

“Highly recommended for those interested in materialism as a perennial current in the history of philosophy and for those wondering how contemporary physicalism and naturalism connect with older materialist philosophies and politics.”

*William Lewis, Skidmore College, USA*

“Brown and Ladyman offer a clear exposition of philosophical materialism much needed in these muddle-headed times. Particularly refreshing is their stress on the essential incompleteness of the explanations it provides, which distinguish it as a scientific worldview from its more strictly ‘philosophical’ rivals.”

*Thomas Uebel, University of Manchester, UK*

# Materialism

The doctrine of materialism is one of the most controversial in the history of ideas. For much of its history it has been aligned with toleration and enlightened thinking, but it has also aroused strong, often violent, passions amongst both its opponents and proponents. This book explores the development of materialism in an engaging and thought-provoking way and defends the form it takes in the twenty-first century.

Opening with an account of the ideas of some of the most important thinkers in the materialist tradition, including Epicurus, Lucretius, Hobbes, Hume, Darwin and Marx, the authors discuss materialism's origins, as an early form of naturalistic explanation and as an intellectual outlook about life and the world in general. They explain how materialism's beginnings as an imaginative vision of the true nature of things faced a major challenge from the physics it did so much to facilitate, which now portrays the microscopic world in a way incompatible with traditional materialism. Brown and Ladyman explain how out of this challenge materialism developed into the new doctrine of physicalism.

Drawing on a wide range of colourful examples, the authors argue that although materialism does not have all the answers, its humanism and commitment to naturalistic explanation and the scientific method is our best

philosophical hope in the ideological maelstrom of the modern world.

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ROBIN GORDON BROWN  
AND JAMES LADYMAN

# Materialism

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The principal aims of this book are to provide the reader with an introduction to the history of the philosophical doctrine of materialism and to outline the elements of contemporary materialism, now known, for reasons explained in the text, as ‘physicalism’. The references provided serve as a guide to further reading for those readers who wish to pursue both these areas in greater depth. The book has been written with the non-specialist reader in mind, but it is also intended to be of interest to those working in both philosophy and the history of ideas.

The chapters are of quite different kinds. Chapter 1 is a general introduction to the basic ideas at the heart of materialist philosophy. Relations to rival and kindred philosophical traditions are discussed.

Chapters 2, 3 and 4 cover the historical development of materialism from the first millennium BCE up to the conclusion of the nineteenth century CE. A short summary of such a huge topic is necessarily very selective, but the material chosen gives a general overview of the intellectual climate of the relevant period, and describes the place of materialist thought in that setting. An account is given of the work and influence of key philosophers who have a significant place in the history of materialism.

Chapters 5, 6 and 7 contain the core philosophical ideas and theses of contemporary materialism, and are the most

demanding. They explain the concept of supervenience, which has a central place in contemporary physicalist thought, and discuss its far-reaching implications.

Chapter 8 is the concluding chapter. It considers the place of physicalism in the contemporary philosophical scene and in modern society at large. As may be evident, materialism is a philosophical doctrine that is not and cannot be confined to academic cloisters.

It may seem foolhardy to write a brief introductory book for the general reader in a field as contentious as philosophy. The authors are likely to be admonished for partiality, selectivity, over-simplification and subjective bias, and are likely to be guilty as charged, to a greater or lesser extent. Nonetheless, in the case of materialism it is important to undertake this task because, of all topics in epistemology and metaphysics, which together lie at the heart of philosophy, it is one of the most significant for people who otherwise have little or no interest in philosophy.

Ideas about what kind of stuff the world is made of have always been at the forefront of human thought, in some form or other, and few if any philosophical theories have aroused as much passion. The wars of religion in Europe that followed the Reformation may have had their origins in disputes about money-making by the Church, but denying the doctrine of the Trinity or that of Transubstantiation – both of which are purely metaphysical doctrines – became illegal. At different times and in different societies there has been extraordinary intolerance for some answers to ontological questions – those concerned with the issue of what sort of stuff exists. Even today there are several countries where it is a capital offence to have certain beliefs about the nature of the world, and about what kinds of things there are.

There are two interconnected strands to the history of materialism; there is the intellectual development and exposition of the philosophical claim, and there are the lives of materialist thinkers and philosophers who, while not materialists themselves, have played a key part in the development of materialism. This book discusses both. It is somewhat partisan in being admiring of the great thinkers in the materialist tradition, which includes one of the greatest poets of the ancient world, Lucretius. This admiration is partly for the ideas, but it is at least as much for the stance these thinkers have taken in the intellectual, social and political world they inhabited.

Prior to the twentieth century, materialist thinkers were in the vanguard of the cause of tolerance and free thinking. For reasons that will become clear, a certain kind of materialism became part of the foundational metaphysics of what has come to be known as the Radical Enlightenment, the great achievement of the Western intellectual tradition (Israel 2002). In the twentieth century everything changed; materialism became untethered from the Enlightenment tradition and, for the first time in history, regimes promoting a materialist ideology achieved state power. Materialism became associated with mass incarceration and murder. This shows, if further evidence were needed, that a theory about what the world is like has no necessary connection with the question of how human beings should behave.

We would like to thank Andrew Pyle and Jan Westerhoff for their very helpful comments on Part I of the book. We also thank the readers appointed by Routledge for their thoughtful and insightful reports. Finally, we would like to thank Tony Bruce at Routledge for his encouragement and enthusiasm in the process of bring this book to publication.

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## A preliminary disambiguation

In much contemporary discourse the word ‘materialistic’ refers to a way of life – ‘excessive devotion to bodily wants or financial success’, as the *Chambers English Dictionary* puts it. If the followers of such a way of life can, by extension, be classed as materialists, it is important to emphasise that this book is not about them or their *credo*. This book is about philosophical materialism, which at heart is a theory about the kind of things that exist. To adopt such a philosophical stance has no necessary connection with any particular attitude about how life should, or should not, be lived. Indeed, it is commonly, though not universally, agreed that an injunction to act in a certain way cannot be derived from a statement of how things are – an ‘ought’ cannot be derived from an ‘is’.

While philosophical materialism may have no logical connection with any ethical system or way of life, asserting that only material things exist, and thereby denying the existence of spiritual things, does perhaps suggest that one should only be interested in material things, and seek one’s rewards in life rather than in some afterlife. Hence, there are connections between philosophical materialism and what might be called ‘hedonistic materialism’, which is the view that life should be devoted to material pleasures.

However, errors arise from the ambiguous use of the single term ‘materialism’ for both. Furthermore, hedonistic materialism only degenerates into the way of life referred to in the dictionary definition quoted above – call it ‘decadent materialism’ – if a particular choice is made concerning which material things and pleasures to pursue amongst many possible ones. The natural world of flora and fauna, the arts and sciences and technology and engineering, to name just a few areas of human endeavour – all these may engage the interest of the philosophical materialist as much as, if not more than, fine food, fast cars and money. Nothing in philosophical materialism implies greed or gluttony.

The origins of philosophical materialism lie in the ancient world and arose in contrast to religious schools of thought (as Chapter 2 explains). It was a time when philosophical thought always had an ethical strand. The religious schools derived much of their teaching on the ethical life from their religious doctrines, including, typically, worship and rituals of sacrifice. In the later, monotheistic traditions, the glory of the spiritual stood in contrast to the ‘lowly’ pleasures of the body. With no religious belief to turn to as the bedrock of philosophical materialist ethics, materialist schools in both the East and West named the pursuit of pleasure as the true goal of life – but there are many different kinds of pleasure, as pointed out above. The most famous materialist of the ancient world, Epicurus, lived ascetically, along with the great majority of philosophically inclined people of his time in Athens, and taught, in his school, the ‘Garden’, that this was an appropriate way to live. Yet the great Roman poet Horace wrote of ‘the sty of Epicurus’, which is an outrageous calumny. Although critics can cite instances in his writings that are ambiguous on the

question, for Epicurus the path to pleasure was by no means associated with excess or lavish taste.

Materialism was, until the twentieth century, associated with the liberal or radical traditions of the societies in which it occurred, for the straightforward reason that it stood in opposition to the prevailing conservative religious orthodoxies of the time. As such, materialism contrasts with more ascetic, self-denying styles of life that were based on religious doctrine, implying these styles of life are based on falsehoods and, therefore, largely pointless. Fasting, and other, sometimes more dramatic, self-inflicted physical torments, were rarely valued by philosophical materialists, but they did not promote decadent materialism as an alternative. They are accused of doing so because their enemies considered their actual views so dangerous. As a consequence, proponents of philosophical materialism have faced intolerance and persecution for long periods of time. That intolerance continues in many places today. Of course, materialists are not the only people to have faced persecution on account of their beliefs. Many religious people have suffered the same fate, and, since the turn of the twentieth century, that persecution has sometimes been, regrettably, at the hands of materialists.

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**An outline of the history of  
materialism**

**Part I**

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# One

## Introduction

Metaphysics is that branch of philosophy concerned with the most basic questions about reality. Ontology is that branch of metaphysics that is concerned with the question ‘what exists?’ Materialism is an ontological theory that presupposes an intuitive concept of space, and the primary claim of materialism is that the only things that exist are those that occupy space. In the Latin of medieval philosophy, these are *res extensa*, extended things. Clearly there is a negative implication of materialism. The existence of spirits, ghosts and, crucially, transcendent beings such as the god of the monotheistic religions is denied by materialism. The *res cogitans* of medieval philosophy, thinking substance, according to materialists does not exist.

The problem is that this kind of materialism seems to be false. Undoubtedly there are things that do not occupy space at all, but the existence of which we would not seriously question. Candidates for such things include thoughts, velocity and danger. Materialism should be revised to assert that what exists, in addition to *res extensa*, are things that depend for their existence on things that occupy space. In other words, without material things there would be no thought, velocity, danger or anything else. The positive

content of materialism becomes a claim about some kind of dependence, and hence materialists need arguments to demonstrate that some given class of things depends wholly for their being on material things. It proves to be easier to demonstrate the dependency of some classes of things than others. For example, *velocity* is not a thing that occupies space, but it is relatively easy to show that things like *velocity*, while not in themselves occupying space, are dependent in the way required; without there being things that occupy space and that move, there would not be *velocity*.

Abstract entities, such as numbers, are more problematic. It is not feasible to think of the number two, for example, occupying space, even if any example of a sign for that number – for example, ‘2’ – does occupy space. Statements like ‘there are infinitely many prime numbers’, which is a truth of arithmetic, seem to be ontological assertions. While materialists struggle with this kind of challenge, it doesn’t seem to bother them unduly. There are various responses; many simply deny that the number two has any genuine existence at all, arguing that the whole edifice of arithmetic is an abstraction arising from the perception of collections of individuals that occupy space. Others argue that whatever kind of existence numbers have, it is irrelevant to the kind of ontological problems in which materialists are interested.

The most contentious subject matter for materialism is always psychological phenomena, in particular conscious phenomena, such as perceptions, feelings and thoughts, and, critically, free will and practical reason. It is at this point that the philosophical dispute between materialists and their critics turns from ontological to moral – and even

political – concerns. For example, while anti-materialists sometimes argue that materialist philosophy promotes a cold disdain for ethical commitment, materialists argue that belief in life after death discourages people from demanding enough from the one life they surely have.

Metaphysical theories do not stand independent of epistemological theories. Epistemology is that branch of philosophy that concerns itself with knowledge and belief. Anyone asserting an ontological theory needs to have something to say about epistemology, if she is to be taken seriously, to answer the challenges – how do you know that what you say exists does, in fact, exist? Or, on what grounds do you believe that what you say exists, exists? Materialism is an ontological theory that is intimately connected to a particular epistemological perspective.

Aristotle's *Metaphysics* famously begins with the statement 'All men by nature desire to know'. Metaphysical theories and epistemological theories go hand-in-hand in the human project of satisfying that desire to know, and to understand the world that human beings inhabit. But it is prudent to add to Aristotle's statement that men by nature want to *feel* that they know. People, or at least those Aristotle is talking about, don't like the feeling of not knowing; it makes them anxious and uneasy, and in the middle of a violent and as-yet-unexplained thunderstorm, frightened. Some theory about what is going on, and preferably a readily understood theory, eases some of the anxiety not-knowing brings. The issue of whether or not that theory is true, whether or not it is *genuine knowledge*, is not of primary importance in stilling disquiet in the mind.

No sooner have we begun our inquiry in ontology than we have been obliged to consider epistemology, and then

straightaway we must consider psychology. Faced with the ‘desire to know’ – we could call Aristotle’s idea the *epistemological urge* – we face the question of what methods to employ to achieve knowledge, and – here’s the psychology – to satisfy us and make us believe we have found knowledge.

The people of many of the first human societies, though apparently not all, developed theories that provided an account of the origins and nature of the world and natural phenomena. Two features of these theories are important: first, that such theories have an important role in strengthening social cohesion – a society can feel more cohesive if its members share a common outlook. The second property is that these theories very often involve reference to gods and spirits in the accounts given of natural phenomena.

Together, a society’s ontological perspectives expressed in these theories can be understood as the society’s *worldview*. The epistemology at the origins of the worldview is often hidden. Consider a society in which someone thought up the idea that thunder was the expression of a powerful being’s anger. To the modern understanding this is a projection of human emotional experience onto the world; through the link of loud noise and violent effects, thunder becomes associated with anger. Once such a worldview becomes established, for subsequent generations the source of belief becomes an authority that provides a canonical interpretation of events in terms of the supernatural agent’s temperament. The authority can be people – the elders or the priests, for example – or it can be, additionally, in societies that developed written language, a text, sometimes a holy book.

From the earliest times, materialists and their critics have been in dispute in a way that can be understood as a dispute

between alternative worldviews – that is, a dispute involving divergent ontological and epistemological claims. A dispute about such matters can generate a lot of heat, as we shall see. But there is a critical asymmetry between the materialists and their opponents. In virtually all instances before the twentieth century, whenever there was a more-or-less established worldview, materialism was in the opposition to it. There were periods in the ancient world when there was genuine freedom of thought, and materialism was free to argue its case with alternative ontological theories, but, for much of the time, proponents of materialism were considered to be a kind of dissident, or outsider, and as such were susceptible to, or threatened with, intolerance and persecution. Thinking the ‘wrong’ way about the nature of the universe could, and often did, prove to be dangerous.

Before describing the history of materialism, a little more needs to be said about the alternative perspectives that developed in epistemology. What might be the possible sources of knowledge? Traditionally, in philosophy, two contrasting answers to this question are *empiricism* and *rationalism*. At its crudest, empiricism finds the source of all knowledge in our perception of the world through our sense organs, while rationalism names the source of our knowledge as our reason. It is not only to someone unfamiliar with the philosophical tradition that this dichotomy may seem odd, if not downright absurd. Human beings cannot really be imagined without sense organs, and perceptions would seem to be necessary to provide at least some of what reason takes as subject matter. Equally, sensory perception without some application of reason is going to provide nothing at all beyond sense perceptions, which cannot be, in and of themselves, knowledge. Knowledge can only come from an interplay of reason and perception.

Other problems with empiricism concern the analysis of just what it is that can be taken to be the sensory input to our sense organs from the external world. A common-sense view would take it that we see and touch, for example, a table. But the more sceptical empiricist may insist that this is just a hypothetical construction from the raw data of shapes of colour and tone that the eyes perceive, and the 'feel' in our fingers.

The true nature of the contrast between empiricism and rationalism lies in the critique of our reasoning alongside the critique of the evidence gained from perception. Perhaps the most striking example of the dispute concerns Parmenides, the pre-Socratic Greek philosopher who argued that motion was impossible. It would seem evident that there is motion, from what we perceive of the world, but Parmenides believed he had sound arguments to prove that motion was impossible, and therefore the evidence of the senses was unreliable. Parmenides needed to perceive *apparent* motion before developing the argument for motion's illusory ontological status. The empiricist cannot rely simply on that perceptual evidence; she has also to discredit the reasoning that led to Parmenides' claim.

Materialist epistemology has evolved to coincide with what can be identified as the epistemology of modern science. With this perspective, empirical evidence is a necessary but not sufficient element for knowledge. Any assertion about the nature of reality may start from reasoned speculation, but must be subjected to test and critique, and, therefore, faces potential rejection. Theories that cannot be tested rule themselves out from scientific credibility. Finally, the scientific stance never relinquishes some element of provisionality, of tentativeness, in the details of theories that are espoused.



## The Heart of Materialism

The heart of materialism is the withholding of belief in the existence of certain kinds of entity and certain kinds of phenomena. There are, it claims, no gods and devils, no ghosts, no spirits. There is, also, no such thing as Providence, or Luck or Fate. Reality consists of material things and things that are wholly dependent for their existence on material things. Their existence is controlled by laws of nature that are independent of Will. The development of the world is not directed by any pre-established plan. There is no pre-determined End, good or bad, to which change is directed.

Materialism believes the vital psychological phenomena of our human and animal existence are wholly dependent on the material nature of our bodies. Though it remains obscure to human understanding, they emerge, in some way or other, from our material being. There is no soul independent of our bodies, let alone one that could survive the destruction of our bodies. There is no afterlife. A human life is a temporary phenomenon, normally encompassing a timespan of less than 100 years.

Materialism has humility in its heart, though it is admittedly sometimes hidden. It claims no path to knowledge other than through scientific endeavour. It holds no conviction that human beings can reach a true Theory of Everything, but it equally presupposes no set limits on human knowledge. It knows there are vast areas of reality about whose workings we know little or nothing, but eschews the adoption of scientifically inadequate theories to satisfy our quest for epistemological peace of mind. For sensible materialists, psychology in general, and consciousness in particular, remain a mystery. The optimists believe the mystery will be resolved; the pessimists are not so sure.

Materialists deny any objective grounding for morality and the notions of Good. Typically, morality is viewed by materialists as the codified rules that facilitate social stability. Such a code may be subject to criticism of various kinds. It may be accused of hypocrisy, if its proponents claim it serves the entire society while its critics see its purpose as maintaining the power of social elites. Alternatively, it may be shown to contradict principles, such as fairness, that the society endorses. But materialism as such can only offer a critique to the suggestion that the code is grounded in an objective legitimacy, the source of which is often identified as a supernatural figure or an authoritative sacred text.

That said, it can be argued that, paradoxically, there is an ethical perspective, if not actually at the heart of materialism, then at its side as a close companion throughout its history, until the twentieth century. Evidently, this perspective does not derive from the core philosophy of materialism but rather from the social experience of its proponents. As mentioned above, until the twentieth century materialists were commonly outcasts in society. In some periods, materialism found itself in a free-thinking milieu where it could flourish alongside rival ontological and epistemological perspectives, but for the greater part materialism has been on the margins of society, disapproved of, barely tolerated. Its adherents were seen as outsiders, opponents of established norms. They were not 'right-thinking', and, in consequence, they were commonly mocked, derided, vilified – and persecuted. It is suggested in Chapter 4 that the apogee of materialism is in the eighteenth century, and here we see it clearly adopting an ethical stance of *freedom of thought*. So it can be said that materialism's ethical companion is *toleration*. Until the twentieth century, materialists

were typically advocates of the right to divergent opinion, and of opposition to the imposition, by authorities, of beliefs and ways of thinking.

Accordingly, materialist epistemology requires that the outline of the heart of materialism is not read as a statement of dogma. The materialist asks for evidence for any statement about the nature of the world, but it should not, in the true scientific spirit, claim certainty about anything. All scientific theories are held with a degree of caution, and insofar as the belief that there is no god is a theory about the nature of the world, the materialist acknowledges the possibility that his or her belief is false. Materialists believe that there is neither credible evidence nor powerful argument for the existence of god, so that there is a negligible probability of theism being a true theory.

As stated above there is no necessary link between freedom of thought and materialist ontology and epistemology, and by the time materialists gained state power in some countries in the twentieth century the link with such ethics had been shattered. This was to devastating effect – not only for the victims of persecution at the hands of states governed by materialists, but also because it changed the standing of materialism in the intellectual realm. Although always disapproved of by the religious, materialism had previously been in the camp of tolerance and free thinking. In the space of fifty years its social standing was diminished by association with much darker social trends rather than enlightenment.

As the course of the development of materialism is discussed in what follows, it is shown that contemporary materialism, under the name of physicalism, has adopted some far-reaching modifications of materialism. However,

the heart of physicalism is shown to be both the true heir to, and a natural extension of, the heart of materialism.

### **Materialism in dispute with other ontologies**

The critique of materialism has two main strands – one is that it is false and the other that it is not only false but also dangerous. For present purposes the second critique can, for the time being, be set aside. The first threatens the materialist with disproof and theoretical rejection. The second threatens the materialist with persecution. While the second is likely to concentrate the mind more than the first, it is the theoretical objection that can be, and has to be, addressed with reason.

It makes sense to start, and quickly dispense with, a line of attack that both materialists and their critics engage in – it is to declare that the position of the opponent is *absurd*. Opponents of materialism argue that materialism is absurd – how can mere matter produce psychological phenomena? If all there is, fundamentally, is matter in space, how could consciousness possibly appear? How could good and bad, right and wrong, have any meaning? If everything boils down to matter driven blindly in its motion by the laws of nature, how could a human being possibly have free will?

Materialists have their own version of this non-argument. Stories of gods throwing hammers making crashing sounds in the sky, or driving chariots through the sky to give us daylight, are the pinnacle of absurdity, if supposed to be taken literally. And so stories of heaven and hell, of judgement and punishment and reward after death, are equally just so much nonsense.

It is sensible to dispense with these accusations because they are not serious arguments. The appeal to a notion of absurdity can, generously, be taken as an appeal to intuition as encountered often in philosophy. Obviously, people have different intuitions. It's one thing to convince ourselves of the correctness of a position because it feels intuitively correct to us, but we need do better than that to convince someone who doesn't share our intuitions.

The central criticism that materialists put forward to challenge non-materialist ontologies can be stated in a more sophisticated way. It is that the theories they oppose lack genuine evidence. The materialist resists the argument from authority as a valid ground for belief. More particularly, the materialist demands some combination of rational argument and empirical experience as a necessary condition for justified belief. They believe the non-materialist fails to provide convincing arguments and perceptual experiences that can be considered as genuinely evidential. On the other hand, given that matter and psychological phenomena *seem* to be different kinds of thing, it falls to the materialist to provide some account of how the psychological – and the ethical – arise from a wholly materialist world.

In this way, in the materialist stance there is both defence and attack, and there is not a unified materialist response to criticism. Some materialists are more sure, more convinced, more belligerent, than others. Materialists hold different conceptions of the phenomena under question – some, for example, bizarrely, even deny the existence of psychological phenomena, thereby supposedly eliminating the problem with a stroke of the pen.

More plausibly, materialists have produced arguments to show *free will* to be a phenomenon radically unlike the pervasive but primitive idea of it. It looks as though a ‘me’ stands outside the physical order and decides what course the future is going to take – it is down to this ‘me’ and nothing else whether the window is opened or remains shut in the next thirty seconds. Materialism demands a radical and detailed analysis of what the ‘me’ in question is like.

A frank materialism acknowledges major gaps in our understanding with this two-pronged defence; gaps in knowledge should not be filled with theories that lack scientific credibility, and gaps in knowledge are in general going to be filled by science, and not philosophy. Philosophy is the servant of science, albeit an essential one, and not its master. There is a critical corollary here – *science could refute materialism*, by discovering non-material phenomena. As explained in Part II, something like this is in fact what has happened, prompting the need for materialism to evolve into physicalism.

Materialism can also be seen to offer an account of non-materialist theories, and of how they appeal. It can, from one perspective, be seen as expressing a psychoanalytic critique, centuries before Freud; animists and religious people, it seems to be claiming, are simply *projecting* their own psychological concerns onto the world. Good standing, as a child, with the elders, and as an adult with your fellow men and women, are concerns that are imagined lived out in your dealings with the natural world. But the earth and the sky, the thunder and storms, the earthquakes and volcanoes, have no interest in you. They don’t have interests in anything, because they don’t have interests at all. Parents

can be pleased with their children when they are well-behaved and angry with them when they are badly behaved, but there is nothing in nature that is pleased with you when the harvest succeeds, or cross with you when it fails. Parents might be pleased with the child when he or she forgoes something desired in order to appease them, but there are no gods pleased with you because you have killed a sheep, or a young virgin, in their honour. Religious perspectives, these materialists would claim, are *infantile*.

### **The relation of materialism to allied traditions**

It is helpful to name some close relations and to note what distinguishes them from materialism.

Perhaps the closest next-of-kin to materialism is *atheism*. Also an ontological theory, atheism makes the wholly negative claim that there is no god or gods. It is evident that a definition of 'god' is required before atheism can be expressed coherently, something that is not a requirement of materialism. If god were potentially material, in the sense of occupying space, then for materialists it would be an open question whether or not there was a god. There would be the same principled rejection of the claim that something non-material exists.

The idea of 'god' has, of course, itself undergone profound changes in the Western tradition. It is not that clear what the ontological status of the gods of the *Iliad* and the *Odyssey* is. Did they occupy space? They lived on a mountain, and sometimes took the form of people and animals, so perhaps they did. On the other hand, they were immortal, so what was taking up space wasn't like the flesh and blood of human beings. By the time we reach the age of the great

monotheisms, Judaism, Christianity and Islam, the god being dealt with is specifically denied by materialism, because the god is specifically identified as immaterial, and the idea that the god of these monotheisms is material was considered a heresy. Therefore, in this period, all materialists were atheists, but perhaps not all atheists were materialists. An obvious example of a non-materialist atheism would be the Buddhist tradition, which holds that there is no god but which does believe in the transmigration of souls. Materialism, and non-materialist atheism, in the Eastern tradition, is discussed in Chapter 2. To the religious, both materialism and atheism are considered – with good reason – forms of *scepticism*. Both promote doubt about the supposed foundations of religious belief, and deny religion's claim to knowledge, based as it commonly is on individual revelation, dubious reasoning and people or books granted supreme authority.

As indicated above, *agnosticism* may, formally, be a closer relation to materialism than atheism, insofar as the materialist avoids dogmatic statements, but, the 'not-knowing whether there is a god' of the materialist agnostic is not so very far from the 'knowing there is not a god' of the atheist insofar as for either view there is no reason to take part in religious practice.

Perhaps the most important perspective, when considering the social impact of materialism as an ontological theory, is simply to recognise that it has, as a consequence, the denial of a non-material deity. But an interesting additional question comes to mind; it was noted above that materialism is obliged to recognise the existence of some non-material things, and does just so long as those non-material things are wholly dependent for their existence on material things. What, then, if the deity were dependent for



its existence on the material world? Of course, in the established traditions of the world's major religions, the very idea is an outrage. However, it does seem that there is a significant number of people who, while they find it hard to swallow the ontological claims of the traditional teachings, want to retain a religious sensibility in their lives. This can involve not only a sense of the spiritual, which may or may not involve engagement in ritual, but also an idea of something that would naturally go by the name 'God'. From the 1960s onwards, in the more liberal strands of Protestant Christianity, there has been a culture of uncertainty about just what the ontological claims of the teachings are. It is not uncommon to hear people talking of finding God within themselves, or of God being manifest in good deeds. Sometimes God appears to be imagined as something like an idea. The materialist claim that our human psychology is wholly dependent on our material selves can accommodate a god that is essentially a human idea.

In any case, there are good reasons for distinguishing the tasks of defending materialism from the tasks of promoting atheism. The atheist is of necessity involved in a confrontation with theists, and there is much disputation here that the materialist can reasonably bypass. Consider the following remark by Rupert Shortt, the religion editor of the *Times Literary Supplement*, in a book review in that periodical.

Informed Jews, Christians and Muslims standing at different points in the same field would insist that God is not a thing who competes for space with creatures. You cannot (to posit a crazy thought experiment) add up everything in the universe, reach a total  $n$ , then conclude that the final total is  $n + 1$  because you're also a theist.

God belongs to no genus; divinity and humanity are too different to be opposites. By definition, then, no physical analogy will describe our putative creator adequately. We are migrating off the semantic map. But light is amongst the more helpful. The light in which we see is not one of the objects seen, because we apprehend light only inasmuch as it is reflected off opaque objects. From a monotheistic standpoint, it is the same with the divine light. The light which is God, writes the philosopher Denys Turner, we can see only in the creatures that reflect it. Therefore ... when we turn our minds away from the visible objects of creation to God, ... the source of their visibility, it is as if we see nothing. The world shines with the divine light. But the light which causes it to shine is itself like a profound darkness.

(TLS, 16/12/16, p. 4)

Who knows what proportion of Jews, Christians and Muslims worldwide are informed in Shortt's terms, and what proportion is of the  $n + 1$  school. Bowing to Shortt's authority on these matters, the suggestion here is that materialists are excused from this dispute as they are essentially concerned with the  $n$  things and those things wholly dependent on them for their existence.

Materialism also has close connections with humanism. Humanism gets its name from a denial of the superhuman deities of religion, and also involves an ethical perspective associated with the principles of the Enlightenment, to be discussed in Chapter 3. While not necessarily being committed to materialism, most humanists adopt a materialist ontology.

Materialism, atheism and humanism are related to naturalism. This is essentially an epistemological doctrine that rejects any but natural explanations of natural phenomena – explanations, in other words, that eschew concepts like Providence, Divine Intervention, Fate and other agents of a supernatural kind. In *The Naturalistic Tradition in Indian Thought*, Riepe identified the following six elements of naturalistic thinking.

- 1 The naturalist accepts sense experience as the most important avenue of knowledge.
- 2 The naturalist believes that knowledge is not esoteric, innate, or intuitive (mystical).
- 3 The naturalist believes that the external world, of which man is an integral part, is objective and hence not 'his idea' but an existent apart from his, your, or anyone's consciousness.
- 4 The naturalist believes that the world manifests order and regularity and that, contrary to some opinion, this does not exclude human responsibility. This order cannot be changed merely by thought, magic, sacrifice, or prayer, but requires actual manipulation of the external world in some physical way.
- 5 The naturalist rejects supernatural teleology. The direction of the world is created by the world itself.
- 6 The naturalist is humanistic. Man is not simply a mirror of deity or the absolute but a biological existent whose goal it is to do what is proper to man. What is proper to man is discovered in a naturalistic context by the moral philosopher.

(Riepe, 1964, pp. 6–7)

There is clearly room here for perspectives that are neither materialist nor atheist, but it is equally evident that materialism and atheism are members of the broader family of naturalism. Perhaps 'naturalistic materialist humanism' would be the preferred, if overblown, name for the perspective of many theorists seeking not only ontological and epistemological theories, but also an ethical outlook.

It is time to turn to the beginnings of materialist thought in the ancient world.

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