CHAPTER I

Aims and Methods

A major preoccupation that has been with me ever since I began research on ancient Greece has been the question of the varieties of human thought and reasoning. To what extent, indeed, is it correct to say that thought and reasoning – that is, the faculties themselves, as opposed to the products of their exercise – exhibit differences? Are the differences we might identify merely superficial or surface appearances overlying fundamental constancies? In which case, can we characterise those constancies – thereby pinning down what we may consider to be basic to all human thought and reasoning? Or do we have to say that no such constancies exist? Spreading the net wider, how does human reasoning relate to the intelligent behaviour we can recognise in other species of animals, or, come to that, to what we customarily label 'artificial intelligence'?

If we accept, as we surely must, that argument, persuasion and debate play a massive role in reasoning, how does the social context of such activities influence the modes of reasoning we deploy, and can that be used to differentiate human reasoning from those other kinds as well as to chart differences within different modes of human reasoning? Some might suppose that our thoughts and attitudes are determined by who we are, the social roles we play, even the language we speak. Even those who would object that 'determined' is too strong a term are likely to accept that such factors do indeed at least influence those thoughts and attitudes. Can we, then, pinpoint the extent of such influences and conversely the room for manoeuvre and criticism that remains?

The questions are easy enough to formulate, but it is not at all easy to say how we can begin to hope to answer them. If we accept that we bring to any inquiry a set of presuppositions and assumptions that reflect our personal histories, we must evidently endeavour, in the first instance, to the best of our ability, to identify and scrutinise them. We must grant that we deploy some more or less circumscribed set of concepts and categories but at the same time allow, indeed insist – for this is a crucial point – that

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they are provisional and revisable. Access to others' modes of reasoning and thought provides a particular challenge but can be especially rewarding in introducing us to assumptions that differ from our own, leading us, sometimes, to modify what we had taken for granted. Evidently one danger is that we assimilate whatever we encounter to what we are already familiar with. But that danger can be minimised, if not ever completely eliminated, if we stress the provisionality and revisability of those starting assumptions of ours.

How does that work in practice, and indeed is it over-optimistic to think that we can achieve any such revisions? Some invoke a strong notion of incommensurability and argue that conceptual systems are intelligible only internally; that is, from within the system in question. There are two mistakes to be avoided here. The first is to conclude from a recognition of the contrasts between different sets of concepts that they are strictly mutually unintelligible: on that view <u>no</u> understanding <u>across</u> systems is possible. But the second, converse, mistake is to underestimate the difficulties of achieving any such understanding. In both cases the very idea that concepts <u>form a system</u> may impede progress, for that may mask not just the complexity of the interrelations between concepts and categories but also their open-endedness and even fuzziness. I shall come back to that in a minute.

The present project aims therefore to explore not just some of the varieties of modes of thought and reasoning, but also the limits of mutual intelligibility that are achievable and how that is to be done, including at what cost to the stability of our own initial assumptions. But if that is in effect at this stage just a statement of an article of faith – that some understanding of the other is possible – we have to be clear what the hoped-for understanding is about. On the one hand we must be aware, throughout, of the constraints and limitations of our inquiry, and the limitations include those of the possible use we can make of the findings of other researchers in many related disciplines. On the other hand, our inquiry focuses, among other things, on the very nature of the constraints to which human reasoning in general is subject.

Thus far I have been writing as if reasoning were a matter of the pure exercise of the intelligence, mediated through language. But that clearly will not do. We have first to factor in the pragmatics of the situations in which communication takes place, for reasoning is not solely nor even primarily a matter of the mind's internal dialogue just with itself. Far more often it involves interaction with a real or imagined audience, present or past or even future. Even as we endeavour to work out what we hold to be the case

on any important subject, we are probably aware of when those ideas of ours will face the crucial test of others' reactions. Sooner or later we have an audience to persuade and how we set about that task will certainly reflect our views of their likely expectations, including what may seem to us to be their prejudices.

The situation is often far more complex than that. Much communication uses channels that are familiar enough: we use language as carefully as we can to get our points across, aware that what we express in one natural language may be difficult to convey in another. But what about where language altogether fails or is irrelevant, when the knowledge we wish to convey is a matter of practice, of the skill in performing a task, for instance, where precisely what the skill consists in cannot be put into words? Much that is relevant to our understanding of cognition and intelligence escapes an analysis of spoken or written words, existing below the threshold of any such analysis, and even when words do pass as the common coin of communication, there is so much more to what is communicated than is captured by an examination of their bare syntax and semantics.

That is the point at which to introduce a conjecture that has far-reaching repercussions, both for the conduct of this inquiry and for our substantive conclusions concerning the answers to the questions we have posed. I am referring to the unorthodox notion that I have introduced elsewhere, that of semantic stretch. My original aim was to escape from the seemingly all-pervasive dichotomy of the literal and the metaphorical. Its many disadvantages include the difficulty of establishing any clear boundary between the two, the expectation that is created that what the metaphor is a metaphor for should be able to be cashed out in literal terms, and especially the common assumption that the literal should be the norm and that the metaphorical is deviant. Semantic stretch, by contrast, allows that any term may exhibit some stretch – a range of interactive meanings which may all contribute to our understanding of what the term conveys in any given collocation.

True, literality has been the recurrent demand of those who require uni-vocity in order to proceed to a logical analysis of the relationships between well-formed formulae. From that point of view semantic stretch may seem to have a high price to pay, in threatening to undermine any such analysis. On the other hand, in other contexts, where formal logic is not in play, it has the advantage that it can do justice to the complexities and flexibility of most human communication and reasoning. Abandoning the mirage that everything that is worth saying has to or should observe the canons of uni-vocity, it can allow for those complexities. But does this not condemn us

to hopeless vagueness and fudge? Not if we see that while every term may have some stretch, that is not to say that that is indefinitely extendable. Terms cannot be made to mean just anything in the manner of Humpty Dumpty, though the range of what they can and do encompass is indeed considerable and liable to be underestimated if we apply the straitjacket of the demand for univocity.

I shall have more to say on this subsequently but for now we may note the implications of this move for my whole project. On the one hand, the terms in which it is to be conducted exhibit semantic stretch. On the other, the recognition of this feature of language constitutes an important substantive conclusion for our understanding of human reasoning.

The problems of assessing both recurrent patterns, and major divergences, within human reasoning are not specific to one domain of scholarly inquiry. Different researchers will tackle different aspects of the question, using different evidence and methods. So I must draw attention to both the limits and the limitations of what shall be attempted here. Let me first acknowledge some notable differences. Palaeontologists will endeavour to plot the changes that marked out *Homo sapiens* from the hominids, where anatomical differences can, up to a point, lead to conjectures about how different species interacted with one another and with their environment. Developmental psychologists can investigate how present-day children acquire the concepts and the skills in reasoning they do, though this field of inquiry suffers from one potential major drawback. This is that the children in question have in the past usually been drawn from particular groups in industrialised societies. That may be less so nowadays, but when it continues to be the case, the extent to which the results suggested can be generalised can be highly problematic. The examination of the diversity of human performance is rather the purview of ethnography, though here too the question of the generalisability of conclusions from any one society to the human condition as a whole must be confronted. Indeed there is not just that question, but, as we have already noted, the prior one of how far mutual intelligibility is possible.[1] Of course, if there is no desire to understand the Other, there is no more to be said. I shall be more concerned with the less extreme case, where the obstacles to mutual understanding are thought to stem from the differences in beliefs and practices themselves. This is where an opportunity for progress presents itself, if we can lay the bogey of radical incommensurability.

[1] I am not presupposing that we can lay down strict criteria for what counts as 'mutual intelligibility', only that we have some, however fallible, grasp of what it is to understand others and to be understood.

The particular evidence I seek to make the most of, in these studies, relates to ancient societies. Of course this poses its own severe set of problems, notably both the bias and the lacunae in the sources available to us. We cannot interview our subjects. The overwhelming majority of our evidence comes from the writings that happened to survive. We have no reason to believe that these are a representative sample of what was actually produced, for most of what we have stems from members of the literate elite. True, we can supplement our written sources with the material remains, particularly helpful for the study of certain facets of ancient societies, the available technology, for example, and their social arrangements. But for the beliefs and practices of most members of ancient societies we rely on what we can gather from those elite writings and we must accordingly allow for their preconceptions and *parti pris*.

Yet even though our evidence suffers from such systemic weaknesses, it does have an advantage over much ethnography in one respect, and that is that we can more readily trace changes that occurred across time. Moreover, if we seek to chart similarities and differences as between ancient and modern societies, the very fact that the latter inherited so much from the former can prove to be an advantage, for we can study just what changed and what remained constant in the complex processes involved. A recurrent topic of concern will be in what precise respects our common modernist assumptions consciously or unconsciously reflect those of our predecessors. It is obvious that what we think of as Western preoccupations owed much to the legacy of Graeco-Roman antiquity (even when the Moderns chose to represent themselves as radically different from the Ancients). But just to what extent those preoccupations figured elsewhere in the world and at different periods is one of the key issues with which we must come to terms.

Now first, a careful examination of the Graeco-Roman legacy itself reveals just how complex that was and how contentious – among the ancient Greeks themselves. They certainly had a lot to say about reason, though there are important shifts in the understandings of the key terms and in the views expressed on the substantive problems.[2] Thus initially, in Homer, the map of the cognitive faculties does not include one that tallies exactly with what we mean by 'reason', and for Homer what survives death is an insubstantial wraith, not (as later in Plato) an immortal soul ontologically contrasted with the body.[3] Yet from the beginnings of Greek

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[2] The volume edited by Frede and Striker 1996 provides a notable collection of studies of that variety.

[3] In a vast literature on the pre-philosophical Greek background, I may single out Onians 1951 and Snell 1953 as particularly influential, especially the latter's thesis (later much criticised by Padel 1992, among others) that the mind was a Greek discovery.

speculative philosophy such issues as the relation between reason and per-
ception, and reason and desire, come to be debated, as do questions to do
with the limits of the powers of reason and others concerning whether other
creatures besides humans have reason and whether all humans do to an
equal degree. Aristotle, who knew a lot about animals' behaviour and skills,
denied they have reason, though some of them have intelligence, *phronēsis*,
even if, in their case, that does not depend on a moral faculty. Notori-
ously he allots only a limited capacity for rational thought to women and
to slaves, and children have none until they become responsible adults.[4] A
final complication is that, for Aristotle and several other Greek thinkers,
humans share reason in the sense of the theoretical faculty with God.

If we want to clarify what faculties, concerns and practices are indeed
common to most humans, then we need to examine both ancient and
modern societies that were not influenced by that Graeco-Roman legacy.
Ancient China in this respect provides an especially useful foil to ancient
Greece. The ancient Chinese were less preoccupied with epistemological
issues, the tendency to support first-order substantive claims by appeal to
second-order arguments about the sources of understanding. In the *scala
naturae* that we find in the third-century BCE writer Xunzi, what marks
out humans from the other animals is not reason (as in Aristotle) but rather
morality.[5] The Chinese sage does not exhibit his pre-eminence by engaging
in Aristotelian intellectual reasoning, but by his wisdom. Chinese investi-
gations into the world around them did not make use of an overarching
concept of nature, nor postulate an ontological gulf between Seeming and
Being. They certainly reflected on language and on methods of persua-
sion and argument, but without deploying the contrast between the literal
and the metaphorical. Even that bare statement of differences identifies
the challenge we face. Can we make sense of those divergent viewpoints,
both Greek and Chinese? What consequences do the Chinese concepts and
practices have for our evaluation of the Greek legacy?

The subjects I tackle in the studies that follow are just a few of those that
can be used to scrutinise just some of the common fundamental assump-
tions made in our attempts to understand one another and the world
around us. But they seem to me to offer notable opportunities both for
the detailed comparisons and contrasts between Ancients and Moderns I
have just alluded to, and for reflections on the commonalities and cross-
cultural divergences in human reasoning more generally.

[4] See Sorabji 1993, Osborne 2007, Lloyd 2012a.   [5] See Lloyd 2012a: 14–15 on *Xunzi* 9: 16a.

Is rationality a well-defined human universal, such that ideas and behaviour can everywhere be judged by a single set of criteria or standards? In that case the analogy would be with biologically determined diseases, where biomedical science offers descriptions of distinct syndromes and symptoms and can often identify specific causes. At the opposite extreme is the view that rational and irrational are simply cultural constructs, varying across populations as well as individuals. There the (imperfect) analogy would be with the concept of illness insofar as that depends on subjective judgements. The position I shall argue for endeavours to avoid the weaknesses of both those options. The universalist thesis tends to underestimate the multiplicity of criteria to which we can and should appeal in assessing sound arguments and practices. On the relativist side, conversely, we need to admit the strength of the universalist claim that all humans everywhere have always argued, inferred, reasoned, persuaded, even though the ways they do so and the successes they achieve vary. The present studies therefore aim to explore the heterogeneity of what can validly be called rational and to caution against a still-common exclusive use of that concept. The rational is what we have to rely on, for sure, but we must be aware of how much eludes its confident grasp and how dangerous may be some of its pretensions to deliver certainty.

We must recognise that the threats to mutual understanding and tolerance that we currently face stretch far beyond what a merely abstract analysis can achieve. I shall return to that issue in my concluding chapter. Nevertheless my aim throughout is to make some small contribution to our self-awareness, principally by way of an examination of what may be considered the master binary of rationality and the irrational. My first study undertakes a preliminary critical scrutiny of that dichotomy, which will remain present in the background in each of the subsequent chapters before re-emerging as the central theme of my concluding discussion of its ambivalences.