I What Is Metaphysics?

The great Greek philosopher Plato wrote (in the dialogue *Theaetetus*) that philosophy "begins in wonder," a phrase repeated by his student Aristotle in his *Metaphysics*. This is especially true of that branch of philosophy that we, echoing the title of Aristotle's book, call "metaphysics." In metaphysics we puzzle and wonder about what exists and what existing things are like, in their most fundamental features and interrelationships.

1.1 The Subject of Metaphysics

The first part of metaphysics is known as "ontology," the study of what there is. In ontology we attempt to give, in broad outlines, an inventory of reality. Are there particular things, such as cabbages, kings, quarks, and galaxies? How many such things are there? One? Many? Infinitely many?

Are there properties, ways things are? For example, is there, in addition to all the individual horses, the *property* of being a horse (equinity)? If so, how many such properties are there? Is there a property for every common noun and every adjective? A property of being red, of being ugly, of sleeping? Do some of these properties exist as separate *universals*? That is, is one and the same property somehow *shared* by everything that has that property? If so, do each of these universals inhere *within* many particular things, or do they in some other way explain the similarities and common characteristics of those many particular things? And are there *relations*, like that of being more massive than or being the same color as, that hold between or among two or more things? Are there things that could be called "facts" or "states of affairs," such as the fact that water molecules contain hydrogen or the state of affairs of all native mammals in Australia's being marsupials? Are there negative facts, such as the fact that there is no plant life on the sun? If there are facts, are they the things that, by simply existing, are responsible for *making* certain beliefs and statements true? Is truth itself a property, and if so, of what things? Do facts contain both particular things and universal properties? Are there merely possible facts, and if so, what are they like? What is the fundamental difference between merely possible facts and the actual ones?

Other parts of metaphysics constitute the study of the fundamental structure of reality as a whole. How do things fit together to make a world? Plato describes this task of philosophy "carving nature at the joints," comparing the metaphysics to a skillful and knowledgeable act of dissection. Here are four relations that seem to be among the fundamental relations of this worldly structure: the relation between things and their properties, between wholes and their parts, between causes and effects, and between things related to each other in space and in time. We will examine all of these foundational relations in some detail.

1.2 The Methods of Metaphysics

Since metaphysicians study reality in its most fundamental and general aspects, in doing it we must marshal as much evidence about the world as we possibly can. All of our knowledge of the world, whether innate or acquired through ordinary life or through specialized sciences, contributes data to the metaphysical theorist. So, too, do hunches and intuitions of the truth, when more secure knowledge is unavailable. The method of the metaphysician is a mixture of the testimony of pure reason, that which is prior to and independent of experience (the *a priori*), and the testimony of experience itself (the *a posteriori*), in all its breadth and variety. Metaphysics is in this way like most other sciences. (We use the word "science" here in a broad sense, as a label of any systematic field of knowledge.)

What exactly the methods of metaphysics should be is one of the most hotly disputed topics among metaphysicians. In addition, some critics have disputed the very right of metaphysics to exist as a separate science. They argue that we best study the fundamental nature of reality through some more specialized discipline, such as physics, history, psychology, or linguistics. However, such thinkers do not thereby avoid doing metaphysics – instead, they do metaphysics in a particular way, with an especially truncated set of data and methods. In this book, we will attempt to be relatively broad and inclusive in our survey of metaphysical methods, including input from all of the natural and human sciences, as well as from that source of knowledge that we call "common sense," anchored in the common experience of humanity.

Another methodological issue that divides metaphysicians is the question of the role that speculation or invention should play. Some metaphysicians seek simple, elegant, and unifying theories, including the postulation of novel entities and properties, while others seek metaphysics as a kind of grammar of ordinary human thought and experience, as merely making explicit what every adult human being knows. On either view, metaphysics can reach results that are surprising, even revolutionary, as the example of mathematics demonstrates: geometry and number theory are able to derive many new and useful results, starting from nothing but a few commonplaces about numbers or space.

1.3 The Waxing and Waning of Metaphysics

Metaphysics is the oldest branch of philosophy, already underway in the speculations of ancient Greek-speaking thinkers, including Thales, Heraclitus, and Parmenides, in Greece, Turkey, and southern Italy in the 600s and 500s BC. Metaphysics continued to be central to the work of Plato and Aristotle, as well as to the "materialism" of Democritus and Empedocles, who sought to answer all of the metaphysical questions in terms of the fundamental material components of things. During the Hellenistic period (between the conquests of Alexander the Great and the rise of Rome), the central focus of philosophy shifted from metaphysics to the theory and critique of knowledge (the branch of philosophy known as "epistemology"), although both the new philosophical schools of the Stoics and Epicureans and the successors of Plato and Aristotle continued in substantial metaphysical investigations.

Metaphysics regained its predominance in late antiquity and throughout the medieval periods, thanks to the pre-eminence within Western philosophy of Platonists and Aristotelians. A synthesis of the two traditions, known as "Scholastic" philosophy, provided a common framework of terminology, questions, and methods among Christians, Jews, and Moslems for over a thousand years. In the later Middle Ages (after 1300 AD), there was a gradual turn toward the study of language and toward epistemological concerns. During the Renaissance, scholars sought to return to ancient sources, including Plato. At the same time, these scholars recovered writings of some of the ancient materialists and Atomists, such as Democritus and Lucretius, which then began to influence the course of Western philosophy.

The scientific revolution of the sixteenth century brought with it a revolt against Aristotle and Scholasticism. Metaphysical thought fragmented into several distinct streams. Some, including the German seventeenth-century philosopher Gottfried Leibniz, continued important features of the Scholastic tradition. Others turned instead to a form of Atomism about the created world, reviving Democritus's idea that the material world is ultimately composed of indivisible "corpuscles." (We say "created" world because these thinkers believed in the existence of God.) Such Atomism had been rejected by Aristotle and his Scholastic followers in favor of a view in which all of matter is infinitely divisible. The French philosopher René Descartes introduced a new form of dualism, which divided reality into two domains, one purely quantitative and material (the physical), and the other qualitative and subjective (the mental). Still others moved all the way to Idealism, the view that all of reality, including the natural world, is fundamentally mental or spiritual. In fact, Idealism of one kind or another dominated European and American philosophy in the nineteenth century.

Descartes altered the course of Western philosophy for 200 years by introducing an overriding concern, amounting almost to an obsession, with attaining certainty. Descartes held that it was the responsibility of philosophers to provide a watertight answer to the challenge of the skeptic, who insists upon doubting every belief that can possibly be doubted. The Cartesian philosopher seeks to build an absolutely secure and indubitable set of foundations for all of our scientific and common sense beliefs. This quest for certainty necessitated a turn inward, relying on Descartes' famous cogito argument: I think, therefore I am ("cogito ergo sum" in Latin). The guiding idea was that introspection of one's own subjective thoughts and feelings was immune to skeptical challenge. One might be wrong about the past or about the physical facts, but one cannot be wrong about the present contents of one's own thoughts and experiences. It was this broad agreement about the subjective or "phenomenological" method that gave the advantage to various forms of Idealism in the mid- to late nineteenth centuries.

1.4 Modern Challenges to Metaphysics

With the loss of the Scholastic framework, the rise of the success and prestige of experimental science, and the premium placed on certainty, metaphysics faced a series of challenges. A number of significant thinkers began to sound a new note in the late eighteenth century, raising doubts about the right of metaphysics to stand as a science among other fields of knowledge. David Hume, the great philosopher of Scotland, stands out as pre-eminent among these new antimetaphysicians. Near the end of his *Enquiry Concerning Human Understanding*, Hume issues his famous challenge to the value of metaphysics:

If we take in our hand any volume; of divinity or school metaphysics, for instance; let us ask, Does it contain any abstract reasoning concerning quantity or number? No. Does it contain any experimental reasoning concerning matter of fact and existence? No. Commit it then to the flames: for it can contain nothing but sophistry and illusion. (Hume 1777: Section XII, Part III, 165)

Hume's assault had a deep effect on a younger German metaphysician, Immanuel Kant. Kant described Hume as having "awakened" him from his "dogmatic slumber." In response, Kant engineered what he called "a Copernican revolution" in philosophy. Henceforth, those following Kant would not seek to understand things as they are *in themselves* but only as they are *for us*. Post-Kantian philosophers examine how things appear to us, and how the structure of our own sensibility and understanding shape those appearances. Kant believed that a new, more sober and restrained metaphysics could result from following this subject-focused and phenomenological method.

If Kant's response to Hume constituted some sort of victory for metaphysics, it proved to be a Pyrrhic one. If we assume that human thought and meaning cannot reach beyond the range of sensory appearances (the empirical domain), then the usual empirical sciences (physics, chemistry, biology, and so on) would seem to exhaust the possibilities for novel discoveries or systematic theorizing, leaving nothing for metaphysicians to do. The effort to limit science to what can be empirically verified came to be known as "positivism." In addition, historical and anthropological research indicated that human experience is more variegated and fluid than Kant had supposed, suggesting that traditional metaphysics be replaced by cultural or historical studies.

The positivists of the nineteenth century were succeeded by the *logical* positivists of the Vienna Circle in the early twentieth century, who insisted that metaphysics (along with other non-empirical fields like ethics, theology, or aesthetics) were nonsensical, since their propositions could not be empirically verified. The Vienna Circle, in turn, influenced Anglo-American philosophy through the early work of Ludwig Wittgenstein and through the Cambridge philosophers Bertrand Russell and Frank Ramsey.

The complementary movement toward historicism and cultural relativity culminated in the work of Georg Hegel in Germany. Hegel described a process by which the *true* metaphysical theory evolves over time, in response to cultural and political factors. Karl Marx, Friedrich Nietzsche, Michel Foucault, and others in the late nineteenth and twentieth century drew the conclusion that any attempt to escape the limitations of one's time or one's own personal biases, as would be required by the pursuit of metaphysical truth, is futile and should be abandoned.

In America, the pragmatists offered a new source of opposition to metaphysics. William James proposed that "truth" should be identified with "whatever works." Pragmatism thus renders many traditional metaphysical theories and disputes irrelevant, since metaphysical truth can often seem to have no immediate "cash value." Thus, pragmatic impulses in philosophy further undermined any interest in metaphysical questions.

Some philosophers who had been part of the logical positivist movement came to be dissatisfied with the positivists' focus on individual and subjective sense experience. They came to see that science, in order to reach results that are publicly verifiable, must primarily pertain to the natural world, the world beyond the individual human mind. At the same time, the Cartesian epistemological foundation was crumbling. Otto Neurath rejected Descartes' fixation on certainty, arguing that our theory of the world is like a raft in the middle of the ocean: we can try to make incremental improvements from within the raft, but we can never hope to find solid ground outside it on which to build for it a new foundation. Further, post-positivist philosophers wanted to maintain the unity of the natural sciences, and they saw fundamental physics as the unifying framework within which all other scientific disciplines could be constructed. These "physicalists," including Neurath, Alfred Tarski, and Willard van Orman Quine, looked to modern mathematics and physics for answers to traditional metaphysical questions, rejecting the legitimacy of any metaphysical question that could not be subjected to investigation through the scientific method as exemplified by mathematical physics.

In summary, metaphysics faced opposition from five sources in the early twentieth century:

- 1. The subjectivist and phenomenological turn (in response to Cartesian skepticism)
- 2. The positivist challenge
- 3. The relativist and historicist challenges
- 4. The pragmatist challenge
- 5. The physicalist challenge

1.5 The Renaissance of Metaphysics in the Later "Analytic" Era

Given the breadth and depth of this opposition to metaphysics, the late twentieth century has been the occasion of one of the most remarkable reversals in the history of thought: the renaissance of metaphysics in Anglo-American philosophy. The need to overcome such intense resistance has forced modern metaphysicians to rise to a level of sophistication that is almost unprecedented, as well as to draw on all of the best of the 2000-year tradition of metaphysical reflection from the past.

The dominant school of thought of philosophy in the English-speaking world (and in the Netherlands and Scandinavia) has been the so-called "analytic" school. Analytic philosophy has its origins in the work of the British philosophers G. E. Moore, Bertrand Russell, and John Cook Wilson in the early 1900s, who led a revolt against the British Idealism of the late nineteenth century. Russell saw Kant's "Copernican revolution" as a great step backwards, as a kind of "Ptolemaic revolution" back to a geocentric view of the world, since Kant placed the human mind and not its objects at the center of philosophical inquiry.

Russell and his colleague Alfred North Whitehead were among the first Anglophone philosophers to recognize the importance of the work of the German logician Gottlob Frege, who revolutionized logic by, for the first time, precisely analyzing the idea of mathematical proof. (The American philosopher Charles Saunders Peirce made the same discovery independently in America.) Russell and Whitehead believed that careful attention to questions of the *logical form*, the precise grammatical structure, of our thoughts would make possible substantial progress toward solving many traditional metaphysical problems. For analytic philosophers, logic and mathematics replace phenomenology or history as the central method of discovery.

Analytic developments in logic contributed to the revival of metaphysics. Harvard's Clarence I. Lewis and Rudolf Carnap, a leading logical positivist who ended his career at the University of California in Los Angeles, resurrected the study of the logic of possibility and necessity, a sub-field that had been neglected since medieval times.

Further developments in this *modal* logic by Arthur Prior, Ruth Barcan Marcus, David Kaplan, and Saul Kripke led inevitably to renewed interest in the nature of possible things and their relation to the actual world in the 1970s.

The physicalists that we mentioned in the last section also opened the door wider to the revival of metaphysics. Work on the philosophy of science in the twentieth century raised serious doubts about the unity of science and about the competency of physics to answer all meaningful questions. The American W. V. O. Quine revived the field of ontology – the investigation of what exists – arguing that we should accept all and only the things and kinds of things required by our best scientific theories.

Physicalism eventually evolved into a new materialist school of metaphysical thought, with its principal representatives in England and Australia. Both Quine and the Australian metaphysicians helped to shape the thinking of the most wide-ranging and influential metaphysician of the twentieth century, Princeton's David K. Lewis. You may notice that Lewis's work is mentioned in every chapter of this book.

In one of history's ironies, David K. Lewis built his impressive metaphysical system on the empiricist tradition of David Hume, the arch-skeptic and opponent of metaphysics. Lewis replaced Hume's Idealism with a materialist theory of mind and a realism about physical phenomena, but he sustained the spirit of Hume's empiricism by seeking to minimize the commitments of his theory to contentious metaphysical notions (such as powers, causation, and properties), except where these can be reduced to or defined in terms of more basic elements, such as physical qualities and quantities and the framework of space and time. Lewis's students, including Laurie Paul and Cian Dorr, as well as students of his students, like Theodore Sider, have continued work on this Neo-Humeist project.

Questions about causation provided analytic philosophers with a final avenue back to metaphysical investigations. Logical positivists, following Hume, had tried to build philosophical systems without any reference to cause and effect. Bertrand Russell wrote an essay in 1908 declaring causation to be a scientifically obsolete notion. Since then, causation has reclaimed its status as a central notion in philosophical theory. Edmund Gettier, in a famous article in 1963, challenged the traditional definition of knowledge as *justified true belief*, leading to new theories of knowledge that relied upon some kind of causal connection between states of knowledge and the world. Modern theories of sensory perception and memory, in particular, require reference to appropriate causal mechanisms. Work in the philosophy of language by Keith Donnellan, Saul Kripke, and Gareth Evans, among others, introduced causal theories of the meanings of words and the content of thought. Finally, the philosopher of science Nancy Cartwright demonstrated that causation is far from obsolete in the experimental sciences.

Metaphysical work on causation has followed three tracks among analytic philosophers: a Neo-Humeist approach, that seeks to reduce causation to patterns of succession, the approach of the Australian Realists, who look to the laws of nature as the ultimate ground of all causal relations, and a Neo-Aristotelian approach, that takes causal powers to be a fundamental and irreducible feature of the world. The Aristotelian "powers ontology" movement has drawn support from England (Stephen Mumford, Alexander Bird), America (John Heil, Peter Unger), and Australia (George Molnar, Brian Ellis) in recent years.

Well, so what? Why does this list of questions and views and philosophers matter? The point of the forgoing is that metaphysics is far from dead, despite repeated attempts to kill it off. Metaphysics, it turns out, is a resilient discipline. Indeed, it appears that metaphysical questions are virtually impossible to escape. This brings us to a final point about what metaphysics is.

1.6 Metaphysics as First Philosophy

Aristotle describes metaphysics as "first philosophy," indicating that all other branches of philosophy depend in some way on it. The subsequent history of philosophy confirms Aristotle's judgment. We have already discussed some of the connections between epistemology (the theory of knowledge) and causation, as well as the role of causation in the philosophy of language. The field of ethics, the study of moral value and obligation, presupposes certain facts about human nature and human actions. Moral obligations can apply to us only if we are, in some sense, capable of acting in different ways, which naturally raises questions about the nature of possibility and contingency. In addition, we bear moral responsibilities for some of the consequences of our actions, which fact brings questions about the nature of causation to our attention.

Analytic philosophers have worked intensively on the theory of mind and the mind-body problem in the last 100 years, and this research has also moved inevitably toward deeper metaphysical issues. Once again, causation plays a crucial role in understanding sensation, memory, and action. In addition, our experience of time raises fundamental questions about the nature of time itself, and the nature of change and the persistence through change, both of perceived objects and of persons. Human sensation and thought involve a relation, not just to particular things, but also to general properties and kinds, which demands attention to the metaphysical theory of properties and the relation between properties and their instances.

Recent experience has also dashed hopes that one of the special sciences, such as physics or biology, could supplant metaphysics. Contemporary scientific theory raises far more metaphysical questions than it answers. For example, there are many questions about the fundamental nature of space and time that contemporary physics renders meaningful without being able to answer them. Is space or spacetime a real thing, in addition to the things that are spatially located? Are regions of space composed of dimensionless points? What gives time its direction (from earlier to later)?

The inevitability of metaphysics is demonstrated by the fact that even the would-be critics of metaphysics rely on tacit metaphysical assumptions. For example, Hume's claim that all knowledge is either logical or sensory in nature presupposes that there is a relation of knowledge or acquaintance, which holds only between the mind and the sensations and ideas that it "contains." These presuppositions raise unavoidable metaphysical questions: what sort of things are these ideas, and how does the mind "contain" them?

Consider also those post-Kantian or post-modern thinkers who insist that all of reality is a *construction* of one's social community. Such a theory presupposes that communities or social practices exist and are able to construct theories or models of the world. In the end, these apparently anti-metaphysical schools of thought are nothing but alternative ways of doing metaphysics. The only way to avoid metaphysics is to avoid thinking.

1.7 Overview of the Book

We begin in Chapter 2 with a discussion of truth and the grounds of truth. We address the question of whether truth is a genuine property of thoughts and statements, as opposed to a mere device for making certain assertions in a more convenient form (as the so-called "deflationists" about truth have it). If truth is a property, then we have to consider whether every truth is grounded in reality, that is, in things that exist. If so, these can be called the "truthmakers." We examine and evaluate several competing theories about what (if anything) makes truths to be true. Philosophers' positions on the existence and character of truthmakers have a direct influence on meta-physical method, as later chapters illustrate.

In Chapter 3 we take up the problem of what makes a thing act the way it does – a thing's dispositions and powers. These dispositions and powers have to do with not only how something is actually observed to behave but also with what it *would* do under a variety of wholly hypothetical situations. We discuss four theories about the truthmakers for dispositional and hypothetical truths, focusing primarily on two of these: Neo-Humeism and Powerism. Neo-Humeists seek to ground truths about dispositions entirely in the pattern of qualities as they are instantiated across space and time (a qualitative mosaic), while Powerists hold that facts about powers and dispositions must be admitted to be among the fundamental and irreducible facts of the world, over and above the facts about their actual manifestations. The Neo-Humeist program promises a simple and uncluttered picture of the world, but the Powerists have wielded some weighty objections against its adequacy.

Powers and dispositions are a kind of property, and it is to properties in general that we turn in Chapter 4, considering the ancient *problem of universals*. Those who affirm the existence of special things (the *universals*) that exist over and above the world of particular things are traditionally known (in this context) as "Realists" (after the Latin word for "thing"). Their opponents are called "Nominalists" (after the Latin word for "name"). Realists believe that universals, such as the property of being a horse or the property of being a water molecule, are real things needed to ground or explain in an ultimate way the obvious similarity of particular horses or particular water molecules to one another. The universals are somehow shared by or present in those particular things. Nominalists, in contrast, deny that we need any such metaphysical explanation of similarity: the particular things themselves suffice to explain why we use common names (like "horse" or "water molecule") as we do.

Both sides claim that they can provide the simplest account of the phenomena, so the debate turns on the question of which theory is really simpler, and what sort of simplicity is desirable, and why. There are several versions of Nominalism, from the Ostrich Nominalists (so-called because their opponents accuse them of sticking their heads in the sand) who simply deny that there are any phenomena about similarity that need to be accounted for in our metaphysics, to various kinds of Reductive Nominalists, who try to account for similarity without invoking universals, either by supposing there to be a single relation of resemblance between particular things or in terms of their common membership in a special kind of class. According to Reductive Nominalists, we don't have to introduce universals to make sense of such basic facts of resemblance or class-membership.

We look next (in Chapter 5) to competing theories about the internal structure or constitution of ordinary particular things and the possible relations between those things and properties. According to *Extreme* Nominalists, such things have no internal structure (except for the internal structure attributed to them by physics and chemistry), and similarity is simply a relation between two such things, taken as a whole. Other Nominalists believe in individualized or particular properties, known as "tropes." A trope is a property that, unlike a universal, can pertain to only one particular. The roundness of the earth, for example, would be a trope, while the universal of roundness would be shared by all round things. Moderate or Trope Nominalists suppose ordinary things to be nothing more than *bundles* of such tropes. So, for example, a particular rock might be nothing more than an aggregate made up of the rock's hardness, shape, volume, mass, color, and so on.

Realists (believers in universals) also come in two varieties, Relational and Constituent, depending on whether they think that universals relate to their instances from the outside or that universals are actual internal parts of those instances. There are, therefore, two kinds of constituent ontologies: Trope Nominalists and Constituent Realists, both of whom think that ordinary particular things contain their properties as parts. Constituent Ontologists think of ordinary things as either bundles of nothing but properties or as bundles that combine properties with some additional element of particularity (a "bare" particular or "substrate"). We evaluate the pros and cons of each option.

Of course, some things are *parts* of others in a much more everyday, common-sense understanding of the word, and this ordinary part-whole relation is the subject of Chapter 6. At this point we confront what Peter van Inwagen has called "the Special Composition Question": when do some things compose a whole? If we pile some books on a table, do the books now compose a new thing, the *pile*? Or do we still have nothing more than what we started with – the books – now merely in a new relationship? Of course, we can ask the same question about the pages of one of the books – is the book a new thing, or merely an arrangement of pages? Indeed, do the fundamental particles of the page really compose a further entity (the page), or are they the only things that really exist, in the strictest sense of the word?

Universalists claim that corresponding to every set of things, no matter how scattered or disparate, there is a whole composed of just those things (and their parts). Universalists would suppose, then, that the Eiffel Tower and the Moon together compose a single thing, despite the quarter of a million miles separating them. Compositional Nihilists, at the other extreme, maintain the paradoxical position that there are no composite things at all! There are many intermediate theories, according to which some but not all sets of things correspond to real wholes. We can also ask about the relative priority of parts and wholes: are wholes really nothing "over and above" their parts, or are parts nothing but aspects or manifestations of certain wholes? Putting the issue this way gives rise to three plausible answers: Atomism (according to which the fundamental things are all simple, without parts), Monism (according to which there is only one fundamental thing, which contains everything else as a part), and Pluralism (according to which there are composite things other than the universe as a whole that are fundamental).

In Chapter 7 we return to the issues of possibility and necessity (or *modality*) that first made an appearance in Chapter 3. At this stage we investigate the nature of the merely possible – things that could have been but are not actual facts. Since the time of Gottfried Leibniz, metaphysicians have found it convenient to talk in terms of "possible worlds": ways that the world as a whole could have been. We consider here two competing theories about possible worlds: Concretism and Abstractionism. On the Concretist picture, another possible world is something like a parallel universe, composed of material objects and living organisms just like us and the things around us. Abstractionists, in contrast, suppose possible worlds to be more like huge, complex stories or diagrams, representing alternative ways for things to be. David Lewis was the great champion of Concretism, and we consider his thought-provoking objections to Abstractionism, as well as the most important objections to his Concretism.

In Chapters 8 and 9, we begin to consider the world in its temporal dimension. In Chapter 8 we survey the debate over whether time really flows. In this chapter, we rely on a distinction first introduced by J. M. E. McTaggart between the A and the B series. In the A series, we relate times to the present, as either past, present, or future. The B series looks only at the positions of times in relation to each other, as earlier than, simultaneous with, or later than. B Theorists hold that a complete description of the metaphysical structure of the world requires only the facts about the B series, while A Theorists insist that A-relational facts are also metaphysically real and objective. Defenders of the B Theory rely primarily on its greater simplicity and its concordance with modern physics, especially relativity theory, while A Theorists rely on our common-sense understanding of what is involved in real change and in our experience of the fleetingness of the present and the passage of time.

In Chapter 9, on continuity and persistence, many of the threads we have built up throughout the book converge for the development of theories about the nature of change and of those things that persist through change. The pursuit of the understanding of persistence and change has been at the core of metaphysics from the very beginning, with the earliest theories of the Greek philosophers. We focus here on a single issue: is all change grounded in a temporal succession of essentially unchanging states, or are temporally extended processes of change among the fundamental facts of the world? The first is sometimes called the "at-at theory" of motion and change: for a thing to move is simply for it to be *at* different locations *at* different instants of time. The alternative, Neo-Aristotelian view sees instantaneous states as mere boundaries of more fundamental *processes*. On the Aristotelian view, the states of things at each moment of time are based in the nature of the ongoing processes they participate in, and not vice versa. At the end of Chapter 9, we survey the variety of metaphysical theories that we have considered throughout the book, grouping them into two packages: the Neo-Humeist and Neo-Aristotelian frameworks.

Finally, we return in Chapter 10, our "Concluding Unmetaphysical Postscript," to the challenges to metaphysics that we introduced in Section 1.4 above. We look at questions of the language of metaphysics: are metaphysical questions nonsensical, and are all metaphysical disputes merely verbal? We then consider the question of knowledge: can we ever know that any metaphysical claim is true, and, if so, how? Finally, we consider and reject the possibility that metaphysics should be thought of as the development of a kind of fiction. We postpone these issues until the end, because the best answer to the challenge of whether metaphysics is possible is the actual doing of metaphysics, something we have undertaken in chapters 2 through 9.

Two final comments that should color the reader's approach to our text. First, there are very rarely knock-down arguments in philosophy generally and metaphysics in particular, and so there is almost always a number of views that might be true. But further, the question is not just whether a philosophical view explains what it's meant to explain, but whether it explains what it's meant to explain better than the other views on offer. Therefore, one cannot judge the truth of a metaphysical view in isolation from its competitors. What philosophers must do is weigh the costs and benefits of the various views on offer, and then judge which one is best. It is the best view - not the only possible view, and not just some view that does the relevant work – that we hunt for. Insofar as we are doing this well, we will be more likely to arrive at the truth. Still further, the view one adopts in one area of metaphysics will, in many cases, impact the plausibility of views in other areas. We hope to chart many of these connections throughout the text. The reader would do well to bear these facts in mind, and to delay delivering a final verdict about a view or collection of views, insofar as he or she is able, until we have completed our survey.

Second, because we will canvass a variety of positions in a number of areas –metaphysics is a huge area of philosophy! – we have been forced to truncate the discussion of each. No doubt this will leave some readers dissatisfied, especially when resources available to one's own views are not fully articulated or brought to bear on objections. We hope, however, that this book will not only provide a useful overview of the most important issues, views, and arguments discussed in contemporary metaphysics, but will also invite the reader to continue the discussion. So we have made no effort to be comprehensive, only an effort to set the reader up for the comprehensive consideration she carries out on her own and in discussion with others. We suggest readers inclined in this direction consult the bibliography of this book for further conversation partners, as well as our more thorough (and much longer!) *Surveying the World: A Compendium of Metaphysics*.