

Mind, Body, Heart, Brain, Soul, Spirit

We have remarked that the key articulating dichotomy in Descola's fourfold taxonomy of ontological regimes was that between interiority and physicality. The former covers notions of selfhood, the latter those of body. For sure we all recognise that as the human beings we are we have a sense of ourselves as individuals capable of making decisions and implementing them, with our own quite particular set of subjective experiences and so on. Equally we recognise physical stuff, whatever account of that we prefer (where we have examined some of the problems in Chapter 8 above). Descola's regimes diverge on the question of the continuity or the discontinuity experienced on those two axes, of interiority and physicality, in particular on whether humans and other animals are held to share or not to share the same niche on those axes. Naturalism, to recall, corresponds to an adherence to the assumption that everything is made of the same basic stuff (physicality is shared) but humans differ from other animals in having distinct interiorities. The obverse of naturalism is animism according to which bodies differ, but all creatures share the same interiority.

The first question this chapter sets itself relates not to the different takes on interiority and physicality but to whether those two are indeed robust cross-cultural universals and if so how they are to be characterised. Descola is of course well aware of the convoluted history of speculations on what we still call the mind–body problem. Once again for Europeans that history took a distinctive turn during the early development of philosophical reflection in ancient Greece. So it will be as well to rehearse some of the divergent views that were entertained on that subject during that development.

In the earliest extant Greek literature, in Homer and Hesiod, a variety of cognitive, conative and affective faculties are associated more or less closely with particular parts of the body, though there is some divergence over which parts control which functions (see especially Onians 1951). The usual view is that decisions are taken and emotions are felt in the *kardiē* or *kradiē*,

that is the heart (in the *Odyssey* 20.13–16, when Odysseus sees the misbehaviour of the women servants in his palace, his heart ‘snarls’ within him). But while another term for an organ associated with cognition, namely *phrenes*, came later to be used for the diaphragm, in Homer it applies rather to the physical organ we would call the lungs. We can infer this from a text that describes a wound to the chest in which the *phrenes* prolapse when a spear is withdrawn (*Iliad* 16.481ff., 502–4): that could never happen to the diaphragm (Lloyd 1983: 152). This is poetry, not anatomy, to be sure, but an indication as to how the *phrenes* were imagined.

The view that Snell (1953 [1948]) put forward, namely that the Homeric poems have no clear sense of the individual as a locus of agency, is nowadays generally discounted (Padel 1992, Williams 1993, cf. Bremmer 1983). But it is correct to say that those texts do not deploy a single clear and distinct vocabulary for the mind as such. The key term that came to be used of the soul, namely *psuchē*, is used for life in humans and animals (e.g. *Od.* 14.426, Lloyd 1966: 201) but also for what survives death. But in the latter context this ‘ghost’ is not incorporeal, but rather a wraith-like figure. In Odysseus’ encounter with the ghosts in Hades they lack any cognitive capacity until they drink the blood that he provides them with from a sacrifice that he performs.

The significance of later Greek developments is clear. It took some time for the term *sōma*, originally used of the corpse, to be applied to bodies in general (inanimate as well as animate). Conversely the idea of a radical contrast between physical body and incorporeal mind only gets to be clearly formulated with Plato. He was to be sure influenced by earlier, especially Pythagorean, beliefs. But he marks a distinctive step in mounting an argument that mind and body are ontologically distinct, the latter visible and subject to coming to be and passing away, the former invisible and not so subject, gifted with immortality indeed (*Phaedo* 79a ff.). He certainly drove a very firm wedge between physicality and interiority, though as we shall see not all his fellow Greeks agreed with his views on the topic.

This brief survey of earlier Greek beliefs is already enough to show that a radical dichotomy between mind and body cannot be held to be their universal assumption, nor the obvious default position that is adopted on questions to do with cognitive capacities. But more importantly that dichotomy poses obvious problems. Ryle famously pointed this out in his *Concept of Mind* (1949) where he attacked what he called Descartes’s Myth, that of the Ghost in the Machine. How, the argument went, if mind is incorporeal, can it conceivably interact with the body? This ghost-like

entity was quite unable to produce any physical effects. Its immortality, in other words, had been bought at the price of perfect incapacity.

Such objections told not just against Descartes but against Plato too, whose account of the soul did not persuade his own immediate pupil, Aristotle. He claimed that it is as inappropriate to ask whether the soul and the body are one as it would be to ask the same question about the wax and the shape given to it by a signet ring (*On the Soul* 412b6f.). The relation between body and soul is analogous to that between an axe and what makes it an axe – its capacity to chop (*On the Soul* 412b11ff.). What Plato had held to be a separate entity from the body was no such thing. Soul was more correctly understood just as the activity of the living body, or more strictly the potentiality for such activity. ‘Suppose the eye were a living creature: sight would have been its soul, for sight is the substance of the eye that corresponds to the definition . . . Once sight is removed the eye is no longer an eye except in name’ (*On the Soul* 412b18–21).

In the period after Aristotle both main positive philosophical sects in the Greco-Roman world, the Epicureans and the Stoics, maintained a monistic view of the soul, denying its incorporeality. For the Epicureans it consisted of atoms of a particular shape endowed with particular types of motion. While the Stoics allowed that time, place, the void and ‘sayables’ (*lekta*) are incorporeal, they did not include soul in that category. Both schools come close to anticipating Ryle’s argument that what is incorporeal can have no effect on what is corporeal. Epicurus states as much in the *Letter to Herodotus* 67 (Long and Sedley 1987: 65–6): ‘Those who say that the soul is incorporeal are talking nonsense. For if it were like that it would be unable to act or be acted upon in any way.’ For the Stoics, Sextus Empiricus (*Against the Mathematicians* VIII 263, Long and Sedley 1987: 272) reports similarly that ‘according to them the incorporeal is not of a nature either to act or to be acted upon’. So on these views soul had no distinct ontological status. Interiority, one might say, was not just not sharply distinguished from physicality, but even reduced to one of its properties or manifestations.

The long-drawn-out history of Greek ideas on the soul and on the seat of cognition depended in part on advances in anatomical and physiological understanding, in part on the attitudes adopted on religious and moral issues. In the former area there were long-lasting disputes as to whether the seat of the control centre in the body, what came to be called the *hēgēmonikon*, is the heart (as Aristotle held) or the brain (a view that goes back to a fifth-century BCE writer called Alcmaeon). Ideas on that subject were in turn connected with what was known, or at least claimed, about the

main vessels that were commonly held to convey various substances round the body. The usual term used for these was *phlebes* but while some, the majority, held that these carried blood around the body, others considered their role to be to circulate air or other humours. Meanwhile some quite speculative accounts were attempted concerning their courses. In his *History of Animals* III 2–3 Aristotle reports a series of these, criticising them for their inaccuracies, in particular their exaggerated assumptions of bodily symmetry and their failure to recognise the heart as the source. These early theories were based, he tells us, in part on the dissection of animals, in part on observation of the surface of the bodies of emaciated humans,¹ to which we may add that some conceptions appear to have been inferences derived from common therapeutic practices. Because blood was taken from the right arm to help alleviate liver complaints it was assumed there must be a physical connection between the two, a vein that was given the name *hēpatitis* (‘liver-vein’) to register that supposed fact (Lloyd 1991: ch. 8).

Aristotle himself by contrast championed dissection as the proper method of investigation in anatomical matters, and in the late fourth and early third century this technique was extended controversially from other animals to humans, indeed to live human subjects, by two investigators working in Alexandria, namely Herophilus and Erasistratus (von Staden 1989, 2000). The appeal to these techniques led to some crucial discoveries, especially that of the nerves (Solmsen 1961). Whereas the Greek term from which ours is eventually derived, namely *neuron*, had originally been used indiscriminately of sinews and tendons as well as what we call nerves, Herophilus and Erasistratus distinguished the latter and further spotted the difference between sensory and motor nerves. The source of the nerves came to be identified as the brain, which accordingly took over from the heart as the control centre in the body.

Yet that was still not a unanimous view among Greek doctors and philosophers (cf. Gill 2006, 2010, Sorabji 2006, Hankinson 2006, King 2006, Long 2015). In particular, some Stoics working both before and after Herophilus’ discoveries continued to follow the heart-centred view of the

¹ It is clear therefore that Aristotle was not the first Greek to investigate these problems empirically. In *History of Animals* 511b13–23 he criticises both methods as used by his predecessors: ‘The reason for their ignorance is the difficulty of carrying out observations. For in dead animals the nature of the most important blood vessels is unclear because they especially collapse immediately the blood leaves them . . . And in living animals it is impossible to investigate the nature of the blood vessels because they are internal. And so those who have examined dead bodies by dissection have not observed the principal sources of the blood vessels, while those who have examined very emaciated living men have inferred the sources of the blood vessels from what could then be seen externally.’

seat of cognition. Moreover while both Herophilus and Erasistratus agreed that arteries should be distinguished from veins, they continued to disagree on the question of the contents of the former. Erasistratus knew that when an artery is cut, blood flows. But he considered that that seeped into the arteries from the veins by way of tiny invisible passages – capillaries (though that term may be misleading in that in Erasistratus' view blood flowed from veins to arteries, not the other way around). What the arteries, on this theory, normally contained was air alone – which he could argue was up to a point supported by the difference in colour between arterial and venous blood and the pressure under which the former exits the body in a lesion.

This sequence of theory and counter-theory is standardly held up as an example where the introduction of a new empirical method – dissection – led to a redefinition of the problems and to advances in their solutions. That is indeed to some extent the case. But once again we need to be careful not to exaggerate claims for radical breakthroughs. Dissection itself continued to be a disputed method: some asserted that it provided nothing useful for medical practice and many objected to vivisection – of humans as well as animals – on moral grounds (Lloyd 1991: ch. 8).² Confusion over the referent or referents of the term *neuron* continued, and so too did the controversies over where precisely the control centre of the body is to be located.

More importantly still we have to pick up the point that Greek ideas about soul often had a very different focus. Notions of rebirth and the transmigration of souls after death go back long before Plato and some such belief appears in one of our earliest sources for what may be the views of Pythagoras himself (Xenophanes, Fragment 7).³ Here the idea was that the type of living creature into which you would be reborn in your next life reflected how you had behaved in this one. You might find yourself

² In Celsus' *History of Medicine* (I Proem 23f.) Herophilus and Erasistratus are said to have practised human vivisection on condemned criminals obtained out of prison from the kings (viz. the Ptolemies, rulers of Alexandria) and Celsus rehearses the moral as well as the epistemological objections that were voiced against this, some time before Christians such as Tertullian (*On the Soul* ch. 10) condemned it in outspoken terms as butchery. In ancient China we have no records of any human vivisection and only exceptional ones of human dissection. One example was the report in the second great dynastic history, the *Han Shu* (99B: 4145–6), that the first century CE emperor Wang Mang ordered the dissection of the body of a political rival, supposedly to contribute to useful medical knowledge. However, we may speculate that one reason for reporting this was to illustrate Wang Mang's shocking behaviour, even though our source does not make that point (cf. Yamada 1991: 39, Kuriyama 1995, 1999: 155).

³ Admittedly Xenophanes is there mocking any such belief. He represents one person telling another to stop beating his dog, for he recognises his bark as the voice of a (now dead) friend.

reincarnated as some other kind of animal or even as a plant. Empedocles in the generation after Pythagoras even suggests a sort of hierarchy among different living genera. As a plant you could progress up the scale to become a laurel, as an animal to become a lion (Fr. 127). If you behaved well as a human being, you would be reborn as human and if that continued through several rebirths your ultimate salvation would be to escape the 'dire cycle' of rebirth altogether. Some such view finds many parallels of course in the ethnographic literature.

This is both more and less than a moral theory. It is more than one since it encompasses every kind of living creature, including some who may not be thought to be capable of good and evil. But it is less than one insofar as the focus is not on morality as such but rather on ritual purity with all its ramifications (cf. Douglas 1966, Parker 1983 in a line of scholarship that stretches back to Frazer 1890 and Harrison 1903). Empedocles discusses all of this in a work called the *Purifications* (*Katharmoi*), where we may recall our discussion of the belief that certain diseases need such purification that is attacked in the Hippocratic treatise *On the Sacred Disease* (above, Chapter 1). But in Plato ideas of the subsequent fate of the soul are more firmly tied to a notion of the rewards and punishments that await you as a consequence of your living or not living a morally good life. However, in the *Timaeus* 90e–92c he combines that idea with a more traditional version of transmigration in which the first degeneration from male human beings who have been cowardly and unjust is for them to be turned into females.⁴ The next degeneration turns certain males into birds, again as a punishment for misdemeanours, while the next two produce wild land animals and water animals.

Thus far I have presented these cross-currents using our contrast between what is empirically grounded and what reflects religious belief. Yet I now have to underline where that oversimplifies the situation. It is not just Plato who straddles all three modes of inquiry as we might distinguish them, natural philosophy, moral philosophy and religion. Aristotle does too. His wide-ranging researches into animals led him to many anatomical and physiological discoveries as we would call them. Yet his notions of cognitive faculties carry important moral and religious implications. Humans are distinguished from other animals by possessing *nous*, a capacity for abstract reasoning (practical intelligence, *phronēsis*, is shared

⁴ The ramifications of the idea found in several male Greek authors, from Semonides onwards, according to which females form a separate genus, family or race from males, have been explored especially by Loraux 1993 [1984] (cf. Vegetti 1979: 122ff.).

by humans and many other creatures, Lloyd 2013). But if we ask what is the highest form of human happiness or well-being, the answer lies in the cultivation of the activity of the most divine part of us, namely theoretical reasoning or 'contemplation'. In the *Ethics* he picks up a point Plato had already made in the *Theaetetus*, the moral injunction that we should 'so far as possible' immortalise ourselves, *eph' hoson endechetai athanatizein* (*Nicomachean Ethics* 1177b30–4). Faced with the problem of saying what god or the gods do (for they cannot just spend their immortal lives in idleness) he uses his notion of *nous* to support the view that they must engage in abstract contemplation. What do they contemplate? Well that must surely be the best of all possible things. So we come to the conclusion that god's activity is self-contemplation. Their existence inspires the movements of the heavenly bodies in their constant circlings. But while astronomy gives us access to the movements of celestial beings (the sun, moon and planets are divine) the whole system depends on Unmoved Movers who move not as efficient causes (pushing those heavenly bodies) but by being the objects of their contemplation – and their love. The heavenly bodies are thus living beings capable of moving themselves when motivated by love.

By the time we have reached this point it has become obvious just how far away from the ordinary beliefs of Aristotle's fellow Greeks we have travelled. They agreed that the sun, for instance, is divine, but Aristotle's idea of an Unmoved self-contemplating Supreme Being had zero impact beyond the circle of his immediate followers. Similarly the learned disputes about the courses and contents of the nerves, arteries and veins were just that, learned disputes between rival claimants to superior knowledge. But ordinary folk remained unaffected. Greeks and Romans had rich if at times conflicting ideas on feelings and reasoning, on the source of life and what makes for a good life and well-being (as we saw). They engaged in a variety of practices celebrating and placating the gods whose characters and dispositions they generally represented in vivid terms more or less directly derived from human experience. Yet they were not usually concerned to give some account as to how all these ideas fitted together and whether indeed they did so. The six items picked out by the title of this chapter formed no single coherent map for the Greeks, rather an indeterminate, overlapping and shifting complex of psychic faculties and their physical correlates.

My next task is to examine whether features of the ancient Greek experience are paralleled in other historical or contemporary cultures and what this may tell us about cross-cultural commonalities or exceptionalities. Once

again ancient China offers a wealth of relevant data.⁵ Once again a little basic lexicography is in order. Four key terms used somewhat differently in different texts from the Warring States and Qin-Han periods, that is down to the end of the second century CE, are *mai* (or *mo*) 脈, *jing* 經, *xin* 心 and *shen* 神.

The first of these, conventionally translated ‘blood vessels’, refers to pulsating vessels more generally. There is an extant treatise entitled *Mai Shu* (the *Book of Pulsating Vessels*) recovered from a tomb that dates from the second century BCE, and a little after the end of the Han we have a canonical work, the *Mai Jing*, by Wang Shuhe (third century CE). As with Greek *phlebes* there was some indeterminacy both about the courses of these vessels in the body (their anatomy, in our anachronistic terms) and about their contents, whether this was *qi* 氣 (air/breath/energy) or blood (*xue* 血) or combinations of both. Again there is a similarity with the Greek situation in that many ideas relating to the *mai* were related to, in some cases derived from, therapeutic practices. We have an extensive source for this in the biography of the second-century BCE physician Chunyu Yi in the *Shiji* (ch. 105), where he is represented as recording his training and apprenticeship with other doctors, as well as aspects of his own medical practice, including several individual case histories which we have mentioned before (Sivin 1995c, Hsu 2010).

From this text it is clear that Chunyu Yi had access to a variety of books, not just one called *Mai Shu*, but others dealing with other aspects of diagnosis, by means of the ‘five colours’ for instance, and discussing anomalies of yin and yang. Indeed one of Chunyu Yi’s own teachers, called Yangqing, speaks of having access to books that were attributed to the Yellow Emperor himself and to the legendary healer Bian Que who was reputed to have brought the dead back to life (his exploits are also recorded in the same chapter of the *Shiji*). The theory or rule of the Pulse, *Mai Fa*, provides the key element in Chunyu Yi’s own methods of diagnosis. Although he does not claim infallibility in treating the sick, his individual

⁵ The scholarly literature on Chinese ideas of the self, mind, body and spirit, drawing not just on textual evidence but on the mortuary practices brought to light by archaeology, is immense. See, for example, Seidel 1982, Yu Ying-shih 1987, Poo 1990, Ames 1993, Brashier 1996, Harper 1998, Goldin 2003, Csikszentmihalyi 2004, Despeux 2007, Lo 2008, Yu Ning 2009, Slingerland and Chudek 2011. Some studies pay explicit attention to the similarities and differences between Chinese, Greek and later European ideas (Kuriyama 1999, King 2006, Slingerland 2013, Raphals 2015). However, the very complexity of the data concerning the explicit or implicit theories adopted, ranging from ontologically based dualism to monistic or holistic conceptions, entirely rules out any simple opposition between Greek and Chinese cultures.

case histories all present cases where his diagnosis, based on the pulse, proved (he claims) to be correct.

The main routes by which a variety of substances travelled around the body were the *jing* 經, circulation tracts (the same term is also used of canonical writings). The key idea here was that flow through these should be unimpeded. Blockage spelt disease in the body just as free flow meant health, and that then served as a powerful image for well-being in the political state and the cosmos as a whole. But while what flowed round the body included blood and air especially, what those substances flowed between were not so much organs as functions. One view we find in the *Huangdi neijing* (*Inner Canon of the Yellow Emperor*)⁶ was that there were no less than twelve distinct internal systems, each with its analogue in the state. Thus ‘the cardiac system is the office of the monarch: consciousness (*shenming* 神明) issues from it. The pulmonary system is the office of the minister-mentors: oversight and supervision issue from it. The hepatic system is the office of the general, planning and strategy issue from it’ and so on (Sivin 1995b, Lloyd and Sivin 2002: 221).

In the late third-century BCE compendium, the *Lüshi chungiu* (20.5), there is an even more elaborate complex of microcosm–macrocosm analogies, where stagnation in the body, in natural phenomena more generally, and in the state, that is the political organisation, is a sign of disease or its analogue, while free flow signifies health and good order. Thus for example ‘when the stagnation of a state abides for a long time, a hundred pathologies arise in concert’ – where the text has just explained that ‘when the ruler’s vital power does not flow freely and the wishes of his people do not reach him, that is the stagnation of a state’ (Lloyd and Sivin 2002: 224).

Our classical Chinese texts disagree on many details of the picture of the human body that they give, and they certainly have a lot to say about intangible entities and processes. But none presents a sharp dichotomy between the realm of the incorporeal and that of the corporeal, of soul or mind on the one hand, contrasted radically with the body on the other. Our classical texts are concerned with processes where physical and psychic functions (as we might distinguish them) are often combined. They associate, to be sure, as we have just seen, the ‘cardiac system’ with ‘consciousness’ (*shenming*: a binome combining ‘spirit’ and ‘brilliance’). The term *xin* 心 picks out that system or set of functions, yet the

⁶ This is our prime source for Chinese medicine of the Han period. The basic text dates from the first century BCE, though we rely on three later recensions, the *Lingshu*, *Suwen* and *Taisu*: cf. Sivin 1995c. The text I cite is from *Suwen* 8 *Ling Lan Mi Dian Lun*.

identification of that with the anatomical organ, the heart, is unstable, as the conventional translation often adopted for it, namely ‘heart-mind’, indicates. *Shen*, spirit, on its own is made to play multiple roles, especially in the predominantly medical texts (Raphals 2015: 145ff.), but it too is linked on the one hand to the viscera, on the other to the emotions and cognition.⁷ When it comes to classical Chinese views about what survives death, that is described as a wraith-like entity called *hunpo* 魂魄, or occasionally two separate components, *hun* and *po*, but it or they do not have an incorporeal existence like Plato’s soul (or at least his *nous*) (Brashier 1996, cf. Poo 2004, Puett 2018).

This excursus on ancient ideas relating to the six items in my chapter title serves to underline several important points. First and foremost the ideas that we are able to document from ancient societies are enormously diverse and the same can be said of those reported from modern ones in the ethnographic literature. In part the lack of a stable consensus reflects the general difficulty humans have faced, in the past and still outside anatomy schools today, of acquiring some clear idea, if not reliable knowledge, about the internal functionings of the human body, about how perception works and where reasoning can be said to occur. Yet that did not prevent ancient writers from conjecturing associations linking cognitive, conative and affective faculties with different body parts or processes. We note a recurrent tendency, and not just in ancient texts, to have *some* physical, as we should say anatomical or physiological, locus for what were seen as the important faculties of thinking, desiring, feeling and the like, even though the particular loci chosen differed so widely.

We may confirm that last point with reference to the ethnographic literature, where once again we may cite Lewis’s careful discussion of ideas among the Gnaou. We reviewed in Chapter 7 what he had to say about *malet*, the term that covers both ‘spirit’ and ‘myth’. But both in that context and in his discussion of Gnaou ideas of *wuna’at* (‘the vital centre’) he makes points that are germane to my overall argument, in particular the Gnaou tendency to localise the activities associated with those terms. *Malet* has different manifestations and associations with different sites, objects

⁷ Thus in the *Suwen* recension of the *Huangdi neijing* 23 (*Xuanming Wu Qi*) *xin* 心 (here the heart) stores *shen* 神, while the lungs and the liver store *po* and *hun*. Dire effects injuring the *shen* stem from fear, reflection and anxiety (*Lingshu* 8 *Ben Shen*). Again in the cosmological compendium *Huainanzi* ch. 8.226, while the heart (*xin*) rules the body (*xing* 形), spirit (*shen*) is the treasure of the heart (Raphals 2015: 145ff., 152). The way in which precisely the same terminology is given quite different interpretations in rival contemporary Chinese medical traditions is well brought out by Hsu (1999).

such as plants, and illnesses (Lewis 1975: 164ff. sets out a table of the distribution of responsibilities among spirits).

As for *wuna'at* Lewis starts his account (1975: 208) by observing that it is at the front of the body, rather than the back; 'it lies centrally just below the breastbone, at the epigastrium'. If it is 'observably inert the man is dead. But if he was cut open one would not see something to call the *wuna'at*, but a heart, lungs, blood and so on.' Yet as well as being the vital centre, *wuna'at* is the centre of thought and emotion. Thus 'your *wuna'at* speaks' can be glossed as 'it is your wish or desire'. Expressions for forgetting, remembering, being ignorant of, not thinking of doing something and disliking are all collocations in which *wuna'at* appears.

So unlike Plato's rational soul, but like Homeric *psuchē* and Chinese *hunpo*, the Gnaou view the vital centre not as something strictly incorporeal, but rather as something insubstantial. Lewis concludes with some remarks on where Gnaou ideas differ from our own (1975: 211):

Our thought and language are imbued with the duality of mind and body: our intellectual traditions include subtle bewildering debate of the relation between consciousness, self-awareness, the individual's spirit or soul and its link to or independence of the body. The duality of mind and body is not shown in Gnaou language as it is in English.

We may agree that some idea of consciousness is universal across all human populations. But what idea that is varies hugely.

Now it was certainly no part of Descola's thesis to suppose that ideas of either interiority or physicality are uniform across the four ontological regimes he distinguished. Quite to the contrary those regimes are to be distinguished precisely by the different attitudes adopted towards the interiorities (plural) and physicalities (plural again) that exist or are assumed between humans and other animals. It is the variation in either the continuities or the discontinuities postulated or experienced between different kinds of living beings that provides the differentiae by which his ontological schemata are established.

But if Descola's chief concern was with the relations between humans and other animals and the consequences that different views on that subject have for many aspects of human life and indeed for ontologies, the actual diversity we have discussed here, like that we revealed in Chapter 8, cuts across that concern. The contrast our analysis brings to light is not, or not just, one between the interiority, or the physicality, exemplified on the one hand by humans, on the other by other animals. Rather what we find good evidence for is a contrast *within* the views held on the interiority

as well as on the physicality of human beings themselves (before any differences between us and other animals come into play). The chief resource available to deal with the evident difficulty of talking about psychic functions is to appeal to analogies with more concrete domains of experience, whether physical or social, and this is true both of speculative theorists and of the assumptions embedded in ordinary language. Yet that is not to say that such talk commits the users to an analogistic regime that should be held to stand in sharp contrast to the naturalism of modernity.

The cardinal difference our sources point to is between a basic dualism in the account of mind (or soul) and body on the one hand, and on the other, various versions of a monistic view that close that gap and deny or erase any radical ontological difference between the two sides. The dualists we encounter in our sources, especially fully articulate ones such as Plato and Descartes, do indeed operate with a clear distinction between the two axes of interiority and physicality, firstly where human beings are concerned and then too on questions about what marks us out from the other animals. But the monistic views we have discussed tend to undermine the contrast between interiority and physicality themselves insofar as interiorities are themselves located in or features of physicalities. This may be a matter of insisting on the role of physical organs, whether the heart or the brain, in mental activities, or, in Aristotle's case, of denying that soul or mind are distinct incorporeal entities and elaborating an alternative theory according to which soul is, as he put it, just the activity of the living individual.

The anthropological controversy over Descola's schemata is ongoing. But so too, we may notice, is the debate about where precisely cognitive science now stands on the issue of the nature of consciousness, on the emergent or supervenient properties of mind, on its relation to the body, and notably on the similarities and differences between the cognitive capacities of humans and other species of animals.⁸ The tools that we can use to further those investigations are very different from those available in ancient civilisations or in modern indigenous ones. Yet for all our deployment of fMRI scans, DNA analysis and the results of the human genome project, it is, for sure, not the case that all the problems now can be seen to have been resolved. In particular, questions to do with how humans relate to other animals, starting with our relationship with our nearest ancestors

⁸ The literature on the topic is enormous. Ginsburg and Jablonka 2019 summarise current opinion, combining a comprehensive and judicious review of the results of experimental investigations on the nature and development of what they call the sensitive soul with particular reference to the historical origins of the debate. Cf. especially Dennett 1991, Humphrey 1992, 2011, Luhmann 2020.

in the story of evolution, continue to exercise us, from a moral as well as a cognitive point of view.

We have seen that many of our predecessors have reflected on similar issues in highly value-laden terms and in support of some preferred view as to how we should conduct ourselves in relation to our fellows – to other humans and to other sentient beings – and to our environment. We are led to suggest that even those who nowadays would have it that ethics has nothing to do with natural science may have something to learn from an examination of the ways in which the views taken on mind, body, heart, brain, soul and spirit can have important repercussions on our self-understanding.

Of course one reaction to the situation of fundamental disagreement that we have described is to say that most of those diverging opinions are simply mistaken, that there is one correct standard by which other earlier or contemporary speculations should be judged and generally found wanting. We do not believe in ghosts and we may suspect that some culturally sanctioned ideas about the need to worship ancestors or spirits may be little more than covert attempts to bring deviant individuals into line. Yet the idea that positive science is now in a position to deliver the truth across the board does not wash. It is not just that many scientists and philosophers believe in god or otherwise entertain views that depend on faith rather than on robust empirical evidence. More generally if we recognise the limits of our own current understanding we shall be more ready to accept that there is something to be gathered from what ethnography and ancient history combine to tell us about how others have tackled problems that are evidently continuous with those with which we still grapple.

Although we have only scratched the surface of the problems, our study has brought to light something of the extraordinary diversity in the ways in which mind, spirit and the rest have been talked about by human populations in different times and places, in different societies and sometimes within just a single such group. But to that our response should be not to dismiss all too swiftly whatever we find strange or not to match our preconceptions of how to go about fruitful inquiry. Rather we should expand our remit, as historians, to make the most of the variety in the approaches we find adopted to the challenge of understanding our cognitive, conative and affective faculties, the methods of investigation employed and the implications imagined for ways of navigating experience. This rejoins, to be sure, Descola's explorations of what he called interiority, but with the

caveats that we have suggested, for the plethora of views we have surveyed shows up some of the limitations of its use in ontological classification. My final study will accordingly aim to survey the lessons we can draw from this and our other endeavours to broaden the horizons of the history of science.