



## Introduction: Methods, Problems and Prospects

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This volume brings together a collection of essays by scholars who are united in their conviction that the critical comparative study of ancient civilisations offers notable opportunities to advance our understanding, in particular by drawing attention to questions and problems that will not readily occur to those who concentrate their efforts on just one civilisation. Traditionally, ancient historians have done just that, all too aware, in many cases, of the complexities and difficulties in investigating a single society over an extended period of time. Yet it is only if, working on our own or in collaboration, we engage in cross-cultural analysis, that we can be in a position more confidently to identify what is distinctive and what is common across ancient civilisations. Claims for uniqueness can sometimes be sustained, but rather less often than advocates of the superiority of one culture over all others are prone to assert. If we limit ourselves to just one ancient society, we might assume that what happened in it was somehow inevitable. Consideration of others can show how mistaken this may be, thereby raising the fundamental question of why things turned out in the ways they did in each case, difficult though it may be to attempt any satisfactory explanatory account on that subject.

That is just a bare statement, in very general terms, of the comparative project. Yet all our contributors are very well aware that comparing can be anything but fruitful. It is easy to see why comparing has so often got a bad reputation. In principle it is possible to compare anything with anything else. In practice many comparative studies seem to engage in an arbitrary juxtaposition of widely different objects without any concern for context or for what may validate the exercise. Nathan Sivin's chapter at the outset of this volume takes up just this question as does Walter Scheidel's examination of the 'how' and 'why' of comparative history, while Michael Loewe reflects on the problems in retrospect at the end. So if comparison is to generate valuable new insights, it is essential that we have a clear idea of why the project should be undertaken, what criteria we should adopt for a worthwhile comparison and how we can test whether our results are sound. I construe my task in this introductory chapter to be to outline the principles that guide our project and to draw attention to the major

problems it faces, though I shall not limit myself to the particular topics that will be the focus of the subsequent chapters of this book.

In the present volume our targets are ancient Greece (including what it bequeathed to the Roman world) on the one hand, and ancient China on the other, and we restrict ourselves to the period down to the end of the third century CE. That cut-off point is, to some extent, an arbitrary one, but it means that in both cases we are studying civilisations not yet fundamentally affected by the major transformations brought about on the one hand by the Christianisation of the Roman Empire, and on the other by the emergence of Buddhism as a dominant influence in China. We should not underestimate the variety and diversity that existed in both the Greco-Roman world and China even before those religious upheavals: but certainly once they had occurred, the complexities of the problems of comparison increase very considerably.

We happen to have particularly rich evidence for both ancient civilisations in the periods concerned, but the comparative approach can and, we hope, will be adopted to advance the study of other societies too, not confined to the ancient world. Ancient history has much in common with, and much to learn from, social anthropology. We may suffer from the disadvantage of not having direct access to our witnesses: obviously we cannot question them. But we have advantages too, in the ability to track changes across many generations, giving our account a diachronic dimension that is much harder to achieve in ethnography.

The possible subjects for comparison between ancient civilisations vary enormously and there is no reason to suppose that the methodological questions I have raised should be answered in identical ways across different fields. One major recurrent issue relates to the concepts we use in discussing what we compare, where there is an obvious danger in any assumption that those we are used to, in whatever happens to be our own mother tongue, will be fit for purpose. The dilemma we face is clear: if we use our own conventional conceptual categories, will that not be bound to lead to us distorting those used by those whom we are trying to understand? And yet how can we fail to employ those categories of ours, since they are the only ones we have?

Evidently there is no entirely neutral vocabulary that we can use. But provided that we allow, as we surely must, that our concepts are revisable, that dilemma can be avoided. Indeed one of the benefits of cross-cultural studies is precisely to enable us to expand our views and to modify our preconceptions on certain fundamental questions. The recurrent difficulty we have to overcome can be expressed like this. If we talk about agriculture,

say, or medicine, or mathematics, or philosophy, or law, or bureaucracy, or slavery, or religion, or warfare, we have to question, in each case, just where such terms are appropriate or inappropriate to our studies of different ancient societies.

On the one hand, then, we cannot export our own categories and expect them to be applicable to any and every other society. On the other, where we find mismatches and discrepancies, that does not mean that comparison is ruled out. We have to avoid both kinds of mistake, both the imposition of our concepts, and the assumption that others are strictly incomparable, if not totally unintelligible (cf. Robert Wardy's chapter below). How are we to steer a course between those two extremes? This is where the chief difficulties, but also the greatest opportunity, of comparative studies lie. Let me take some time now to give some examples, going back to the items in the check-list of possible comparanda I gave just now, to show how, as we proceed, our understanding of the very subjects we are investigating is subject to modification, as we learn from the very variety that our investigations throw up.

I shall first illustrate this with two of the most important categories that we use in the West to classify certain intellectual activities, namely 'philosophy' and 'mathematics'. I shall then widen the field to cover also practical matters where there is a more obvious sense in which these relate to common human concerns, where I shall focus on food-supply, housing and health. In a third phase of my discussion I shall broaden the net still further with some admittedly programmatic remarks about other aspects of inquiries, social institutions and practices, including attitudes towards the past, law, education, religion, music and art.

It would clearly be rash to assume that what 'philosophy' comprises is agreed even among the speakers of languages that appear to have a term derived from the Greek *philosophia* that appears to refer to it, 'philosophie' in French and 'Philosophie' in German, 'filosofia' in Italian and so on. Already striking differences appear within different European traditions, both as regards the subjects investigated and in how to investigate them, as between so-called continental philosophy and the mainly English-speaking (but partly German) analytic tradition, each with its paradigmatic philosophical heroes, Hegel, Nietzsche and Heidegger on the one hand, Quine, Kripke and Bernard Williams on the other. Where some positivist adherents of the analytic approach tended to argue that many standard metaphysical questions rest on confusions which could and should be removed by careful linguistic analysis, in the continental

tradition such questions were fundamental to the whole philosophical endeavour.

So given that there is no universal agreement, in the West, on what philosophy should include, many studies that purported to survey Chinese philosophy, and in particular several that claimed that there was no such thing (the Chinese did not have philosophy, they only had wisdom<sup>1</sup>) were alike based on a confusion or at least oversimplified the problems. Yet to go to the opposite extreme and say that any such study is simply impossible is also to fall into a mistake. Even though 'philosophy' itself is contentious, there are some areas of reasonable agreement about some elements of what should be included. The discussion of questions of morality and right and wrong would surely be accepted as such, and such questions are evidently the subject of concerned debate in China just as much as in Greece, or Rome, or modern Europe. There is, for example, the famous dispute between Mencius, Gaozi and Xunzi in the fourth and third centuries BCE over whether human beings are naturally good, bad or indifferent. So that provides us with a starting point from which we can compare both the positions adopted, and the manner in which they were defended, as between ancient Greece and China.

Further questions concerning other areas that might be included in 'philosophy', such as philosophy of language, logic, epistemology, and indeed metaphysics itself, present greater challenges, but also offer prospects for interesting reflection. Thus the topic of the relation between words and objects is pursued in classical Chinese texts although not with the same problems in mind as those of Plato's *Cratylus*. The Chinese discussion focuses on the proper relations between humans and the maintenance of social roles, and this certainly suggests that the social implications of this study were seen as more important than the purely intellectualist ones.

Two further issues will illustrate both the complexities and the possible pay-offs of comparison in this domain, first how the individuals in question saw themselves and were seen by others – how they were categorised indeed – and, secondly, how they saw their chief goal. The origin of the Greek term *philosophos* is disputed and some early uses of that term and cognates are very general and appear to refer to any mode of curiosity.<sup>2</sup>

<sup>1</sup> Such a view goes back to Hegel, but for a relatively recent survey of the *status quaestionis* see Cheng 2005, and cf. Deleuze and Guattari 1994: 93–5.

<sup>2</sup> See for example Herodotus 1.30 on Solon and Thucydides 2.40 on the Athenians in general. For several divergent views on what 'philosophy' stood for in the period before Plato, see Laks and Louguet 2002.

There are some late sources that ascribe the word to Pythagoras.<sup>3</sup> But in any event those whom we conventionally label the ‘Presocratic philosophers’ would not all have seen themselves as belonging to a single unified group with a clearly defined goal. ‘Philosophy’ only becomes a recognisable activity in the late fifth and early fourth centuries, especially with Plato’s adoption of Socrates as his model. Aristotle considered the investigations he associated with philosophy (*theōrein*) as the highest activity of which humans are capable and a major contribution to happiness.

Thereafter Greek philosophers achieved a certain recognisability, if not notoriety. Many were figures of fun, exposed as pretentious hypocrites in comedy. But many saw themselves as serious seekers after the truth and concerned in the process to find personal happiness. Some (Epicureans and Sceptics) considered that that was incompatible with engagement in public life, though others, among the Stoics especially, saw their responsibilities as extending into the political domain and were indeed notable statesmen or advisers to rulers.

In China, however, the balance between the personal aspirations and the public involvement of those I have already identified as interested in moral questions is rather different. Of course there are Chinese thinkers who turned their backs on life at court and lived more or less as recluses. Zhuangzi is one such who refused to take office when there were those who tried to persuade him to do so.<sup>4</sup> However, another who retired from public life, Wang Chong, at the turn of the millennium, still saw fit to compose a notable treatise, the *Lun Heng*, in which he criticised many others for their wrong beliefs contributing to disorder.

Nevertheless a large number of prominent Chinese thinkers were centrally involved with good government. In the Warring States period these were often known as *you shui*, wandering advisers or persuaders, or alternatively *you shi*, wandering ‘knights’.<sup>5</sup> The rulers of Warring States kingdoms surrounded themselves with experts of many different kinds, including those who, precisely, claimed to be able to offer advice on how to govern the country. Many such experts moved from one state to another, as opportunities arose: we know that Confucius visited several, hoping, against hope, to find a ruler worthy enough to accept his advice. Of course these advisers attracted followers who saw it as their duty to preserve the

<sup>3</sup> See for example Diogenes Laertius 1.12. This issue is discussed by several contributors to Huffman 2014.

<sup>4</sup> See for example *Zhuangzi* 17: 81–4. I use the Harvard Yenching editions for *Xunzi* and *Zhuangzi* (cited by *pian* and line number).

<sup>5</sup> The shifts in the sense and reference of the term *shi* are discussed in Lloyd and Sivin 2002: 18.

teachings of the master – a process that continued and was strengthened with the creation of canonical texts after the unification of China. But when that occurred, the relation between teachers and rulers generally remained strong, and the main concern of the former was to provide useful advice to the latter.

If we ask what goals the majority of Chinese thinkers set themselves, the answer is of course very different from some Aristotelian ideal of *theōrein*. The Chinese aim was less a matter of learning or of understanding than of being, that is of embodying the way, the *dao*. To be sure the *dao* could take many forms: there is a *dao* of cooking and of butchery, and even a mockery of a *dao* of robbery.<sup>6</sup> But the ideal was set by the *dao* that the Sage Kings of antiquity embodied, a matter of being in tune with the universe, with ‘Heaven’, *tian*, as the Chinese generally put it.

I shall have more to say about the *dao* in my next section, on mathematics, but for now may conclude this first discussion by stressing four points. First ‘philosophy’ can certainly not be considered a well-defined cross-cultural category. Yet secondly we can investigate thinkers in both the Greco-Roman and the Chinese worlds who engaged in one or other study that for us falls into one or other of the components of philosophical inquiry. When we do so, thirdly, we find that the circumstances under which they worked and the goals they set themselves differ, both as between different periods, and as between our two societies, and this in turn, fourthly, helps to shed light on the values of the groups concerned. Crudely stated, the balance between personal self-cultivation and public involvement varies. Both goals are represented in both ancient civilisations, but thanks to the greater concern with advice on public affairs that we find in China, there that interest tends to outweigh personal, intellectual, ambitions.

My second example, ‘mathematics’, poses a similar set of problems. We cannot assume that everywhere there will be an equivalent intellectual inquiry to the one we call mathematics, which in any case in the West comprises a number of sub-fields, including those we distinguish as ‘pure’ and ‘applied’. The Greeks did talk of *mathēmatikē* for sure, from which our own term is derived, but the Greek word is cognate to the most general word for learning, namely *mathēma*. We should not approach the ancient Chinese texts expecting to find an equivalent concept, but they spoke of *suan shu* and *shu shu*, roughly ‘calculations and methods’, and certainly engaged in detailed studies of numbers and shapes, and thought about the

<sup>6</sup> Cf. Lloyd and Sivin 2002: 200.

ways in which they might be applied to achieve understanding of other problems.

But while that secures some common ground that we can use to get our comparison started, we should not assume that the manner in which ‘mathematical’ studies were pursued was uniform in all ancient societies and in particular in the two we are most concerned with, as the chapters by Karine Chemla and Reviel Netz will illustrate. As I have pointed out on other occasions, the pursuit of axiomatic-deductive demonstrations is not only distinctive of some (not all) Greek mathematics, but unparalleled in any other ancient civilisation.<sup>7</sup> So far from the search for such demonstrations being a natural or normal or even inevitable development once mathematical inquiries were established, it is quite exceptional and we have to ask why.

That Greek ambition owes much to the work of Aristotle who was after all the first to define strict demonstration in terms of the combination of self-evident primary premises and valid deductive arguments leading to incontrovertible conclusions.<sup>8</sup> But if we ask in turn what may have stimulated his exploration of this possibility, then over and above a no doubt laudable sense of the value of rigour in argument, we should bear in mind that, like Plato before him, he was profoundly dissatisfied with what he considered the merely plausible or persuasive arguments used by his fellow Greeks in such contexts as the law-courts and political assemblies, where indeed decisions were taken by the audience themselves, generally by majority vote. Given that neither in China nor elsewhere in ancient societies was there any real equivalent to such debates held in public and settled by taking a vote, it may be less surprising that we find no urge to develop an alternative style of argumentation that would be immune to error.

That does not mean that the Chinese had no sense of the need to check their results. On the contrary they do so regularly, verifying that the algorithms that they used are correct.<sup>9</sup> But once they assured themselves that they were, they got on with the next problem without attempting to produce demonstrations based on self-evident axioms. Comparison, here,

<sup>7</sup> I first developed this argument in 1990. In some histories of Greek mathematics it tends to be assumed that the development of mathematical proof was purely internal to mathematics itself. But the ideal of incontrovertibility was first made explicit in Aristotle, as indeed was the notion of self-evident axioms.

<sup>8</sup> Aristotle, *Posterior Analytics* 1.1–2 and 1.10.

<sup>9</sup> On Chinese techniques of proof and verification in mathematics, see Chemla 2012 and cf. Netz’s Chapter 10 below.



between ancient societies reveals that there was no one route by which mathematics could, let alone had to, develop.

But we can go further. The idea that Chinese mathematics is practical in orientation has been grossly exaggerated, since it leaves out of account considerable theoretical interests, in determining the circle–circumference ratio for example, or what we call  $\pi$ .<sup>10</sup> But there is a further interesting point of comparison and contrast in the ways in which Chinese and Greeks saw the possibilities of using their mathematical skills to resolve problems beyond those suggested by mathematics itself. Some Greeks in the Pythagorean tradition held that numbers are the key to understanding everything in nature, but the way that idea worked out in practice ranged from the manipulation of number symbolism to the mathematical analysis of harmonic ratios. In China too there was a fascination with number symbolism, but again an interest in such matters as the numerical analysis of musical harmonies and the use of similar right-angled triangles to determine the height and distance of remote objects – the sun itself included.<sup>11</sup>

One text that mentions that last possibility is particularly interesting for the way in which mathematical skills are represented. In the *Zhoubi suanjing* (23–5) a pupil praises his teacher for his ability to tackle a whole list of obscure problems, but he puts all this down to the teacher's *dao*. When the pupil asks how to get similar results, he is told that he will do so if he tries hard enough, and several abortive attempts occur before the teacher relents and gives the pupil more detailed instructions on how to do it. Learning mathematics through Euclid was a matter simply of understanding the proofs with which you were presented. Learning mathematics, in some cases in China, is a matter of internalising the skills. Moreover the invocation of the *dao* links mathematics to the most important and prized activity of all. Indeed mathematics is claimed to have been the invention of Sage Kings in remotest antiquity. 'Mathematics' was no mere intellectual pursuit but an aspect of wisdom.

'Philosophy' and 'mathematics' are both particularly problematic areas for comparative study. But other topics seem to be more straightforward since they correspond to basic needs that humans always have to meet, such as the provision of food and shelter, to which we may add securing health or well-being however these are construed. However, in each of

<sup>10</sup> One of the most sustained early investigations of the circle–circumference comes in Liu Hui's commentary to the *Jiuzhang suanshu* 1.104–6.

<sup>11</sup> See, for example, *Zhoubi suanjing* 23, and cf. *Huainanzi* 3.



these areas there is, potentially, much more to investigate than might appear at first glance.

Thus where food is concerned, we may first note the symbolic, ideological, even religious, significance of agricultural activities, carried on under the auspices of tutelary deities, Demeter in Greece, Ceres in Rome, Shennong in China (cf. Sterckx 2010; Lloyd 2002: ch. 4). Then we must ask who actually produced the food and how far they enjoyed the benefits of their labour themselves or were compelled to work for others. This introduces the topic of slavery, again a difficult concept to apply cross-culturally since we encounter many different types of unfree labour across the world. Who controlled the agricultural surpluses produced is a question that leads into social and political organisation more generally. How far is it possible to test Finley's argument that the institutions of the Greek city-state depended crucially on the existence of considerable numbers of slaves?<sup>12</sup> Certainly many of those institutions – the law-courts and assemblies – could not have functioned if the citizen body, or a large proportion of it, had not enjoyed considerable leisure. This is a point that Greek political theorists themselves draw attention to when considering which kinds of activities – including trade, crafts and agriculture – were or were not compatible with fulfilling the responsibilities of citizenship.<sup>13</sup> In China too officials had the usufruct of considerable estates and yet the existence of those agricultural surpluses did not there lead to comparable political institutions. Evidently the particular mode by which surpluses were extracted and used in the Greco-Roman world – slavery especially – provided in no sense a sufficient condition for the particular institutions we find there, though some surplus production was undoubtedly a necessary condition for those institutions.

A second controversial issue here relates to the extent to which in either Greece or China efforts were devoted to improving efficiency whether in agriculture or in any other aspect of technology.<sup>14</sup> The negative effects of the existence of slaves in the Greco-Roman have often been held to have been a prime cause of a supposed technological stagnation there. But first, that stagnation has often been exaggerated: I addressed the question and summarised the chief data in Lloyd 2002: ch 4. Secondly, where China is concerned the experience is mixed. There were extraordinary and extraordinarily successful engineering undertakings in connection with schemes of irrigation, notably Li Bing's division of the river Min at

<sup>12</sup> See Finley 1983 especially. <sup>13</sup> As discussed at length, for example, by Aristotle, *Politics* 7.9.

<sup>14</sup> See, for example, Finley 1965; Pleket 1973.

Guanxian, using *corvée* labour. This at one stroke solved the problems of flooding and provided water to irrigate large tracts of what is now Sichuan province, turning one uncontrolled river into two manageable ones. Yet in China members of the literate elite were generally as reluctant to involve themselves directly in agricultural activity as were some of their Greek counterparts (cf. Lloyd 2002: 80–1).

As for shelter, it may seem that there is nothing interesting to say about houses of different kinds. But again we must be careful. We do not have enough evidence concerning Greek and Chinese domestic buildings to be able to match the sophisticated analyses that such anthropologists as Tambiah and Humphrey have given of the symbolism of the organisation of the space of houses in the societies they studied, where the house serves as a microcosm mirroring the cosmos as understood by the peoples concerned and serving to reinforce beliefs about the place of humans in the order of things.<sup>15</sup> Yet in both Greco-Roman and Chinese houses there was space reserved for ritual functions. A house was not just a place of shelter but one for worship.

Much more obviously when we are dealing with town or city agglomerations, considerable attention was paid not just to defensibility but to symbolic appropriateness. The siting of cities, palaces and tombs in China called upon elaborate procedures of geomancy. The privileged south-facing position associated with the Emperor was a simple rule to apply: but when it came to the position of tombs for members of the imperial family, the relations that had to be taken into account were extremely complex.<sup>16</sup> In the classical Greek world there were no tombs of emperors to worry about, but there were arguments about how best to adapt the planning of a city to the democratic ideology of equality among citizens.<sup>17</sup> That points to an obvious difference with China but we encounter similarities again in those texts, in the Hippocratic Corpus and in the Chinese medical writings, that concern themselves with the relative healthiness of different orientations. So once again a comparative approach can help one to identify both recurrent cross-cultural interests and divergent ideological concerns.

That takes me to the third topic I mentioned among basic human needs, namely health, where perhaps the temptation is particularly strong to

<sup>15</sup> See Tambiah 1969; Humphrey 1974, 1988; and the essays collected in Carsten and Hugh-Jones 1995.

<sup>16</sup> See, for example, Loewe 2010a.

<sup>17</sup> Some of these ideological factors are discussed by Lévêque and Vidal-Naquet 1964 and by Vernant 1965/1983.