching themes and Leitmotiven but they too implicitly celebrate coherence over variety.) In some sense then the ordering of the *Natural History* presents a vision of the ordering of the world, one that is both original to Pliny and in many respects a mix of quite conventional Platonic and Stoic ideas.

If the Pliny's *Natural History* was one survival of a lost and evolving genre perhaps it would be legitimate to see it as presenting a Roman knowledge

order in rather the way Burke has early modern examples do. But Pliny's works is a stand alone classic and the nearest analogues were ordered on quite different lines. His two most likely Latin predecessors are Celsus' *Artes* and Varro's *Disciplinae* but the latter is lost all together and the former survives only in part. Celsus too was concerned to order a *systematic* world of knowledge but chose a quite different scheme producing runs of books on medicine, agriculture, war, jurisprudence, philosophy and rhetoric. How Varro ordered his work is unknown and controversial: perhaps it was close to the liberal arts (on which more in a moment) perhaps not. Like Celsus and Pliny he wrote at length, he excerpted and reordered material from a vast book world mostly written in Greek, and offered it to Roman readers under the sign of utility.

Much more could be said and has been said about these projects. Systematic mega-books of this kind seem characteristically Roman (although Roman writers also produced miscellanistic texts). Connections of one kind or another have been suggested with the totalizing order of empire. Their production depended on wealth, skilled slave secretaries and – yes – libraries. Probably very few copies of most of these works ever existed and with the exception of Pliny their manuscript tradition is usually precarious. What they do not represent, however, is the emergence of a standardized and accepted academic classification of knowledge. Ordering was important – but originality came largely from re-ordering. Solinus' collections of memorable things drew very largely on Pliny (and on Mela and other sources too) but it was completely rearranged in his case on a

geographical-cum-periegetic frame. The links that Ann Blair and others have asserted between Enlightenment encyclopaedism and education did not exist in the ancient world. Pliny's book explicitly performed enkyklios paideia, or a Roman version of it, but it was not a handbook to it.

Curricula

Our research project spent proportionally less time on education per se, although it naturally arose in connection with the ideal of *enkyklios paideia* from which the terms encyclopaedia and encyclopaedism derive.

Fortunately there has been a long tradition of investigation of ancient pedagogy, based to begin with on prescriptive texts like those of Isocrates and Quintilian, supplemented by anecdotes collected from some of the many ancient writers like Suetonius, Ausonius and Libanius with direct experience of teaching, and by epigraphic mentions such as the variable pay-scales for different kinds of teachers defined in the Price Edict. [19] Most recently this work has been supplemented with the evidence of school texts, some on papyrus from Egypt, others recovered from manuscripts.[20] These latter add detail to be largely confirm the impression given by literary texts that education beyond the teaching of reading and writing was overwhelmingly focused on rhetorical training, if often studied through the medium of literary study. The range of actual books used, both in the Greek

[19] (Marrou 1965; Kaster 1988; Harris 1989). See also (Too and Livingstone 1998; Too 2001).

[20] (Morgan 1998) and crucially (Dionisotti 1982).

East and the Latin West, was fairly restricted. At the centre were two small canons, one Greek and one Latin, in which the epic poems of Homer and Virgil respectively took pride of place not only as reading matter but supplying material for exercises in memorization, composition, recitation and disputation.

A range of cultural interpretations of this style of education have been offered. These emphasize its utility in converting economic to cultural capital so permitting certain kinds of social mobility, point out the possible advantages to individuals and the empire as a whole in the creation of a restricted set of common references through which a ruling class could define itself.[21] It has also been pointed out that some common rhetorical themes emphasize ethical issues of special importance for Roman males, such as conflicts between duty to friends and duty to the state.[22] Along with physical exercise, both athletic and military, educational systems remained designed for the social reproduction of male citizens and, in its higher level, the ruling classes.

These objects are quite different from those of the mediaeval and early modern institutions Burke describes, both the universities and the humanistic academies. If we wish to look for educational curricula that might reveal an academic classification of knowledge it is necessary to focus on the small special interest groups who acquired a philosophical,

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[21] (Kaster 1988; Heather 1994).
[22] (Beard 1993; Bloomer 1992; Skidmore 1996).

medical and legal education: specialists teachers, specialized libraries and the development of "schools" of thought focused on founders and canonical texts characterised each group. But none claimed to offer comprehensive orderings of knowledge. We might also consider religious textual communities: [23] these appear early in the Jewish tradition and a little later among Manichees and Christians.

Last, and most controversial, is the question of the seven liberal arts, comprising the trivium of grammar, dialectic and rhetoric and the quadrivium of music, geometry, astronomy and philosophy. That organization, so influential in the Middle Ages, does appear in late antiquity in Augustine's *de Ordine* (late fourth century) and in Martianus Capella's *De nuptiis Philologiae et Mercurii* (early fifth). For some the liberal arts were an invention of this period, developed directly from Neoplatonic ideas.[24] Others trace them back as far as Varro's (lost) *Disciplinae* and much earlier Platonic roots.[25] The question may not be soluable given the great gaps in the extant literature. The disagreement is, however, essentially about system, since there is no doubt that a very small segment of the elite of the Roman empire were knowledgeable in a wide range of *disciplinae* and that they, and perhaps a few others, considered that an all-round education of that kind (*enkuklios paideia*) was a goal to which all learned people should aspire.[26] A soft version of this view was a general high valuation placed on

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[23] (Stock 1983) followed by (Lane Fox 1994)
[24] (Hadot 1984) developed in (Hadot 1997).
[25] (Shanzer 2005)
[26] (Rawson 1985)

polymathy, which occasionally surfaces in works like Vitruvius' *de architectura* as a claim that the architect should be a master of a wide range of skills. A harder version might be a belief that all knowledge was to be articulated around a single method, Platonic dialectic, Aristotelian system or whatever. This is difficult to attest. In the current state of the evidence I think the onus of proof should be on those who claim the seven-fold system of disciplines was already known in the late Republic and early empire.

Curricula, then, cast no more light on a Roman knowledge order than do libraries and encyclopaedic projects.

Ordering without order and the absent clerisy.

My conclusions then are straightforward and – as promised – negative. The creation of vast libraries and vast books and the generalization of education among a broad elite was not accompanied by the establishment or dissemination of a standard academic classification of knowledge. Some things were widely known, some were more central than others, certain books had prestige but this did not add up to a Roman knowledge order. Why not?

Let me close with a few suggestions.

The first, most obvious, is the absence of a sacred text. Mediaeval and early modern scholars were in some sense trying to escape from a knowledge of the world in purely biblical lines yet the notion of an authoritative text promoting a single order haunted their efforts. Nowhere is this clearer than in the notion of a book of nature that might complement scripture. But the tree of life image was also influential. Ancient scholars had no authoritative religious world view to supplant or supplement, and so did not create one of their own.

My second suggestion returns us to Burke's notion of a clerisy. Knowledge orders in many societies have been intimately linked to particular specialists in knowledge, specialists who were themselves ordered in various ways, by the church, by emergent universities, by the constraints of an educational syllabus they had learned and then taught, by an examination system and so on.

It is very difficult, however, to identify a Roman clerisy. Books were produced and read by members of loosely organized social networks within the imperial and municipal elites of the empire. But not all members of those elites participated. Rhetorical education was a necessary precursor, but most of those who received it did not go on to participate in a life of letters. Those who did included some senators and equites, a few decuriones, some sophists, and a minority were teachers.[27] Apart from networks of friendship they came together around collections of books and

[27] (Bowersock 1969; Woolf 2003)

sometimes the imperial court. But very few committed to this activity full time. Not only did they not identify primarily in terms of their literary or scientific activity, they did not seek status primarily in terms of their success within particular institutions. Authority, in other words, was not one of the prizes of competition. They certainly did compete, and perhaps the agonistic context of ancient rhetoric also undermined any emergent knowledge orders (but the scholastici were a fairly disputatious lot too). But it one's erudition was best displayed by taking one's predecessors works to pieces and making new constructions out of the parts, no cumulative system of knowledge was likely to emerge.

There were exceptions. Medicine most obviously, and mathematics, did establish knowledge orders in their respective spheres. Medics of course were more specialized, more likely to identify as such. Philosophical schools and religious groups in their very small way also tried to build systematic and authoritative bodies of knowledge. But their practice never captured the academy. Roman and Greek intellectuals, for the most part, remained fascinated with different ways of ordering knowledge, without seeking in any way to create a comprehensive or lasting knowledge order.

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