Relativists define truth as that which is rhetorically persuasive. Idealists define truth as the largest set of logically consistent propositions. Realists define truth as that which corresponds with reality. This chapter outlines the realist's theory without too much attention to its critics until the very end.

The theory begins by distinguishing between substances and attributes. A substance is anything that can exist by itself. An attribute is something that can only exist in a substance. For example, a red flag can exist on its own; but its "redness" can only exist in the flag (or some other substance). It is important to note that substances are not always "touchable." Rainbows are a substance, even though they cannot be touched.

There are three kinds of attributes. Accidents are attributes which vary in a single kind of substance, e.g., some humans have a lot of hair and others have little. Essential attributes do not vary, e.g., all (normal) humans are rational. (By "rational" we mean no more than able to conceive of things that they have never seen, like a chiliagon or tomorrow.) Properties are attributes which do not in fact vary, but they could, e.g., all humans are featherless bipeds. But if for some strange reason human mothers started giving birth to children with a single feather growing from their tail bone, yet the children were fully rational, we would still have little doubt about their essential humanity.

The distinction between accidents, essences and properties in turn defines two modes of existence. "Contingent" means that a thing's existence, attributes, or actions are dependent upon something besides the thing itself. "Necessary" means that a thing's existence, attributes, or actions are dependent upon nothing except the thing itself.

It is likely that the vast majority of things humans define are not necessary. We can, for example, categorize (define) books,

4

buildings, and baseball bats in many different ways. These are called nominal definitions. However, Aristotelians argue that the distinction between humans, animals, plants, and non-living physical things have real definitions in terms of their essential natures.

Relativists, on the other hand, argue that all definitions are nominal because all definitions are dependent (contingent) upon a culture's conceptual schemes. Nothing has an "essential nature" in-and-of itself according to relativists.

Two thousand years ago, Pontius Pilate asked, "What is truth?" Though his question was in part cynical, it would be uncharitable to suppose that it was not also in part honestly motivated by the philosophical puzzles we will be considering in this chapter.

There are three definitions of truth. Relativists like Protagoras define truth as any consensus that rhetorical persuasion is able to produce. Exactly how wide spread the consensus must be is open to question. Is it sufficient for a single individual to be persuaded that his beliefs are true or must consensus be spread throughout a culture? But whoever needs to be persuaded, once they are persuaded their beliefs are true *for them*.

Philosophical idealists define "truth" as all statements which are included in the largest possible set of consistent ideas. The crucial point here is that idealists *deny* that we can significantly talk about a reality which exists independent of our ideas. Since no one can possibly *see* reality directly, it is meaningless, they say, to think a tree can fall in the forest when nobody sees or hears it fall. As one philosopher famously said, "To be *is* to be perceived." In short, reality and our most coherent ideas about reality are one-in-the-same. Idealists thereby reject as meaningless the question of whether or not those ideas match reality. Though idealism is currently out of favor in the West, it has dominated the East for millennia and was prominent here toward the end of the nineteenth century.

Directly opposed to idealism is philosophical realism. Realists like Aristotle and Aquinas defines "truth" as the correspondence of what we say or think with what *really exists*. Realism is basically a defense of common sense. It is, so to speak, the default position for the vast majority of westerners. After all, what could be more simple, obvious, and true than saying "The cat is on the mat" is true if and only if the cat *really* is on the mat? There are, on the other hand, numerous philosophical critics of realism in the West which we will be considering throughout this book. But before we consider these criticisms, we must first flesh out the realists' thesis in more detail.

4.1 SUBSTANCES AND ATTRIBUTES

Things exist in a multitude of sizes, shapes, colors, and weights. Some things maintain their individual identity for a fairly long time, like rocks and diamonds. Other things only maintain their identity for a very short period of time, like clouds and subatomic particles. Some things are fairly solid, like books and backdoors. Other things are virtually impossible to touch or feel, like rainbows and light rays. Some things are inanimate and without life, like dirt and sand. Other things are alive and animated, like plants and people.

But perhaps the most fundamental distinction is between substances and attributes.¹ A substance is anything that is able to exist by itself.² An attribute is something that is *only* able to exist in a substance. "Substance" literally means that which "stands under," upholds, or supports attributes. "Attribute" refers to everything that "falls to" or "befalls" something else.

Here are some examples of substances and of the many different ways to name them. Individual substances can be given a proper name like "Fido" or "Fred." They can also be referred to with a definite description, like the "fastest man on the team" or the "first President of the United States." Natural groups of substances can be given a common name like "plants" or "animals." Arbitrary groups or clusters of things can also be treated as a substance, for example, "a pile of dirt" or "all the water in all the world's oceans." In all these cases the descriptive words refer to something that exists by and in itself.

Contrast this with the way we refer to their attributes. We might say that Fido "has red fur" or that Fred "weighs 160 pounds." We might also

1. Thomas Aquinas, commenting on Aristotle puts it like this: "Blackness itself does not become whiteness, so that, if there is a change from black to white, there must be something besides blackness which becomes white." Aquinas, *Commentary*, sec. 2429; vol. 2, 859.

2. "But the idea of substance itself can still be used to refer to things that can be identified as beings in some sense complete, such as human beings, horses, and houses, to revert back to examples used by Saint Thomas, if not to atomic or subatomic particles. The idea is not derived from physics or chemistry, but is rather presupposed by them, even when they seem to be subverting our naïve representations of it." Blanchette, *The Perfection of the Universe*, 55.

say that the first President of the United States was "born in Virginia" or that a pile of dirt "is brown." In these cases, the descriptive words do not refer to independently existing substances. They only refer attributes *of* a substance. Unlike substances, attributes cannot exist by themselves; they can only exist in a substance. "Weighs 160 pounds" or "is brown" are not "things" which can exist by themselves; they must always exist *in* something else.

Though the italicized words "of" and "in" are short, they are also tricky. We say both that there is dirt *in* a rug and that attributes exist *in* substances. However, the word "in" means something quite different in these two cases. Attributes are not *in* substances the way dirt is *in* a rug. The relation between dirt and a rug is a relation between two physical substances. The relation between substances and attributes is relation that transcends physics. Traditionally it was called a *metaphysical* relation. Today some philosophers sometimes call it a grammatical relation. But whatever we call it, we must not try to form a "mental picture" of the relation of attributes and substances; it cannot be done.

The distinction philosophical realists make between substances and attributes more-or-less parallels the distinction logicians and grammarians make between subjects and predicates. Substances will typically be the subject of a proposition and attributes will typically be the predicate of a proposition. For example, we can say "Fred has red hair" or "The fastest man on the team weighs 160 pounds." But it makes no sense to say of one predicate that it is some other predicate. "Has red hair is weighing 160 pounds" is nonsense.

Though the distinction between substance and attributes may seem trivial, it is the basis of a philosophically crucial (and thus controversial) distinction between three kinds of attributes—accidents, properties, and essences. In the next chapter we will consider the realists claim that these distinct attributes refer to real differences in the nature of things. But for now we will simply consider the way they function in our language.

We will begin by distinguishing accidental and essential attributes. Consider a group of one hundred dinosaurs. Each dinosaur undoubtedly had a slightly different weight, size, and shape, yet they are all referred to as "dinosaurs." The reason is simple: the specific attributes of weight, size, and shape are all *accidental* attributes of dinosaurs. An accident is an attribute which only some members of a group or kind actually possess. In other words, accidental attributes vary among the individual members.

Whether a particular dinosaur weighs 9,534 pounds or 9,535 pounds has no effect on our willingness to refer to it as a "dinosaur." Similar sorts of things could be said about a dinosaur's exact size, shape, color, smell, and so on. These are all accidental attributes which can and will vary among particular members of the species.

However, there are other attributes which all dinosaurs must possess or else they would not be a dinosaur.³ Every dinosaur was a coldblooded, egg-laying animal with a backbone. These attributes—being cold-blooded, egg-laying, and having a backbone—are *essential*. There is no variation here among dinosaurs. An essence is an attribute which all members of a species must possess. An animal which was not coldblooded or did not possess a backbone could not *by definition* be a dinosaur. The essences determine *what* something is, that is, it *defines* a species.

Properties are a third kind of attribute. In one way they are like accidents but in another way they are like essences. Like an essence, a property is an attribute which all members of a species possess. Unlike an essence, a property is not what makes something what it is or defines it as a species. Instead, they only *happen* to have the attribute in question. For example, all past and present human beings have been less than eight feet tall. But "being less than eight feet tall" is not part of human's essential nature. There is nothing incoherent in the suggestion that some day humans might grow to be more than 8 feet tall. This means that properties are like accidents because they *could* vary among individual members of a species without changing the fact that they were all members of the same species. An eight foot tall person would still be a human being.

To recap: An essential attribute is one all members of the species *must* have to be a member of the species; an accidental attribute is one that can and does vary among individuals; a property is an attribute which *could* vary among members of the species, even though in fact it does not.

3. "For by the essence of a thing we mean the proper answer which can be given to the question asking what it is. And when we ask what a thing is we cannot give a proper answer by mentioning attributes which belong to it accidentally; for when someone asks what man is, one cannot answer that he is white or sitting or musical. Hence none of those attributes which are predicated of a thing accidentally belong to its essence; for being you is not being musical." Aquinas, *Commentary*, sec. 1309; vol. 2, 506.

4.2 MODES OF EXISTENCE

"Must," "happen," and "could" are common words, but they too are tricky. Logicians call them *modal terms*. Modal words do not refer to the existence or non-existence of a thing or event. They refer instead to the *way* a thing or event either exists or does not exist.

For example, there are two things we can say about all normal humans. First, they are all rational animals. (By "rational" all we mean is "able to understand abstract words like 'tomorrow.") Second, all humans are featherless bipeds. (*Only* humans and birds are anatomically bipedal.)

The interesting point about attributes like "rational animal" and "featherless biped" is that even though the words mean something different, they both *refer to* exactly the same group of things.⁴ It is equally true that all normal humans are rational animals and that all normal humans are featherless bipeds. In other words, every rational animal is a featherless biped *and vice versa*, every featherless biped is a rational animal. This is unusual. Typically when we reverse a subject and predicate in a true sentence, the new sentence will be false. For example, while it is true that "all humans are animals with hearts," it is false that "all animals with hearts are humans."

So, the philosophically crucial (again controversial⁵) point becomes: If the words "rational animal" and "featherless biped" both refer to the same class of things, can they really be significantly different? In short, is there really a difference between an essence and a property? Aristotelians think that there is for the following reasons.⁶

4. In the terms of the logician, "rational animal" and "featherless biped" have the same *extension*, though they have different *intensions*.

5. In the jargon of philosophers, the issue concerns the possibility of "intensional" logic. Most "modern logic" is wholly extensional, i.e. it assumes that words which refer to identical groups of things must be logically equivalent. Aristotelian logic does not make this assumption because (among other reasons) it distinguishes between essences and properties. See my *In Defense of the Soul*, 73–75 for short and simple account of this dispute. For a book-length and scholarly treatment, see Veatch, *Intentional Logic*.

6. The classic Aristotelian example of the difference is between humans' rationality (which is an essence) and human's capacity for laughter (which is a property). "Because in every thing, that which pertains to its essence is distinct from its proper accident [i.e. property]; thus in man it is one thing that he is a mortal rational animal, and another that he is an animal capable of laughter." Aquinas, *ST*, I–II 2.6.

A simple thought experiment illustrates the difference. Imagine that at some time in the future mothers, all around the world, started giving birth to children with a single feather growing from the tail bone. This would, to say the least, be highly troublesome. Doctors would be shocked; mothers would be surprised; and biologists would have to do a lot of rethinking about the effects of mutations. But if we suppose that no other changes occur and that these children grow up to live otherwise normal lives, we would have no question about their status as human beings.

But now imagine a different scenario. This time, mothers from all around the world start giving birth to children who are never able to understand the concept "tomorrow" or any other word that refers to things which cannot be perceived or imaged. This would be more than highly troublesome. If humans lost their rational ability to understand abstractions, then even if these "children" which continue to *look* just like human beings could perpetuate their species, it would be a *new* species. There would no longer be a *human* species as we now understand it. The rationality that allows us to understand abstractions is part of our essential nature. If we lose that, we lose our identity as humans. (Of course, this example says nothing about how we should ethically treat this new species in the "transitional period" and it says even less about how we should treat individual humans who lack rational abilities as the result of brain damage or have yet to develop their natural capacities, i.e. infants.)

In sum, while we *happen* to be featherless, we *must* be rational or else we would not be humans. And while we *could* begin to grow feathers and remain human, we *could not* lose our rationality and remain human. Being rational is necessary in order for us to be human beings.

The example above concerns the way (mode) *things exist*. The same point can be made about the way *events occur*. Consider the following example from Hilary Putnam, a Harvard philosopher. He notes that Emerson Hall at Harvard University has been in existence for over one hundred years. Now suppose that during those one hundred years no person has ever walked through the doors of Emerson Hall and been able to speak and understand Inuit, the native language of Eskimos. Thus the statement "everyone who has ever sat in Emerson Hall is unable to speak Inuit" is a true generalization. It is also a true generalization that every pen that has ever been dropped in Emerson Hall falls down, not up. But these two generalizations are not true in the same *way*.

The "mode" of these two events is distinct. It is true that pens *must* fall down (not up); it is not true that people entering Emerson Hall *must* be unable to speak Inuit. If Sam, an Eskimo whose first language is Inuit, wins a scholarship from Harvard and takes a course in Emerson Hall, then he will not suddenly lose his ability to speak and understand Inuit when he sits in Emerson Hall. There is nothing about the nature of Emerson Hall that causes a person to be unable to speak Inuit. And if Sam decides to go to Princeton instead of Harvard and it just happens that no future person who enters Emerson Hall is able to speak and understand Inuit, we would still understand that "being unable to speak and understand Inuit while inside" is a property, not an essence, of Emerson Hall.

These two distinct modes of existence are termed *contingent* and *necessary*. Contingent means that a thing's existence, attributes, or actions are dependent upon something besides the thing itself. Necessary means that a thing's existence, attributes, or actions are dependent upon nothing except the thing itself. It is a *contingent* truth that no person in Emerson Hall has been able to speak Inuit; it has nothing to do with the nature of the building itself. But it is a *necessary* truth that when objects heavier than air are dropped, they move down, not up. (Of course, here we are speaking inductively, i.e., "scientific," and thus there is always an implicit *ceteris paribus* clause. See 2.4 above.)

The important point to remember about modes of existence is that they refer to what is possible, not what actually exists or happens. Just because something always *has* happened does not mean that it always *will* happen. For as long as the earth has existed, the sun has always risen in the east. Yet we know that one day the sun will run out of fuel and will no longer rise in the east. "Rising in the east" is, therefore, a contingent truth about the relative motion of the earth and sun; it is not a necessary truth. In other words, we can say that if something happens necessarily, then we know it will always happen. But we cannot reverse this proposition. We cannot say that if something always happens, then we know that it happens necessarily.

This distinction between contingent and necessary modes of existence allows us to sharpen our definition of accidents, properties, and essences. Both accidents and properties are *contingently* connected to the substances of which they are attributes. Only essences are *necessarily* connected to the substances of which they are attributes. It is a wholly *contingent* truth, for example, that all human beings are feather-less bipeds; but it is a *necessary* truth that all human beings are rational animals.

	Attribute	Frequency	Mode
Essential Nature	Rationality	Always	Necessary
Property	Featherless	Always	Contingent
Accident	Baldness	Sometimes	Contingent

DEFINITION OF HUMAN

Figure 4.1

4.3 LIMITS TO WHAT CAN BE DEFINED

According to Aristotelian realists, there are two different kinds of substances: those that exist independent of human action and those that only exist as the direct result of human creativity. Rocks, plants, and animals are all examples of natural substances (sometimes called "natural kinds") whose existence and attributes do not depend upon human action. Guns, snow boards, and grocery stores are examples of artificial substances which, though real, cannot existence independent of human action. Dinosaurs existed before any humans existed, but no gun existed prior to the existence of humans.

The distinction between natural substances and artificial substances introduces a corresponding distinction between real and nominal definitions.

A *real definition* defines a naturally existing substance in terms of its essential attributes. The goal of all real definitions, in Plato's evocative phrase, is to "divide nature at its joints"—that is, to separate and classify the parts of nature as they really exist. The discovery of real definitions is the first step to understanding the natural world and its causal relations. Until we know the essences of things we will never be able to understand how things causally interact. For example, if we do not know *what* a clear, odorless liquid is, then we cannot know whether it will quench our thirst or make us drunk.

A *nominal definition*, on the other hand, merely specifies the words we have *chosen* to attach to a humanly created thing—whether that "thing" is a substance, like a gun, an event, like a baseball game, or a cluster of things, like a baseball team. Nominal definitions never pretend to "divide nature at its joints" because it is not nature that is being *defined*. Instead, it is a human artifact or creation that is being *named*. The fundamental principle here is: you make it; you get to name (or "define") it. Since guns are something humans make, humans get to define the word as broadly or as narrowly as they choose. Of course, after a culture has agreed to the range of things called "guns," if an individual chooses to call a "slingshot" a gun because it, too, can kill people, he is perfectly free to do so. But he is not free to insist that everyone else use the word "gun" to include slingshots.

Heaps and clusters also lack a real definition. Though humans did not create Mount Everest or the Indian Ocean, these too cannot, strictly speaking, be defined; they can only be named. As we will see in the next section, failure to distinguish between real and nominal definitions leads to a serious misunderstanding of realist philosophy.

Individuals and existence itself are also indefinable. Both Fido and Fred can be considered either as members of a natural kind or as individuals. When we say that Fido is a dog or that Fred is a human being we are considering them as members of natural kinds. In doing so, we are also defining the essential natures of Fido and Fred. But when we consider an individual dog or person and *name* them "Fido" or "Fred" we are not defining their essential natures. The parents of Fred in some sense "created" him, and thus they get to name him anything they choose. And if a person chooses to raise a particular dog, then that person, too, earns the right to name the dog. The important point to remember here is that the process of *naming* an individual is fundamentally different from the process of *natural* kind. Names are entirely arbitrary; definitions of natural kinds are not arbitrary.

Specific qualities are also *named*, not defined. For example, humans have agreed to call a specific range on a color wheel red, but in doing so they are not defining the essential nature of red. In fact we cannot define specific qualities like red because there is no non-circular way to specify how *red* is different from other colors. Red and yellow are both colors, but it is not possible to specify the difference between red and yellow except by pointing to examples of things that are red and other things that

are yellow. It is an arbitrary and wholly contingent truth about different cultures that they attach different sounds and symbols to various ranges on the color spectrum.

While the use of *names* is arbitrary, real definitions are not arbitrary. Realists happily acknowledge that it is wholly arbitrary whether we use the word "silver" or "*argentums*" to refer to a particular naturally occurring element. But it is *not* an arbitrary human convention that silver (or *argentum*) melts at 5.336 times the temperature at which pure water boils. This ratio between the melting point of silver and the boiling point of water is a truth that we have *discovered* and is not just an arbitrary *convention* about the way we choose to use language.

Normally when we define a word we first locate it in a larger category of things (its genus) and then explain how it differs from other members of the larger category. For example, we define "hammer" as a tool designed to pound nails. Here, "tool" is the larger category (genus) and "designed to pound nails" explains how hammers are different from other kinds of tools. It is impossible to do this with *individuals* (be they people, dogs, or qualities) since as individuals they are a genus unto themselves. When we say (pointing to a particular person) "He is Fred" we are not categorizing something by putting it into a larger genus and then specifying how it differs from other things in that genus. We can know *what* a hammer is through a definition; we can only know *who* Fred is through experience.

A similar problem arises when we reach the most general category.⁷ Consider the following sequence (*figure 4.2*):

7. "There is a science that investigates being as being and the attributes that belong to this in virtue of its own nature. Now this is not the same as any of the so-called special sciences; for none of these others deal generally with being as being. They cut off a part of being and investigate the attributes of this part—this is what the mathematical sciences for instance do [i.e., they investigate that which can be quantified apart from all matter and the natural sciences investigates that which moves]. Now since we are seeking the first principles and the highest causes, clearly there must be some thing to which these belong in virtue of its own nature ... *Therefore it is of being as being that we also must grasp the first cause.*" Aristotle *Metaphysics* 4, I, 1003a22–31; emphasis added. It is the emphasized phrased which gives rise to the "cosmological conjecture" in chapter 10.3.

Fred Human Animal Plant Physical Thing Existence Figure 4.2

The four middle terms can each be defined in terms of their genus and specific difference. For example, "human are rational animals"; "animals are living beings capable of self locomotion and consciousness"; "living beings are physical organisms capable of reproduction"; "physical things are beings that exist in time and space." But at the far left hand side, no definition in terms of genus and specific difference is possible.⁸ True, we can say that "Fred is a human being." That gives us a genus, but there is no definition until we have a specific difference, i.e., how the term being defined *differs* from other members of the genus into which it is placed by the definition. Again, "Fred" names an individual and individuals can only be *described*; they cannot be defined.

At the far right hand side, an analogous problem arises. Existence can never be defined because there is no larger genus into which it falls. A person who has never seen a chiliagon can still know what it is. A simple definition will work—"It is a thousand-sided geometrical object." With such a definition a person knows all there is to know about chiliagons.

But with existence it is quite different. Existence must be experienced to be "understood." And in this last sentence, the scare quotes are deliberate and necessary. Since existence cannot be defined, we cannot have a *concept* of existence. This means that existence cannot be understood the way other things are understood, namely, in terms of their essential natures. Existence is not, Aristotelians insist, simply another category (genus) of things the way life, consciousness, and rationality are categories of different kinds of things. The reason is simple: the whole point of categorizing things is to distinguish them from other things. But once we reach, so to speak, the largest (i.e., most inclusive) category we can no longer make a distinction between it and something else. Existence is really more like a verb than a noun. Existence is not an attribute of a thing; instead it is what a thing *does*.

^{8. &}quot;The only thing that is defined in a proper sense is the species, since every definition is composed of a genus and a difference." Aquinas, *Commentary*, sec. 877; vol. 1, 341.

Furthermore, the "doing" that is existence is a unique activity. Trees do lots of things—they turn light and carbon dioxide into carbohydrates, they grow, their leaves change colors, etc. But as long as we are thinking about a real tree (not an imaginary tree) it is doing something even more fundamental—it is existing. Aristotle called this most fundamental kind of doing *actus*, or actuality. Josef Pieper (1904–1997), puts it like this:

Anyone who wishes to underline the difference between a real tree and an imaginary one can do no better than to repeat the same phrases: that the real tree exists, that it "actually is," that it is "something real." Existence cannot be defined ... says Thomas [Aquinas] in his commentary on Aristotle's *Metaphysics*. This means that at this point in our considerations—without the slightest exaggeration of the actual facts—our thinking has encountered the riddle of being, perhaps for the first time. Perhaps, to put it more sharply, our thinking meets the *mysterium* of being."⁹

We will say much more about the "mystery of existence" in succeeding chapters (especially chapter 10), but for now we sum up like this: definitions of things require both a specific difference and a genus. In the case of individual things or specific qualities no real definition is possible because it is impossible to provide a specific difference. In the case of existence itself, no real definition is possible because it has no genus. Real definitions provide knowledge about many things. But individuals and existence itself can only be known through direct experience.

4.4 RELATIVISTS' OBJECTIONS

Until history ends, there will be no end to human creativity. Since makers get to name what they make there are countless objects for which there are no real definitions, only nominal definitions. Relativists claim that what is true in these many cases is really true in *all* cases. According

9. Pieper, *Thomas Aquinas*, 136–37. The "mystery of Being" alludes to what Thomists call the "Transcendentals." "What has an essence, and a quiddity ["whatness"] by reason of that essence, and what is undivided in itself, are the same. Hence these three—thing, being, and unity—signify absolutely the same thing but according to different concepts." Aquinas, *Commentary*, sec. 553; vol. 1, 223. In addition to "thing or truth," "being," and "unity" there is a fourth transcendental, namely, "goodness." "Good and being are really the same ... But good presents the aspect of desirableness, which being does not present." Aquinas, *ST*, I 5.1.

to relativists, classification is *always* based on individual or cultural interests since there are no real essences.

The most common argument for relativism is based on the (alleged) infinite flexibility of conceptual schemes. The notion of a conceptual scheme gets its impetus from Immanuel Kant's (1724–1804) theory that the human mind has certain "built in" categories with which it organizes all experience. Kant argued that the division of things into substances and attributes was not something *discovered* in reality but was something that the categories of the mind *imposed* upon experience.¹⁰ Imagine that everyone was born with blue-colored contact lenses and that no one could see anything without them. In such a situation everyone would *think* everything is blue. We, of course, know better. Reality is not wholly blue. Only imaginary people who view everything through blue lenses think otherwise. But Kant believed that the categories of space, time, substance, and causation were like blue lenses. That is, he thought that these categories were *imposed upon* reality rather than categories the mind *abstracted from* reality.

Few philosophers today believe there is a *single* set of categories that *all* humans impose upon their experience.¹¹ But many claim that Kant's point—that it is impossible to see reality directly—is borne out because the sets of categories people use vary from culture to culture and these various linguistic categories constitute a culture's own "con-

10. Kant wrote: "Hitherto it has been assumed that all our knowledge must conform to objects. But all attempts to extend our knowledge of objects by establishing something in regard to them a priori, by means of concepts, have, on this assumption, ended in failure. We must therefore make trial whether we may not have more success in the tasks of metaphysics, if we suppose that object must conform to our knowledge." Kant, *Critique of Pure Reason*, 22.

Here are two contemporary philosophers' responses: According to Kant, "there is no knowledge of essences and causes of things-in-themselves; [instead there is] a mere ordering of data in accordance with a conceptual scheme which we ourselves impose and which carries with it no more than a pragmatic justification." Veatch, "Two Logics," 352. And, "For Kant the only things that are independent of the human mind are, in his words, '*Ding an sich*'—things in themselves that are intrinsically unknowable. This is tantamount to saying that the real is unknowable, and the knowable is ideal in the sense that it is invested with the ideas that our minds bring to it to make it what it is." Adler, *Ten Philosophical Mistakes*, 100.

11. The fact that Kant began with "mental categories" makes him a philosophical idealist as we discussed in chapter one. He was not, however, a relativist because he believed all people in all cultures shared the same mental categories. It was only later that relativists loosen the notion of "mental categories" so that they varied among individuals and cultures.

ceptual scheme." Relativists claim the only way we can understand our experiences is through some conceptual scheme *of our own making*.

To see how this might play out, imagine two different cultures. One is very "scientific" and the other is very "religious." The scientific culture distinguishes between animals in terms of their ability to interbreed, and ultimately in terms of their genetic make up. The religious culture, on the other hand, though it knows how animals mate, concerns itself primarily with animals' suitability for use in religious ceremonies. (In this imaginary culture, since it snows too infrequently, only snow-colored pelts can be worn while petitioning the spirits.) Since these cultures have different *interests*, they will also have different "conceptual schemes."

The scientific culture is going to distinguish between rabbits and foxes because of their inability to mate. The religious culture may implicitly realize that rabbits and foxes cannot mate. Yet they may have no word to distinguish between rabbits and foxes because for them what is important is whether their pelts are suitable for petitioning the snow gods. Therefore, they might have a term like "whiterox" and "darrox." A "whiterox" in this culture is the name for all animals with white pelts, i.e. white rabbits and albino foxes. A "darrox" is the name for all dark-pelt animals, i.e., dark rabbits and all non-albino foxes.

According to relativists, there are no "facts," either scientific or philosophical, that require rational people to divide the world up in any particular way.¹² See for example *figure 4.3*.

No matter what characteristics are represented by the letters X and Y, there will always be an alternative set of characteristics by which to divide that world that will be equally rational. Whether we chose to classify things as "X's" and "Y's" or as "Upper case" and "Lower case" is *solely up to us* according to relativists. All conceptual schemes are equally "rational."

Relativists tend to think of the cosmos as a huge piece of cookie dough just waiting to be cut into shapes such as trees or bells. But if trees or bells no longer suffice, the dough can be rolled up and new shapes cut out, even original ones that have no name. The cosmos, too, is in

12. Here is what a contemporary evolutionary biologist has to say about species relativism. "There is no more devastating refutation of the nomimalistic [i.e., relativistic] claims than the fact that primitive natives in New Guinea, with a Stone Age culture, recognize as species exactly the same entities of nature as western taxonomists. If species were something purely arbitrary, it would be totally improbable for representatives of two drastically different cultures to arrive at the identical species delimitations." Mayr, *Towards a New Philosophy of Biology*, 317.

World Divided into		World Divided by Upper	
X's and Y's		and Lower cases	
XXXX	Үууу	XXXXY	ууу
XXXX	уууу	XXXX	уууу
ХХХх	уууу	XXX	хуууу

Figure	4.3

a perpetual state of flux in which everything is gradually merging and morphing into something else. Nature comes with no real joints so humans are free¹³ to categorize "things" in any way they choose. Even the category of "things" is itself a human construct!

Realists, on the other hand, are quite willing to grant the cookie dough analogy for large sections of the cosmos. Objects for which there are only nominal definitions fit the analogy well. And the class of nominal definitions is very large. In fact, there may be only *four* real definitions in the entire cosmos, namely, humans, animals, plants, and the basic physical things out of which everything else is made. These can be defined in terms of genus and specific difference:

- *Physical things*: fundamental stuff with both quantitative and qualitative properties.
- *Plant*: Physical things that are alive.
- *Animal*: Physical things that are alive and capable of consciousness.
- *Human*: Physical things that are alive, capable of consciousness, and capable of using language conceptually.

Why are there so few linguistic categories of really distinct substances? Because there is strong evidence to suggest that Darwin was correct. If so, then the differences between animal species, e.g., between rabbits and foxes, are really only the differences between well marked varieties. Clearly, there is no real difference between Irish Setters and

13. Or "*condemned* to be free," in the language of existentialist philosopher Jean-Paul Sartre (1905–1980).

Dachshunds. These two breeds of dogs are "social constructs"; if humans allowed dogs to breed indiscriminately, soon these distinct breeds would disappear and all that would be left would be the mongrel mutt. If Darwin was correct (and only scientific investigation can answer this question), then all species are in some sense arbitrary divisions that humans draw between gradually merging and morphing slices of life here on earth.¹⁴

But having granted the fundamental correctness of Darwin's theory, realists argue that there are some (i.e., at least five) real joints in nature that are not created by humans. Fundamental potentiality, elements, plants, animals, and humans constitute distinct categories. Realists argue that these distinct categories are created by nature and/or God, and, hence, they are not covered by the principle of "you make it; you get to name it."¹⁵

4.5 CONCLUSION

So who's right about the nature of *truth*—the realists or the relativists? This is a big philosophical question and it cannot be answered yet. But we can be clear about the precise nature of the question and what is at stake.

The question hinges on the reality of essential natures—realists assert that they exist; relativists, on the other hand, deny the existence of essential nature. They assert that "truth"—*all* categorical propositions is relative to a "conceptual scheme" and that these schemes are essentially

14. Aristotle also understood the problems posed by borderline cases. "Nature proceeds little by little from things lifeless to animal life in such a way that it is impossible to determine the exact line of demarcation, nor on which side thereof an intermediate form should lie . . . In regard to sensibility, some animals give no indication whatsoever of it, while others indicate it but indistinctly. Further, the substance of some of these intermediate creatures is flesh-like [such as the sea anemones]; but the sponge is in every respect like a vegetable. And so throughout the entire animal scale there is a graduated differentiation in amount of vitality and in capacity for motion." *History of Animals*, 8.1 588b 4–22.

15. John Searle makes this point even stronger: "Many people find it repugnant that we, with our language, our consciousness, and our creative powers should be subject to and answerable to a dumb, stupid, inert material world. Why should we be answerable to the world? Why shouldn't we think of the 'real world' as something we create, and therefore something that is answerable to us? If all of reality is a 'social construction,' then it is we who are in power, not the world. The deep motivation for the denial of realism is not this or that argument, but a will to power, a desire for control, and a deep and abiding resentment." Searle, *Mind, Language and Society*, 32–33.

arbitrary, or at best, purely pragmatic. If, for example, an American says of his automobile that the engine is under the hood, what he says is true. And if an Englishman says of his automobile that the engine is under the bonnet, what he says is also true. Obviously, the "truth" about the location of cars' engines are relative to the "conceptual scheme" one is assuming.

Now with this sort of example, and countless others, relativists and realists are in complete agreement. There is no right or wrong answer to the question: Are car engines under the hood or the bonnet? Here the answer unequivocally depends on a person's conceptual scheme. Aristotelian realists make precisely the same point when they distinguish between real and nominal definitions. Since "hoods" and/or "bonnets" are human creations, that means that human's are free to name them as they please. In other words, when the question concerns the location of automobile engines we are *not* seeking to "divide nature at its joints." With such questions, there is no underlining reality (essential nature) with which our propositions could or could not correspond.

What is absolutely crucial is that we not create a straw man. This is the fallacy that arises whenever one side of a debate significantly misdescribes their opponents' position, knocks over the straw man, and then claims victory. Unfortunately, such fallacies are common when discussing the nature of truth. Since realism and relativism are in some sense "opposites" it is easy to reason like this:

- 1. Relativists say that *all* truth is relative to a conceptual scheme.
- 2. Relativism and realism are "opposite" theories.
- 3. Therefore, realist must say that *no* truth is relative to a conceptual scheme.

But this argument is fallacious. As we just saw in the preceding paragraph, Aristotelian realists happily acknowledge that the truth of many propositions, if not the vast majority, is "relative" to the nominal definitions (or "conceptual schemes") which are being assumed. It would be difficult, if not impossible, to name a single philosopher who has ever defended the conclusion in the above argument.

The confusion arises because the word "opposite" in the second premise is ambiguous. The language of logicians clearly distinguishes two different meanings of "opposite." Sometimes "opposite" means *con*-

trary. Other times it means *contradictory*. (The contrary of "All S is P" is "No S is P"; the *contradiction* of "All S is P" is "Some S is not P.") Realism and Relativism are *contradictory* theories; they are *not* the contraries. Relativists assert that "*All* truth is relative to one's conceptual scheme"; Realists assert that "*Some* truths are *not* relative to one's conceptual scheme." The only time when "truth" is not relative to a set of nominal definitions and/or conceptual schemes is when the terms being discussed have an essential nature. Then, and only then, do realist think that we both can and must "divide nature at its joints." And as we said at the end of section 4.3, today's realists today no longer assume that biological species are fixed and unchanging.¹⁶ The only *real* divisions in nature that they insist upon are among fundamental potentiality, elements, plants, animals, and humans.

If there are only *five* real definitions of terms, then that means the 99.9 percent of the words we ordinarily use have no real definition, and thus, in 99.9 percent of our arguments about "truth" the relativist is right. Why worry about the remaining 0.1 percent of disagreement?

Because the four cases where they disagree are of supreme significance. For example, when Hitler said that Jews, homosexuals, and gypsies were not truly human, realists insist that he was wrong—what makes someone a human being is not determined by one's "conceptual scheme"; instead, it is determined by nature and/or God. And this is only the most striking example. The existence or non-existence of essential natures has huge implications for how we think about human freedom, the nature of morality and the existence of God. But before considering these *really* big questions, we will address the slightly smaller questions in the next two chapters: 1) Do *any* essential natures exist, and 2) if they do, how can they be known?

16. Many times biologists and other scientists will refer to Aristotle's "essentialism" and then add that it has been thoroughly refuted by modern science. In one sense this is true; in another sense it is false. If essentialism means that each individual species has a fixed and unchangeable "essential nature," then it is true that Aristotle was an "essentialist." (Though it is worth adding that in this sense virtually everyone else prior to the twentieth century, including people like J. S. Mill who is generally considered thoroughly modern, progressive, and "scientific," were also essentialists.) It is also true that essentialism in this sense has been "refuted" by modern science for all the reasons discussed in chapter 3. However, if "essentialism" is the theory that there are *some* (probably as few as five) essential natures and that these essential natures are crucial to thinking well about our world, then it is far from obvious that *this* sense of "essentialism" has been refuted by modern science.