

PHYSICALISM

Daniel Stoljar

CONTENTS

Acknowledgments	xi
Introduction	1
Chapter 1 The Standard Picture	13
1.1 Introduction	13
1.2 The generality of physicalism	15
1.3 Physicalism and the mind–body problem	16
1.4 Philosophy within science	18
1.5 Philosophical problems as placement problems	20
1.6 Neurath and Carnap	21
1.7 Quine and Smart	23
1.8 The standard picture in a nutshell	26
Summary	27
Recommended reading	27
Chapter 2 Form and Alternatives	28
2.1 Introduction	28
2.2 Unrestricted quantification	29
2.3 Restriction to particulars	31
2.4 Restriction to properties	32
2.5 Fundamental properties	34
2.6 Metaphysical necessitation	36
2.7 Commentary	39
2.8 Alternatives	43
Summary	50
Recommended reading	50

Chapter 3 The Starting Point View	51
3.1 Introduction	51
3.2 Physical objects v. physical properties	52
3.3 Over before it begins?	53
3.4 Cluster concepts	54
3.5 The concept of the physical as a cluster concept	56
3.6 The Starting Point View	56
3.7 Classical atomism	58
3.8 Gravity	60
3.9 Modern physics	62
3.10 Is atomism possible?	66
Summary	68
Recommended reading	68
Chapter 4 The Theory View	69
4.1 Introduction	69
4.2 Liberalizing the Starting Point View	70
4.3 What is a physical theory?	72
4.4 Two versions of the Theory View	74
4.5 The actualist version	76
4.6 Twin physics	77
4.7 Could the conclusion have been reached more quickly?	79
4.8 The possibilist version	80
4.9 Adjusting the possibilist version	81
4.10 Adjusting the actualist version	85
4.11 Four further suggestions	86
4.12 The argument of the last two chapters in a nutshell	90
Summary	91
Recommended reading	92
Chapter 5 Hempel's Dilemma	93
5.1 Introduction	93
5.2 The Theory View again	93
5.3 What is an ideal theory?	95
5.4 The dilemma formulated	96
5.5 The first premise	98
5.6 The second premise	99
5.7 The third premise	101
5.8 Fallibilism	101
5.9 Knowing enough to know	103
5.10 Identifying the mistake in Hempel's dilemma	105
5.11 Hempel's dilemma v. our dilemma	107
Summary	108
Recommended reading	108
Chapter 6 The Necessity View	109
6.1 Introduction	109
6.2 The Necessity View formulated	111

6.3	Some variations on the basic theme	113
6.4	Supervenience	114
6.5	The Semantic View	117
6.6	The Identity View	118
6.7	Maneuvers in defense of the Identity View	119
6.8	The Realization View	122
6.9	The Fundamental Properties View	125
	Summary	126
	Recommended reading	126
Chapter 7 Is Necessitation Necessary?		127
7.1	Introduction	127
7.2	Metaphysical v. nomological necessity	128
7.3	The contingency of physicalism	130
7.4	Physicalism and the physicalist conditional	131
7.5	The epiphenomenal ectoplasm problem	133
7.6	Epiphenomenal ectoplasm and supervenience	136
7.7	The blockers problem	137
7.8	Necessitation and psychophysical laws	139
7.9	A priori and a posteriori physicalism	141
	Summary	142
	Recommended reading	143
Chapter 8 Is Necessitation Sufficient?		144
8.1	Necessitation dualism	144
8.2	The problem	145
8.3	Further examples of the problem	147
8.4	The incoherence reply	148
8.5	Varieties of distinctness	150
8.6	Three further replies	153
8.7	Negotiating the impasse	159
8.8	Reductionism v. non-reductionism	160
	Summary	162
	Recommended reading	163
Chapter 9 Skeptics and True Believers		164
9.1	Recapitulation	164
9.2	The metathesis and the standard picture	166
9.3	The skeptic	167
9.4	The true believer	170
9.5	A false presupposition?	172
9.6	Rejecting conceptual analysis?	173
9.7	Evaluating the rejection of conceptual analysis	174
9.8	Van Fraassen on empiricism and physicalism	176
9.9	Evaluating the stance idea	179
9.10	Physicalism as inessential in discussions of physicalism	181
	Summary	183
	Recommended reading	183

Chapter 10 Arguments Against Physicalism	184
10.1 The super-tasters	184
10.2 The conceivability argument	185
10.3 Catalogue of responses	191
10.4 The role of physicalism in the conceivability argument	195
10.5 Does this strategy generalize?	197
10.6 Intentionality	200
10.7 Meaning	203
10.8 Morality	204
Summary	205
Recommended reading	205
Chapter 11 Arguments for Physicalism	207
11.1 Introduction	207
11.2 The impressionistic argument	208
11.3 From the impressionistic argument to the causal argument	210
11.4 The event version	211
11.5 The property version	213
11.6 The causal argument and the varieties of dualism	214
11.7 Problems with exclusion	215
11.8 Exclusion and distinctness	217
11.9 Problems with closure	220
11.10 The role of physicalism in the causal argument	223
Summary	224
Recommended reading	225
Conclusion	226
Glossary	233
References	237
Index	247

INTRODUCTION

In 1925 Bertrand Russell wrote the preface to Friedrich Lange's *The History of Materialism*. Lange's monumental work, which had been published in German sixty years before Russell's preface, is a grand survey of materialism from the earliest times to the nineteenth century. What Russell says in his preface about materialism—for present purposes, for 'materialism' read 'physicalism'; I will explain the terminology in a moment—is instructive. He writes:

Materialism as a theory of the nature of the world has had a curious history. Arising almost at the beginning of Greek philosophy, it has persisted down to our own time, in spite of the fact that very few eminent philosophers have advocated it. It has been associated with many scientific advances, and has seemed, in certain epochs, almost synonymous with a scientific outlook. ... A system of thought which has such persistent vitality must be worth studying, in spite of the professional contempt which is poured on it by most professors of philosophy. (Russell 1925: v)

Russell goes on to say that Lange's book appeared "at the height of the period often described as 'the materialist '60s'"—that is, the *eighteen*-sixties. This period is remarkable from Russell's point of view because it is a brief period in which materialism became influential. For most of the rest of the

history of philosophy, he thinks, materialism is a minority view. Even Lange, whose book is sympathetic to materialism, is no materialist.

Russell's suggestion that the 1860s are exceptional in the history of philosophy is, because of its scope, difficult to assess; any claim about the entire history of philosophy is difficult to assess. But there is no doubt that he is right both about the period in which he was writing, and the period immediately preceding it. Toward the end of the nineteenth century, almost all professional philosophers were idealists of one sort or another; that is, they held that the world was in some fundamental sense spiritual or mental, rather than being in some fundamental sense physical or material (see Stove 1991). Russell himself was extremely influential in destroying idealism, but the kind of philosophy that replaced idealism was not materialist. For example, what is perhaps the central work in philosophy of mind of the period, C.D. Broad's *The Mind and its Place in Nature*, contains a famous and influential critique of materialism (see Broad 1925), and Broad himself was an active member of the (definitely non-materialist) Society for Psychical Research (see Broad 1960).

If materialism wasn't popular in 1925, however, the contrast between then and now could not be more extreme. Far from being viewed with professional contempt, materialism became something like a consensus position within analytic philosophy in the 1960s and has remained so, or very nearly so, ever since. Philosophers such as Quine, Smart, Lewis, Armstrong, Fodor, and many others are all materialists. Some philosophers, such as Jaegwon Kim, were materialists and have since changed their minds; while others, such as Frank Jackson, were anti-materialists and have since relented. But as we will see as we proceed, even the anti-physicalism espoused by (then) Jackson and (now) Kim is deeply inflected by physicalism, sharing large parts of its content and philosophical context. As Carl Gillett and Barry Loewer say in one of the passages I selected as an epigraph for this book, physicalism is in many ways the *Weltanschauung* of modern analytic philosophy. (For an explanation of the German word 'Weltanschauung,' see the other passage I selected as an epigraph.)

Our questions

This book is about that *Weltanschauung*. We will focus in particular on three sets of questions. The first concerns the interpretation of the thesis of physicalism. In slogan form the thesis is easy enough to understand: it says that everything is physical, just as the idealists of the nineteenth century said

that everything is mental. But, as we will see, it is difficult to interpret that slogan in a precise way. What is this condition—being physical—that according to physicalism everything has or is? And what is it for *everything* to have this condition?

The *second* set of questions concerns the truth or falsity of physicalism, and, of course, the arguments for or against its truth or falsity. Physicalism is sometimes thought to be part and parcel of the scientific world-view; “synonymous with a scientific outlook” as Russell put it. But what is ‘the scientific world-view’? Is there one? And what is the connection between it and physicalism? In recent times philosophers have advanced responses to these questions. We will need to discuss what those responses are.

The *third* set of questions concern the *philosophical significance* of physicalism. Even if physicalism were an interesting thesis that had arguments for and against it, this would hardly justify talk of a ‘Weltanschauung.’ What justifies this talk in my view is not the thesis of physicalism itself, nor the particular arguments for or against it, but rather the fact that in contemporary philosophy the idea of physicalism structures and informs many different questions and debates. In philosophy of mind, for example, philosophical problems about conscious experience or representation are routinely viewed as problems about finding or fitting or placing or locating—the metaphors differ with different authors—conscious experience or representation in a purely physical world, that is, in a world in which physicalism is true. These sorts of problems, often called ‘placement problems,’ are viewed as a template for other philosophical problems, e.g. problems about ethics, so that the philosophy of mind becomes a sort of laboratory for the rest of philosophy. But it is far from obvious that this way of viewing philosophical problems is necessary or desirable, and it is a very distinctive feature of this period of philosophy—i.e. from roughly 1960 to the present—that it falls so naturally into this way of thinking.

Other questions

The three questions that we are going to focus on—interpretation, truth, and significance—are by no means the only questions that one might raise about physicalism. It will be helpful for what follows to explicitly set aside three others.

The first concerns the relation of physicalism to its intellectual and social context. Philosophy does not operate in a vacuum, and it is reasonable to suppose that the prevalence of physicalism in philosophy is part of larger

currents in intellectual life in the twentieth century and after. For example, it is difficult to believe that the prestige of the sciences in intellectual culture had or has nothing to do with the popularity of physicalism among professional philosophers. Nor is it credible that the extraordinary success of Western medicine, with its largely materialistic or physicalistic outlook, has nothing to do with it. (Is it an accident that one of the central defenders of materialism in the eighteenth century, Julien de La Mettrie, was also a medical doctor?) However, while there are books to be written about the connection between materialism and medicine, and between the social prestige of science and the assumption of physicalism, this book is not an exercise in intellectual history. Rather it is a philosophy book, and questions that I will raise about physicalism have a distinctively philosophical flavor.

Second, one might ask about the relation of physicalism to issues of a fairly technical kind within physics, or perhaps the philosophy thereof—that is, issues whose discussion requires specialized knowledge in physics or philosophy of physics. Indeed, you might think it impossible to discuss one without the other. However, while there are no doubt questions to be raised about the connection between physicalism and physics, there will be no discussion either of physics or philosophy of physics in what follows—apart that is, from very general points about physics that require no specialist knowledge at all. What is the reason for this? Well, for one thing, talking about physics in detail is not something I am competent to do. So if discussions of physicalism in philosophy required technical knowledge in physics, this book would be considerably shorter than it is. Another and more important reason is that something has gone wrong if it is assumed that talking competently and in detail about physics were a requirement on talking competently and in detail about physicalism. For physicalism is a very abstract proposal about the nature of the world, a proposal that does not depend on the details of particular physical theories. True, words like ‘physics’ and ‘physical theory’ crop up a lot in discussions of physicalism, and what follows will be no exception. But talking about physics (physical theory, and so forth) in very general terms is one thing and talking about it in detail is quite another.

Finally, there is a legitimate set of questions to ask about the relation between physicalism of the kind that we find in modern philosophy, and various versions of physicalism or materialism to be found throughout the history of thought. Lange’s first sentence is “Materialism is as old as philosophy, but not older” (1925: 3). One might therefore ask about its history, not only in philosophy but in science as well. However, while again

there are books to be written on these themes—Lange’s remains one of the best I know of—and while I will make occasional comments about this, the primary emphasis of this book is not on history so much as on philosophy itself. Contemporary philosophers talk about physicalism in a certain sort of way, and they assume that this thesis plays a certain sort of role in the structure of philosophical problems. Our questions are mainly what that thesis is, whether it is true, and whether it does or should play that role; whether famous materialists or physicalists of the past, such as Lucretius or Gassendi or d’Holbach or Marx or Neurath, held similar views is not our primary concern.

Organization

Our questions concern the interpretation, truth and significance of physicalism; my plan in answering those questions is as follows.

I begin, in Chapter 1, with an exposition of what I take to be the standard picture of physicalism and its role in contemporary philosophy. I set out the standard picture as the conjunction of five theses, noting that these theses form a system. I suggest in addition that this system is attractive because it removes a fundamental obstacle to the very existence of philosophy, and portrays philosophical problems as being highly unified. In my view, it is largely the role that physicalism plays in this way of thinking about philosophical problems that best explains its current popularity.

In Chapter 2 I begin to discuss the interpretation question, starting with some preliminary issues about the logical form of the thesis to be discussed and what its alternatives might be. As we will see, the sentence ‘everything is physical’ doesn’t quite capture what is intended. Most physicalists do not mean that absolutely everything is physical or that every particular is physical or even that every property is physical. What they mean instead is (something like) every instantiated property is necessitated by some physical property. But charting the course from ‘everything is physical’ to ‘every instantiated property is ...’ is instructive.

In Chapters 3 to 6 I turn to the heart of the interpretation question: the issue of what a physical property is. In Chapter 3 I set out one particular view about what a physical property is which I call ‘the Starting Point View.’ The Starting Point View provides an adequate formulation of some classical versions of physicalism, but it cannot be what contemporary physicalists have in mind because physicalism as defined by the Starting Point View is false, and for empirical reasons that have little to do with the distinctive

concerns of philosophy, and which are in any case accepted by contemporary physicalists.

In Chapter 4 I discuss the prospects of liberalizing the Starting Point View, and so of reinterpreting the notion of a physical property in such a way that physicalism might be true, at least in so far as empirical science is concerned. The most common way to do this is to adopt what I call ‘the Theory View.’ The problem with this view is that defining physicalism in terms of it ‘gets the cases wrong,’ i.e. it either has physicalism being true in imagined or possible cases where no version of physicalism should be true, or it has physicalism being false in imagined or possible cases where no version of physicalism should be false. At the end of the chapter, I distill the line of thought presented in Chapters 3 and 4 into an argument whose conclusion is a metathesis about physicalism, viz. that there is no version of physicalism that is (a) true and (b) deserves the name.

In Chapter 5, I discuss an argument that has something in common with, but is also rather different from, the argument of Chapters 3 and 4, viz. Hempel’s dilemma. Hempel’s dilemma is that if physicalism is defined with reference to contemporary physics, it is false (for no one thinks that contemporary physics provides the whole truth about the world), but if physicalism is defined with reference to an ideal physics, then it is unclear what it is saying, and in particular it is unclear that what it says rules out various possibilities inconsistent with physicalism as usually understood. I discuss various objections to Hempel’s dilemma, and suggest that the most powerful one is that the dilemma proceeds from implausible assumptions about how physicalism is to be defined, assumptions which have already emerged in our discussion.

Chapters 3 to 5 concern various proposals about what a physical property is, and some consequences of these proposals. In Chapters 6 to 8 I turn to the issue of what relation must hold between every (instantiated) property and a physical property if physicalism is to be true. In Chapter 2 I adopted a particular proposal about this relation without much elaboration and defense, viz. that the relation in question was necessitation understood in the way that Kripke explains it in *Naming and Necessity*. In Chapter 6 I set out this ‘Necessity View,’ as I call it, in more detail, showing how it is one sort of modal definition of physicalism, and compare it to various non-modal definitions stated in terms of identity, synonymy, realization, and fundamental properties.

In Chapter 7 I turn to the assessment of the Necessity View, focusing in particular on whether it follows from the truth of physicalism that

necessitation holds between every property and physical properties. On the one hand, a suggestion along these lines seems mandatory if one wants to distinguish physicalism from standard forms of dualism, according to which there is a lawful but contingent connection between the mental and the physical; indeed, as I understand them, all reasonable definitions of physicalism are in agreement on this point, and so even non-modal definitions of physicalism will have this modal consequence. On the other hand, explaining physicalism in terms of all possible worlds looks in stark contrast with the contingent and empirical nature of the doctrine. In the chapter I examine various ways to develop and resolve this conflict. I also draw a connection between the Necessity View and some widely discussed issues about physicalism, viz. whether physicalism requires there to be psychophysical laws, and the distinction (as it is often expressed) between ‘a priori physicalism’ and ‘a posteriori physicalism.’

In Chapter 8 I turn from the issue of whether necessitation is necessary for physicalism to the issue of whether it is sufficient, focusing in particular on the objection that, if the Necessity View is correct, physicalism cannot be distinguished from various kinds of non-physicalist positions—I focus on (what I call) ‘necessitation dualism.’ I discuss a number of proposals about how to distinguish these doctrines, concluding with the suggestion that in order to formulate physicalism it will be required that physicalists move beyond logical and modal considerations, and confront the distinctively metaphysical content of their doctrine. It is here that the conflict between modal and non-modal definitions of physicalism becomes acute; indeed, the upshot of discussion in the chapter involves a sort of compromise between these two styles of definition.

Taken as a whole, our discussion of the interpretation question—the question of what physicalism means or is—puts considerable pressure on the thesis normally called ‘physicalism’: Chapters 3 to 5 argue that it is not physicalism; Chapters 6 to 8 point out it is no clearer than the metaphysical notions required to explain it. In Chapters 9 to 11 I examine the ways in which philosophers have sought to respond to these problems.

As I see it, the literature on these matters is dominated by two loud and opposing voices. The first, that of the skeptic, accepts that there is no true genuine version of physicalism, and draws a negative consequence for the standard picture and indeed for large parts of philosophy itself. The second, that of the true believer, takes it to be obvious that the standard picture is legitimate, and looks around for a thesis of physicalism that can play the role assigned to it by that picture. The debate between the skeptic and

the true believer looks intractable, so it is attractive to seek to avoid it by rejecting a presupposition shared by both sides. In Chapter 9 I critically discuss three such proposals. The first suggests that the problem is generated by the forlorn attempt to analyze the notion of physicalism—doesn't the history of philosophy suggest that attempts at analysis are always a failure? The second suggests that the problem is generated by the mistaken assumption that there is a thesis here in the first place—doesn't the physicalist hold a characteristic attitude rather than believe a characteristic thesis? The third suggests that the problem is generated by a failure to distinguish the thesis of physicalism and various philosophical uses of a thesis—surely a thesis might be illegitimate or objectionable even while various philosophical uses of a thesis are not. I argue that the first two of these suggestions don't survive scrutiny, and so we are left with the third.

The main consequence of this third view is that if the various philosophical problems associated with the standard picture are legitimate, then in a sense they cannot be about physicalism—references to physicalism in their formulation must be inessential. In Chapters 10 to 11, therefore, I assess whether this consequence is correct. Chapter 10 reviews the arguments against physicalism, the most famous of which occur in philosophy of mind, in particular the conceivability or modal argument against physicalism. These arguments require books unto themselves, and so I focus mainly on what the role of physicalism is in each of the arguments. The conclusion is that physicalism does indeed play an inessential role, and so that the arguments can survive the observation that there is no version of physicalism that is both genuine and plausibly true.

In Chapter 11 I consider the arguments in favor of physicalism, of which the most famous is the so-called causal argument. This argument seeks to infer the truth of physicalism from a principle about causation called 'the exclusion principle' together with the theses that the world is a physically closed system and that the mental is efficacious. I suggest that, once we factor in the question about interpretation into this argument, it too emerges as an argument which is highly abstract and which has nothing to do with physicalism *per se*.

In conclusion, I return to the standard picture and ask what our discussion has revealed about it. The standard picture combines both a philosophy of nature and a philosophy of philosophy. Its philosophy of nature is that physicalism is a high-level empirical hypothesis that we have considerable reason to believe. Its philosophy of philosophy is that many contemporary philosophical problems may be viewed as attempts to place (or find, or ...) various

items in the world as portrayed in this philosophy of nature. Our discussion shows that this general picture is unsustainable. Contra the standard picture's philosophy of nature, the thesis that seems reasonable to hold about the nature of the world does not deserve the name 'physicalism.' Contra the standard picture's philosophy of philosophy, stating a whole series of philosophical problems in terms of physicalism imposes a uniformity on these problems that is both inaccurate and problematic. It is inaccurate simply because when one looks at a whole range of problems, it is hard to believe that they all have the structure that the standard picture interprets them as having. And it is problematic because the structure often blinds us to ways in which the problems can be solved.

The view I arrive at by the end of the book is a kind of 'bad news/good news' view. The bad news is that the skeptics about the formulation of physicalism are right: physicalism has no formulation on which it is both true and deserving of the name. The good news is that this does not have the catastrophic effects on philosophy that it is often portrayed as having in the literature. For physicalism itself plays an inessential role in the many philosophical problems that are formulated in terms of it, and so the fact that physicalism has no reasonable formulation does not entail that philosophical problems stated in terms of it have no reasonable formulation. In sum, the very considerable influence of physicalism on contemporary philosophy is largely without foundation, but appreciating this points us toward a better understanding of the philosophical problems that confront us.

A word of warning

Well that is the view that I arrive at anyway. Whether it will be your view too remains to be seen. And indeed, at this point it is worth issuing a word of warning about the discussion to follow. This is that while I certainly take myself to be a *reliable* narrator I am not an *unopinionated* one. And my opinions have certainly affected how I present the issues, what I think is plausible and not plausible and so on. Whether my opinions are correct or not is a matter about which you will have to make up your own mind. My best advice—though here again I am being opinionated!— is to follow up the readings I have suggested at the end of each chapter (and the references contained in those readings) and, even more importantly, to think through the issues yourself.

Having got that word of warning out of the way let me close this introduction with some brief comments on terminology.

Terminology

The word ‘physicalism’ was introduced into philosophy in the 1930s by Otto Neurath (1931a, 1931b) and Rudolf Carnap (1959, first published 1932/33), both of whom were key members of the Vienna Circle, a group of philosophers, scientists, and mathematicians active in Vienna prior to World War II. It is not at all clear that Neurath and Carnap conceived of physicalism in the same way, but one thesis that is often attributed to them (e.g. by Hempel 1949) is the linguistic thesis that every statement is synonymous with (i.e. is equivalent in meaning with) some physical statement. On the other hand, ‘materialism’ is traditionally construed as denoting, not a linguistic thesis, but a metaphysical one, i.e. it tells us about the nature of the world as such. Hence Neurath and Carnap had a good reason for distinguishing physicalism (a linguistic thesis) from materialism (a metaphysical thesis). Moreover, this reason was compounded by the fact that, according to official positivist doctrine, metaphysics is nonsense.

It is sometimes suggested that ‘physicalism’ is distinct from ‘materialism’ for a reason quite unrelated to the one associated with its Viennese origins, viz. that ‘physicalism’ has a certain generality that ‘materialism’ does not. The root notion of materialism is ‘matter’ and historically the notion of matter is quite constrained: matter is the stuff that fills up space, is inert, senseless, hard, impenetrable, and so on; a materialist is someone who holds that everything is fundamentally material in this sense of ‘matter.’ The problem with this version of materialism is that physical science has itself shown that it is untrue; modern physics postulates events and properties that are non-material in this sense (see Chapter 3). Because of this, some contemporary philosophers prefer to speak of ‘physicalism’ on the grounds, first, that the root notion of physicalism is ‘physics’ and, second, that ‘physics’ includes more than simply ‘matter.’

Neither of these two reasons for distinguishing the terms is particularly persuasive. As regards the distinction invoked by Carnap and Neurath, the background philosophy that held that in place has for the most part been rejected. As regards the idea that the word ‘physicalism’ is somehow connected to ‘physics’, it remains the case that it is as closely related to ‘physical object’ as it is to ‘physics’ and, since ‘physical object’ is synonymous with ‘material object,’ it is quite unclear that a terminological division between ‘physicalism’ and ‘materialism’ is well motivated.

Not only is it difficult to pinpoint any clear rationale for distinguishing ‘physicalism’ from ‘materialism,’ it is also the case that, while some

physicalists prefer the term ‘physicalist,’ others most definitely do not. David Lewis, one of the most influential physicalists of the twentieth century, writes as follows:

[Materialism] was so named when the best physics of the day was the physics of matter alone. Now our best physics acknowledges other bearers of fundamental properties: parts of pervasive fields, parts of causally active spacetime. But it would be pedantry to change the name on that account, and disown our intellectual ancestors. Or worse, it would be a tacky marketing ploy, akin to British Rail’s decree that second-class passengers shall now be called ‘standard class passengers.’ (1994: 293)

And Lewis here is plausibly interpreted as following the terminology of Smart’s 1963 paper, one of the key documents of the modern version of the thesis, which had a simple title: ‘Materialism.’

In view of the fact that there is no consensus about how exactly to use these words, I will proceed here by stipulation. First, I assume that ‘physicalism’ and ‘materialism’ are interchangeable but will generally use the first rather than the second. Where other authors use ‘materialism’—as we have seen Russell does—I will paraphrase what they say by using ‘physicalism.’ Second, and relatedly, I will hereby cancel any implication about the difference between physicalism and materialism. Of course, no up-to-date philosophical thesis can rely on an outmoded science, but the mere use of the terminology should not prejudice questions like this one way or the other.

In addition to ‘physicalism’ and ‘materialism,’ another word that is sometimes used is ‘naturalism.’ Once again, there is no consensus about how to use this word, but in what follows I will use ‘naturalism’ to mean not a thesis about the nature of the world, and so not physicalism, but rather a methodological thesis. According to this thesis, the best methods that we have for finding out about the world are the methods, whatever they are, that one finds in the natural sciences. As I understand it, methodological naturalism is a pretty thin doctrine. It says that we should think about the world in the way that those people think about the world, where the demonstrative expression ‘those people’ picks out a particular class of people, viz. scientists. This idea is completely silent on whether people who are not normally regarded as scientists (detectives, for example) use the same methods or not. Likewise it is silent on whether methods employed by such people are justified or not, or even what such methods are. For example, it is sometimes suggested that naturalism is in some way opposed

to a priori reasoning (see, e.g. Devitt 1996). But one could only establish this if one could establish that the people demonstrated did not employ a priori reasoning. That seems unlikely, in view of the role of logical, mathematical and conceptual thinking in the sciences. At any rate, I will not assume here that methodological naturalism entails that there is no such thing as a priori reasoning.

Summary

In this introduction, we have set out three questions to focus on: the interpretation, truth (or falsity), and philosophical significance of physicalism, and set aside three others: the relation of physicalism to broader social currents, the relation of physicalism to technical questions in physics or philosophy of physics, and the history of the subject. We have also noted the origins of the word ‘physicalism’ in the positivism of the Vienna Circle, and made some comments on the relation between the words ‘physicalism,’ ‘materialism,’ and ‘naturalism.’

Further reading

Two classic works in the history of physicalism are Dijksterhuis’s *The Mechanization of the World-Picture* (1961) and Lange’s *The History of Materialism* (1925). For a much less forbidding account, see Vitzthum 1995. For physicalism as it appears in positivism, see the further readings for Chapter 1. The Lewis quotation at the end is from ‘Reduction of mind’ (1994) the first part of which provides an excellent summary of Lewis’s views on physicalism. (As I noted in the text, Lewis calls it ‘materialism.’)

1

THE STANDARD PICTURE

1.1 Introduction

There is a view about physicalism and its place in philosophy that is accepted by enough contemporary philosophers to be called ‘the standard picture.’ To put it very roughly, the standard picture is as follows.

On the one hand, physicalism is a thesis about the nature of the world that we have considerable and perhaps even overwhelming reason to believe. Physicalism is not an a priori doctrine, like a doctrine in ethics or mathematics. People who deny it are not thereby making any conceptual or logical error. Rather the status of physicalism is more like the status of the theory of evolution or of continental drift; in the words of Hartry Field, one prominent physicalist, “it functions as a high-level empirical hypothesis, a hypothesis that no small number of experiments can force us to give up” (1972: 357). Those who deny physicalism are not making a conceptual mistake, but they are, nevertheless, flying in the face not merely of science but also of scientifically informed common sense.

On the other hand, while physicalism is a thesis we have overwhelming reason to believe, believing it without qualification is no easy matter. For physicalism is on the face of it incompatible with, or at least is in some tension with, various claims that are central to ordinary or common sense views about humans and what they are like, views which in various ways

are presumed also in the sciences. Some of the claims which physicalism might be thought to be inconsistent with or in tension with are:

- that people perceive things and have bodily sensations of various kinds, e.g. tastes, cramps, itches, nausea;
- that people speak and think about the world and about each other;
- that at least some words have meaning;
- that people's bodies, and physical objects in general, are colored, textured, have various tastes, and emit sounds and smells;
- that people's bodies, and physical objects in general, are solid or have bulk or fill in space;
- that people have reasons for thinking and acting as they do, and that those reasons may be subjected to normative (including moral) scrutiny;
- that people sometimes act and think freely;
- that people participate in group decisions and actions, and in turn the actions of these groups impact on the individuals who constitute them;
- that there are mathematical and logical truths (e.g. " $5 + 7 = 12$ "), and that people can come to know these mathematical and logical truths.

In order to appreciate the importance of these claims, try to think for a moment how things would be if they were false—that nobody thinks or feels, or says anything meaningful, or that ordinary physical objects are not solid or colored, or that there is no freedom of action or social agency or mathematical knowledge. It is obvious when you think about it that these claims and others like them are central to life as we live it; they are, as I will say, the *presuppositions of everyday life*. So in effect what we are being asked to accept by the standard picture is the idea that there is a *prima facie* conflict between the presuppositions of everyday life on the one hand, and a thesis we have overwhelming reason to believe—i.e. physicalism—on the other.

In view of the conflict or apparent conflict between physicalism and the presuppositions of everyday life, we are faced with a number of options. One is to abandon or modify physicalism. But that seems implausible if physicalism really is, as proponents of the standard picture say it is, a thesis for which we have considerable evidence. Another is to abandon some or all of these presuppositions. But that too seems implausible. Even if we wanted to deny these claims, it is not clear that we could do so. (If a philosophy professor convinces you in a seminar that nobody is in pain and that no physical object is solid, you will forget both the moment you stub your toe

on the doorframe as you leave the room.) The third option is to compromise, i.e. to propose ways to understand these presuppositions so as they are not incompatible with the truth of physicalism.

It is the third option that is most central to the standard picture. Indeed, it is no exaggeration to say that variations on this third option together make up large parts of what analytic philosophy is about. Large parts of analytic philosophy, that is, involve proposing and assessing ways of interpreting the presuppositions of everyday life so as they are compatible with the truth of physicalism. Famous philosophers are often associated with particular proposals about how to do this. For example, Gilbert Ryle in *The Concept of Mind* (1949) is famous for saying that psychological claims are logically in a different category from other kinds of claim, and that if that is true, the conflict between physicalism and psychological claims is merely apparent. Similarly, J.J.C. Smart's paper 'Sensations and brain processes' (1959) is famous for saying that we might exploit Frege's distinction between the sense of an expression and its referent in order to remove the source of tension between ordinary talk about mental states such as sensations and physicalism. Finally, Kripke's (1980) discussion in *Naming and Necessity* of the necessary a posteriori looks like it is interesting in part at least because it permits us to say that physicalism makes the presuppositions of everyday life true without committing ourselves to various proposals about how these claims are to be interpreted and analyzed. As David Lewis once remarked, Kripke's discovery of the necessary a posteriori looks from this point of view like a "godsend" (Lewis 2002: 95).

1.2 The generality of physicalism

The standard picture does not view physicalism as true merely for selected bits of the world—merely for human or sentient or living beings, for example. Rather it is intended to be a very general and abstract doctrine that is true of the world as a whole. It is, as we saw in the introduction, a world-view or *Weltanschauung*.

One way to bring this out is to think of the world as a huge complicated structure, emanating out in various dimensions from the point at which you exist. There is the history of the world: human history both recorded and unrecorded; the history of living organisms, the history of the planet, the solar system and the universe itself. There is the future of the world (assuming the future exists) both for you, and for the universe in general. There is the composition of the world: almost any part of it is

made up of smaller and smaller parts: your body, the organs of your body, the cells that make up the organs, the molecules that make up the cells; and so on. Correlatively, almost any part of the world forms larger and larger wholes: your family, your country, your species, the environment, and so on. Still other dimensions of the world are harder to capture in spatial or temporal terms. Every part of the world has various characteristic features and patterns of development. You in particular have various capacities to grow and decay, and to reproduce; you have various sensory and cognitive faculties and potentialities, some of which can be broken down into smaller faculties, and some of which constitute larger ones; there are various social and physical forces operating on you, and in turn you are an actor in a social and physical environment; you are subject to, and critic of, moral, aesthetic, prudential, and epistemic pressures of various kinds; and so on.

Physicalism has something to say about every aspect of this complicated structure. It says that everything here is physical, or to put it more cautiously (for reasons we will examine in the next chapter) that everything here is necessitated by the physical. It is this very general idea that, according to the standard picture, we have considerable and perhaps overwhelming reason to believe. But it is also this very general idea that, according to the standard picture, is inconsistent with, or in tension with, the presuppositions of everyday life.

1.3 Physicalism and the mind–body problem

Physicalism is a general thesis, but it is also very closely associated with the mind–body problem; indeed, the work of the three philosophers I mentioned a moment ago—Ryle, Smart and Kripke—was in each case a contribution to (among other things) the mind–body problem. This connection to the mind–body problem is important for the standard picture in two respects; first, it provides perhaps the clearest example of the general tension between physicalism and the presuppositions of everyday life; second, it provides a template for how to think about many other philosophical problems.

We will turn to this second issue—the way in which the mind–body problem provides a template for others—more fully as we proceed. But, first, how is the mind–body problem an instance of the general tension? Well, you might naturally think that the mind–body problem is a problem about the relation between two things, the mind, and the body. In fact in contemporary philosophy of mind, the problem is almost always conceived of as a problem about the apparent incompatibility of physicalism, on the

one hand, and the existence and nature of various mental phenomena, on the other. If physicalism is true, humans and other sentient creatures are themselves wholly physical. But many philosophers think that there are arguments which if successful would show that the apparent fact that we sometimes have (e.g.) sensations is incompatible with the claim that we are wholly physical. (These arguments are usually called conceivability or modal arguments. I will set out these arguments in Chapter 10.) Since it seems obvious that we do have sensations—when we stub our toes, for example—the soundness of these arguments entails that physicalism is false. But as I have said, physicalism is something that, according to the standard picture, we have overwhelming reason to believe. So the mind–body problem in contemporary philosophy presents a sort of paradox in our thinking: apparently persuasive arguments like the conceivability argument show that two things we strongly believe cannot both be true.

If we have an apparently persuasive argument showing that two things we believe cannot both be true we must give up something—but what? Well, to abandon or modify physicalism is in the philosophy of mind case to become a dualist. Dualism may be developed in various ways, as we will see in the next chapter. But however it is developed, a dualist is someone who says that physicalism is at best mostly true, rather than being true outright. Maybe physicalism is true of most of the complicated structure I mentioned in the previous section—maybe it is true of rocks and planets and plants—but it is not true of people and other sentient creatures. The option of giving up the presuppositions of everyday life is in philosophy of mind called *eliminativism*. The eliminativist holds that since physicalism is true, and since physicalism is incompatible with sensations, then sensations do not exist. Finally, just as it does in the general case, the compromise option occupies most of the attention of philosophers of mind. There are two broad strategies here. One is to work out an account of what sensations are which makes it clear that the existence of sensations is compatible with physicalism. (Ryle, for example, is often interpreted as proposing a so-called behaviorist analysis of sensations according to which to have a sensation is to exhibit a certain characteristic pattern of behavior; Smart, on the other hand, is often interpreted as proposing a functionalist or topic-neutral analysis according to which to have a sensation is to have an inner state that plays a certain causal role, i.e. is caused by certain things, and in turn causes certain behavior and other mental states of a distinctive sort.) The other strategy, which is inspired by part of Kripke's discussion (though was not endorsed by

Kripke himself), is to argue directly that the conceivability argument is not persuasive, even in the absence of any functionalist or behaviorist analysis of sensations. As we will see in Chapter 10, it is most often this second sort of strategy that philosophers of mind have employed in recent discussions.

1.4 Philosophy within science

We have so far seen that, according to the standard picture, physicalism is a thesis we have overwhelming reason to endorse but is also in tension with the presuppositions of everyday life. We have also noted the generality of physicalism and its connection to the mind–body problem. But why did the standard picture become the standard picture? What is attractive about it?

One reason is that it solves, at least in part, the problem I will call—somewhat grandly—‘the problem of philosophy.’ Richard Rorty gives a vivid statement of this problem in the following terms:

If philosophy becomes too naturalistic, hard-nosed positive disciplines will nudge it aside; if it becomes too historicist, then intellectual history, literary criticism and similar soft spots in the ‘humanities’ will swallow it up. (Rorty 1979: 168)

Rorty might be read in this passage as if he were saying that the problem of philosophy were one about social power, i.e. about whether philosophy construed as a discipline will survive a competition with other disciplines to attract funding from a dean or a rich benefactor. But to my mind the problem is mainly an intellectual one about the very nature of philosophical problems. If philosophical problems are at bottom scientific ones, they seem not to be the sort of thing that philosophers, with their special talents and training, can study. On the other hand, if they are at bottom unscientific ones, then it seems most likely that they should be grouped together with problems about the historical development and cultural expression of ideas; that is, the sorts of problems discussed mainly in history or literature departments rather than in philosophy departments. What then could philosophy possibly be about?

This dilemma has been close to the heart of a lot of philosophy at least since the onset of logical positivism in the 1930s and perhaps much earlier. How to solve it? Well, one option is not to solve it but to

embrace it; that is, give up on philosophy and become either a scientist or a person of letters—to become (or try to become!) either Einstein or Nietzsche, as it is sometimes put. If one wants to defend philosophy against this dilemma, however, it is necessary to find something for it to do that is neither science nor literature. The standard picture we have been discussing provides an apparently simple and decisive answer to the problem. Physicalism is a thesis about the world that, on the face of it, has impeccable scientific credentials. But physicalism also looks to be in conflict with the presuppositions of everyday life. In the light of this conflict, we seem inevitably to face the intellectual project of resolving it. Such a project seems important, since we can give up neither physicalism nor everyday life, and yet it is not in any straightforward way either scientific or literary. In summary, physicalism solves (in part, at least) the problem of philosophy.

We may put the basic point differently by connecting the problem of philosophy with the idea of a placement problem, and related to this, with the idea of a *Weltanschauung*, both of which I mentioned in the introduction. As Freud says in the passage I quoted, a *Weltanschauung* is a relatively simple thesis or proposal that applies to everything; we may think of it as a relatively simple thesis about the world that aspires to completeness, i.e. that aspires to tell us something about every instantiated property in the world. On the other hand, any *Weltanschauung* worth its salt is going to generate a series of placement problems. For a world picture with any content is going to place some constraints on what is in the world, and these constraints will render some claims about what is in the world initially implausible. From this point of view, philosophers emerge as those who police the world-view—the *Weltanschauungspolizei*, i.e. those who seek out sites of conflict and make those conflicts disappear.

Now physicalism is a *Weltanschauung* in Freud's sense, or at any rate is often thought of in that way. And, from a philosopher's point of view, the beauty of this particular *Weltanschauung* is, first, that it is one with scientific backing and, second, that the placement problems it generates involve the presuppositions of everyday life. In consequence, the task of policing this particular *Weltanschauung* could not be more important. So the standard picture is popular in part because it solves this problem of what philosophy is about, and solves it with considerable aplomb.

1.5 Philosophical problems as placement problems

The standard picture is attractive because it provides an answer to the problem of philosophy. But it is attractive also because it makes us think about philosophical problems, or at any rate a large class of philosophical problems, in a remarkably unified way. Consider this passage from Huw Price:

Like coastal cities in the third millennium, important areas of human discourse seem threatened by the rise of modern science. The problem isn't new, of course, or wholly unwelcome. The tide of naturalism has been rising since the seventeenth century, and the rise owes more to clarity than to pollution in the intellectual atmosphere. All the same, the regions under threat are some of the most central in human life—the four Ms, for example: Morality, Modality, Meaning and the Mental. Some of the key issues in contemporary metaphysics concern the place and fate of such concepts in a naturalistic worldview. (Price 1997: 247)

In the first part of this passage, Price is describing the standard picture roughly in the terms I have done. (He does use 'naturalism' rather than 'physicalism', but I think we can interpret him as meaning the latter *inter alia*). In the final sentence, however, Price goes on to identify "the key issues in contemporary metaphysics" as concerning "the place and fate of such concepts in a naturalistic worldview." In short, what Price is suggesting is that philosophical, or any rate metaphysical, problems in many domains should all be thought of as questions about whether and how to place or fit or locate or find (as I said in the introduction, the metaphors differ with different authors) various items or claims in a physical world. In the rest of his article, Price goes on to propose an interesting way to deal with these placement problems, a way that owes a considerable amount to Ryle's denial that many claims of philosophical interest are in the fact-stating business. Whether Price is right to endorse this Ryle-inspired view is an interesting question. But for the moment the point I want to emphasize is something implicit rather than explicit in what Price says: the apparent thematic unity of the different issues he mentions, and, related to this, the idea that one can generalize about the key issues in metaphysics in the way that he does.

For in fact it is quite unobvious that there is or should be any thematic unity here. For example, it is quite unobvious that questions in science exhibit any genuine unity, except perhaps in the very general (and so

unhelpful) sense that in science people are interested in explaining things. So why should we assume that metaphysical questions about morality, meaning, mind, and modality (to take Price's examples) are similar insofar as all of them represent questions about how to place or fit or locate or find these phenomena in the natural or physical world? Has Price conducted a study of these problems and concluded on the basis of the study that they are all placement problems? Of course not—rather he has, implicitly or explicitly, a theory about what these problems consist in, a theory that entails that they are placement problems, and moreover that they are placement problems of the same sort. This is not to deny that Price is right to assume there is some kind of unity here—perhaps he is. It is simply to remark on the fact that he, and proponents of the standard picture, do assume this, and that this is one reason why the standard picture is attractive.

1.6 Neurath and Carnap

When did the standard picture become the standard picture? As I have already mentioned, it was Otto Neurath and Rudolf Carnap who introduced the word 'physicalism' as a piece of philosophical shoptalk in the 1930s. (One of Neurath's papers is entitled (in English) 'Physicalism: the philosophy of the Vienna Circle.')

However, not only did the philosophers of this period use the term differently to the way it is employed today, there were differences in usage even among themselves.

For Rudolf Carnap, perhaps the most influential member of the Vienna Circle, physicalism was explicitly a thesis about meaning or translation. The "general thesis of physicalism," he wrote, is that "physical language is a universal language, that is, a language into which every sentence may be translated" (1959/1932: 165). For Carnap, physicalism was a variation on a more familiar positivist doctrine of phenomenalism. According to phenomenalism, the universal language, i.e. the language into which every sentence may be translated, is an observation language rather than a physical language, where an observation language is one whose basic sentences concern observation or experience.

Why adopt physicalism in this sense as opposed to phenomenalism? In some parts of his writing, Carnap suggests that the choice is pragmatic (1947: 207–8). But elsewhere he seems to suggest that physicalism has an advantage over phenomenalism, viz. that physical language is intersubjective—in particular it is a language suitable for co-operative scientific enquiry (1959/1932: 166). Neurath agreed with Carnap over the

intersubjectivity of the physical language, but he nevertheless had a version of physicalism that was different from Carnap's. While Carnap thought that the relation of physical statements to other statements would be one of translatability, Neurath seemed to endorse a much looser conception. For Neurath, commitment to physicalism was a way of being committed to the connection and integration of the various sciences, without assuming that one science was the dominant one. In later work (1946), Neurath used the image of an orchestra for the different sciences—physicalism was part of the background conditions for the orchestra. (Actually the interpretation of Neurath's position is a difficult matter which we will set aside here; for discussion see Cartwright *et al.* 1996.)

While Carnap and Neurath differed over the interpretation of physicalism, they nevertheless agreed that the notion of a physical language is central to it; to this extent, both held linguistic versions of physicalism that differ from the metaphysical doctrines current today. (As I mentioned in the introduction, for Neurath, and indeed for Carnap, the word 'physicalism' is reserved for a linguistic doctrine quite different from any metaphysical thesis like materialism.) But what is a physical language and what is physical about it? Carnap sometimes writes as if what he means by 'physical language' is the language of physics (e.g. 1959/1932). However, it is unlikely that the language of physics could have played the role that either Carnap or Neurath wanted the idea of a physical language to play. Physics can scarcely be thought of as a *lingua franca* available to any scientist as Neurath envisioned, and nor is the language of physics plausibly a foundational language in the epistemological program presented by Carnap.

Carnap also seems to suggest (e.g. 1947) that the physical language is not physics but a language of ordinary physical objects and their distinctive properties. This is certainly better from his point of view, but now the distinction between phenomenalism and physicalism looks very subtle indeed. As we have seen, the phenomenalist has the observation language where the physicalist has the physical language. What then is the observation language? One interpretation is that it is the language of things observed, i.e. ordinary physical objects and their properties; another interpretation is that it is the language of events of observation, i.e. observings of physical objects. But observings of physical objects look as if they are best explained by mentioning the physical objects observed. So either way of introducing the idea of an observation language makes it look very closely related to the language of ordinary physical objects. Of course that the distinction between phenomenalism and physicalism (in this sense) is subtle is an

objection to neither but is striking in view of the fact that physicalism and phenomenalism are often thought of as radically different doctrines.

The distinction between two accounts of what a physical language is that we have seen at play in Carnap—the language of physics, on the one hand, and the language of ordinary physical objects on the other—will be in one form or another with us throughout our discussion. It is always a good question to ask any physicalist whether they have in mind the idea of a physical object in an ordinary sense or a physics (often the answer is that they have both). So it is interesting to note that Neurath took a quite independent path on this question. He wrote:

[Physicalism] ... starts from everyday language, which avoids elements which the various peoples of the earth do not have in common. The assumption is, that Melanesian tribes and European explorers can start to talk on cows and calves, pains and pleasures without difficulties, whereas difficulties appear when expressions like 'cause,' 'punishment,' 'mind,' etc. enter the talk. In this part of our everyday language which physicalism acknowledges one formulates questions with 'where, when, how.' And physicalism suggests to drop discussion which do not allow these three questions reasonably made [sic]. (Neurath, quoted in O'Neill 2004: 435)

That Neurath includes 'pleasure' and 'pain' in the physical language is striking, and suggests that what he has in mind by 'physicalism' is something quite remote from contemporary concerns.

1.7 Quine and Smart

The versions of physicalism promoted by Carnap and Neurath were not universally popular with the Vienna Circle and associated philosophers. Wittgenstein, who many in the Circle revered, thought the name at least of the doctrine was horrible (Stern 2005). And Moritz Schlick, another member of the Circle, criticized Neurath's version of physicalism on philosophical grounds (see Schlick 1932, 1934). Schlick argued that it was implausible to assign physical language and statements any kind of foundational role in epistemology. Presumably one can be mistaken about whether a certain physical object statement is true in a way that one cannot be mistaken about whether a certain observation statement is true. It is doubtful that Neurath would have been overly concerned with this criticism since for him the whole idea that knowledge has a foundation was something to be rejected.

While their influence on other members of the Vienna Circle was limited, both Carnap and Neurath were extremely influential on W.V. Quine, perhaps the most prominent physicalist of the twentieth century. In the 1950s Quine produced a series of works that defended physicalism in something like its current form. In 'The scope and language of science,' for example, Quine starts as follows:

I am a physical object sitting in a physical world. Some of the forces of this physical world impinge on my surface. Light rays strike my retinas; molecules bombard my eardrums and fingertips. I strike back, emanating concentric airwaves. These waves take the form of a torrent of discourse about tables, people, molecules, light rays, retinas, airwaves, prime numbers, infinite classes, joy and sorrow, good and evil. (1954: 22)

Such passages seem fairly clearly to formulate a version of physicalism, but the philosophical setting that Quine gave physicalism was quite different from that provided by Carnap or Neurath. In particular, for Quine, as for more contemporary philosophers, physicalism is a very general thesis about what the world is and what it is like, rather than a thesis in semantics or epistemology. For Quine, in short, it was a piece of metaphysics.

Quine took physicalism to be a hypothesis about what the world is and what it is like, but the philosophy of philosophy that is associated with physicalism by the standard picture seems to me at least hinted at in Quine rather than developed fully. In *Word and Object* (1960), the book that culminated the series of physicalist articles in the 1950s, Quine did discuss the question—to borrow Price's words—of the place and fate of the notion of *meaning* in a physical world. And the position he ended up with was a negative one that objective sense could not be made out of ordinary semantic notions. (Indeed, Quine's famous skepticism about semantic notions was a major reason for him to reject the linguistic version of physicalism associated with Carnap.) Nevertheless, the general idea that philosophical problems, or at least a very large class of philosophical problems, can be thought of as placement problems doesn't seem to me explicit in Quine. Indeed, in some parts of his writings, Quine veers surprisingly close to the scientific end of Rorty's dilemma mentioned earlier (Quine 1969).

In the early 1960s a number of philosophers who were attracted to Quine's criticism of positivism as well as his physicalism began to formulate the idea that various philosophical problems are best viewed as problems about how to place or find or locate various items in a purely

physical world. A particularly frank and clear statement of this position is given by J.J.C. Smart both in *Philosophy and Scientific Realism* and in the article 'Materialism' (1963, 1963a; see also Sellars 1962). Smart opened the book with the statement that "This book is meant as an essay in synthetic philosophy, as the adumbration of a coherent and scientifically plausible world view" (1963: 1). He went on to defend a materialistic conception of nature, and then to articulate a role for philosophy that is very close to the one that we saw in the passage from Price. Smart took himself to be deeply influenced by Quine, and so he was. But what we find in Smart quite explicitly is something we find (or I find, anyway) only implicitly in Quine, viz. the standard picture, the idea that physicalism is a doctrine about the world that we have overwhelming reason to believe, and yet it is prima facie in conflict with the central claims of human life. The task, or at any rate a key task, of philosophy is to resolve this conflict. Smart himself wrote at a time in which many people would have rejected this picture of what philosophy was about. But it seems reasonable to say that since the 1960s the picture, or something like it, has come to dominate not only the way that philosophers think about the world but also in many cases how they think about philosophy.

The sort of philosophy, and the sort of physicalism, that we find in positivists such as Neurath and Carnap is obviously very different from the sort of philosophy, and the sort of physicalism, that we find in post-positivists such as Quine and Smart. But there is also a sense in which they are quite similar, and it is worth having this similarity clearly before us for what follows. For what the linguistic version of physicalism does is provide a condition on something's being a meaningful sentence; that is, something is a meaningful sentence only if it is translatable into a physical language. The project for philosophers who hold this version of physicalism is then to divide sentences into the meaningful and the non-meaningful, with, hopefully, intuitively correct (or at least interesting) results. On the other hand, what the metaphysical version does is provide a condition on something's being a fact; that is, something is a fact just in case it bears the right kind of relation to physical facts. The project for philosophers who hold this version of physicalism is then to divide putative facts into genuine facts and non-facts with, hopefully, intuitively correct (or at least interesting) results. From a certain point of view, therefore, this post-positivist position on philosophy seems to have more in common with positivist thought than is often supposed.

1.8 The standard picture in a nutshell

Drawing together what we have said, the standard picture may be expressed as the conjunction of five theses:

- 1 Physicalism is true—the *basic thesis*.
- 2 Physicalism summarizes the picture of the world implicit in the natural sciences—the *interpretative thesis*.
- 3 It is most rational to believe the picture of the world implicit in the natural sciences, whatever that picture happens to be—the *epistemological thesis*.
- 4 Physicalism is, *prima facie*, in conflict with many presuppositions of everyday life—the *conflict thesis*.
- 5 The way to resolve these conflicts is to propose views about how to interpret the presuppositions of everyday life so that they are compatible with physicalism—the *resolution thesis*.

These claims form a system. The interpretative thesis and the epistemological thesis together articulate a reason to believe the basic thesis. The conflict thesis then articulates a problem for the basic thesis, and the resolution thesis sets out a strategy whereby we might seek to solve the problem. As we have seen, the picture is attractive because it provides a rationale for philosophy itself, and because it suggests that there is some sort of underlying unity in many, but certainly not all, philosophical questions.

It is the standard picture, I think, that provides the answer (or better: the framework for an answer) to one of the three questions we distinguished in the introduction, the question of the significance of physicalism. Physicalism as it appears in the standard picture certainly *looks* a significant thesis. But of course physicalism would only *be* significant in this sense if the picture were correct. And is it? Well, that is the question I hope we will be in a position to answer at the end of the book. But we should certainly not rush to an answer. To begin with, we will need to learn a good deal about what physicalism says before we will be in a position to assess the truth of any of the constituent claims of the standard picture. So it is to that interpretative question we will turn next.

Summary

In this chapter, we have seen that, for philosophers who hold what I called ‘the standard picture’ there is a conflict or apparent conflict between physicalism, on the one hand, and many of the presuppositions of everyday life on the other. And we have also looked briefly at the attractiveness of the standard picture and (even more briefly) at its origins in the physicalism of Carnap, Neurath, Quine, and Smart.

Recommended reading

For classic presentations of philosophical problems as placement problems involving physicalism, see Smart 1963 and Sellars 1962; later, more sophisticated developments of the idea can be found in Lewis 1986b and Jackson 1998. A paper written from a different perspective but which is nonetheless in agreement with the general idea is Price 1997, from which I took the quotation about the “M-worlds” above. For physicalism as it was expressed by the positivists, see Carnap 1959, original date of publication 1932/33, and Neurath 1931a. The best place for Quine’s view is the opening chapter of Quine 1960; see also Friedman 1975. A paper which discusses physicalism and connects it both to Quine and to Neurath is Field 1972.