

# PHILOSOPHY OF MIND

THIRD EDITION

JAEGWON KIM



A Member of the Perseus Books Group

Westview Press was founded in 1975 in Boulder, Colorado, by notable publisher and intellectual Fred Praeger. Westview Press continues to publish scholarly titles and high-quality undergraduate- and graduate-level textbooks in core social science disciplines. With books developed, written, and edited with the needs of serious nonfiction readers, professors, and students in mind, Westview Press honors its long history of publishing books that matter.

Copyright © 2011 by Westview Press

Published by Westview Press,  
A Member of the Perseus Books Group

All rights reserved. Printed in the United States of America. No part of this book may be reproduced in any manner whatsoever without written permission except in the case of brief quotations embodied in critical articles and reviews. For information, address Westview Press, 2465 Central Avenue, Boulder, CO 80301.

Find us on the World Wide Web at [www.westviewpress.com](http://www.westviewpress.com).

Every effort has been made to secure required permissions for all text, images, maps, and other art reprinted in this volume.

Westview Press books are available at special discounts for bulk purchases in the United States by corporations, institutions, and other organizations. For more information, please contact the Special Markets Department at the Perseus Books Group, 2300 Chestnut Street, Suite 200, Philadelphia, PA 19103, or call (800) 810-4145, ext. 5000, or e-mail [special.markets@perseusbooks.com](mailto:special.markets@perseusbooks.com).

Designed by Trish Wilkinson  
Set in 10.5 point Minion Pro

Library of Congress Cataloging-in-Publication Data

Kim, Jaegwon.

Philosophy of mind / Jaegwon Kim.—3rd ed.

p. cm.

ISBN 978-0-8133-4458-4 (alk. paper)

1. Philosophy of mind. I. Title.

BD418.3.K54 2011

128'.2—dc22

E-book ISBN 978-0-8133-4520-8

2010040944

10 9 8 7 6 5 4 3 2 1

# Introduction

In coping with the myriad things and events that come our way at every moment of our waking life, we try to organize them into manageable chunks. We do this by sorting things into groups—categorizing them as “rocks,” “trees,” “fish,” “birds,” “bricks,” “fires,” “rains,” and countless other kinds—and describing them in terms of their properties and features as “large” or “small,” “tall” or “short,” “red” or “yellow,” “slow” or “swift,” and so on. A distinction that we almost instinctively apply to just about everything is whether it is a *living* thing. (It might be a dead bird, but still we know it is the *kind* of thing that lives, unlike a rock or a celadon vase, which couldn’t be “dead.”) There are exceptions, of course, but it is unusual for us to know what something is without at the same time knowing, or having some ideas about, whether it is a living thing. Another example: When we know a person, we almost always know whether the person is male or female.

The same is true of the distinction between things, or creatures, with a “mind” and those without a mind. This, too, is one of the most basic contrasts we use in our thoughts about things in the world. Our attitudes toward creatures that are conscious and capable of experiencing sensations like pain and pleasure are importantly different from our attitudes toward things lacking such capacities, mere chunks of matter or insentient plants, as witness the controversies about vegetarianism and scientific experiments involving live animals. And we are apt to regard ourselves as occupying a special and distinctive place in the natural world on account of our particularly highly developed mental capacities and functions, such as the capacity for abstract thoughts, self-consciousness, artistic sensibilities, complex emotions, and a capacity for rational deliberation and action. Much as we admire the miracle of the flora and fauna, we do not think that every living thing has a mind or that we need a

psychological theory to understand the life cycles of elms and birches or the behavior and reproductive patterns of amoebas. Except those few of us with certain mystical inclinations, we do not think that members of the plant world are endowed with mentality, and we would exclude many members of the animal kingdom from the mental realm as well. We would not think that planarians and gnats have a mental life that is fit for serious psychological inquiry.

When we come to higher forms of animal life, such as cats, dogs, and chimpanzees, we find it entirely natural to grant them a fairly rich mental life. They are surely *conscious* in that they experience *sensations*, like pain, itch, and pleasure; they *perceive* their surroundings more or less the way we do and use the information so gained to guide their behavior. They also *remember* things—that is, store and use information about their surroundings—and *learn* from experience, and they certainly appear to have *feelings* and *emotions*, such as fear, frustration, and anxiety. We describe their psychological life using the expressions we normally use for fellow human beings: “Phoebe is feeling cramped inside the pet carrier and all that traffic noise has made her nervous. The poor thing is dying to be let out.”

But are the animals, even the more intelligent ones like horses and dolphins, capable of complex social emotions like embarrassment and shame? Are they capable of forming intentions, engaging in deliberation and making decisions, or performing logical reasoning? When we go down the ladder of animal life to, say, oysters, crabs, and earthworms, we would think that their mental life is considerably impoverished in comparison with that of, say, a domestic cat. Surely these creatures have sensations, we think, for they react in appropriate ways to noxious stimuli, and they have sense organs through which they gain information about what goes on around them and adjust and modify their behavior accordingly. But do they have minds? Are they conscious? Do they have mentality? What is it to have a mind, or mentality?

## WHAT IS PHILOSOPHY OF MIND?

Philosophy of mind, like any other field of inquiry, is defined by a group of problems. As we expect, the problems that constitute this field concern mentality and mental properties. What are some of these problems? And how do they differ from the scientific problems about mentality and mental properties, those that psychologists, cognitive scientists, and neuroscientists investigate in their research?

There is, first of all, the problem of answering the question raised earlier: What is it to be a creature with a mind? Before we can fruitfully consider ques-

tions like whether inorganic electromechanical devices (for example, computers and robots) can have a mind, or whether speechless animals are capable of having thoughts, we need a reasonably clear idea about what mentality is and what having a thought consists in. What conditions must a creature or system meet if we are to attribute to it a “mind” or “mentality”? We commonly distinguish between mental phenomena, like thoughts and sensory experiences, and those that are not mental, like digestive processes or the circulation of blood through the arteries. Is there a general characteristic that distinguishes mental phenomena from nonmental, or “merely” physical, phenomena? We canvass some suggestions for answering these questions later in this chapter.

There are also problems concerning specific mental properties or kinds of mental states and their relationship to one another. Are pains only sensory events (they hurt), or must they also have a motivational component (such as aversiveness)? Can there be pains of which we are not aware? Do emotions like anger and jealousy necessarily involve felt qualities? Do they involve a cognitive component, like belief? What is a belief anyway, and how does a belief come to have the content it has (say, that it is raining outside, or that  $7 + 5 = 12$ )? Do beliefs and thoughts require a capacity for speech?

A third group of problems concerns the relation between minds and bodies, or between mental and physical phenomena. Collectively called “the mind-body problem,” this has been a central problem of philosophy of mind since Descartes introduced it nearly four centuries ago. It is a central problem for us in this book as well. The task here is to clarify and make intelligible the relation between our mentality and the physical nature of our being—or more generally, the relationship between mental and physical properties. But why should we think there is a philosophical problem here? Just what needs to be clarified and explained?

A simple answer might go like this: The mental seems *prima facie* so utterly different from the physical, and yet the two seem intimately related to each other. When you think of conscious experiences—such as the smell of basil, a pang of remorse, or the burning painfulness of a freshly bruised elbow—it is hard to imagine anything that could be more different from mere configurations and motions, however complex, of material particles, atoms and molecules, or mere physical changes involving cells and tissues. In spite of that, these conscious phenomena don’t come out of thin air, or from some immaterial source; rather, they arise from certain configurations of physical-biological processes of the body, including neural processes in the brain. We are at bottom physical-biological systems—complex biological structures wholly made up of bits of matter. (In case you disagree, we consider Descartes’s contrary

views in chapter 2.) How can biological-physical systems come to have states like thoughts, fears, and hopes, experience feelings like guilt and pride, act for reasons, and be morally responsible? It strikes many of us that there is a fundamental, seemingly unbridgeable gulf between mental and physical phenomena and that this makes their apparently intimate relationships puzzling and mysterious.

It seems beyond doubt that phenomena of the two kinds are intimately connected. For one thing, evidence indicates that mental events occur as a result of physical-neural processes. Stepping barefoot on an upright thumbtack causes a sharp pain in your foot. It is likely that the proximate basis of the pain is some event in your brain: A bundle of neurons deep in your hypothalamus or cortex discharges, and as a result you experience a sensation of pain. Impingement of photons on your retina starts off a chain of events, and as a result you have a certain visual experience, which in turn leads you to form the belief that there is a tree in front of you. How could a series of physical events—little particles jostling against one another, electric current rushing to and fro, and so on—blossom all of a sudden into a conscious experience, like the burning hurtfulness of a badly scalded hand, the brilliant red and purple sunset you see over the dark green ocean, or the smell of freshly mown lawn? We are told that when certain special neurons (nociceptive neurons) fire, we experience pain, and presumably there is another group of neurons that fire when we experience an itch. Why are pain and itch not switched around? That is, why is it that we feel pain, rather than itch, when just these neurons fire and we experience itch, not pain, when those other neurons fire? Why is it not the other way around? Why should any experience emerge from molecular-biological processes?

Moreover, we take it for granted that mental events have physical effects. It seems essential to our concept of ourselves as agents that our bodies are moved in appropriate ways by our wants, beliefs, and intentions. You see a McDonald's sign across the street and you decide to get something to eat, and somehow your perception and decision cause your limbs to move in such a way that you now find your body at the doors of the restaurant. Cases like this are among the familiar facts of life and are too boring to mention. But how did your perception and desire manage to move your body, all of it, across the street? You say, that's easy: Beliefs and desires first cause certain neurons in the motor cortex of my brain to discharge, these neural impulses are transmitted through the network of neural fibers all the way down to the peripheral control systems, which cause the appropriate muscles to contract, and so on. All that might be a complicated story, you say, but it is something that

brain science, not philosophy, is in charge of explaining. But how do beliefs and desires manage to cause those little neurons to fire to begin with? How can this happen unless beliefs and desires are themselves just physical happenings in the brain? But is it coherent to suppose that these mental states are simply physical processes in the brain? These questions do not seem to be questions that can be answered just by doing more research in neuroscience; they seem to require philosophical reflection and analysis beyond what we can learn from science alone. This is what is called the problem of mental causation, one of the most important issues concerning the mind ever since Descartes first formulated the mind-body problem.

In this book, we are chiefly, though not exclusively, concerned with the mind-body problem. We begin, in the next chapter, with an examination of Descartes's mind-body dualism—a dualism of material things and immaterial minds. In contemporary philosophy of mind, however, the world is conceived to be fundamentally material: There are persuasive (some will say compelling) reasons to believe that the world we live in is made up wholly of material particles and their structured aggregates, all behaving strictly in accordance with physical laws. How can we accommodate minds and mentality in such an austere material world? That is our main question.

But before we set out to consider specific doctrines concerning the mind-body relationship, it will be helpful to survey some of the basic concepts, principles, and assumptions that guide the discussions to follow.

## METAPHYSICAL PRELIMINARIES

For Descartes, “having a mind” had a literal meaning. On his view, minds are things of a special kind, souls or immaterial substances, and having a mind simply amounts to having a soul, something outside physical space, whose essence consists in mental activities like thinking and being conscious. (We examine this view of minds in chapter 2.) A substantival view of mentality like Descartes's is not widely accepted today. However, to reject minds as substances or objects in their own right is not to deny that each of us “has a mind”; it is only that we need not think of “having a mind” as there being some object called a “mind” that we literally “have.” Having a mind need not be like having brown eyes or a laptop. Think of “dancing a waltz” or “taking a walk”: When we say, “Sally danced a waltz,” or “Sally took a leisurely walk along the river,” we do not mean—at least we do not need to mean—that there are *things* in this world called “waltzes” or “walks” such that Sally picked out one of them and danced it

or walked it. Where are these dances and walks when no one is dancing or walking them? What could you do with a dance except dance it? Dancing a waltz is not like owning an SUV or kicking a tire. Dancing a waltz is merely a *manner* of dancing, and taking a walk is a *manner* of moving your limbs in a certain relationship to the physical surroundings. In using these expressions, we need not accept the existence of entities like waltzes and walks; all we need to admit into our ontology—the scheme of entities we accept as real—are persons who waltz and persons who walk.

Similarly, when we use expressions like “having a mind,” “losing one’s mind,” “being out of one’s mind,” and the like, there is no need to suppose there are objects in this world called “minds” that we have, lose, or are out of. Having a mind can be construed simply as having a certain group of *properties, features, and capacities* that are possessed by humans and some higher animals but absent in things like rocks and trees. To say that some creature “has a mind” is to classify it as a certain sort of being, capable of certain characteristic sorts of behaviors and functions—sensation, perception, memory, learning, reasoning, consciousness, action, and the like. It is less misleading, therefore, to speak of “mentality” than of “having a mind”; the surface grammar of the latter abets the problematic idea of a substantival mind—mind as an object of a special kind. However, this is not to preclude substantival minds at the outset; the point is only that we should not infer their existence from our use of certain forms of expression. As we will see in the chapter to follow, there are serious philosophical arguments that we must accept minds as immaterial things. Moreover, an influential contemporary view identifies minds with brains (discussed in chapter 4). Like Descartes’s substance dualism, this view gives a literal meaning to “having a mind”: It would simply mean having a brain of certain structure and capacities. The main point we should keep in mind is that all this requires philosophical considerations and arguments, as we will see in the rest of this book.

Mentality is a broad and complex category. As we just saw, there are numerous specific properties and functions through which mentality manifests itself, such as experiencing sensations, entertaining thoughts, reasoning and judging, making decisions, and feeling emotions. There are also more specific properties that fall within these categories, such as experiencing a throbbing pain in the right elbow, believing that Kabul is in Afghanistan, wanting to visit Tibet, and being annoyed at your roommate. In this book, we often talk in terms of “instantiating,” “exemplifying,” or “having” this or that property. When you shut a door on your thumb, you will likely *instantiate* or *exemplify*



the property of being in pain; most of us *have*, or *instantiate*, the property of believing that snow is white; some of us have the property of wanting to visit Tibet; and so on. Admittedly this is a somewhat cumbersome, not to say stilted, way of talking, but it gives us a uniform and simple way of referring to certain entities and their relationships. Throughout this book, the expressions “mental” and “psychological” and their respective cognates are used interchangeably. In most contexts, the same goes for “physical” and “material.”

We will now set out in general terms the kind of ontological scheme that we presuppose in this book and explain how we use certain terms associated with the scheme. We suppose, first, that our scheme includes *substances*, that is, *things* or *objects* (including persons, biological organisms and their organs, molecules, computers, and such) and that they have various *properties* and stand in various *relations* to each other. (Properties and relations are together called *attributes*.) Some of these are physical, like having a certain mass or temperature, being one meter long, being longer than, and being between two other objects. Some things—in particular, persons and certain biological organisms—can also instantiate mental properties, like being in pain, fearing darkness, and disliking the smell of ammonia. We also speak of mental or physical *events*, *states*, and *processes* and sometimes of *facts*. A process can be thought of as a (causally) connected series of events and states; events differ from states in that they suggest *change*, whereas states do not. The terms “phenomenon” and “occurrence” can be used to cover both events and states. We often use one or another of these terms in a broad sense inclusive of the rest. (For example, when we say “every event has a cause,” we are not excluding states, phenomena, and the rest.) How events and states are related to objects and their properties is a question of some controversy in metaphysics. We simply assume here that when a person instantiates, at time *t*, a mental property—say, being in pain—then there is the event (or state) of that person’s being in pain at *t*, and there is also the fact that the person is in pain at *t*. Some events are psychological events, such as pains, beliefs, and onsets of anger, and these are instantiations by persons and other organisms of mental properties. Some events are physical, such as earthquakes, hiccups and sneezes, and the firing of a bundle of neurons, and these are instantiations of physical properties. Another point to note: In the context of the mind-body problem, the physical usually goes beyond the properties and phenomena studied in physics; the biological, the chemical, the geological, and so on, also count as physical.

So much for the ontological preliminaries. Sometimes clarity and precision demand attention to ontological details, but as far as possible we will try to

avoid general metaphysical issues that are not germane to our concerns about the nature of mind.

### MIND-BODY SUPERVENIENCE

Consider the apparatus called the “transporter” in the science-fiction television series *Star Trek*. You walk into a booth. When the transporter is activated, your body is instantly disassembled; exhaustive information concerning your bodily structure and composition, down to the last molecule, is transmitted, instantaneously, to another location, often a great distance away, where a body that is exactly like yours is reconstituted (presumably with local material). And someone who looks just like you materializes on the spot and starts doing the tasks you were assigned to do there.

Let us not worry about whether the person who is created at the destination is really you or only your replacement. In fact, we can avoid this issue by slightly changing the story: Exhaustive information about your bodily composition is obtained by a scanner that does no harm to you, and on the basis of this information, an exact physical replica of your body—a molecule-for-molecule identical duplicate—is created at another location. By assumption, you and your replica have exactly the same *physical* properties; you and your replica could not be distinguished by any *current intrinsic* physical differences. We say “current” to rule out the obvious possibility of distinguishing you from your duplicate by tracing the causal chains backward to the past. We say “intrinsic” because you and your replica have different relational, or extrinsic, properties; for example, you have a mother but your replica does not.

Given that your replica is your *physical* replica, will she also be your *psychological* replica? Will she be identical with you in all mental respects as well? Will she be as smart and witty as you are, and as prone to daydream? Will she share your likes and dislikes in food and music and behave just as you would when angry or irritable? Will she prefer blue to green and have a visual experience exactly like yours when you and she both gaze at a Van Gogh landscape of yellow wheat fields against a dark blue sky? Will her twinges, itches, and tickles feel to her just the way yours feel to you? Well, you get the idea. An unquestioned assumption of *Star Trek* and similar science-fiction fantasies seems to be that the answer is yes to each of these questions. If you are like the many *Star Trek* fans in going along with this assumption, that is because you have tacitly consented to the following “supervenience” thesis:

*Mind-Body Supervenience I.* The mental supervenes on the physical in that things (objects, events, organisms, persons, and so on) that are exactly alike in all physical properties cannot differ with respect to mental properties. That is, physical indiscernibility entails psychological indiscernibility.

Or as it is sometimes put: No mental difference without a physical difference. Notice that this principle does not say that things that are alike in psychological respects must be alike in physical respects. We seem to be able coherently to imagine intelligent extraterrestrial creatures whose biochemistry is different from ours (say, their physiology is not carbon-based) and yet who share the same psychology with us. As we might say, the same psychology could be realized in different physical systems. Now, that may or may not be the case. The thing to keep in mind, though, is that mind-body supervenience asserts only that creatures could not be psychologically different and yet physically identical.

There are two other important ways of explaining the idea that the mental supervenes on the physical. One is the following, known as “strong supervenience”:

*Mind-Body Supervenience II.* The mental supervenes on the physical in that if anything  $x$  has a mental property  $M$ , there is a physical property  $P$  such that  $x$  has  $P$ , and necessarily any object that has  $P$  has  $M$ .

Suppose that a creature is in pain (that is, it has the mental property of being in pain). This supervenience principle tells us that in that case there is some physical property  $P$  that the creature has that “necessitates” its being in pain. That is to say, pain has a physical substrate (or “supervenience base”) such that anything that has this underlying physical property must be in pain. Thus, this formulation of mind-body supervenience captures the idea that the instantiation of a mental property in something “depends” on its instantiating an appropriate physical “base” property (that is, a neural correlate or substrate). How is this new statement of mind-body supervenience related to the earlier statement? It is pretty straightforward to show that the supervenience principle (II) entails (I); that is, if the mental supervenes on the physical according to (II), it will also supervene according to (I). Whether (I) entails (II) is more problematic.<sup>1</sup> For practical purposes, however, the two principles may be considered equivalent, and we make use of them in this book without worrying about their subtle differences.

There is another common way of understanding the supervenience relationship:

*Mind-Body Supervenience III.* The mental supervenes on the physical in that worlds that are alike in all physical respects are alike in all mental respects as well; in fact, worlds that are physically alike are exactly alike overall.<sup>2</sup>

This formulation of supervenience, called “global” supervenience, states that if there were another world that is just like our world in all physical respects, with the same particles, atoms, and molecules in the same places and the same laws governing their behavior, the two worlds could not differ in any mental respects. If God created this world, all he had to do was to put the right basic particles in the right places and fix basic physical laws, and all else, including all aspects of mentality, would just come along. Once the basic physical structure is put in place, his job is finished; he does not *also* have to create minds or mentality, any more than trees or mountains or bridges. The question whether this formulation of supervenience is equivalent to either of the earlier two is a somewhat complicated one; let it suffice to say that there are close relationships between all three. In this book, we do not have an occasion to use (III); however, it is stated here because this is the formulation some philosophers favor and you will likely come across it in the philosophy of mind literature.

To put mind-body supervenience in perspective, it might be helpful to look at supervenience theses in other areas—in ethics and aesthetics. Most moral philosophers would accept the thesis that the ethical, or normative, properties of persons, acts, and the like are supervenient on their nonmoral, descriptive properties. That is, if two persons, or two acts, are exactly alike in all nonmoral respects (say, the persons are both honest, courageous, kind, generous, and so on), they could not differ in moral respects (say, one of them is a morally good person but the other is not). Supervenience seems to apply to aesthetic qualities as well: If two pieces of sculpture are physically exactly alike (the same shape, size, color, texture, and all the rest), they cannot differ in some aesthetic respect (say, one of them is elegant, heroic, and expressive while the second has none of these properties). A world molecule-for-molecule identical with our world will contain works of art just as beautiful, noble, and mysterious as our Michelangelos, Vermeers, and Magrittes. One more example: Just as mental properties are thought to supervene on physical properties, most consider biological properties to supervene on more basic physicochemical properties. It seems natural to suppose that if two things are exactly alike in basic physical

and chemical features, including, of course, their material composition and structure, it could not be the case that one of them is a living thing and the other is not, or that one of them is performing a certain biological function (say, photosynthesis) and the other is not. That is to say, physicochemically indiscernible things must be biologically indiscernible.

As noted, most philosophers accept these supervenience theses; however, whether they are true, or why they are true, are philosophically nontrivial questions. And each supervenience thesis must be evaluated and assessed on its own merit. Mind-body supervenience, of course, is our present concern. Our ready acceptance of the idea of the *Star Trek* transporter shows the strong intuitive attraction of mind-body supervenience. But is it true? What is the evidence in its favor? Should we accept it? These are deep and complex questions. One reason is that, in spirit and substance, they amount to the following questions: Is physicalism true? Should we accept physicalism?

## MATERIALISM AND PHYSICALISM

Since materialism, or physicalism, broadly understood is the basic framework in which contemporary philosophy of mind has been debated, it is useful for us to begin with some idea of what it is. Materialism is the doctrine that all things that exist in the world are bits of matter or aggregates of bits of matter. There is no thing that isn't a material thing—no transcendental beings, Hegelian “absolutes,” or immaterial minds. Physicalism is the contemporary successor to materialism. The thought is that the traditional notion of material stuff was ill-suited to what we now know about the material world from contemporary physics. For example, the concept of a “field” is widely used in physics, but it is unclear whether fields would count as material things in the traditional sense. Physicalism is the doctrine that all things that exist are entities recognized by the science of physics, or systems aggregated out of such entities.<sup>3</sup> According to some physicalists, so-called nonreductive physicalists, these physical systems can have nonphysical properties, properties that are not recognized by physics or reducible to them. Psychological properties are among the prime candidates for such nonphysical properties possessed by physical systems.

If you are comfortable with the idea of the *Star Trek* transporter, that means you are comfortable with physicalism as a perspective on the mind-body problem. The wide and seemingly natural acceptance of the transporter idea shows how pervasively physicalism has penetrated contemporary culture, although when this is made explicit some people would no doubt recoil and proclaim themselves to be against physicalism.

What is the relationship between mind-body supervenience and physicalism? We have not so far defined what physicalism is, but the term itself suggests that it is a doctrine that affirms the primacy, or basicness, of what is physical. With this very rough idea in mind, let us see what mind-body supervenience implies for the dualist view (to be discussed in more detail in chapter 2) associated with Descartes that minds are immaterial substances with no physical properties whatever. Take two immaterial minds: Evidently, they are exactly alike in all physical respects since neither has any physical property and as a result it is impossible to distinguish them from a physical perspective. So if mind-body supervenience, in the form of (I), holds, it follows that they are alike in all mental respects. That is, under mind-body supervenience (I), all Cartesian immaterial souls are exactly alike in all mental respects, from which it follows that they are exactly alike in all possible respects. From this it seems to follow that there can be at most one immaterial soul! No serious mind-body dualist would find these consequences of mind-body supervenience tolerable. This is one way of seeing why the dualist will want to reject mind-body supervenience.

To appreciate the physicalist implication of mind-body supervenience, we must consider one aspect of supervenience that we have not so far discussed. Many philosophers regard the supervenience thesis as affirming a relation of *dependence* or *determination* between the mental and the physical; that is, the mental properties a given thing has depend on, or are determined by, the physical properties it has. Consider version (II) of mind-body supervenience: It says that for every mental property M, if anything has M, it has some physical property P that *necessitates* M—if anything has P, it *must* have M. This captures the idea that mental properties must have neural, or other physical, “substrates” from which they arise and that there can be no instantiation of a mental property that is not grounded in some physical property. So a dependence relation can naturally be read into the claim that the mental supervenes on the physical, although, strictly speaking, the supervenience theses as stated only make claims about how mental properties *covary* with physical properties. In any case, many physicalists interpret supervenience as implying mind-body dependence in something like the following sense:

*Mind-Body Dependence.* The mental properties a given thing has depend on, and are determined by, the physical properties it has. That is, our psychological character is wholly determined by our physical nature.

The dependence thesis is important because it is an explicit affirmation of the *ontological primacy*, or *priority*, of the physical in relation to the mental. The

thesis seems to accord well with the way we ordinarily think of the mind-body relation, as well as with scientific assumptions and practices. Few of us would think that there can be mental events and processes that float free, so to speak, of physical processes; most of us believe that what happens in our mental life, including the fact that we have a mental life at all, is dependent on what happens in our body, in particular in our nervous system. Furthermore, it is because mental states depend on what goes on in the brain that it is possible to intervene in the mental goings-on. To ease your headache, you take aspirin—the only way you can affect the headache is to alter the neural base on which it supervenes. There apparently is no other way.

For these reasons, we can think of the mind-body supervenience thesis, in one form or another, as *minimal physicalism*, in the sense that it is one commitment that all who consider themselves physicalists must accept. But is it sufficient as physicalism? That is, can we say that anyone who accepts mind-body supervenience is ipso facto a full physicalist? Opinions differ on this question. We saw earlier that supervenience does not by itself completely rule out the existence of immaterial minds, something antithetical to physicalism. But we also saw that supervenience has consequences that no serious dualist can accept. Whether supervenience itself suffices to deliver physicalism depends, by and large, on what we consider to be full and robust physicalism. As our starting options, then, let us see what varieties of physicalism are out there.

First, there is an ontological claim about what objects there are in this world:

*Substance Physicalism.*<sup>4</sup> All that exists in this world are bits of matter in space-time and aggregate structures composed of bits of matter. There is nothing else in the space-time world.

This thesis, though it is disputed by Descartes and other substance dualists, is accepted by most contemporary philosophers of mind. The main point of contention concerns the *properties* of material or physical things. Certain complex physical systems, like higher organisms, are also psychological systems; they exhibit psychological properties and engage in psychological activities and functions. How are the psychological properties and physical properties of a system related to each other? Broadly speaking, an ontological physicalist has a choice between the following two options:

*Property Dualism, or Nonreductive Physicalism.* The psychological properties of a system are distinct from, and irreducible to, its physical properties.<sup>5</sup>

*Reductive Physicalism*, or *Type Physicalism*. Psychological properties (or kinds, types) are reducible to physical properties (kinds, types). That is, psychological properties and kinds are physical properties and kinds. There are only properties of one sort exemplified in this world, and they are physical properties.

Remember that for our purposes “physical” properties include chemical, biological, and neural properties, not just those properties investigated in basic physics (such as energy, mass, or charm). You could be a property dualist because you reject mind-body supervenience, but then you would not count as a physicalist since, as we argued, mind-body supervenience is a necessary element of physicalism. So the physicalist we have in mind is someone who accepts mind-body supervenience. However, it is generally supposed that mind-body supervenience is consistent with property dualism, the claim that the supervenient psychological properties are irreducible to, and not identical with, the underlying physical base properties. In defense of this claim, some point to the fact that philosophers who accept the supervenience of moral properties on nonmoral, descriptive properties for the most part reject the reducibility of moral properties, like being good or being right, to nonmoral, purely descriptive properties. The situation seems the same with the case of aesthetic supervenience and aesthetic properties.<sup>6</sup>

Some philosophers who reject reductive, or type, physicalism as too ambitious and overreaching embrace “token” physicalism—the thesis that although psychological types are not identical with physical types, each and every individual psychological event, or event-token, is a physical event. So pain, as a mental kind, is not identical with, or reducible to, a kind of physical event or state, and yet each individual instance of pain—this pain here now—is usually a physical event. Token physicalism is considered a form of nonreductive physicalism. The continuing debate between nonreductive physicalists and reductive physicalists has largely shaped the contemporary debate on the mind-body problem.<sup>7</sup>

## VARIETIES OF MENTAL PHENOMENA

It is useful at this point to look at some major categories of mental events and states. This will give us a rough idea about the kinds of phenomena we are concerned with and also remind us that the phenomena that come under the rubric “mental” or “psychological” are extremely diverse and variegated. The following list is not intended to be complete or systematic, and some categories obviously overlap others.



First, we may distinguish those mental phenomena that involve *sensations* or *sensory qualities*: pains, itches, tickles, having an afterimage, seeing a round green patch, smelling ammonia, feeling nauseous, and so on. These mental states are said to have a “phenomenal” or “qualitative” character—the way they *feel* or the way they *look* or *appear*. To use a popular term, there is *something it is like* to experience such phenomena or be in such states. Thus, pains have a special qualitative feel that is distinctive of pains—they hurt. Similarly, itches itch and tickles tickle. When you look at a green patch, there is a distinctive way the patch looks to you: It looks *green*, and your visual experience involves this green look. Each such sensation has its own distinctive feel and is characterized by a sensory quality that we seem to be able to identify directly, at least as to the general type to which it belongs (for example, pain, itch, or seeing green). These items are called “phenomenal” or “qualitative states,” or sometimes “raw feels.” However, “qualia” has now become the standard term for these sensory, qualitative states, or the sensory qualities experienced in such states. Collectively, these mental phenomena are said to constitute “phenomenal consciousness.”

Second, there are mental states that are attributed to a person by the use of embedded that-clauses: for example, President Barack Obama *hopes* that Congress will pass a health-care bill this year; Senator Harry Reid *is certain* that this will happen, and Newt Gingrich doubts that Obama will get what he wants. Such states are called “propositional attitudes.” The idea is that these states consist in a subject’s having an “attitude” (for example, hoping, being certain, doubting, and believing) toward a “proposition” (for example, that Congress will pass a health-care bill, that it will rain tomorrow). The propositions are said to constitute the “content” of the propositional attitudes, and that-clauses that specify these propositions are called “content sentences.” Thus, the content of Obama’s hope is the proposition that Congress will pass a health-care bill this year, which is also the content of Gingrich’s doubt, and this content is expressed by the sentence “Congress will pass a health-care bill this year.” These states are also called “intentional”<sup>8</sup> or “content-bearing” states.

Do these mental states have a phenomenal, qualitative aspect? We do not normally associate a specific feel with beliefs, another specific feel with desires, and so on. There does not seem to be any special belief-like feel, a common sensory quality, associated with your belief that Providence is south of Boston and your belief that two is the smallest prime number. At least it seems that we can say this much: If you believe that two is the smallest prime and I do too, there does not seem to be—nor need there be—any common sensory quality that both of us experience in virtue of sharing this belief. The importance of these

intentional states cannot be overstated. Much of our ordinary psychological thinking and theorizing (“commonsense” or “folk” psychology) involves propositional attitudes; we make use of them all the time to explain and predict what people will do. Why did Mary cross the street? Because she wanted some coffee and thought that she could get it at the Starbucks across the street. These states are essential to social psychology, and their analogues are found in various areas of psychology and cognitive science.

And then there are various mental states that come under the broad heading of *feelings* and *emotions*. They include anger, joy, sadness, depression, elation, pride, embarrassment, remorse, regret, shame, and many others. Notice that emotions are often attributed to persons with a *that*-clause. In other words, some states of emotions involve propositional attitudes: For example, you could be *embarrassed* that you had forgotten to call your mother on her birthday, and she could be *disappointed* that you did. Further, some emotions involve belief: If you are embarrassed that you had forgotten your mother’s birthday, you must believe that you did. As the word *feeling* suggests, there is often a special qualitative component we associate with many emotions, such as anger and grief, although it is not certain that all instances of emotion are accompanied by such qualitative feels, or that there is a single specific sensory feel to each kind of emotion.

There are also what some philosophers call “volitions,” like intending, deciding, and willing. These states are propositional attitudes; intentions and decisions have content. For example, I may intend to take the ten o’clock train to New York tomorrow; here the content is expressed by an infinitive construction (“to take”), but it is easily spelled out in a full sentence, as in “I intend that I take the ten o’clock train to New York tomorrow.” In any case, these states are closely related to actions. When I intend to raise my arm *now*, I must *now* undertake to raise my arm; when you intend, or decide, to do something, you commit yourself to doing it. You must be prepared not only to take the necessary steps toward doing it but also to initiate them at an appropriate time. This is not to say that you cannot change your mind, or that you will necessarily succeed; it is to say that you need to change your intention to be released from the commitment to action. According to some philosophers, all intentional actions must be preceded by an act of volition.

Actions typically involve motions of our bodies, but they do not seem to be mere bodily motions. My arm is going up, and so is yours. However, you are raising your arm, but I am not—my arm is being pulled up by someone else. The raising of your arm is an action; it is something you do. But the rising of my arm is not an action; it is not something that I do but something that happens

to me. There appears to be something mental about your raising your arm that is absent from the mere rising of an arm; perhaps it is the involvement of your desire, or intention, to raise your arm, but exactly what distinguishes actions from “mere bodily motions” has been a matter of philosophical dispute. Or consider something like buying a loaf of bread. Evidently someone who can engage in the act of buying a loaf of bread must have appropriate beliefs and desires; she must, for example, have a desire to buy bread, or at least a desire to buy something, and knowledge of what bread is. And to do something like buying, you must have knowledge, or beliefs, about what constitutes buying rather than, say, borrowing or simply taking, about money and exchange of goods, and so on. That is to say, only creatures with beliefs and desires and an understanding of appropriate social conventions and institutions can engage in activities like buying and selling. The same goes for much of what we do as social beings; actions like promising, greeting, and apologizing presuppose a rich and complex background of beliefs, desires, and intentions, as well as an understanding of social relationships and arrangements.

There are other items that are ordinarily included under the rubric of “psychological,” such as traits of character and personality (being honest, obsessive, witty, introverted), habits and propensities (being industrious, punctual), intellectual abilities, artistic talents, and the like. But we can consider them to be mental in an indirect or derivative sense: Honesty is a mental characteristic because it is a tendency, or disposition, to form desires of certain sorts (for example, the desire to tell the truth, or not to mislead others) and to act in appropriate ways (in particular, saying only what you sincerely believe).

In the chapters to follow, we focus on sensations and intentional states. They provide us with examples of mental states when we discuss the mind-body problem and other issues. We also discuss some specific philosophical problems about these two principal types of mental states. We will largely bypass detailed questions, however, such as what types of mental states there are, how they are interrelated, and the like.

But in what sense are all these variegated items “mental” or “psychological”? Is there some single property or feature, or a reasonably simple and perspicuous set of them, by virtue of which they all count as mental?

### IS THERE A “MARK OF THE MENTAL”?

Various characteristics have been proposed by philosophers to serve as a “mark of the mental,” a criterion that would separate mental phenomena or properties from those that are not mental. Each has a certain degree of plausibility and can

be seen to cover a range of mental phenomena, but as we will see, none seems to be adequate for all the diverse kinds of events and states, functions and capacities, that we normally classify as “mental” or “psychological.” Although we will not try to formulate our own criterion of the mental, a review of some of the prominent proposals will give us an understanding of the principal ideas traditionally associated with the concept of mentality and highlight some of the important characteristics of mental phenomena, even if, as noted, no single one of them seems capable of serving as a universal, necessary, and sufficient condition of mentality.

### *Epistemological Criteria*

You are experiencing a sharp toothache caused by an exposed nerve in a molar. The toothache that you experience, but not the condition of your molar, is a mental occurrence. But what is the basis of this distinction? One influential answer says that the distinction consists in certain fundamental differences in the way you come to have *knowledge* of the two phenomena.

*Direct or Immediate Knowledge.* Your knowledge that you have a toothache, or that you are hoping for rain tomorrow, is “direct” or “immediate”; it is not based on evidence or inference. There is nothing else that you know or need to know from which you infer that you have a toothache; that is, your knowledge is not mediated by other beliefs or knowledge. This is seen in the fact that in cases like this the question “How do you know?” seems to be out of place (“How do you know you are hoping for rain and not snow?”). The only possible answer, if you take the question seriously, is that you *just* know. This shows that here the question of “evidence” is inappropriate: Your knowledge is direct and immediate, not based on evidence. Yet your knowledge of the physical condition of your tooth is based on evidence: Knowledge of this kind usually depends on the testimonial evidence provided by a third party—for example, your dentist. And your dentist’s knowledge presumably depends on the evidence of X-rays, visual inspection of your teeth, and so on. The question “How do you know that you have an exposed nerve in a molar?” makes good sense and can receive an informative answer.

But isn’t our knowledge of certain simple physical facts just as “direct” and “immediate” as knowledge of mental events like toothaches and itches? Suppose you are looking at a large red circle painted on a wall directly in front of you: Doesn’t it seem that you know, directly and without the use of any further evidence, that there is a round red patch in front of you? Don’t I know, in

the same way, that here is a piece of white paper in front of me or that there is a tree just outside my window?

*Privacy, or First-Person Privilege.* One possible response to the foregoing challenge is to invoke the privacy of our knowledge of our own mental states, namely, the apparent fact that this direct access to a mental event is enjoyed by a single subject, the person to whom the event is occurring. In the case of the toothache, it is only you, not your dentist or anyone else, who is in this kind of specially privileged position. But this does not hold in the case of seeing the red patch. If you can know “directly” that there is a round red spot on the wall, so can I and anyone else who is suitably situated in relation to the wall. There is no single person with specially privileged access to the round red spot. In this sense, knowledge of mental events exhibits an *asymmetry* between first person and third person: It is only the first person, namely the subject who experiences a pain, who enjoys a special epistemic privilege as regards the pain. Others, that is, third persons, do not. In contrast, for knowledge of physical objects and states—say, the red round spot on the wall—there is no meaningful first-person/third-person distinction; everyone is a third person. Moreover, the first-person privilege holds only for knowledge of *current* mental occurrences, not for knowledge of *past* ones: You know that you had a toothache yesterday, a week ago, or two years ago, from the evidence of memory, an entry in your diary, your dental record, and the like.

But what about those bodily states we detect through proprioception, such as the positions and motions of our limbs (for example, knowing that your legs are crossed or that you are raising your right hand)? Our proprioceptors and associated neural machinery are in the business of keeping us *directly* informed of certain physical conditions of our bodies, and proprioception is, in general, highly reliable. Moreover, first-person privilege seems to hold for such cases: It is only I who know, through proprioception, that my right knee is bent; no third party has similar access to this fact. And yet it is knowledge of a bodily condition, not of a mental occurrence. Perhaps this example could be handled by appealing to the following criterion.

*Infallibility and Transparency.* Another epistemic feature sometimes associated with mentality is the idea that in some sense your knowledge of your own current mental states is “infallible” or “incorrigible,” or that it is “self-intimating” (or that your mind is “transparent” to you). The main idea is that mental events—especially events like pains and other sensations—have the following property: You cannot be mistaken about whether you are experiencing

them. That is, if you *believe* that you are in pain, then it follows that you *are* in pain, and if you believe that you are not in pain, then you are not; it is not possible to have false beliefs about your own pains. In this sense, your knowledge of your own pain is *infallible*. So-called psychosomatic pains are pains nonetheless; they can hurt just as badly. The same may hold for your knowledge of your own propositional attitudes like belief; Descartes famously said that you cannot be mistaken about the fact that you doubt, or that you think.<sup>9</sup> In contrast, when your belief concerns a physical occurrence, there is no guarantee that your belief is true: Your belief that you have a decayed molar may be true, but its truth is not entailed by the mere fact that you believe it. Or so goes the claim, at any rate. Returning briefly to knowledge gained through proprioception, the reply would be that such knowledge may be reliable but not infallible; there can be incorrect beliefs about your bodily position based on proprioception.

Transparency is the converse of infallibility: A state or event *m* is said to be transparent to a person just in case, necessarily, if *m* occurs, the person is aware that *m* occurs—that is, she knows that *m* occurs.<sup>10</sup> The claim, then, is that mental events are transparent to the subjects to whom they occur. If pains are transparent in this sense, there could not be *hidden* pains—pains that the subject is unaware of. Just as the infallibility of beliefs about your own pains implies that pains with no physiological cause are at least conceivable, the transparent character of pain implies that even if all normal physical and physiological causes of pain are present, if you are not aware of any pain, then you are not in pain. There are reports about soldiers in combat and athletes in the heat of competition that they experienced no pain in spite of severe physical injuries; if we assume pains are transparent, we would have to conclude that pain, as a mental event, is not occurring to these subjects. We may define “the doctrine of the transparency of mind” as the claim that nothing that happens in your mind escapes your awareness—that is, nothing in your mind is hidden from you. The conjunction of this doctrine and the doctrine of infallibility is often associated with the traditional conception of the mind, especially that of Descartes.

Infallibility and transparency are extremely strong properties. It would be no surprise if physical events and states did not have them; a more interesting question is whether all or even most mental events satisfy them. Evidently, not all mental events or states have these special epistemic properties. In the first place, it is now commonplace to speak of “unconscious” or “subconscious” beliefs, desires, and emotions, like repressed desires and angers—psychological states the subject is not aware of and would even vehemently deny having but that evidently shape and influence his action and behavior. Second, it is not al-

ways easy for us to determine whether an emotion that we are experiencing is, say, one of embarrassment, remorse, or regret—or one of envy, jealousy, or anger. And we are often not sure whether we “really” believe or desire something. Do I believe that globalization is a good thing? Do I believe that I am by and large a nice person? Do I want to be sociable and gregarious, or do I prefer to stay somewhat aloof and distant? If you reflect on such questions, you may not be sure what the answers are. It is not as though you have suspended judgment about them—you may not even know *that*. Epistemic uncertainties can happen with sensations as well. Does this overripe avocado smell a little like a rotten egg, or is it okay for the salad? Special epistemic access is perhaps most plausible for sensations like pains and itches, but here again, not all our beliefs about pains appear to have the special authoritative character indicated by the epistemic properties we have surveyed. Is the pain I am now experiencing more intense than the pain I felt a moment ago in the same elbow? Just where in my elbow is the pain? Clearly there are many characteristics of pains, even introspectively identifiable ones, about which I could be mistaken and don’t feel fully certain.

It is also thought that you can misclassify, or misidentify, the type of sensation you are experiencing: For example, you may report that you are itchy in the shoulder when the correct description would be that you have a ticklish sensation there. However, it is not clear just what such cases show. It might be replied, for example, that the error is a verbal one, not one of belief. Although you are using the sentence “My left shoulder is itchy” to report your belief, your belief is to the effect that your left shoulder *tickles*, and this belief is true.

Thus, exactly how the special epistemic character of mental events is to be characterized can be a complex and controversial business, and unsurprisingly there is little agreement in this area. Some philosophers, especially those who favor a scientific approach to mentality, would take pains to minimize these *prima facie* differences between mental and bodily events. But it is apparent that there are important epistemological differences between the mental and the nonmental, however the differences are to be precisely described. Especially important is the first-person epistemic authority noted earlier: We seem to have special access to our own mental states—or at least to an important subclass of them if not all of them. Such access may well fall short of infallibility or incorrigibility, and it seems beyond doubt that our minds are not wholly transparent to us. But the differences we have noted, even if they are not quite the way described, are real enough, and they may be capable of serving as a starting point for thinking about our concepts of the mental and the physical. It may be that we get our initial purchase on the concept of mentality

through the core class of mental states for which some form of special first-person authority holds and that we derive the broader class of mental phenomena by extending and generalizing this core in various ways.<sup>11</sup>

### *Mentality as Nonspatial*

For Descartes, the essential nature of a mind is that it is a thinking thing (“res cogitans”), and the essential nature of a material thing is that it is a spatially extended thing—something with a three-dimensional bulk. A corollary of this, for Descartes, is that the mental is essentially nonspatial and the material is essentially lacking in the capacity for thinking. Most physicalists would reject this corollary even if they accept the thesis that the mental is definable as thinking; they will say that as it happens, some material things, like higher biological organisms, can think, feel, and be conscious. But there may be a way of developing the idea that the mental is nonspatial that leaves the question of physicalism open.

For example, we might try something like this: To say that *M* is a mental property is to say that the proposition that something has *M* *does not logically imply* that it is a spatially extended thing. This allows the possibility that something that has *M* is in fact a spatially extended thing, though it is not required to be. So it may be that *as a matter of contingent fact*, all things that have mental properties are spatially extended things, like human beings and other biological organisms.

Thus, from the proposition that something *x* believes that four is an even number, it does not seem to follow that *x* is a spatially extended thing. There may be no immaterial angels in this world, but it does not seem logically contradictory to say that there are angels or that angels have beliefs and other mental states, like desires and hopes. But it evidently is a contradiction to say that something has a physical property—say, the color red, a triangular shape, or a rough texture—and at the same time to deny that it is something with spatial extensions. What about being located at a geometric point? Or *being* a geometric point, for that matter? But no physical *thing* is a geometric point; geometric points are not physical objects, and no physical object has the property of being a point or being located wholly at a point in space.

How useful is this nonspatiality approach toward a mark of the mental? It would seem that if you take this approach seriously, you must also take the idea of immaterial mental substance seriously. For you must allow the existence of possible worlds in which mental properties are instantiated by nonphysical beings (beings without spatial extension). The reasoning leading to this conclu-



sion is straightforward: Any mental property *M* is such that something can instantiate *M* without being spatially extended—that is, without being a physical thing. So *M* can be instantiated even if there is no physical thing. It follows then that there is a possible world in which mental properties, like belief and pain, are instantiated, even though no physical things exist in that world. What objects are there in such a world to serve as instantiators, or bearers, of mental properties? Since it makes no sense to think of abstract objects, like numbers, as possessors of mental properties, the only remaining possibility seems to be immaterial mental substances. It follows then that anyone who accepts the criterion of the mental as nonspatial must accept the idea of immaterial substance as a coherent one and allow the possible existence of such substances. This means that if you have qualms about the coherence of the Cartesian conception of minds as mental substances (see chapter 2), you would be well advised to stay away from the nonspatiality criterion of mentality.

### *Intentionality as a Criterion of the Mental*

Schliemann sought the site of Troy. He was lucky; he found it. Ponce de León sought the Fountain of Youth, but he never found it. He could not have found it, since it does not exist and never did. It remains true, though, that he looked for the Fountain of Youth with great tenacity. The nonexistence of Bigfoot or the Loch Ness Monster has not prevented people from looking for them. Not only can you *look for* something that does not exist, but you can apparently also *think about, have beliefs and desires about, write about, and even worship* a nonexistent object. Even if God should not exist, he could be, and has been, the object of these mental acts or attitudes on the part of many people. Contrast these mental acts and states with physical ones, like cutting, kicking, and being to the left of. You cannot cut a nonexistent piece of wood, kick nonexistent tires, or be to the left of a nonexistent tree. That you kick something logically entails that the thing exists. That you are thinking of some object does not entail its existence. Or so it seems.

The Austrian philosopher Franz Brentano called this feature “the intentional inexistence” of psychological phenomena, claiming that it is this characteristic that separates the mental from the physical. In a famous passage, he wrote:

Every mental phenomenon is characterized by what the Scholastics of the Middle Ages called the intentional (or mental) inexistence of an object, and what we might call, though not wholly unambiguously, reference to a content, direction toward an object (which is not to be understood here as

meaning a thing), or immanent objectivity. Every mental phenomenon includes something as object within itself, although they do not all do so in the same way. In presentation something is presented, in judgement something is affirmed or denied, in love loved, in hate hated, in desire desired and so on.<sup>12</sup>

This feature of the mental—namely, that mental states are *about*, or are *directed upon*, objects that may or may not exist or have contents that may or may not be true—has been called “intentionality.”

Broadly speaking, intentionality refers to the mind-world relation—specifically, the fact that our thoughts relate to, or hook up with, the things in the world, and represent how things are in the world. The idea at bottom is the thought that mentality is the capacity for representing the world around us, and that this is one of its essential functions. In short, the mind is a repository of inner representations—an inner mirror—of the outer world. The concept of intentionality may be subdivided into *referential intentionality* and *content intentionality*. Referential intentionality concerns the *aboutness* or *reference* of our thoughts, beliefs, intentions, and the like. When Ludwig Wittgenstein asked, “What makes my image of him into an image of *him*?”<sup>13</sup> he was asking for an explanation of what makes it the case that a given mental state (my “image of him”) is *about*, or *refers to*, a particular object—him—rather than someone else. (That person may have an identical twin, and your image may fit his twin just as well, perhaps even better, but your image is of him, not of his twin. You may not even know that he has a twin.) Our words, too, refer to, or are directed upon, objects; “Mount Everest” refers to Mount Everest, and “horse” refers to horses.

Content intentionality concerns the fact that, as we saw, an important class of mental states—that is, propositional attitudes such as beliefs, hopes, and intentions—have contents or meanings, which are often expressed by full sentences. It is in virtue of having contents that our mental states *represent* states of affairs in the world. My perceiving that there are sunflowers in the field represents the fact, or state of affairs, of there being sunflowers in the field, and your remembering that there was a thunderstorm last night represents the state of affairs of there having been a thunderstorm last night. The capacity of our mental states to represent things external to them—that is, the fact that they have *representational content*—is clearly a very important fact about them. Obviously, our capacity to have representations of the outside world is critical to our ability to cope with our environment and survive and prosper. In

short, it is what makes it possible for us to have knowledge of the world. On a standard account, having knowledge is a matter of having mental representations with true contents—that is, representations that correctly represent.

Thus, referential intentionality and content intentionality are two related aspects of the fact that mental states have the capacity, and function, of representing things and states of affairs in the world. Brentano's thought seems to be that this representational capacity is the essence of the mind. It is the mind's essential function and *raison d'être*.

But can intentionality serve as the defining characteristic for all of mentality? Concerning the idea of representation, there is one point we must keep in mind: A representation has "satisfaction" conditions. In the case of representations with content intentionality, like the belief that snow is white, they can be evaluated in terms of truth or correctness. Pictorial or visual representations can be evaluated in terms of degrees of accuracy and fidelity. That means that a representation may fail to correctly represent—that is, it can misrepresent. In the case of referential intentionality, like "London" and "the Fountain of Youth," we can talk about their successfully referring to the intended object—an existing object. "London" refers to the city London, whereas "the Fountain of Youth" turned out to refer to nothing.

With this preliminary out of the way, there are two issues about intentionality as a criterion of the mental we need to discuss. The first is that some mental phenomena—in particular, bodily sensations like pains and tickles and orgasms<sup>14</sup>—do not seem to exhibit either kind of intentionality. The sensation of pain does not seem to be "about," or to refer to, anything; nor does it have a content that can be true or false, accurate or inaccurate. Doesn't the pain in my knee "mean," or "represent," the fact that I have strained the torn ligament again? But the sense of "meaning" involved here seems something like causal indication; the pain "means" a damaged ligament in the same sense in which your nice new suntan means that you spent the weekend on the beach. *Prima facie*, many bodily sensations don't seem to be evaluable in term of truth or correctness. Or consider moods, like being bored, feeling low and blue, feeling upbeat, and the like. Do they represent anything? Can they be accurate or inaccurate? However, the view that all states of consciousness, including bodily sensations, are representational in nature has recently been gaining in popularity and influence, and we will revisit this issue later (in chapters 9 and 10).

Second, it may be observed that minds, or mental states, are not the only things that exhibit intentionality. Languages, in particular words and sentences, refer to things and have representational contents. The word "London"

refers to London, and the sentence “London is large” refers to, or represents, the fact, or state of affairs, that London is large. A string of zeros and ones in a computer data structure can mean your name and address, and such strings are ultimately electronic states of a physical system. If these physical items and states are capable of reference and content, how can intentionality be considered an exclusive property of mentality?

The following line of reply seems open, however. As some have argued, we might distinguish between *genuine*, or *intrinsic*, intentionality, which our minds and mental states possess, and *as-if*, or *derivative*, intentionality, which we attribute to objects and states that do not have intentionality in their own right.<sup>15</sup> When I say that my computer printer “likes” to work with Windows XP but not with Windows Vista, I am not really saying that my printer has likes and dislikes. It is at best an “as-if” or metaphorical use of language, and no one will take my statement to imply the presence of mentality in the machine. And it seems not implausible to argue that the word “London” refers to London only because language users use the word to refer to London. If we used it to refer to Paris, it would mean Paris, not London. Or if the inscription “London” were not a word in a language, it would just be meaningless scribbles with no referential function. Similarly, the sentence “London is large” represents the state of affairs it represents only because speakers of English use this sentence to represent that state of affairs—for example, in affirming this sentence, they express the belief that London is large. The point, then, is that the intentionality of language is derived from the intentionality of language users and their mental processes. It is the latter that have intrinsic intentionality, intentionality that is not derived from, or borrowed from, anything else. Or so one could argue.<sup>16</sup>

A more direct reply would be this: To the extent that some physical systems can be said to refer to things, represent states of affairs, and deal in meanings, they should be considered as exhibiting mentality, at least one essential form of it. No doubt, as the first reply indicates, analogical or metaphorical uses of intentional idioms abound, but this fact should not blind us to the possibility that physical systems and their states might possess genuine intentionality and hence mentality. After all, it might be argued, we are complex physical systems ourselves, and the physical-biological states of our brains are capable of referring to things and states of affairs external to them and of storing their representations in memory. Of course, it may turn out not to be possible for purely physical states to have such capabilities, but that would only show that they are not capable of mentality. It remains true, the reply goes, that intentionality is at least a sufficient condition for mentality.

## A Question

In surveying these candidates for “the mark of the mental,” we realize that our notion of the mental is far from unified and monolithic and that it is in fact a cluster of many ideas. Some of the ideas are fairly closely related to one another, but others appear independent of each other. (Why should there be a connection between special epistemic access and nonspatiality?) The diversity and possible lack of unity in our conception of the mental would imply that the class of things and states that we classify as mental may be a varied and heterogeneous lot. It is standardly thought that there are two broad categories of mental phenomena: first, conscious states, in particular sensory or qualitative states (those with “qualia”), like pains and sensings of colors and textures, and, second, intentional states, states with representational contents, like beliefs, desires, and intentions. The former seem to be paradigm cases of states that satisfy the epistemic criteria of the mental, such as direct access and privacy, and the latter are the prime examples of mental states that satisfy the intentionality criterion. An important question that is still open is this: In virtue of *what common property* are both sensory states and intentional states “mental”? What do pains and beliefs have in common in virtue of which they both fall under the single rubric of “mental phenomena”?

There are two approaches that might yield an answer—and a unified conception of mentality. Some have argued that consciousness is fundamental, and that it is presupposed by intentionality—in particular, that all intentional states are either conscious or in principle possible to become conscious.<sup>17</sup> Along the same line, one might urge that only beings with consciousness are capable of having thoughts with content and intentionality. Such a view opens the possibility that all mentality is at bottom anchored in consciousness, and that consciousness is the single foundation of minds.

In direct opposition to this, there is the increasingly influential view, mentioned above, that all consciousness, including phenomenal consciousness, is representational in character. It is held that it is of the essence of conscious states that they represent things to be in a certain way, and that this is no less the case with bodily sensations, like pain, than with perceptual experiences like seeing a green vase on the table. This would mean that all conscious states have representational, or intentional, contents and are “directed upon” the objects and properties represented. Representationalism about consciousness, therefore, leads to the view that intentionality is the single mark characterizing all mentality. Thus, one potential bonus from consciousness representationalism could be a satisfying unified concept of minds and mentality.

## FOR FURTHER READING

Readers interested in philosophical issues of cognitive science may explore Andy Clark, *Mindware: An Introduction to the Philosophy of Cognitive Science*; Barbara von Eckardt, *What Is Cognitive Science?*; Robert M. Harnish, *Minds, Brains, Computers: An Historical Introduction to the Foundations of Cognitive Science*. Also useful are two anthologies: *Minds, Brains, and Computers*, edited by Denise Dellarosa Cummins and Robert Cummins; *Readings in Philosophy and Cognitive Science*, edited by Alvin Goldman.

*The Oxford Handbook of Philosophy of Mind*, edited by Brian McLaughlin, Ansgar Beckermann, and Sven Walter, is a comprehensive and highly useful reference work. The following general encyclopedias of philosophy feature many fine articles (some with extensive bibliographies) on topics in philosophy of mind and related fields: *Stanford Encyclopedia of Philosophy* (<http://plato.stanford.edu>); *Macmillan Encyclopedia of Philosophy*, second edition, edited by Donald Borchert; and *Routledge Encyclopedia of Philosophy*, edited by Edward Craig. The “Mind & Cognitive Science” section of *Philosophy Compass* ([www.blackwell-compass.com](http://www.blackwell-compass.com)) includes many fine up-to-date surveys of current research on a variety of topics in philosophy of mind. *The Internet Encyclopedia of Philosophy* ([www.iep.utm.edu](http://www.iep.utm.edu)) has many helpful entries in its “Mind & Cognitive Science” section. In general, however, readers should exercise proper caution when consulting Web resources.

There are many good general anthologies on philosophy of mind. To mention a sample: *The Philosophy of Mind*, edited by Brian Beakley and Peter Ludlow; *Philosophy of Mind: Classical and Contemporary Readings*, edited by David J. Chalmers; *Problems in Mind*, edited by Jack S. Crumley II; *Philosophy of Mind: A Guide and Anthology*, edited by John Heil; *Mind and Cognition: An Anthology*, third edition, edited by William G. Lycan and Jesse Prinz; *Philosophy of Mind: Contemporary Readings*, edited by Timothy O'Connor and David Robb.

## NOTES

1. For details see Brian McLaughlin and Karen Bennett, “Supervenience.”
2. Sometimes this version of supervenience is formulated as follows: “Any minimal physical duplicate of this world is a duplicate *simpliciter* of this world.” See, for example, Frank Jackson, “Finding the Mind in the Natural World.” The point of the qualifier “minimal” is to exclude the following kind of situation: Consider a world that is like ours in all physical respects but in addition contains ectoplasms and immaterial spirits. (We are assuming these

things do not exist in the actual world.) There is a sense in which this world and our world are physically alike, but they are clearly not alike overall. A case like this is ruled out by the qualifier “minimal” because this strange world is not a minimal physical duplicate of our world.

3. On characterizing physicalism, see Alyssa Ney, “Defining Physicalism.”

4. Also called “ontological physicalism.”

5. Nonreductive physicalism, as a form of physicalism, also includes mind-body supervenience; property dualism as such is not committed to supervenience. In fact, Cartesian substance dualism entails property dualism.

6. We should keep in mind the possibility that these philosophers who accept supervenience but reject reducibility are just mistaken.

7. For more on token and type physicalism, see Jaegwon Kim, “The Very Idea of Token Physicalism.”

8. Why they are called “intentional” states is not simple to explain or motivate; it is best taken simply as part of philosophical terminology. If you insist on an explanation, the following might help: These states, in virtue of their contents, are *representational* states; the belief that snow is white represents the world as being a certain way—more specifically, it represents the state of affairs of snow being white. Traditionally, the term “intentionality” has been used to refer to this sort of representational character of mental states. More to follow on intentionality below.

9. René Descartes, *Meditations on First Philosophy*, Meditation II.

10. Later in the book (chapter 8) you will encounter another sense of “transparency” applied to perceptual experiences.

11. It is worth noting that many psychologists and cognitive scientists take a dim view of the claim that we have specially privileged access to the contents of our minds. See, for example, Richard Nisbett and Timothy Wilson, “Telling More Than We Can Know,” and Alison Gopnik, “How We Know Our Minds: The Illusion of First-Person Knowledge of Intentionality.”

12. Franz Brentano, *Psychology from an Empirical Standpoint*, p. 88.

13. Ludwig Wittgenstein, *Philosophical Investigations*, p. 177.

14. This example is taken from Ned Block.

15. See, for example, John Searle, *Intentionality* and *The Rediscovery of the Mind*.

16. This point has been disputed. Other possible positions are these: First, one might hold that linguistic intentionality is in fact prior to mental intentionality, the latter being derivative from the former (Wilfrid Sellars); second, we might claim that the two types of intentionality are distinct but interdependent, neither being prior to the other and neither being derivable from the

other (Donald Davidson); and third, some have argued that the very distinction between “intrinsic” and “derivative” intentionality is bogus and incoherent (Daniel Dennett).

17. John Searle is a well-known advocate of this claim; see his *The Rediscovery of Mind*, chapter 7. See also Galen Strawson, “Real Intentionality 3: Why Intentionality Entails Consciousness.”