



Such a representation would emphasize that the two parts of each metaphor are linked only via an experiential basis and that it is only by means of these experiential bases that the metaphor can serve the purpose of understanding.

We will not use such representations, but only because we know so little about experiential bases of metaphors. We will continue to use the word "is" in stating metaphors like MORE IS UP, but the IS should be viewed as a shorthand for some set of experiences on which the metaphor is based and in terms of which we understand it.

The role of the experiential basis is important in understanding the workings of metaphors that do not fit together because they are based on different kinds of experience. Take, for example, a metaphor like UNKNOWN IS UP; KNOWN IS DOWN. Examples are "That's *up in the air*" and "The matter is *settled*." This metaphor has an experiential basis very much like that of UNDERSTANDING IS GRASPING, as in "I couldn't *grasp* his explanation." With physical objects, if you can grasp something and hold it in your hands, you can look it over carefully and get a reasonably good understanding of it. It's easier to grasp something and look at it carefully if it's on the ground in a fixed location than if it's floating through the air (like a leaf or a piece of paper). Thus UNKNOWN IS UP; KNOWN IS DOWN is coherent with UNDERSTANDING IS GRASPING.

But UNKNOWN IS UP is not coherent with metaphors like GOOD IS UP and FINISHED IS UP (as in "I'm finishing *up*"). One would expect FINISHED to be paired with KNOWN and UNFINISHED to be paired with UNKNOWN. But, so far as verticality metaphors are concerned, this is not the case. The reason is that UNKNOWN IS UP has a very different experiential basis than FINISHED IS UP.

feeling up" meant "I'm feeling happy," but "My spirits rose" meant "I became sadder.")

—There is an overall external systematicity among the various spatialization metaphors, which defines coherence among them. Thus, GOOD IS UP gives an UP orientation to general well-being, and this orientation is coherent with special cases like HAPPY IS UP, HEALTH IS UP, ALIVE IS UP, CONTROL IS UP. STATUS IS UP is coherent with CONTROL IS UP.

—Spatialization metaphors are rooted in physical and cultural experience; they are not randomly assigned. A metaphor can serve as a vehicle for understanding a concept only by virtue of its experiential basis. (Some of the complexities of the experiential basis of metaphor are discussed in the following section.)

—There are many possible physical and social bases for metaphor. Coherence within the overall system seems to be part of the reason why one is chosen and not another. For example, happiness also tends to correlate physically with a smile and a general feeling of expansiveness. This could in principle form the basis for a metaphor HAPPY IS WIDE; SAD IS NARROW. And in fact there are minor metaphorical expressions, like "I'm feeling expansive," that pick out a different aspect of happiness than "I'm feeling up" does. But the major metaphor in our culture is HAPPY IS UP; there is a reason why we speak of the height of ecstasy rather than the breadth of ecstasy. HAPPY IS UP is maximally coherent with GOOD IS UP, HEALTHY IS UP, etc.

—In some cases spatialization is so essential a part of a concept that it is difficult for us to imagine any alternative metaphor that might structure the concept. In our society "high status" is such a concept. Other cases, like happiness, are less clear. Is the concept of happiness independent of the HAPPY IS UP metaphor, or is the up-down spatialization of happiness a part of the concept? We believe that it is a part of the concept within a given conceptual system. The HAPPY IS UP metaphor places happiness within a coherent metaphorical system, and part of its meaning comes from its role in that system.

—So-called purely intellectual concepts, e.g., the concepts in a

scientific theory, are often—perhaps always—based on metaphors that have a physical and/or cultural basis. The *high* in "high-energy particles" is based on MORE IS UP. The *high* in "high-level functions," as in physiological psychology, is based on RATIONAL IS UP. The *low* in "low-level phonology" (which refers to detailed phonetic aspects of the sound systems of languages) is based on MUNDANE REALITY IS DOWN (as in "down to earth"). The intuitive appeal of a scientific theory has to do with how well its metaphors fit one's experience.

—Our physical and cultural experience provides many possible bases for spatialization metaphors. Which ones are chosen, and which ones are major, may vary from culture to culture.

—It is hard to distinguish the physical from the cultural basis of a metaphor, since the choice of one physical basis from among many possible ones has to do with cultural coherence.

Experiential Bases of Metaphors

We do not know very much about the experiential bases of metaphors. Because of our ignorance in this matter, we have described the metaphors separately, only later adding speculative notes on their possible experiential bases. We are adopting this practice out of ignorance, not out of principle. *In actuality we feel that no metaphor can ever be comprehended or even adequately represented independently of its experiential basis.* For example, MORE IS UP has a very different kind of experiential basis than HAPPY IS UP or RATIONAL IS UP. Though the concept UP is the same in all these metaphors, the experiences on which these UP metaphors are based are very different. It is not that there are many different UPS; rather, verticality enters our experience in many different ways and so gives rise to many different metaphors.

One way of emphasizing the inseparability of metaphors from their experiential bases would be to build the experiential basis into the representations themselves. Thus, instead of writing MORE IS UP and RATIONAL IS UP, we might have the more complex relationship shown in the diagram.

draft number is *high*. My income *rose* last year. The amount of artistic activity in this state has gone *down* in the past year. The number of errors he made is incredibly *low*. His income *fell* last year. He is *underage*. If you're too hot, turn the heat *down*.

Physical basis: If you add more of a substance or of physical objects to a container or pile, the level goes up.

FORESEEABLE FUTURE EVENTS ARE UP (and AHEAD)

All *up* coming events are listed in the paper. What's coming *up* this week? I'm afraid of what's *up ahead* of us. What's *up*?

Physical basis: Normally our eyes look in the direction in which we typically move (ahead, forward). As an object approaches a person (or the person approaches the object), the object appears larger. Since the ground is perceived as being fixed, the top of the object appears to be moving upward in the person's field of vision.

HIGH STATUS IS UP; LOW STATUS IS DOWN

He has a *lofty* position. She'll *rise* to the *top*. He's at the *peak* of his career. He's *climbing* the ladder. He has little *upward* mobility. He's at the *bottom* of the social hierarchy. She *fell* in status.

Social and physical basis: Status is correlated with (social) power and (physical) power is UP.

GOOD IS UP; BAD IS DOWN

Things are looking *up*. We hit a *peak* last year, but it's been *downhill* ever since. Things are at an all-time *low*. He does *high-quality* work.

Physical basis for personal well-being: Happiness, health, life, and control—the things that principally characterize what is good for a person—are all UP.

VIRTUE IS UP; DEPRAVITY IS DOWN

He is *high-minded*. She has *high* standards. She is *upright*. She is an *upstanding* citizen. That was a *low* trick. Don't be

underhanded. I wouldn't *stoop* to that. That would be *beneath* me. He *fell* into the *abyss* of depravity. That was a *low-down* thing to do.

Physical and social basis: GOOD IS UP for a person (physical basis), together with a metaphor that we will discuss below, SOCIETY IS A PERSON (in the version where you are *not* identifying with your society). To be virtuous is to act in accordance with the standards set by the society/person to maintain its well-being. VIRTUE IS UP because virtuous actions correlate with social well-being from the society/person's point of view. Since socially based metaphors are part of the culture, it's the society/person's point of view that counts.

RATIONAL IS UP; EMOTIONAL IS DOWN

The discussion *fell* to the *emotional* level, but I *raised* it back *up* to the *rational* plane. We put our *feelings* aside and had a *high-level intellectual* discussion of the matter. He couldn't *rise above* his *emotions*.

Physical and cultural basis: In our culture people view themselves as being in control over animals, plants, and their physical environment, and it is their unique ability to reason that places human beings above other animals and gives them this control. CONTROL IS UP thus provides a basis for MAN IS UP and therefore for RATIONAL IS UP.

Conclusions

On the basis of these examples, we suggest the following conclusions about the experiential grounding, the coherence, and the systematicity of metaphorical concepts:

- Most of our fundamental concepts are organized in terms of one or more spatialization metaphors.
- There is an internal systematicity to each spatialization metaphor. For example, HAPPY IS UP defines a coherent system rather than a number of isolated and random cases. (An example of an incoherent system would be one where, say, "I'm

Orientational Metaphors

So far we have examined what we will call *structural metaphors*, cases where one concept is metaphorically structured in terms of another. But there is another kind of metaphorical concept, one that does not structure one concept in terms of another but instead organizes a whole system of concepts with respect to one another. We will call these *orientational metaphors*, since most of them have to do with spatial orientation: up-down, in-out, front-back, on-off, deep-shallow, central-peripheral. These spatial orientations arise from the fact that we have bodies of the sort we have and that they function as they do in our physical environment. Orientational metaphors give a concept a spatial orientation; for example, HAPPY IS UP. The fact that the concept HAPPY is oriented UP leads to English expressions like 'I'm feeling *up* today.'

Such metaphorical orientations are not arbitrary. They have a basis in our physical and cultural experience. Though the polar oppositions up-down, in-out, etc., are physical in nature, the orientational metaphors based on them can vary from culture to culture. For example, in some cultures the future is in front of us, whereas in others it is in back. We will be looking at up-down spatialization metaphors, which have been studied intensively by William Nagy (1974), as an illustration. In each case, we will give a brief hint about how each metaphorical concept might have arisen from our physical and cultural experience. These accounts are meant to be suggestive and plausible, not definitive.

HAPPY IS UP; SAD IS DOWN

I'm feeling *up*. That *boosted* my spirits. My spirits *rose*. You're in *high* spirits. Thinking about her always gives me a *lift*. I'm feeling *down*. I'm *depressed*. He's really *low* these days. I *fell* into a depression. My spirits *sank*.

Physical basis: Drooping posture typically goes along with sadness and depression, erect posture with a positive emotional state.

CONSCIOUS IS UP; UNCONSCIOUS IS DOWN

Get *up*. Wake *up*. I'm *up* already. He *ris*es early in the morning. He *fell* asleep. He *dropped* off to sleep. He's *under* hypnosis. He *sank* into a coma.

Physical basis: Humans and most other mammals sleep lying down and stand up when they awaken.

HEALTH AND LIFE ARE UP; SICKNESS AND DEATH ARE DOWN

He's at the *peak* of health. Lazarus *rose* from the dead. He's in *top* shape. As to his health, he's way *up* there. He *fell* ill. He's *sinking* fast. He came *down* with the flu. His health is *declining*. He *dropped* dead.

Physical basis: Serious illness forces us to lie down physically. When you're dead, you are physically down.

HAVING CONTROL OF FORCE IS UP; BEING SUBJECT TO CONTROL OF FORCE IS DOWN

I have control *over* her. I am *on top* of the situation. He's in a *superior* position. He's at the *height* of his power. He's in the *high* command. He's in the *upper* echelon. His power *rose*. He ranks *above* me in strength. He is *under* my control. He *fell* from power. His power is on the *decline*. He is my social *inferior*. He is *low man* on the totem pole.

Physical basis: Physical size typically correlates with physical strength, and the victor in a fight is typically on top.

MORE IS UP; LESS IS DOWN

The number of books printed each year keeps going *up*. His

matter and where all the participants in the conversation understand the sentences in the same way. These two entailments are exemplified by sentences like

The meaning is *right there* in the words,

which, according to the CONDUIT metaphor, can correctly be said of any sentence. But there are many cases where context does matter. Here is a celebrated one recorded in actual conversation by Pamela Downing:

Please sit in the apple-juice seat.

In isolation this sentence has no meaning at all, since the expression "apple-juice seat" is not a conventional way of referring to any kind of object. But the sentence makes perfect sense in the context in which it was uttered. An overnight guest came down to breakfast. There were four place settings, three with orange juice and one with apple juice. It was clear what the apple-juice seat was. And even the next morning, when there was no apple juice, it was still clear which seat was the apple-juice seat.

In addition to sentences that have no meaning without context, there are cases where a single sentence will mean different things to different people. Consider:

We need new alternative sources of energy.

This means something very different to the president of Mobil Oil from what it means to the president of Friends of the Earth. The meaning is not right there in the sentence—it matters a lot who is saying or listening to the sentence and what his social and political attitudes are. The CONDUIT metaphor does not fit cases where context is required to determine whether the sentence has any meaning at all and, if so, what meaning it has.

These examples show that the metaphorical concepts we have looked at provide us with a partial understanding of what communication, argument, and time are and that, in doing this, they hide other aspects of these concepts. It is

important to see that the metaphorical structuring involved here is partial, not total. If it were total, one concept would actually *be* the other, not merely be understood in terms of it. For example, time isn't really money. If you *spend your time* trying to do something and it doesn't work, you can't get your time back. There are no time banks. I can *give you a lot of time*, but you can't give me back the same time, though you can *give me back the same amount of time*. And so on. Thus, part of a metaphorical concept does not and cannot fit.

On the other hand, metaphorical concepts can be extended beyond the range of ordinary literal ways of thinking and talking into the range of what is called figurative, poetic, colorful, or fanciful thought and language. Thus, if ideas are objects, we can *dress them up in fancy clothes*, *juggle them*, *line them up nice and neat*, etc. So when we say that a concept is structured by a metaphor, we mean that it is partially structured and that it can be extended in some ways but not others.

limitations of metaphors

Metaphorical Systematicity: Highlighting and Hiding

The very systematicity that allows us to comprehend one aspect of a concept in terms of another (e.g., comprehending an aspect of arguing in terms of battle) will necessarily hide other aspects of the concept. In allowing us to focus on one aspect of a concept (e.g., the battling aspects of arguing), a metaphorical concept can keep us from focusing on other aspects of the concept that are inconsistent with that metaphor. For example, in the midst of a heated argument, when we are intent on attacking our opponent's position and defending our own, we may lose sight of the cooperative aspects of arguing. Someone who is arguing with you can be viewed as giving you his time, a valuable commodity, in an effort at mutual understanding. But when we are preoccupied with the battle aspects, we often lose sight of the cooperative aspects.

A far more subtle case of how a metaphorical concept can hide an aspect of our experience can be seen in what Michael Reddy has called the "conduit metaphor." Reddy observes that our language about language is structured roughly by the following complex metaphor:

IDEAS (OF MEANINGS) ARE OBJECTS.
LINGUISTIC EXPRESSIONS ARE CONTAINERS.
COMMUNICATION IS SENDING.

The speaker puts ideas (objects) into words (containers) and sends them (along a conduit) to a hearer who takes the idea/object out of the word/containers. Reddy documents this with more than a hundred types of expressions in English, which he estimates account for at least 70 percent of

the expressions we use for talking about language. Here are some examples:

The CONDUIT Metaphor

It's hard to get that idea *across* to him.

I gave you that idea.

Your reasons *came through* to us.

It's difficult to *put* my ideas *into* words.

When you *have* a good idea, try to *capture* it immediately *in* words.

Try to *pack* more thought *into* fewer words.

You can't simply *stuff* ideas *into* a sentence any old way.

The meaning is right there *in* the words.

Don't *force* your meanings *into* the wrong words.

His words *carry* little meaning.

The introduction *has* a great deal of thought *content*.

Your words seem *hollow*.

The sentence is *without* meaning.

The idea is *buried* in terribly dense paragraphs.

In examples like these it is far more difficult to see that there is anything hidden by the metaphor or even to see that there is a metaphor here at all. This is so much the conventional way of thinking about language that it is sometimes hard to imagine that it might not fit reality. But if we look at what the CONDUIT metaphor entails, we can see some of the ways in which it masks aspects of the communicative process.

First, the LINGUISTIC EXPRESSIONS ARE CONTAINERS FOR MEANINGS aspect of the CONDUIT metaphor entails that words and sentences have meanings in themselves, independent of any context or speaker. The MEANINGS ARE OBJECTS part of the metaphor, for example, entails that meanings have an existence independent of people and contexts. The part of the metaphor that says LINGUISTIC EXPRESSIONS ARE CONTAINERS FOR MEANING entails that words (and sentences) have meanings, again independent of contexts and speakers. These metaphors are appropriate in many situations—those where context differences don't

I don't have the time to give you.
 How do you spend your time these days?
 That flat tire cost me an hour.
 I've invested a lot of time in her.
 I don't have enough time to spare for that.
 You're running out of time.
 You need to budget your time.
 Put aside some time for ping pong.
 Is that worth your while?
 Do you have much time left?
 He's living on borrowed time.
 You don't use your time profitably.
 I lost a lot of time when I got sick.
 Thank you for your time.

Time in our culture is a valuable commodity. It is a limited resource that we use to accomplish our goals. Because of the way that the concept of work has developed in modern Western culture, where work is typically associated with the time it takes and time is precisely quantified, it has become customary to pay people by the hour, week, or year. In our culture TIME IS MONEY in many ways: telephone message units, hourly wages, hotel room rates, yearly budgets, interest on loans, and paying your debt to society by "serving time." These practices are relatively new in the history of the human race, and by no means do they exist in all cultures. They have arisen in modern industrialized societies and structure our basic everyday activities in a very profound way. Corresponding to the fact that we act as if time is a valuable commodity—a limited resource, even money—we conceive of time that way. Thus we understand and experience time as the kind of thing that can be spent, wasted, budgeted, invested wisely or poorly, saved, or squandered.

TIME IS MONEY, TIME IS A LIMITED RESOURCE, and TIME IS A VALUABLE COMMODITY are all metaphorical concepts. They are metaphorical since we are using our everyday experiences with money, limited resources, and valuable

commodities to conceptualize time. This isn't a necessary way for human beings to conceptualize time; it is tied to our culture. There are cultures where time is none of these things.

The metaphorical concepts TIME IS MONEY, TIME IS A RESOURCE, and TIME IS A VALUABLE COMMODITY form a single system based on subcategorization, since in our society money is a limited resource and limited resources are valuable commodities. These subcategorization relationships characterize entailment relationships between the metaphors. TIME IS MONEY entails that TIME IS A LIMITED RESOURCE, which entails that TIME IS A VALUABLE COMMODITY.

We are adopting the practice of using the most specific metaphorical concept, in this case TIME IS MONEY, to characterize the entire system. Of the expressions listed under the TIME IS MONEY metaphor, some refer specifically to money (*spend, invest, budget, profitably, cost*), others to limited resources (*use, use up, have enough of, run out of*), and still others to valuable commodities (*have, give, lose, thank you for*). This is an example of the way in which metaphorical entailments can characterize a coherent system of metaphorical concepts and a corresponding coherent system of metaphorical expressions for those concepts.

The most important claim we have made so far is that metaphor is not just a matter of language, that is, of mere words. We shall argue that, on the contrary, human *thought processes* are largely metaphorical. This is what we mean when we say that the human conceptual system is metaphorically structured and defined. Metaphors as linguistic expressions are possible precisely because there are metaphors in a person's conceptual system. Therefore, whenever in this book we speak of metaphors, such as ARGUMENT IS WAR, it should be understood that *metaphor* means *metaphorical concept*.

Arguments usually follow patterns; that is, there are certain things we typically do and do not do in arguing. The fact that we in part conceptualize arguments in terms of battle systematically influences the shape arguments take and the way we talk about what we do in arguing. Because the metaphorical concept is systematic, the language we use to talk about that aspect of the concept is systematic.

We saw in the ARGUMENT IS WAR metaphor that expressions from the vocabulary of war, e.g., *attack a position*, *indefensible*, *strategy*, *new line of attack*, *win*, *gain ground*, etc., form a systematic way of talking about the battling aspects of arguing. It is no accident that these expressions mean what they mean when we use them to talk about arguments. A portion of the conceptual network of battle partially characterizes the concept of an argument, and the language follows suit. Since metaphorical expressions in our language are tied to metaphorical concepts in a systematic way, we can use metaphorical linguistic expressions to study the nature of metaphorical concepts and to gain an understanding of the metaphorical nature of our activities.

To get an idea of how metaphorical expressions in everyday language can give us insight into the metaphorical nature of the concepts that structure our everyday activities, let us consider the metaphorical concept TIME IS MONEY as it is reflected in contemporary English.

TIME IS MONEY

You're *wasting* my time.

This gadget will *save* you hours.

2

The Systematicity of Metaphorical Concepts

Primarily on the basis of linguistic evidence, we have found that most of our ordinary conceptual system is metaphorical in nature. And we have found a way to begin to identify in detail just what the metaphors are that structure how we perceive, how we think, and what we do.

To give some idea of what it could mean for a concept to be metaphorical and for such a concept to structure an everyday activity, let us start with the concept ARGUMENT and the conceptual metaphor ARGUMENT IS WAR. This metaphor is reflected in our everyday language by a wide variety of expressions:

ARGUMENT IS WAR

Your claims are *undefensible*.

He *attacked every weak point* in my argument.

His criticisms were *right on target*.

I *demolished* his argument.

I've never *won* an argument with him.

You disagree? Okay, *shoot!*

If you use that *strategy*, he'll *wipe you out*.

He *shot down* all of my arguments.

It is important to see that we don't just *talk* about arguments in terms of war. We can actually win or lose arguments. We see the person we are arguing with as an opponent. We attack his positions and we defend our own. We gain and lose ground. We plan and use strategies. If we find a position undefensible, we can abandon it and take a new line of attack. Many of the things we *do* in arguing are partially structured by the concept of war. Though there is no physical battle, there is a verbal battle, and the structure of an argument—attack, defense, counterattack, etc.—reflects this. It is in this sense that the ARGUMENT IS WAR metaphor is one that we live by in this culture; it structures the actions we perform in arguing.

Try to imagine a culture where arguments are not viewed in terms of war, where no one wins or loses, where there is no sense of attacking or defending, gaining or losing

ground. Imagine a culture where an argument is viewed as a dance, the participants are seen as performers, and the goal is to perform in a balanced and aesthetically pleasing way. In such a culture, people would view arguments differently, experience them differently, carry them out differently, and talk about them differently. But we would probably not view them as arguing at all: they would simply be doing something different. It would seem strange even to call what they were doing "arguing." Perhaps the most neutral way of describing this difference between their culture and ours would be to say that we have a discourse form structured in terms of battle and they have one structured in terms of dance.

This is an example of what it means for a metaphorical concept, namely, ARGUMENT IS WAR, to structure (at least in part) what we do and how we understand what we are doing when we argue. *The essence of metaphor is understanding and experiencing one kind of thing in terms of another.* It is not that arguments are a subspecies of war. Arguments and wars are different kinds of things—verbal discourse and armed conflict—and the actions performed are different kinds of actions. But ARGUMENT is partially structured, understood, performed, and talked about in terms of WAR. The concept is metaphorically structured, the activity is metaphorically structured, and, consequently, the language is metaphorically structured.

Moreover, this is the *ordinary* way of having an argument and talking about one. The normal way for us to talk about attacking a position is to use the words "attack a position." Our conventional ways of talking about arguments presuppose a metaphor we are hardly ever conscious of. The metaphor is not merely in the words we use—it is in our very concept of an argument. The language of argument is not poetic, fanciful, or rhetorical; it is literal. We talk about arguments that way because we conceive of them that way—and we act according to the way we conceive of things.

I

Concepts We Live By

Metaphor is for most people a device of the poetic imagination and the rhetorical flourish—a matter of extraordinary rather than ordinary language. Moreover, metaphor is typically viewed as characteristic of language alone, a matter of words rather than thought or action. For this reason, most people think they can get along perfectly well without metaphor. We have found, on the contrary, that metaphor is pervasive in everyday life, not just in language but in thought and action. Our ordinary conceptual system, in terms of which we both think and act, is fundamentally metaphorical in nature.

The concepts that govern our thought are not just matters of the intellect. They also govern our everyday functioning, down to the most mundane details. Our concepts structure what we perceive, how we get around in the world, and how we relate to other people. Our conceptual system thus plays a central role in defining our everyday realities. If we are right in suggesting that our conceptual system is largely metaphorical, then the way we think, what we experience, and what we do every day is very much a matter of metaphor.

But our conceptual system is not something we are normally aware of. In most of the little things we do every day, we simply think and act more or less automatically along certain lines. Just what these lines are is by no means obvious. One way to find out is by looking at language. Since communication is based on the same conceptual system that we use in thinking and acting, language is an important source of evidence for what that system is like.