# Is an Other

The Secret Life of Metaphor and How It Shapes the Way We See the World

JAMES GEARY

#### HARPER PERENNIAL

A hardcover edition of this book was published in 2011 by HarperCollins Publishers.

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FIRST HARPER PERENNIAL EDITION PUBLISHED 2012.

Designed by Cassandra J. Pappas

Library of Congress Cataloging-in-Publication Data is available upon request.

ISBN 978-0-06-171029-2 (pbk.)

17 18 19 20 OV/RRD 20 19 18 17 16 15 14 13 12

#### Contents

Foreword WHY I IS AN OTHER	1
Metaphor and Thought ALL SHOOK UP	5
Metaphor and Etymology LANGUAGE IS FOSSIL POETRY	17
Metaphor and Money HOW HIGH CAN A DEAD CAT BOUNCE?	29
Metaphor and the Mind IMAGINING AN APPLE IN SOMEONE'S EYE	44
Metaphor and Advertising IMAGINARY GARDENS WITH REAL TOADS IN THEM	58
Metaphor and the Brain	76

# viii Contents

	94
Metaphor and the Body ANGER IS A HEATED FLUID IN A CONTAINER	112
Metaphor and Politics FREEDOM FRIES AND LIBERTY CABBAGE	
Metaphor and Pleasure EXPERIENCE IS A COMB THAT NATURE GIVES TO BALD MEN	137
Metaphor and Children HOW SHOULD ONE REFER TO THE SKY?	152
Metaphor and Science THE EARTH IS LIKE A RICE PUDDING	167
Metaphor and Parables and Proverbs MIGHTY DARN GOOD LIES	179
Metaphor and Innovation MAKE IT STRANGE	197
Metaphor and Psychology A LITTLE SPLASH OF COLOR FROM MY MOTHER	208
Backword THE LOGIC OF METAPHOR	223
Acknowledgments	227
Notes	229
Bibliography	259
Index	291

Reality is a cliché from which we escape by metaphor.

—WALLACE STEVENS

stream of consciousness. The waves rippling out from that impact are only just beginning to reach us.

Édouard Claparède, a Swiss neurologist and early investigator of memory who died in 1940, studied individuals with brain lesions and other neurological damage that affected their abilities to create new memories and recall old ones. One of his patients was a woman who had no short-term memory whatsoever. She had perfect recollection of the more distant past, including her childhood, but the recent past was a total blank. Unable to form any new memories, this woman saw Claparède every day at his clinic yet had no recollection of ever meeting him. Each time they met, it was as if for the very first time.

Claparède wanted to test whether some part of this woman's brain did indeed remember him. So one day he concealed a pin in his hand and, when the woman arrived for her next session, he shook her hand. The woman cried out in pain and withdrew her hand.

The following day, the woman arrived as usual for her appointment and, as usual, professed that she had never seen Claparède before. But when Claparède proffered his hand to shake, she hesitated, fearing another jab. The experiment proved that, on some unconscious level, the woman recalled the physical pain associated with Claparède's handshake. Therefore, Claparède concluded, some vestige of her short-term memory was still at work.

Like Claparède's handshake, metaphor slips a pin into the quotidian. By mixing the foreign with the familiar, the marvelous with the mundane, metaphor makes the world sting and tingle. Though we encounter metaphor every day, we typically fail to recognize it. Its influence is profound but takes place mostly outside our conscious awareness. Yet once metaphor has us in its grasp, it never lets us go, and we can never forget it.

## Metaphor and Thought

#### ALL SHOOK UP

etaphor lives a secret life all around us. We utter about one metaphor for every ten to twenty-five words, or about six metaphors a minute.

Sound like a lot? Too many, perhaps? A quick look at some representative language samples shows just how popular metaphor is. Take this Australian weather forecast, for instance (the metaphors are in italics):

Perth is in the grip of a heat wave with temperatures set to soar to 40 degrees Celsius by the end of the week. Australia is no stranger to extreme weather. Melbourne was pummelled with hailstones the size of golf balls on Saturday. Long term, droughts, bushfires, and floods have all plagued large swathes of Queensland, New South Wales and Victoria.

That's five metaphors in an excerpt of fifty-eight words, or about one metaphorical phrase for every eleven words. These

are all classic metaphors, too, in which one thing is described in terms of another: hailstones are described in terms of golf balls; extreme weather conditions are described in terms of biblical plagues.

Still, maybe we innately resort to metaphor when talking about meteorology. Would the metaphor-per-words ratio still hold for a presumably more exact science, like economics? Here are the headline and first line from a by no means atypical story about the economy, in this case Great Britain's:

#### RISKS TO U.K. RECOVERY LURK BEHIND CLOUDY OUTLOOK

Britain's recovery from the worst recession in decades is gaining traction but confused economic data and the high risk of a hung parliament could yet snuff out its momentum.

Six metaphors in thirty-seven words, or roughly one for every six words. Again, these metaphors describe one thing in terms of another: economic data is described in terms of confusion, a psychological state usually associated with the people who interpret the data rather than the data itself; economic growth prospects are described in terms of overcast skies.

These are both relatively trivial examples, however. We may well wax metaphorical when talking about the little stuff but surely we get seriously literal when talking about the big stuff. But that's not true, either. Here are the first line of Abraham Lincoln's Gettysburg Address and the fourth paragraph of Barack Obama's inaugural address (again, the metaphors are in italics):

Four score and seven years ago, our fathers brought forth, upon this continent, a new nation, conceived in liberty, and dedicated to the proposition that "all men are created equal."

The words [of the presidential oath] have been spoken during rising tides of prosperity and the still waters of peace. Yet, every so often the oath is taken amidst gathering clouds and raging storms. At these moments, America has carried on not simply because of the skill or vision of those in high office, but because We the People have remained faithful to the ideals of our forebears, and true to our founding documents.

There are two main metaphors in Lincoln's opening line of thirty words (one metaphor for every fifteen words), both of which describe America in terms of conception and birth. Indeed, Lincoln's entire speech, which is only 243 words in length, is a single extended metaphor about how individuals and nations are conceived, born, fight, and die.

There are seventy-four words and four main metaphors in the fourth paragraph of Obama's speech (one metaphor for every eighteen or so words). He describes prosperity in terms of tides, peace in terms of becalmed water, and political trouble in terms of adverse meteorological events. Maybe there is something inherently metaphorical about the weather, after all . . .

If you're still skeptical about metaphor's ubiquity, just listen carefully the next time you or anyone else opens their mouth. You'll find yourself in the middle of a metaphorical blizzard.

To demonstrate this, I cite one of our greatest philosophers, the reigning king of the metaphorians, a man whose contributions to the field are so great that he himself has become a metaphor. I am, of course, referring to none other than . . . Elvis Presley:

She touched my hand, what a chill I got. Her lips are like a volcano that's hot. I'm proud to say that she's my buttercup. I'm in love; I'm all shook up.

"All Shook Up" is a great love song. It is also a great example of how. whenever we describe anything abstract—ideas, feelings, thoughts. emotions, concepts—we instinctively resort to metaphor. In "All Shook Up," a touch is not a touch, but a chill; lips are not lips, but volcanoes (technically, any formulation involving the word "like" is a simile—as in, "Her lips are like a volcano that's hot"—but a simile is just a metaphor with the scaffolding still up); she is not she, but a buttercup; and love is not love, but the state or condition of being all shook up.

In describing love this way, Elvis follows Aristotle's classic definition of metaphor as the process of "giving the thing a name that belongs to something else." This is the mathematics of metaphor, the simplest equation of which can be written like this:

X = Y.

This formula works wherever metaphor is present. Elvis uses it in "All Shook Up":

lips = volcano.

Rimbaud uses it in his metaphor manifesto:

I = other.

And Shakespeare uses it in his famous line from Romeo and Juliet: "Juliet is the sun." In the mathematics of Aristotle's poetics, the line is written:

Iuliet = sun.

Here, Shakespeare gives the thing (Juliet) a name that belongs to something else (the sun). This is a textbook example of metaphor. Indeed, this line turns up in almost every academic treatment of the subject. In literary parlance, the "thing" is called the metaphor's "target" and the "something else" from which it takes a name is called its "source."

The terminology fits well with the etymology of the word "metaphor" itself. Derived from the Greek roots meta (over, across, or beyond) and phor (to carry), the literal meaning of metaphor is "to carry across." A metaphor carries across a name from the source to the target. Rhetoricians throughout history have recognized metaphors as linguistic hand-me-downs, meanings passed on from an old word to a new thing. In De Oratore, Cicero observed:

When something that can scarcely be conveyed by the proper term is expressed metaphorically, the meaning we desire to convey is made clear by the resemblance of the thing that we have expressed by the word that does not belong. Consequently, the metaphors in which you take what you have got from somewhere else are a sort of borrowing.

In his treatise on rhetoric, The Mysteries of Eloquence, Abdalqahir Al-Jurjani also described metaphor as a sort of borrowing. In fact, the Arabic word for metaphor is isti'ara, or "loan."

But when we lend a thing a name that belongs to something else, we lend it a complex pattern of relations and associations, too. We mix and match what we know about the metaphor's source (in Shakespeare's case, the sun) with what we know about its target (Juliet). A metaphor juxtaposes two different things and then skews our point of view so unexpected similarities emerge. Metaphorical thinking half discovers and half invents the likenesses it describes.

The "Juliet is the sun" metaphor allows us to understand Juliet much more vividly than if Shakespeare had taken a more literal approach, such as "But, soft! What light through yonder window breaks? It is Juliet, applying her luminous restorative night cream."

Metaphor is, however, much more than a mere literary device employed by love-struck poets when they refer to their girlfriends as interstellar masses of incandescent gas. Metaphor is intensely yet inconspicuously present in everything from ordinary conversation and commercial messaging to news reports and political speeches. Metaphor is always breathing down our necks.

Look no further than the common expressions we use every day to convey our feelings. Whether you're down in the dumps or riding high, on the straight and narrow or at a crossroads, cool as a cucumber or hot under the collar, you are fulfilling the classic Aristotelian definition of metaphor by giving the thing (your emotional state) a name that belongs to something else (waste storage facilities, wellpaved thoroughfares, refrigerated vegetables).

Even the simplest, most unassuming words are capable of a bewildering variety of metaphorical mutations. Take "shoulder," for instance. You can give someone the cold shoulder or a shoulder to cry on. You can have a chip on your shoulder or be constantly looking over your shoulder. You can stand on the shoulders of giants, stand shoulder to shoulder with your friends, or stand head and shoulders above the rest. Wherever you turn, you can't help but rub shoulders with one of the word's multitude of metaphorical meanings.

Metaphor is present in proverbs (A bird in the hand is worth two in the bush, Let sleeping dogs lie), in idioms (shoot the breeze, kick the bucket), in compound phrases (forbidden fruit, red herring), and in formulaic expressions (in the zone, the last straw).

Ordinary conversation is so rife with figurative phrases because metaphor is about more than just words. We think metaphorically. Metaphorical thinking is the way we make sense of the world, and every individual metaphor is a specific instance of this imaginative

process at work. Metaphors are therefore not confined to spoken or written language.

Visual metaphors abound in advertisements and other types of popular imagery, such as the lightbulb that appears above someone's head to signify a bright idea. But metaphors are not merely symbolic; they have implications for—and impacts on—the "real" world. In one study, for instance, participants exposed to a bare illuminated lightbulb performed better at spatial, verbal, and mathematical problem solving than those exposed to shaded lightbulbs or fluorescent lighting. Brightness, it seems, facilitates insight.

A common metaphorical gesture is the "thumbs-up" sign, in which we indicate our state of general well-being by closing the fist and extending the thumb upward at a 90-degree angle. Visual metaphors like these also follow Aristotle's definition. The only difference is that the thing is given an image or a gesture rather than a name that belongs to something else.

Metaphor is so essential that it is impossible to describe emotions, abstract concepts, complex ideas, or practically anything else without it, as art historian and connoisseur of metaphor Nelson Goodman wrote in Languages of Art:

Metaphor permeates all discourse, ordinary and special, and we should have a hard time finding a purely literal paragraph anywhere. This incessant use of metaphor springs not merely from love of literary color but also from urgent need of economy. If we could not readily transfer schemata to make new sortings and orderings, we should have to burden ourselves with unmanageably many different schemata, either by adoption of a vast vocabulary of elementary terms or by prodigious elaboration of composite ones.

Shakespeare's description of Juliet is a marvel of metaphorical economy. On the surface, Juliet is nothing like the sun. for her-in just four simple words.

After hundreds of years of constant use, this comparison has become something of a cliché. But the metaphorical thinking that enabled the equation to be made in the first place is the essence of creativity in the sciences as well as the arts. Whenever we solve a problem, make a discovery, or devise an innovation, the same kind of metaphorical thinking takes place.

Scientists and inventors compare two things: what they know and what they don't know. The only way to find out about the latter is to investigate the ways it might be like the former. And whenever we explore how one thing is like another, we are in the realm of metaphorical thinking, as in this comparison, another academic staple, from Scottish poet Robert Burns:

My love is like a red, red rose.

By drawing our attention to the similarities between the object of his affections and a perennial flowering shrub of the Rosaceae family, Burns exquisitely-and economically-tells us about the unknown (his love) by comparing it with the known (a red, red rose). We can therefore be reasonably sure that the beauty of Burns's beloved is flush and full (and fleeting), her perfume is sweet, and she can be very prickly. And we know all this without ever having laid eyes on her.

The paradox of metaphor is that it tells us so much about a person, place, or thing by telling us what that person, place, or thing is not. Understanding a metaphor (like reading a book about that process, in fact) is a seemingly random walk through a deep, dark forest of associations. The path is full of unexpected twists and turns, veering wildly off into the underbrush one minute and abruptly disappearing down a rabbit hole the next. Signposts spin like weather vanes. You can't see the wood for the trees. Then, suddenly, somehow, you step into the clearing. A metaphor is both detour and destination, a digression that gets to the point.

Aristotle identified the mastery of metaphorical thinking as "a sign of genius, since a good metaphor implies an intuitive perception of the similarity in dissimilars." French mathematician Henri Poincaré found an ingenious metaphor for metaphorical thinking in the theories of one of Aristotle's predecessors, Epicurus.

According to the Greeks, the world was made up of just two basic things: atoms and the void. "Atoms are unlimited in size and number," wrote Democritus, the fourth-century B.C.E. philosopher who formulated ancient Greece's version of atomic theory, "and they are borne along in the whole universe in a vortex, and thereby generate all composite things-fire, water, air, earth; for even these are conglomerations of given atoms."

To the Greeks, the physical universe was, quite literally, an atomic shower, a steady downpour of tiny, indivisible particles falling through empty space. All the objects in the world—all the things we see, hear, smell, touch, and taste-were made up of atoms combining and recombining in every conceivable way.

In some of the wilder expositions of the theory, thinkers imagined a distant time when the body parts of every living thing tumbled through the void. The early universe was a cascade of arms and legs, feet and paws, fins and wings, hands and claws. Every limb connected randomly with every other until it met its corresponding shape and clicked into place. Through this process of trial and error, the world as we know it was made.

But Epicurus, who was born around 341 B.C.E., spotted a flaw in

the theory. In order to meet its match, an atom could not simply fall through the void like rain. It must veer from the vertical path and waft its way down like a feather. Otherwise, he reasoned, it would never bump into any other atoms and thus never form the conglomerations Democritus described.

So Epicurus came up with the clinamen—the unpredictable moment during which each atom deviates from its course, creating the opportunity for a chance encounter with another atom. It was only through these "clinamactic" collisions, Epicurus believed. that change, surprise, and variety entered the world.

Like most ancient Greek philosophers, Epicurus left behind verv few of his own words and even less about his own life. We know about the clinamen largely thanks to the first-century C.E. Roman poet Lucretius, whose epic poem On the Nature of the Universe is an encyclopedic exposition of Epicurean philosophy.

Not much is known about Lucretius, either, except that, according to Saint Jerome, he was driven insane by a love potion and killed himself at the age of forty-four. Whether his love resembled the sun, a red, red rose, or something else entirely, we do not know.

Still, for a love-crazed, suicidal poet, Lucretius summed up Epicurus's ideas quite lucidly. Without the clinamen, he wrote, "No collision would take place and no impact of atom upon atom would be created. Thus nature would never have created anything." Some 2,000 years after the composition of Lucretius's poem, Poincaré used Epicurean atomic theory to explain the nature of mathematical discovery and, by extension, the nature of metaphorical thinking.

Born in Nancy, France, in 1854, Poincaré was a cross between a dandy and a distracted professor. He was "short and plump, carried an enormous head set off by a thick spade beard and splendid moustache, was myopic, stooped, distraught in speech, absentminded and wore pince-nez glasses attached to a black silk ribbon." He was also intensely interested in the sources of creativity.

In The Foundations of Science, Poincaré set out his general theory of ingenuity. Based on his own experience as well as his interrogations of other mathematicians, Poincaré concluded that great creative breakthroughs occur unexpectedly and unconsciously after an extended period of hard, conscious labor. He invoked an Epicurean analogy to explain this. Poincaré described ideas as being like Epicurus's atoms, writing:

During the complete repose of the mind, these atoms are motionless; they are, so to speak, hooked to the wall . . . During a period of apparent rest and unconscious work, certain of them are detached from the wall and put in motion. They flash in every direction through the space . . . as would, for example, a swarm of gnats . . . Their mutual impacts may produce new combinations. What is the role of the preliminary conscious work? It is evidently to mobilize certain of these atoms, to unhook them from the wall and put them in swing. After this shaking-up imposed upon them by our will, these atoms do not return to their primitive rest. They freely continue their dance.

Poincaré's atomic two-step is a deft analogy for how mathematical creativity-indeed, all creativity-lies in the dance of metaphorical thought, the tumultuous tango that ensues when idea rubs up against idea, when thought grapples with thought.

Metaphor is the mind's great swerve. Creativity don't mean a thing if it ain't got that clinamactic swing.

This same idea is contained in the three most famous words in all of Western philosophy, Descartes's "Cogito ergo sum." This phrase is routinely translated as:

I think, therefore I am.

But there is a better translation.

The Latin word cogito is derived from the prefix co (with or together) and the verb agitare (to shake). Agitare is the root of the English words "agitate" and "agitation." Thus, the original meaning of cogito is "to shake together," and the proper translation of "Cogito ergo sum" is:

I shake things up, therefore I am.

Metaphor shakes things up, producing everything from Shakespeare to scientific insight in the process.

The mind is a plastic snow dome: most beautiful, most interesting, and most itself when, as Elvis put it, it's all shook up. And metaphor keeps the mind shaking, rattling, and rolling long after Elvis has left the building.

# Metaphor and Etymology

### LANGUAGE IS FOSSIL POETRY

hen Elvis appeared on The Ed Sullivan Show for the first time, on September 9, 1956, his pelvic undulations on other programs had already unsettled television executives and nervous parents across the country. Elvis performed two sets that night. For the first, the camera remained fixed above his waist. For the second, it pulled back far enough for the world to see the gyrations that earned him the moniker, Elvis the Pelvis. The uproar occasioned by Elvis's early TV appearances is not unlike that which has periodically attended metaphor. Elvis was condemned for promoting immorality and licentiousness; metaphor has been condemned for promoting deception and subversion.

Historically, metaphor has often been considered a devious use of language, an imprecise and vaguely suspicious linguistic trick employed chiefly by charlatans, faith healers, snake oil salesmen, and poets. Many philosophers regarded metaphorical language as at best a harmless diversion and at worst a deliberate and

potentially dangerous obfuscation. As a result, not many serious thinkers took metaphor at all seriously.

In Leviathan, Thomas Hobbes classified metaphor as one of the "abuses of speech" and accused people of lying when they "use words metaphorically; that is, in other sense than that they are ordained for; and thereby deceive others . . . Reasoning upon [metaphor] is wandering amongst innumerable absurdities; and their end, contention and sedition, or contempt."

The Anglo-Irish philosopher George Berkeley advocated going cold turkey to protect against the errors of metaphorical thinking. "A philosopher should abstain from metaphor," he urged.

In An Essay Concerning Human Understanding, John Locke was equally unsympathetic:

If we would speak of things as they are, we must allow that all the art of rhetoric, besides order and clearness; all the artificial and figurative application of words eloquence hath invented, are for nothing else but to insinuate wrong ideas, move the passions, and thereby mislead the judgement; and so indeed are perfect cheats.

As Hobbes, Berkeley, and Locke plunged the dagger of reason into metaphor's cheating heart, they were presumably unaware that the weapon they wielded was, in fact, metaphor itself.

Hobbes, in his brief denunciation, repeatedly abuses speech by using words in senses other than that for which they were ordained. The meaning of the word "ordain," for example, comes from roots that mean "to set in order," not "to designate," "to decree," or even "to admit to the Christian ministry." Similarly, "deceive" literally meant "to catch or ensnare" before it meant "to make a person believe what is not true."

And can we really construe the phrase "wandering amongst innumerable absurdities" as anything other than a seditious, contemptible deployment of figurative language when perfectly rational language would do? After all, how can one wander amongst absurdities? The idea itself is absurd.

Berkeley shamelessly indulged in metaphor by using the word "abstain," which is derived from the Latin verb tenere (to hold) and literally refers to anything untenable, anything that cannot be held—such as a mistaken opinion about metaphor.

Even Locke's seemingly innocuous choice of "insinuate" harbors a hidden metaphor. The word comes from the Latin sinus, meaning "a bay, gulf, or cove"; only much later was it used to describe the introduction of a thought or a thing through a winding, circuitous route, as seafaring smugglers shift contraband by hugging the shore.

Metaphor got up so many philosophical noses because it seemed so imprecise. Comparing your beloved to a red, red rose might be fine if you're writing a poem, but these thinkers believed more exact language was needed to express the "truth"—a term, by the way, distilled from Icelandic, Swedish, Anglo-Saxon, and other non-English words meaning "believed" rather than "certain."

The truth is, metaphor is astonishingly precise. Nothing is as exact as an apt metaphor. Even the most mundane metaphors contain finely detailed descriptions, hidden deposits of knowledge that a quick dig into a word's etymology will turn up.

Open a dictionary at random; metaphors fill every page. Take the word "fathom," for example. The meaning is clear. A fathom is a measurement of water depth, equivalent to about six feet. But fathom also means "to understand." Why?

Scrabble around in the word's etymological roots. "Fathom" comes from the Anglo-Saxon fæthm, meaning "the two arms outstretched." The term was originally used as a measurement of cloth, because the distance from fingertip to fingertip for the average man with his arms outstretched is roughly six feet. This technique was later extended to sounding the depths of bodies of water, since it was easy to lower a cord divided into six-foot increments, or fathoms, over the side of a boat. But how did fathom come to mean "to understand," as in "I can't fathom that" or "She's unfathomable"? Metaphorically, of course.

You master something—you learn to control or accept it—when you embrace it, when you get your arms around it, when you take it in hand. You comprehend something when you grasp it, take its measure, get to the bottom of it-fathom it.

Fathom took on its present significance in classic Aristotelian fashion: through the metaphorical transfer of its original meaning (a measurement of cloth or water) to an abstract concept (understanding). This is the primary purpose of metaphor: to carry over existing names or descriptions to things that are either so new that they haven't yet been named or so abstract that they cannot be otherwise explained.

This ferrying back and forth happens all the time. What accounts for the amazing acceleration of a sports car? Horsepower. What happens to an economy when growth falls and unemployment rises? A depression. What do you see when you switch on a computer? A desktop. These are all metaphors, names taken from one thing and applied to a completely different thing because someone somewhere once noticed a resemblance.

The English literary critic, philosopher, and evangelical etymologist Owen Barfield picked up Aristotle's definitive insight when he wrote in History in English Words:

When a new thing or a new idea comes into the consciousness of the community, it is described, not by a new word, but by the name of the pre-existing object which most closely resembles it.

Look at and listen to the language around you and you will discover a moveable feast of metaphor. Let me run this idea by you; ideas do not have legs (neither do tables or chairs, by the way) but "run" is used metaphorically to request a brisk consideration of a proposal. Similarly, combs do not have teeth; books do not have spines; and mountains do not have feet.1

The markets are jittery today; markets don't get the jitters, investors do, but the phrase metaphorically expresses the reigning uncertainty.

I see what you mean; you "see" absolutely nothing when you say this, but you do convey quite clearly that you understand what someone else is saying.

Etymologies make perfect poetic sense. The word "emotion," for example, comes from the Latin verb "to move," movere. How do we describe the emotional state occasioned by a poignant encounter, a beautiful film, or a powerful piece of music? We are moved. Movement is even visibly ensconced in the word "emotion" itself.

Even the word "literal"—derived from the Latin litera, meaning "letter"-is a metaphor. "Literal" means "according to the letter"; that is, actual, accurate, factual. But litera is, in turn, derived from the verb linire, meaning "to smear," and was transferred to litera when authors began smearing words on parchment instead of carving them into wood or stone. The roots of linire are also visible in the word "liniment," which denotes a salve or ointment. Thus, the literal meaning of "literal" is to smear or spread, a fitting metaphor for the way metaphor oozes over rigid definitional borders.

It is impossible to pinpoint the first use of most words as metaphors. It happened far too long ago and, in most cases, long before reading and writing were commonplace. But it is possible to pinpoint the metaphorical debuts of some words, thanks to the Oxford English Dictionary.

<sup>1</sup> Notes do not have feet, either, just as lines do not have heads. The words "footnote" and "headline" are metaphors for the text that appears at the bottom and the top of a page, respectively, thereby occupying positions analogous to the corresponding body parts.

The first recorded literal use of the word "hot," for example, occurred in 1000, according to the OED. Its first recorded metaphorical use in relation to taste (a hot, or spicy, food) occurred in 1390, to sound (a hot musical passage) in 1876, and to color (a hot red) in 1896. The first literal meaning of the word "bridge" dates back to the eleventh century, but the common figurative use of the word (to bridge our differences) didn't occur until the middle of the eighteenth century.

Often, the most common phrases have the most intricate etymologies. When someone does something beyond the pale, they are not pushing the boundaries of pigmentation. They are venturing outside the limits of the acceptable by going beyond the wooden stakes ("pale" comes from the Latin palus, meaning "pole" or "stake," as in the English word "impaled") that marked the edge of a settlement in the Middle Ages. Fences made of wooden pales often surrounded medieval towns and villages, demarcating the point beyond which it was considered unsafe—or unacceptable—to go.

Similarly, during the American Civil War, the word "deadline" referred to the perimeter around a prison camp beyond which any wayward prisoner would be shot. Now, it commonly refers to the precise time and date beyond which an author or journalist will be executed for not handing in a finished manuscript.

When you take a parting shot at someone, flinging one last insult before you depart, you are reenacting a battlefield technique perfected by the ancient Parthians. The Parthians, who lived near the Caspian Sea around the first century B.C.E., were expert archers and horsemen. They lured enemies into the open by feigning retreat. Then, as their opponents advanced in hot (a metaphor for angry or impassioned) pursuit, they turned in their saddles and picked them off with their arrows, a practice known as the Parthian shot.

As archaeologist A. H. Sayce, who specialized in deciphering ancient languages, observed in The Principles of Comparative Our knowledge grows by comparing the unknown with the known, and the record of that increase in knowledge grows in the same way. Things are named from their qualities, but those qualities have first been observed elsewhere. The table like the stable originally meant something that "stands" but the idea of standing had been noted long before the first table was invented . . . Three-fourths of our language may be said to consist of worn-out metaphors.

These "worn-out metaphors" are incredibly durable, and many of them are consistent across a diverse range of times and places. The use of the verb "to see" to mean "to understand" is an example of how identical seams of etymological meaning run under the crust of very different languages and cultures.

The "seeing is knowing" metaphor is present throughout the Indo-European language group. The Indo-European root \*weid. meaning "to see" became \*oida (to know) in Greek, \*fios (knowledge) in Irish, and words like "wit," "witness," "wise," and "idea" in English, all of which originally connoted some sense of understanding as vision. In Aristotle's metaphorical mathematics, the equation is written:

Seeing = knowing.

Other examples of the "seeing = knowing" link include the words "intuition," derived from the Latin in (at) and tueri (to look), and "speculate," from the Latin speculari (to watch, examine, or observe). This etymological root also surfaces in common expressions like "I'm in the dark," "Your argument is transparent" (or murky or opaque), "The explanation is crystal clear," and "That really sheds light on the problem."

The same thing has happened with the verb "to grasp," which means "to understand" in English, French, Italian, German, and Polish, among many other languages. Other consistently crosscultural metaphors include the association of anger with heat, happiness with altitude, and importance with size.

In Japanese, anger is equated with hot stuff just as it is in English. Arabic, and the Sotho languages spoken in South Africa, though the locus of the combustion is different. English speakers with bad tempers are hotheads, while angry Tunisian Arabic speakers say their brains are boiling. In the Sotho languages, angry people are described as hot-blooded but in Japan they have boiling intestines. Even in American Sign Language, anger is depicted as a fire or an explosion in the abdomen.

Languages as different as Chinese and English both describe positive emotional states using phrases that suggest height, as in "He is in high spirits" and "I feel really up today." Even Hungarian. a language that, along with Finnish, developed independently of the Indo-European group, employs familiar metaphors like "I'm on cloud nine" to convey extreme happiness.

The equation of size with significance—as in "It was a big deal" and "It is her big moment"—is present in Zulu, Hawaiian, Turkish, Malay, and Russian as well as English, while the use of the sense of smell to indicate suspicion—as in "I smell a rat" and "He's been sniffing around the premises again"—is universal, too, active even in a geographically isolated non-Indo-European language like Basque. Whenever we use words or phrases like these, we are using ancient comparisons or, as linguist Joseph Grady has called them, primary metaphors: "low-level metaphorical associations between concepts, based directly on experiential correlation." And people from vastly different times and places always seem to converge on the same figurative correlations.

Etymology is often said to be the final resting place for dead metaphors, figurative uses of language that we no longer consciously recognize as figurative. But these metaphors are still very

much alive and well. Few people may be consciously aware of the etymological origins of common words and phrases, but the essential metaphor-making process of comparing the unknown with the known is still vital and ongoing. This process is the way meaning was, is, and ever shall be made.

A better way to describe the relative animation of metaphors would be to classify them like volcanoes. (Elvis would no doubt approve.) Active metaphors are those still bubbling with figuration, as in early twentieth-century artist and author Wyndham Lewis's definition:

#### Laughter is the mind sneezing.

Dormant metaphors, which tend to petrify into clichés, are those whose figurative nature slumbers just below the surface, as in the expression:

We're getting in over our heads.

Extinct metaphors are those whose metaphorical magma will never rise again, as in the phrase:

I see what you mean.

One of the ironies of etymology is that the less conscious we are of a metaphor as a metaphor, the more literal it becomes, a paradox observed by Nelson Goodman: "With progressive loss of its virility as a figure of speech, a metaphor becomes not less but more like literal truth. What vanishes is not its veracity but its vivacity."

Barfield, always preternaturally aware of buried etymological meanings, neatly mapped out the geology of metaphor when he wrote:

Every modern language, with its thousands of abstract terms and its nuances of meaning and association, is apparently nothing, from beginning to end, but an unconscionable tissue of dead, or petrified, metaphors ... A man cannot utter a dozen words without wielding the creations of a hundred named and nameless poets.

These named and nameless poets are still active, busy wherever new advances, insights, or discoveries require new designations. After the advent of the Internet, for example, we needed a word to describe electronic messages. The old word, mail-from the French malle, meaning a "bag, sack, or wallet"—had served us well, so we just put the word "electronic" in front it. Hence, e-mail. a surprisingly accurate term since an e-mail is essentially a tinv sack of electrons encoding information.

The new designations coined by metaphorical thinking can also be applied retroactively to things that already have names but can be even better described. Hence, once e-mail was in circulation. the ancient word "prayer"—which comes from the same etymological root as "precarious"—became knee-mail.

Scientists are also prolific recyclers of terminology. Louis de Broglie won the Nobel Prize in Physics in 1929 for his theory of electron waves, a term he borrowed from acoustics. De Broglie loved chamber music, and he imagined atoms as musical instruments that emitted different tones with different wavelengths, just as each instrument in an orchestra transmits sound in different wavelengths.

Even economics—the driest of all the sciences, a parched landscape of jagged flow charts and desiccated statistics—is drenched in metaphors, many of which describe money in terms of fluid dynamics.

Liquidity is the ability to quickly convert assets into cash. A firm . is solvent when it has plenty of liquid assets. Cash flow occurs at the confluence of revenue streams. A company floats shares in an initial

public offering. Dark pools are platforms that allow share trading without revealing prices, even to the participants, until the trades are completed.

Banks get bailed out when they are too big to fail. Governments prime the pump by pouring money into the economy. When you need money, you can tap a friend, sponge off relatives, dip into savings or-if you're prepared to be unscrupulous-skim a little something off the top. When growth is buoyant, a rising tide lifts all boats. When options are underwater, though, checking your investment portfolio feels like snorkeling into a shipwreck.

The word "broker" is a fluid metaphor, too, derived from the Anglo-French brokur (or broacher), the person in a tavern who tapped kegs of wine or beer. Today, brokers are still in the business of tapping liquidity for clients or, perhaps just as often, draining it from them.

The blandest words, the ones we think about the least, invariably have deep, twisted etymological roots. The term "stock" is a case in point. In the thirteenth century, the English Exchequer needed some method of tracking payments to the Treasury. The receipt had not been invented yet, but without proof of debits and credits there was no way to settle disputes.

So Treasury officials came up with tally sticks, narrow strips of hazel wood that were notched to indicate various amounts of money. A notch about the width of a man's thumb, for example, represented £100; a notch about the width of the little finger represented £20; and, in what has to be one of the most poetic of all financial phrases, a notch about "the width of a swollen barleycorn" represented £1.

After a tally stick was appropriately notched, it was split down its length into two halves, each of which bore corresponding markings. One half of the stick, known as "the stock," was given to the person who deposited the money with the Exchequer. Treasury officials retained the other half of the stick, known as "the foil."

Whenever an account was audited, the sundered halves of the stick were matched up again to see if they tallied. Our use of the term "stock" is derived from this practice, as is the term "teller," or "tallier," which comes from the Latin talea and originally referred to a plant cutting or a thin piece of wood.

Ralph Waldo Emerson, an avid amateur etymologist, once said that money was "as beautiful as roses." In his essay "The Poet," Emerson described language itself as a kind of etymological artifact, or "fossil poetry." But before language was fossil poetry, it was fossil metaphor, as Emerson wrote:

The poets made all the words, and therefore language is the archives of history, and, if we must say it, a sort of tomb of the muses. For though the origin of most of our words is forgotten, each word was at first a stroke of genius, and obtained currency because for the moment it symbolized the world to the first speaker and to the hearer. The etymologist finds the deadest word to have been once a brilliant picture. Language is fossil poetry. As the limestone of the continent consists of infinite masses of the shells of animalcules, so language is made up of images or tropes, which now, in their secondary use, have long ceased to remind us of their poetic origin.

The metaphors entombed in even the simplest words are not mere etymological curiosities. These fossils still breathe, exerting a potent but largely unnoticed influence on us. We don't normally feel the long, slow grinding of Earth's tectonic plates, but still the ground shifts beneath our feet. Economics is one of the places where the secret life of metaphor breaks the surface, and where its ruptures and ructions can have powerful aftershocks.

Metaphor and Money

# HOW HIGH CAN A DEAD CAT BOUNCE?

tocks do the most amazing things. They soar, surge, climb, leap, and perform all kinds of other superheroic statistical feats. Sadly, they also plummet, slide, plunge, drop, and fall, subject as they are to gravity and similar dismal laws.

Flick on the business news and you're in for a smorgasbord of financial metaphors. Gasp in horror as the bear market grips Wall Street in its hairy paws; then cheer as fearless investors claw back gains. Watch in amazement as the NASDAQ vaults to new heights; then cringe as it slips, stumbles, and drops like a stone. Wait anxiously to see if the market will shake off the jitters, slump into depression, or bounce back.

Finance and economics are the ultimate numbers games, yet commentators from Helsinki to Hong Kong instinctively use metaphors to describe what's going on. Here are just a few of the more outlandish ones you might have come across in the financial news: