METAPHORS We Live By

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For Andy and The Gherkin

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.

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 indefensible.
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 indefensible, 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 things.

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.

The Systematicity of Metaphorical Concepts

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 every-day 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. 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.

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/objects 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

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.

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 rises 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

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

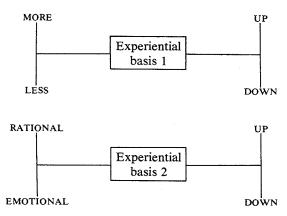
- feeling up" meant "I'm feeling happy," but "My spirits rose" meant "I became sadder.")
- —There is an overall external systematicity among the various spatialization metaphors, which defines coherence among them. Thus, GOOD IS UP gives an UP orientation to general well-being, and this orientation is 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 OF 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.



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.

XXUBAVW

It's up in the our -unknown is up up is good?

Metaphor and Cultural Coherence

Élevdepix Délévoque (Snew) to go Soul > to soul?

The most fundamental values in a culture will be coherent with the metaphorical structure of the most fundamental concepts in the culture. As an example, let us consider some cultural values in our society that are coherent with our UP-DOWN spatialization metaphors and whose opposites would not be.

"More is better" is coherent with MORE IS UP and GOOD IS UP.

"Less is better" is not coherent with them.

"Bigger is better" is coherent with MORE IS UP and GOOD IS UP.

"Smaller is better" is not coherent with them.

"The future will be better" is coherent with THE FUTURE IS UP and GOOD IS UP. "The future will be worse" is not.

"There will be more in the future" is coherent with MORE IS UP and THE FUTURE IS UP.

"Your status should be higher in the future" is coherent with HIGH STATUS IS UP and THE FUTURE IS UP.

These are values deeply embedded in our culture. "The future will be better" is a statement of the concept of progress. "There will be more in the future" has as special cases the accumulation of goods and wage inflation. "Your status should be higher in the future" is a statement of careerism. These are coherent with our present spatialization metaphors; their opposites would not be. So it seems that our values are not independent but must form a coherent system with the metaphorical concepts we live by. We are not claiming that all cultural values coherent with a

metaphorical system actually exist, only that those that do exist and are deeply entrenched are consistent with the metaphorical system.

The values listed above hold in our culture generally—all things being equal. But because things are usually not equal, there are often conflicts among these values and hence conflicts among the metaphors associated with them. To explain such conflicts among values (and their metaphors), we must find the different priorities given to these values and metaphors by the subculture that uses them. For instance, MORE IS UP seems always to have the highest priority since it has the clearest physical basis. The priority of MORE IS UP over GOOD IS UP can be seen in examples like "Inflation is rising" and "The crime rate is going up." Assuming that inflation and the crime rate are bad, these sentences mean what they do because MORE IS UP always has top priority.

In general, which values are given priority is partly a matter of the subculture one lives in and partly a matter of personal values. The various subcultures of a mainstream culture share basic values but give them different priorities. For example, BIGGER IS BETTER may be in conflict with THERE WILL BE MORE IN THE FUTURE when it comes to the question of whether to buy a big car now, with large time payments that will eat up future salary, or whether to buy a smaller, cheaper car. There are American subcultures where you buy the big car and don't worry about the future, and there are others where the future comes first and you buy the small car. There was a time (before inflation and the energy crisis) when owning a small car had a high status within the subculture where VIRTUE IS UP and SAVING RE-SOURCES IS VIRTUOUS took priority over BIGGER IS BETTER. Nowadays the number of small-car owners has gone up drastically because there is a large subculture where sav-ING MONEY IS BETTER has priority over BIGGER IS BETTER.

In addition to subcultures, there are groups whose defining characteristic is that they share certain important values

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that conflict with those of the mainstream culture. But in less obvious ways they preserve other mainstream values. Take monastic orders like the Trappists. There LESS IS BET-TER and SMALLER IS BETTER are true with respect to material possessions, which are viewed as hindering what is important, namely, serving God. The Trappists share the mainstream value VIRTUE IS UP, though they give it the highest priority and a very different definition. MORE is still BETTER, though it applies to virtue; and status is still UP, though it is not of this world but of a higher one, the Kingdom of God. Moreover, THE FUTURE WILL BE BETTER is true in terms of spiritual growth (UP) and, ultimately, salvation (really UP). This is typical of groups that are out of the mainstream culture. Virtue, goodness, and status may be radically redefined, but they are still UP. It is still better to have more of what is important, THE FUTURE WILL BE BETTER with respect to what is important, and so on. Relative to what is important for a monastic group, the value system is both internally coherent and, with respect to what is important for the group, coherent with the major orientational metaphors of the mainstream culture.

Individuals, like groups, vary in their priorities and in the ways they define what is good or virtuous to them. In this sense, they are subgroups of one. Relative to what is important for them, their individual value systems are coherent with the major orientational metaphors of the mainstream culture.

Not all cultures give the priorities we do to up-down orientation. There are cultures where balance or centrality plays a much more important role than it does in our culture. Or consider the nonspatial orientation active-passive. For us active is up and passive is down in most matters. But there are cultures where passivity is valued more than activity. In general the major orientations up-down, in-out, central-peripheral, active-passive, etc., seem to cut across all cultures, but which concepts are oriented which way and which orientations are most important vary from culture to culture.

Ontological Metaphors

Entity and Substance Metaphors

Spatial orientations like up-down, front-back, on-off, center-periphery, and near-far provide an extraordinarily rich basis for understanding concepts in orientational terms. But one can do only so much with orientation. Our experience of physical objects and substances provides a further basis for understanding—one that goes beyond mere orientation. Understanding our experiences in terms of objects and substances allows us to pick out parts of our experience and treat them as discrete entities or substances of a uniform kind. Once we can identify our experiences as entities or substances, we can refer to them, categorize them, group them, and quantify them—and, by this means, reason about them.

When things are not clearly discrete or bounded, we still categorize them as such, e.g., mountains, street corners, hedges, etc. Such ways of viewing physical phenomena are needed to satisfy certain purposes that we have: locating mountains, meeting at street corners, trimming hedges. Human purposes typically require us to impose artificial boundaries that make physical phenomena discrete just as we are: entities bounded by a surface.

Just as the basic experiences of human spatial orientations give rise to orientational metaphors, so our experiences with physical objects (especially our own bodies) provide the basis for an extraordinarily wide variety of ontological metaphors, that is, ways of viewing events, activities, emotions, ideas, etc., as entities and substances.

Ontological metaphors serve various purposes, and the

various kinds of metaphors there are reflect the kinds of purposes served. Take the experience of rising prices, which can be metaphorically viewed as an entity via the noun *inflation*. This gives us a way of referring to the experience:

INFLATION IS AN ENTITY

Inflation is lowering our standard of living.

If there's much more inflation, we'll never survive.

We need to combat inflation.

Inflation is backing us into a corner.

Inflation is taking its toll at the checkout counter and the gas pump.

Buying land is the best way of dealing with inflation.

Inflation makes me sick.

In these cases, viewing inflation as an entity allows us to refer to it, quantify it, identify a particular aspect of it, see it as a cause, act with respect to it, and perhaps even believe that we understand it. Ontological metaphors like this are necessary for even attempting to deal rationally with our experiences.

The range of ontological metaphors that we use for such purposes is enormous. The following list gives some idea of the kinds of purposes, along with representative examples of ontological metaphors that serve them.

Referring

My fear of insects is driving my wife crazy.

That was a beautiful catch.

We are working toward peace.

The middle class is a powerful silent force in American politics.

The honor of our country is at stake in this war.

Quantifying

It will take a lot of patience to finish this book.

There is so much hatred in the world.

DuPont has a lot of political power in Delaware.

You've got too much hostility in you.

Pete Rose has a lot of hustle and baseball know-how.

Identifying Aspects

The ugly side of his personality comes out under pressure.

The brutality of war dehumanizes us all.

I can't keep up with the pace of modern life.

His emotional health has deteriorated recently.

We never got to feel the thrill of victory in Vietnam.

Identifying Causes

The pressure of his responsibilities caused his breakdown.

He did it out of anger.

Our influence in the world has declined because of our lack of

moral fiber.

Internal dissension cost them the pennant.

Setting Goals and Motivating Actions

He went to New York to seek fame and fortune.

Here's what you have to do to insure financial security.

I'm changing my way of life so that I can find true happiness. The FBI will act quickly in the face of a threat to national se-

curity.

She saw getting married as the solution to her problems.

As in the case of orientational metaphors, most of these expressions are not noticed as being metaphorical. One reason for this is that ontological metaphors, like orientational metaphors, serve a very limited range of purposes—referring, quantifying, etc. Merely viewing a nonphysical thing as an entity or substance does not allow us to comprehend very much about it. But ontological metaphors may be further elaborated. Here are two examples of how the ontological metaphor THE MIND IS AN ENTITY is elaborated in our culture.

THE MIND IS A MACHINE

We're still trying to grind out the solution to this equation.

My mind just isn't operating today.

Boy, the wheels are turning now!

I'm a little rusty today.

We've been working on this problem all day and now we're running out of steam.

THE MIND IS A BRITTLE OBJECT

Her ego is very fragile.

You have to handle him with care since his wife's death.

He broke under cross-examination.

She is easily crushed.

The experience shattered him.

I'm going to pieces.

His mind snapped.

These metaphors specify different kinds of objects. They give us different metaphorical models for what the mind is and thereby allow us to focus on different aspects of mental experience. The MACHINE metaphor gives us a conception of the mind as having an on-off state, a level of efficiency, a productive capacity, an internal mechanism, a source of energy, and an operating condition. The BRITTLE OBJECT metaphor is not nearly as rich. It allows us to talk only about psychological strength. However, there is a range of mental experience that can be conceived of in terms of either metaphor. The examples we have in mind are these:

He broke down. (THE MIND IS A MACHINE) He cracked up. (THE MIND IS A BRITTLE OBJECT)

But these two metaphors do not focus on exactly the same aspect of mental experience. When a machine breaks down, it simply ceases to function. When a brittle object shatters, its pieces go flying, with possibly dangerous consequences. Thus, for example, when someone goes crazy and becomes wild or violent, it would be appropriate to say "He cracked up." On the other hand, if someone becomes lethargic and unable to function for psychological reasons, we would be more likely to say "He broke down."

Ontological metaphors like these are so natural and so pervasive in our thought that they are usually taken as selfevident, direct descriptions of mental phenomena. The fact that they are metaphorical never occurs to most of us. We take statements like "He cracked under pressure" as being directly true or false. This expression was in fact used by

various journalists to explain why Dan White brought his gun to the San Francisco City Hall and shot and killed Mayor George Moscone. Explanations of this sort seem perfectly natural to most of us. The reason is that metaphors like THE MIND IS A BRITTLE OBJECT are an integral part of the model of the mind that we have in this culture; it is the model most of us think and operate in terms of.

Container Metaphors

Land Areas

We are physical beings, bounded and set off from the rest of the world by the surface of our skins, and we experience the rest of the world as outside us. Each of us is a container, with a bounding surface and an in-out orientation. We project our own in-out orientation onto other physical objects that are bounded by surfaces. Thus we also view them as containers with an inside and an outside. Rooms and houses are obvious containers. Moving from room to room is interest moving from one container to another, that is, moving out of one room and into another. We even give solid objects Ev this orientation, as when we break a rock open to see what's inside it. We impose this orientation on our natural environment as well. A clearing in the woods is seen as having a bounding surface, and we can view ourselves as being in the clearing or out of the clearing, in the woods or out of the woods. A clearing in the woods has something we can perceive as a natural boundary—the fuzzy area where the trees more or less stop and the clearing more or less begins. But even where there is no natural physical boundary that can be viewed as defining a container, we impose boundaries-marking off territory so that it has an inside and a bounding surface—whether a wall, a fence, or an abstract line or plane. There are few human instincts more basic than territoriality. And such defining of a territory, putting a boundary around it, is an act of quantification.

Bounded objects, whether human beings, rocks, or land areas, have sizes. This allows them to be quantified in terms of the amount of substance they contain. Kansas, for example, is a bounded area—a CONTAINER—which is why we can say, "There's a lot of land in Kansas."

Substances can themselves be viewed as containers. Take a tub of water, for example. When you get into the tub, you get into the water. Both the tub and the water are viewed as containers, but of different sorts. The tub is a CONTAINER OBJECT, while the water is a CONTAINER SUBSTANCE.

The Visual Field

We conceptualize our visual field as a container and conceptualize what we see as being inside it. Even the term "visual field" suggests this. The metaphor is a natural one that emerges from the fact that, when you look at some territory (land, floor space, etc.), your field of vision defines a boundary of the territory, namely, the part that you can see. Given that a bounded physical space is a CONTAINER and that our field of vision correlates with that bounded physical space, the metaphorical concept VISUAL FIELDS ARE CONTAINERS emerges naturally. Thus we can say:

The ship is coming into view.

I have him in sight.

I can't see him—the tree is in the way.

He's out of sight now.

That's in the center of my field of vision.

There's nothing in sight.

I can't get all of the ships in sight at once.

Events, Actions, Activities, and States

We use ontological metaphors to comprehend events, actions, activities, and states. Events and actions are conceptualized metaphorically as objects, activities as substances, states as containers. A race, for example, is an event, which is viewed as a discrete entity. The race exists

in space and time, and it has well-defined boundaries. Hence we view it as a CONTAINER OBJECT, having in it participants (which are objects), events like the start and finish (which are metaphorical objects), and the activity of running (which is a metaphorical substance). Thus we can say of a race:

Are you in the race on Sunday? (race as CONTAINER OBJECT) Are you going to the race? (race as OBJECT)

Did you see the race? (race as OBJECT)

The finish of the race was really exciting. (finish as EVENT OBJECT within CONTAINER OBJECT)

There was a lot of good running in the race. (running as a SUBSTANCE in a CONTAINER)

I couldn't do much sprinting until the end. (sprinting as SUBSTANCE)

Halfway into the race, I ran out of energy. (race as con-TAINER OBJECT)

He's out of the race now. (race as CONTAINER OBJECT)

Activities in general are viewed metaphorically as SUB-STANCES and therefore as CONTAINERS:

In washing the window, I splashed water all over the floor. How did Jerry get out of washing the windows? Outside of washing the windows, what else did you do? How much window-washing did you do? How did you get into window-washing as a profession? He's immersed in washing the windows right now.

Thus, activities are viewed as containers for the actions and other activities that make them up. They are also viewed as containers for the energy and materials required for them and for their by-products, which may be viewed as *in* them or as *emerging from* them:

I put a lot of energy into washing the windows. I get a lot of satisfaction out of washing windows. There is a lot of satisfaction in washing windows.

Various kinds of states may also be conceptualized as containers. Thus we have examples like these:

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He's in love.

We're out of trouble now.

He's coming out of the coma.

I'm slowly getting into shape.

He entered a state of euphoria.

He fell into a depression.

He finally *emerged from* the catatonic state he had been *in* since the end of finals week.

Personification

Perhaps the most obvious ontological metaphors are those where the physical object is further specified as being a person. This allows us to comprehend a wide variety of experiences with nonhuman entities in terms of human motivations, characteristics, and activities. Here are some examples:

His theory explained to me the behavior of chickens raised in factories.

This fact argues against the standard theories.

Life has cheated me.

Inflation is eating up our profits.

His religion tells him that he cannot drink fine French wines.

The Michelson-Morley experiment gave birth to a new physical theory.

Cancer finally caught up with him.

In each of these cases we are seeing something nonhuman as human. But personification is not a single unified general process. Each personification differs in terms of the aspects of people that are picked out. Consider these examples.

Inflation has attacked the foundation of our economy.

Inflation has pinned us to the wall.

Our biggest enemy right now is inflation.

The dollar has been destroyed by inflation.

Inflation has robbed me of my savings.

Inflation has outwitted the best economic minds in the country.

Inflation has given birth to a money-minded generation.

Here inflation is personified, but the metaphor is not