

Block That Metaphor!

by Steven Pinker

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Whose Freedom?

The Battle Over America's Most Important Idea

By George Lakoff

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The field of linguistics has exported a number of big ideas to the world. They include the evolution of languages as an inspiration to Darwin for the evolution of species; the analysis of contrasting sounds as an inspiration for structuralism in literary theory and anthropology; the Whorfian hypothesis that language shapes thought; and Chomsky's theory of deep structure and universal grammar. Even by these standards, George Lakoff's theory of conceptual metaphor is a lollapalooza. If Lakoff is right, his theory can do everything from overturning millennia of misguided thinking in the Western intellectual tradition to putting a Democrat in the White House.

Lakoff is a distinguished linguist at Berkeley who trained with Chomsky in the 1960s, but broke with him to found first the school of generative semantics and then the school of cognitive linguistics, each of which tries in its way to explain language as a reflection of human thought processes rather than as an autonomous module of syntactic rules. Recently he has been cast as a savior of the Democratic Party in the wake of its shocking defeat in the 2004 election. He has conferred with the Democrats' leaders and strategists and addressed their caucuses, and his book *Don't Think of an Elephant!* has become a liberal talisman. *Whose Freedom?* is the latest installment of the linguist's efforts as campaign consultant. It is a reply to conservatives' repeated invocation of "freedom" to justify their agenda. It, too, is influencing prominent Democrats, to judge from its endorsements by Tom Daschle and Robert Reich.

Lakoff's theory begins with his analysis of metaphor in everyday language, first presented in 1980 in a

brilliant little book written with Mark Johnson called *Metaphors We Live By*. When we say "I shot down his argument," or "He couldn't defend his position," or "She attacked my theory," we are alluding to an unstated metaphor that argument is war. Similarly, to say "Our marriage is at a crossroads," or "We've come a long way together," or "He decided to bail out of the relationship" is to assume metaphorically that love is a journey. These metaphors are never stated in so many words, but they saturate our language and spin off variations that people easily understand (such as "We need to step on the brakes"). In each case, people must grasp a deep equivalence between the abstract idea and the concrete experience. Lakoff insists, not unreasonably, that this is an important clue to our cognitive makeup.

But this isn't the half of it. Conceptual metaphor, according to Lakoff, shows that all thought is based on unconscious physical metaphors, with beliefs determined by the metaphors in which ideas are framed. Cognitive science has also shown that thinking depends on emotion, and that a person's rationality is bounded by limitations of attention and memory. Together these discoveries undermine, in Lakoff's view, the Western ideal of conscious, universal, and dispassionate reason based on logic, facts, and a fit to reality. Philosophy, then, is not an extended debate about knowledge and ethics, it is a succession of metaphors: Descartes's philosophy is based on the metaphor "knowing is seeing," Locke's on "the mind is a container," Kant's on "morality is a strict father." And political ideologies, too, cannot be understood in terms of assumptions or values, but only as rival versions of the metaphor "society is a family." The political right likens society to a family ruled by authoritarian parenting, whereas the political left prefers a family cared for with nurturant parenting.

Political debates, according to Lakoff, are contests between metaphors. Citizens are not rational and pay no attention to facts, except as they fit into frames that are "fixed in the neural structures of their brains" by sheer repetition. In George W. Bush's first term, for example, the president promised tax "relief," which frames taxes as an affliction, the reliever as a hero, and anyone obstructing him as a villain. The Democrats were foolish to offer their own version of tax relief, which accepted the Republicans' framing; it was like asking people not to think of an elephant. Instead, they should have re-framed taxes as "membership fees" necessary to maintain the services and infrastructure of the society to which they belong. Likewise, the lawyers who are said to press "frivolous lawsuits" should be reframed as "public protection attorneys," and "activist judges" who "legislate from the bench" rebranded as "freedom judges."

And now, in his new book, Lakoff takes on the concept of freedom, which was mentioned forty-nine times in Bush's last inaugural address. American conservatism, he says, appeals to a notion of freedom rooted in strict-father morality--but this is a hijacking of the traditional American concept, which is based on progressive values of nurturance and empathy. The left and the right are also divided by another cognitive style: conservatives think in terms of direct causation, where a person's actions have an immediate billiard-ball effect (people get fat because they lack self-control), while progressives think in terms of systemic causation, in which effects fall out of complex social, ecological, and economic systems (people are fat because of an economic system that allows the food industry to lobby against government regulation).

There is much to admire in Lakoff's work in linguistics, but *Whose Freedom?*, and more generally his thinking about politics, is a train wreck. Though it contains messianic claims about everything from epistemology to political tactics, the book has no footnotes or references (just a generic reading list), and cites no studies from political science or economics, and barely mentions linguistics. Its use of cognitive neuroscience goes way beyond any consensus within that field, and its analysis of political ideologies is skewed by the author's own politics and limited by his disregard of centuries of prior thinking on the subject. And Lakoff's cartoonish depiction of progressives as saintly sophisticates and conservatives as evil morons fails on both intellectual and tactical grounds.

Let us begin with the cognitive science. As many of Lakoff's skeptical colleagues have noted, the ubiquity of metaphor in language does *not* imply that all thinking is concrete. People cannot use a metaphor to reason with unless they have a deeper grasp of which aspects of the metaphor should be taken seriously and which should be ignored. When reasoning about a relationship as a kind of journey, it is fine to mull over the counterpart to a common destination, or to the bumpy stretches along the way--but someone would be seriously deranged if he wondered whether he had time to pack, or whether the next gas station has clean restrooms. Thinking cannot trade in metaphors directly. It must use a more basic currency that captures the abstract concepts shared by the metaphor and its topic--progress toward a shared goal in the case of journeys and relationships, conflict in the case of argument and war--while sloughing off the irrelevant bits.

Also, most metaphors are not processed as metaphors as all. They may have been alive in the minds of the original coiners, who needed some sound to express a new concept (such as "attack" for aggressive criticism). But subsequent speakers may have kicked the ladder away and memorized the idiom by rote. That is why we hear so many dead metaphors such as "coming to a head" (which most people would avoid if they knew that it alludes to the buildup of pus in a pimple), mixed metaphors ("once you open a can of worms, they always come home to roost"), Goldwynisms ("a verbal agreement isn't worth the paper it's written on"), and figurative uses of "literally," as in Baruch Korff's defense of Nixon during his Watergate ordeal: "The American press has literally emasculated the president." Laboratory experiments have confirmed that people don't think about the underlying image when understanding a familiar metaphor, only when they are faced with a new one.

Lakoff's way with brain science is even more dubious. It is true that "the frames that define common sense are instantiated physically in the brain," but only in the sense that every thought we think--permanent or transient, rational or irrational--is instantiated physically in the brain. The implication that frames, by being "physically fixed" in the brain, are especially insidious or hard to change, is gratuitous. Also, cognitive psychology has not shown that people absorb frames through sheer repetition. On the contrary, information is retained when it fits into a person's greater understanding of the subject matter. Nor is the claim that people are locked into a single frame

anywhere to be found in cognitive linguistics, which emphasizes that people can nimbly switch among the many framings made available by their language. When Becky shouts across a room to Liz, an onlooker can construe the event as affecting Liz, creating a message, making noise, sending a message across the room, or just Becky moving her muscles in a certain way.

The upshot is that people can evaluate their metaphors. In everyday conversation they can call attention to them, such as the deconstruction of the "time is space" metaphor in the African American snap "Your mama's so dumb, she put a ruler on the side of the bed to see how long she slept." And in science, practitioners scrutinize and debate whether a given metaphor (heat as fluid, atom as solar system, gene as coded message) accurately captures the causal structure of the world, and if so, in which ways.

Finally, even if the intelligence of a single person can be buffeted by framing and other bounds on rationality, this does not mean that we cannot hope for something better from the fruits of many people thinking together--that is, from the collective intelligence in institutions such as history, journalism, and science, which have been explicitly designed to overcome those limitations through open debate and the testing of hypotheses with data. All this belies Lakoff's cognitive relativism, in which mathematics, science, and philosophy are beauty contests between rival frames rather than attempts to characterize the nature of reality.

It undermines his tips in the political arena as well. Lakoff tells progressives not to engage conservatives on their own terms, not to present facts or appeal to the truth, and not to pay attention to polls. Instead they should try to pound new frames and metaphors into voters' brains. Don't worry that this is just spin or propaganda, he writes: it is part of the "higher rationality" that cognitive science is substituting for the old-fashioned kind based on universal disembodied reason.

But Lakoff's advice doesn't pass the giggle test. One can imagine the howls of ridicule if a politician took Lakoff's Orwellian advice to rebrand taxes as "membership fees." Surely no one has to hear the metaphor "tax relief" to think of taxes as an affliction; that sentiment has been around as long as taxes have been around. (Even Canadians, who tolerate a far more expansive government, grumble about their taxes.) Also, "taxes" and "membership fees" are not just two ways of framing the same thing. If you choose not to pay a membership fee, the organization will stop providing you with its services. But if you choose not to pay taxes, men with guns will put you in jail. And even if taxes were like membership fees, aren't lower membership fees better than higher ones, all else being equal? Why should anyone feel the need to defend the very idea of an income tax? Other than the Ayn Randian fringe, has anyone recently proposed abolishing it?

In defending his voters-are-idiots theory, Lakoff has written that people do not realize that they are really better off with higher taxes, because any savings from a federal tax cut would be offset by increases in local taxes and private services. But if that is a fact, it would have to be demonstrated to a bureaucracy-jaded populace the old-fashioned way, as an argument backed with numbers. And that is the kind of wonkish analysis that Lakoff dismisses.

Now let us consider the metaphor "a nation is a family." Recall that in Lakoff's account, conservatives think of a strict father and progressives think of a nurturant ... well, here Lakoff runs into a wee problem. The metaphors in our language imply that the nurturing parent should be a mother, beginning with "nurture" itself, which comes from the same root as "to nurse." Just think of the difference in meaning between "to mother a child" and "to father a child"! The value that we sanctify next to apple pie is motherhood, not parenthood, and dictionaries list "caring" as one of the senses of "maternal" but not of "parental," to say nothing of "paternalistic," which means something else altogether. But it would be embarrassing if progressivism seemed to endorse the stereotype that women are more suited to nurturing children than men are, even if that is, by Lakoff's own logic, a "metaphor we live by." So political correctness trumps linguistics, and the counterpart to the strict father is an androgynous "nurturant parent."

Lakoff's theory is aimed at explaining a genuine puzzle: why the various positions clustering in left-wing and right-wing ideologies are found together. If someone is in favor of laissez-faire economics, it's a good bet the person will also favor judicial restraint, tough criminal punishment, and a strong military, and be opposed to expansive welfare programs, sexual permissiveness, and shocking art. Conversely, if someone is an environmental activist, it is likely that he or she will favor abortion rights, homosexual marriage, and soak-the-rich taxes. At first glance these positions would seem to have nothing in common. Lakoff argues that the two clusters fall out of the competing metaphors for the family, with the strict father demanding personal responsibility of his wayward children and punishing them when they misbehave, and the nurturant parent showing empathy and emphasizing interdependence.

Lakoff does not mention that others have pondered this question before him, going back at least to Hobbes, Rousseau, Burke, and Godwin. The standard contemporary analysis sees the political right as having a tragic vision in which human nature is permanently afflicted by limitations of knowledge, wisdom, and virtue, and the political left as having a utopian vision in which human nature is naturally innocent, but corrupted by defective social institutions and perfectible by reformed ones. The right therefore has an affinity for market economies, because people will always be more motivated to work for themselves and their families than for something called "society," and because no planner has the wisdom, information, and disinterest to run an economy from the top down. A tough defense and criminal justice system are needed because people will eternally be tempted to take what they want by force, so only the prospect of sure punishment makes conquest and crime unprofitable. And since we are always teetering on the brink of barbarism, social traditions in a functioning society should be respected as time-tested workarounds for the shortcomings of an unchanging human nature, as applicable today as when they developed, even if no one can explain their rationale.

The left, by contrast, is more likely to embrace George Bernard Shaw's (and later Robert Kennedy's) credo, "Some people see things as they are and ask 'why?', I dream things that never were and ask 'why not?'" Psychological limitations are artifacts that come from our social arrangements, which should be scrutinized, morally judged, and constantly improved. Economies, social systems, and international relations should be consciously designed to bring about desirable outcomes.

This Enlightenment-inspired framing has a natural counterpart in Lakoff's nation-as-family metaphor, because different parenting styles follow from the assumption that children are noble savages and the assumption that they are nasty, brutish, and short. Every thoughtful parent struggles to balance discipline and compassion, and one can imagine how a dialectic between these extremes might be the mental model behind right-left debates on welfare, crime, and sexuality. It is less clear how the metaphor would handle economics, since family members do not transact business with one another, or defense, since other than the Hatfields and McCoys most families do not wage war against other families. And it cannot be reconciled with the concept of a democracy, in which citizens consent to be governed by representatives rather than being the infantilized dependents of their parents. But at least it is conceivable that a discipline-compassion dimension could shed light on our political psychology.

In any case, this is not the conceptual analysis that Lakoff provides. His nurturant parent marks out not the indulgent pole of the continuum but the ideal balancing point, setting "fair but reasonable limits" and being "authoritative without being authoritarian." His strict father, on the other hand, lives by Lewis Carroll's advice: "Speak roughly to your little boy, and beat him when he sneezes." According to Lakoff, the ideal parent in the conservative worldview loves and cares only for those of his children "who measure up," and believes that "affection is important, either as a reward for obedience or to prevent alienation through a show of love despite painful punishment." Lakoff provides no evidence from linguistics or from surveys to show that this ludicrous ogre is the prototype of fatherhood in any common American conception of the family.

This put-up job is typical of Lakoff's book. While he ostensibly offers a scholarly analysis of political thought, Lakoff cannot stop himself from drawing horns on the conservative portrait and a halo on the progressive one. Nowhere is this more egregious than in his claim that conservatives think in terms of direct rather than systemic causation. Lakoff seems unaware that conservatives have been making exactly this accusation against progressives for centuries.

Laissez-faire economics, from Adam Smith to contemporary libertarians, is explicitly motivated by the systemic benefits of the market (remember the metaphor of the "invisible hand"?). Lakoff strikingly misunderstands his enemies here, repeatedly attributing to them the belief that capitalism is a system of moral reckoning designed to reward the industrious with prosperity and to punish the indolent with poverty. In fact, the theory behind free markets is that prices are a form of information about supply and demand that can be rapidly propagated through a huge decentralized network of buyers and sellers, giving rise to a distributed intelligence that allocates resources more efficiently than any central planner could hope to do. Whatever distribution of wealth results is an unplanned by-product, and in some conceptions is not appropriate for moralization one way or another. It is emphatically not, as Lakoff supposes (in a direct-causation mentality of his own), a moral system for doling out just deserts.

Likewise, cultural conservatives, from Burke to our own day, play up the systemic benefits of cultural

traditions in bestowing unspoken standards of stability and decency on our social life. The "broken windows" theory of crime reduction is an obvious contemporary example. And both kinds of conservatives gleefully point to the direct remedies for social problems favored by progressives ("war on poverty" programs, strict emission limits to fix pollution, busing to negate educational inequality) and call attention to their unanticipated systemic consequences, such as perverse incentives and self-perpetuating bureaucratic fiefdoms. Now, none of this means that the conservative positions are unassailable. But it takes considerable ignorance, indeedchutzpah, for Lakoff to boast that only a progressive such as himself can even understand the difference between systemic and direct causation.

In examining the concept of freedom itself, Lakoff again makes little use of previous analyses. Freedom comes in two flavors. Negative freedom ("freedom from") is the right of people to act as they please without being coerced by others. It obviously must be subject to the limitation that "your freedom to swing your fist ends where my nose begins." Just as obviously, freedom sometimes must be traded off against other social goods, such as economic equality, since even in a perfectly fair and free society, some people may end up richer than others through talent, effort, or luck.

Positive freedom ("freedom to") is the right of people to the conditions that enable them to act as they please, such as food, health, and education. The concept is far more problematic than negative freedom, because human wants are infinite, and because many of these wants can be satisfied only through the efforts of other humans. The idea that people have a right to paid vacations, central heating, and a college education would have been unthinkable throughout most of human history. (And what about air-conditioning, or orthodontics, or high-speed Internet access?) Also, my freedom to have my teeth fixed impinges on my dentist's freedom to sit at home and read the paper. For this reason, positive freedom requires an agreed-upon floor for the worst-off in a society with a given level of affluence, and presupposes an economic arrangement that gives providers an incentive to benefit recipients without being forced to do so at gunpoint. That is why many political thinkers (most notably Isaiah Berlin) have been suspicious of the very idea.

Since freedom must be traded off against other social goods (such as economic equality and social cohesion), political systems can be lined up according to where they locate the best compromise, ranging from anarchism to libertarianism to socialism to totalitarianism. For better or worse, American political sentiments tend to veer in the libertarian direction compared with other modern democracies. The tilt goes back to the Founders, who were obsessed with limiting governmental power but not terribly mindful of what happens to those who end up in the lower social and economic strata.

This brings us to Bush's invocation of freedom. I suspect it is futile to find a common ideology underlying the president's coalition of Christian fundamentalists, cultural conservatives, foreign interventionists, and economic libertarians, just as it would be to find the common denominator of the two Georges--McGovern and Wallace--in the Democratic Party of the 1960s and early 1970s. And

there is no small irony in casting Dubya as a rigorous philosopher and a wizard with language. Still, there are discernible themes in his rhetoric of freedom.

Bush has capitalized on the concept of freedom in two ways. He has preserved the perception that Republicans are more economically libertarian than Democrats, and he has waged war against a foreign movement with an unmistakable totalitarian ideology. This still leaves his opponents with plenty of ammunition, such as his hypocritical protectionism and expansion of government, and his delusion that liberal democracy can be easily imposed on Arab societies. But his invocation of "freedom" has a semblance of coherence, and, like it or not, it resonates with many voters.

The same cannot be said for Lakoff's conception. "What I am calling progressive freedom," he writes, "is simply freedom in the American tradition--the understanding of freedom that I grew up with and have always loved about my country." Such an equation fails to acknowledge the possibility that Lakoff's preferences and the American tradition may not be the same thing. His understanding is pure positive freedom, while acknowledging none of its problems. It consists of appending the words "freedom to" in front of every item in a Berkeley-leftist wish list: freedom to live in a country with affirmative action, "ethical businesses," speech codes, not too many rich people, and pay in proportion to contributions to society. The list runs from the very specific--the freedom to eat "food that is pesticide free, hormone free, antibiotic free, free of genetically modified ingredients, healthy, and uncontaminated," to the very general, namely "the freedom to live in a country and a community governed by the traditional progressive values of empathy and responsibility."

"You give me a progressive issue," Lakoff boasts, "and I'll tell you how it comes down to a matter of freedom"--oblivious to the fact that he has just gutted the concept of freedom of all content. Actually, the damage is worse than that, because many of Lakoff's "freedoms" are demands that society conform to his personal vision of the good (right down to the ingredients of food), and thus are barely distinguishable from totalitarianism. How would he implement "pay in proportion to contributions to society through work"? Will a commissar decide that an opera singer deserves higher pay than a country singer, or that a seller of pork rinds should earn less than a seller of tiramisu? And his freedom not to be harmed by "hurtful language" is merely another name for the unlimited censorship of political speech. No doubt slaveholders found the speech of abolitionists to be "hurtful."

Probably not since *The Greening of America* has there been a manifesto with as much faith that the country's problems can be solved by the purity of the moral vision of the 1960s. *Whose Freedom?* shows no trace of the empirical lessons of the past three decades, such as the economic and humanitarian disaster of massively planned economies, or the impending failure of social insurance programs that ignore demographic arithmetic. Lakoff is contemptuous of the idea that social policy requires thinking in terms of trade-offs. His policy on terrorism is that "we do not defend our freedoms by giving up our freedoms." His response to pollution is to endorse the statement that "you are not morally free to pollute." One doesn't have to be a Republican to see this as jejune nonsense. Most of us

are happy to give up our freedom to carry box cutters on airplanes, and as the progressive economist Robert Frank has put it (alluding to the costs of cleanups), "there is an optimal amount of pollution in the environment, just as there is an optimal amount of dirt in your house."

What about the conservative conception of freedom? Here Snidely Whiplash pauses long enough from beating his children to explain it to us. As transmitted by Lakoff, the conservative conception includes "the freedom to hunt--regardless of whether I am hunting an endangered species." It acknowledges the need for "a free press, because business depends on many kinds of accurate information." Religious freedom implies "the freedom ... to put the Ten Commandments in every courthouse." Conservatives get their morality from strict obedience to their Protestant ministers, and this morality includes the belief that "pursuing self-interest *is* being moral," that abortion should be illegal because a woman pregnant out of wedlock has acted immorally and should be punished by having to bear the child, and that everyone "who is poor just hasn't had the discipline to use the free market to become prosperous," including "people impoverished by disaster, who, if they had been disciplined enough, would be okay and who have only themselves to blame if they're not."

The problem is that the misrepresentations are harmful both intellectually and tactically, and will backfire with all of this book's potential audiences. Any of Lakoff's allies on the left who think that their opponents are the imbeciles whom he describes will have their clocks cleaned in their first debate with a Young Republican. Lakoff's book will be red meat for his foes on the right, who can hold up his distortions as proof of liberals' insularity and incomprehension. And the people in the center, the ones he really wants to reach, will be turned off by his relentless self-congratulation, his unconcealed condescension, and his shameless caricaturing of beliefs with which they might have a modicum of sympathy.

Worst of all, by delineating such a narrow ideological province as "progressivism," Lakoff is ceding vast swaths of territory to the other side. If you think that recent history has taught us anything that requires amending orthodox '60s liberalism, if you think that free markets and free trade bring any economic benefits at all (while agreeing that they have side effects that must be mitigated), if you think that democratic governance requires finding optimal tradeoffs in dilemmas such as pollution, terrorism, crime, taxes, and welfare, then you are a "conservative." It is surprising that Lakoff is not a hero to more Republicans.

There is no shortage of things to criticize in the current administration. Corrupt, mendacious, incompetent, autocratic, reckless, hostile to science, and pathologically shortsighted, the Bush government has disenchanted even many conservatives. But it is not clear what is to be gained by analyzing these vices as the desired outcome of some coherent political philosophy, especially if it entails the implausible buffoon sketched by Lakoff. Nor does it seem profitable for the Democrats to brand themselves as the party that loves lawyers, taxes, and government regulation on principle, and that does not believe in free markets or individual discipline. Lakoff's faith in the power of euphemism

to make these positions palatable to American voters is not justified by current cognitive science or brain science. I would not advise any politician to abandon traditional reason and logic for Lakoff's "higher rationality."

"The latest polls have come out," the political philosopher Jay Leno said last week, "and President Bush's approval ratings have dropped another 3 percent. In fact, he's so unpopular that the Democrats are going to have to work really, really hard to screw up this election." If they take the ideas of George Lakoff seriously, they just might succeed.

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THE NEW REPUBLIC ONLINE

A response to Steven Pinker.

Defending Freedom

by George Lakoff

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For a quarter of a century, Steven Pinker and I have been on opposite sides of major intellectual and scientific divide concerning the nature of language and the mind. **Until this review**, the divide was confined to the academic world. But, recently, the issue of the nature of mind and language has come into politics in a big way. We can no longer conduct twenty-first-century politics with a seventeenth-century understanding of the mind. The political issues in this country and the world are just too important.

Pinker, a respected professor at Harvard, has been the most articulate spokesman for the old theory. In language, it is Noam Chomsky's claim that language consists in (as Pinker puts it) "an autonomous module of syntactic rules." What this means is that language is just a matter of abstract symbols, having nothing to do with what the symbols mean, how they are used to communicate, how the brain processes thought and language, or any aspect of human experience--cultural or personal. I have been on the other side, providing evidence over many years that all of those considerations enter into language, and recent evidence from the cognitive and neural sciences indicates that language involves bringing all these capacities together. The old view is losing ground as we learn more.

In thinking, the old view comes originally from Rene Descartes's seventeenth-century rationalism. A view of thought as symbolic logic was formalized by Bertrand Russell and Gottlob Frege around the turn of the twentieth century, and a rationalist interpretation was revived by Chomsky in the 1950s. In that view, thought is a matter of (as Pinker puts it) "old-fashioned ... universal disembodied reason." Here, reason is seen as the manipulation of meaningless symbols, as in symbolic logic. The new view holds that reason is embodied in a nontrivial way. The brain gives rise to thought in

the form of conceptual frames, image-schemas, prototypes, conceptual metaphors, and conceptual blends. The process of thinking is not algorithmic symbol manipulation, but rather neural computation, using brain mechanisms. Jerome Feldman's recent MIT Press book, *From Molecule to Metaphor*, discusses such mechanisms. Contrary to Descartes, reason uses these mechanisms, not formal logic. Reason is mostly unconscious, and as Antonio Damasio has written in *Descartes' Error*, rationality *requires* emotion.

The old view in economics is the rational actor model, where all economic actors are assumed to be acting according to formal logic, including probabilistic logic. Daniel Kahneman won the Nobel Prize in economics for his work with Amos Tversky showing that real people do economic reasoning using frames, prototypes, and metaphors rather than classical logics.

These questions matter in progressive politics, because many progressives were brought up with the old seventeenth-century view of reason that implies that, if you just tell people the facts, they will reason to the right conclusion--since reason is universal. We know from recent elections that this is just false. "Old-fashioned ... universal disembodied reason" also claims that everyone reasons the same way and that differences in worldview don't matter. But anybody tuning in to contemporary talk shows will notice that not everybody reasons the same way and that worldview does matter.

There is another scientific divide that Pinker and I are opposite sides of. Pinker interprets Darwin in a way reminiscent of social Darwinists. He uses the metaphor of survival as a competition for genetic advantage. He has become one of the principal spokesmen for a form of evolutionary psychology that claims that there are genetic differences between men and women that stem from prehistoric differences in gender roles. This led him to support Lawrence Summers' suggestion that there might be fewer women than men in the sciences because of genetic differences. Luckily, this unfortunate metaphorical interpretation of Darwin has few supporters.

This divide matters, because my cognitive analysis--in *Moral Politics*--of conservative and progressive ideologies in terms of a nation-as-family metaphor is inconsistent with his version of evolutionary psychology. The seriousness of present-day politics in the United States makes these issues more than a simple ivory-tower

matter. If I--and other neuroscientists, cognitive scientists, and cognitive linguists--are right, then Pinker is wrong, and vice versa. Pinker is, however, right for raising the issues and bringing these academic research questions into the public eye.

Unfortunately, what passes for a review of my book, *Whose Freedom?*, is actually a vituperative and underhanded attack. You might never guess from the review what the book is about. It is about the fact that freedom is a contested concept, a concept that people necessarily have different versions of, depending on their values. The book is an account of how conservative and progressive ideologies extend a limited common view of freedom in opposite directions to yield two opposed versions of the "same" concept. Pinker's review is based on two rhetorical strategies:

First, he claims that I say the opposite of what I really say. He points out something ridiculous, then ridicules me for saying such a thing. Pinker uses the tactic over and over. Second, he assumes that his old-guard theory is obviously right and anything else is radical and crazy. He uses the second strategy with his politics as well as his theory of mind. Here are some examples.

Pinker represents the research on conceptual metaphor as follows: "Conceptual metaphor, according to Lakoff, shows that all thought is based on unconscious physical metaphors." I have actually argued the opposite: Chapter twelve of *Metaphors We Live By* discussed the non-metaphorical grounding of conceptual systems. Chapter two of *More Than Cool Reason* begins with a section on "What is not metaphorical." *Women, Fire, and Dangerous Things* goes through 373 pages of non-metaphorical conceptual analysis before bringing up examples of metaphorical thought. And Mark Johnson and myself, in *Philosophy in the Flesh* (see chapter three) survey the basic mechanisms of thought, beginning with the non-metaphorical ones--e. g., image-schemas, conceptual frames (sometimes called simply "schemas" in psychology), and various kinds of prototype structures.

Metaphorical thought is based on these extensive and absolutely crucial aspects of non-metaphorical thought. The system of metaphorical thought is extensive, as those cognitive science books show in great detail. Results from other branches of cognitive science demonstrating the reality of unconscious conceptual metaphor are listed in chapter six of *Philosophy in the Flesh*.

Having claimed falsely that I believe that all thought is metaphorical, Pinker then chides me by taking the position I have actually advocated: "Thinking cannot trade in

metaphors directly." This is something I have not merely stated but have argued empirically.

Pinker even gets the research in his own field of psychology wrong. "Laboratory experiments show that people don't think about the underlying image when understanding a familiar metaphor, only when they are faced with a new one." But experiments show exactly the opposite, as Ray Gibbs at UC Santa Cruz and Lera Boroditsky at Stanford (whose work has won her a National Science Foundation Career Award) have dramatically shown.

In addition, Pinker misunderstands the most basic result in contemporary metaphor research: Metaphor is a matter of thought, not just language. The same words can be instances of different conceptual metaphors. To take a familiar example: *It's all downhill from here* can mean either (1) things will get progressively worse, based on the "Good Is Up, Bad Is Down" metaphor; or (2) things will be easier from now on, based on the metaphor in which action is understood as motion (as in *things are moving right along*) and easy action is understood in terms of easy (i.e., downhill) motion. The literature in the field is filled with such examples.

One of my persistent themes is that facts are crucial, and that the right system of frames is often required in order to make sense of facts. With a system of frames that is inconsistent with the facts, the frames (which are realized in the brain) will stay in place and the facts will be ignored. That is why framing to reveal truth is so important. Here is what I say in *Don't Think of an Elephant!* (pages 109-110): "Facts are all-important. They are crucial. But they must be framed appropriately if they are to be an effective part of public discourse. We have to know what a fact has to do with moral principles and political principles. We have to frame those facts as effectively and honestly as we can. And honest framing of the facts will entail other frames that can be checked with other facts."

In short, I'm a realist--both about how the mind works and how the world works. Given that the mind works by frames and metaphors, the challenge is to use frames and metaphors a mind to accurately characterize how the world works. That is what "reframing" is about--correcting frames that distorts truths and finding frames that expose them.

But Pinker claims that I say the opposite--that, rather than being a realist, I am a cognitive relativist: "All this belies Lakoff's cognitive relativism, in which mathematics, science, and philosophy are beauty contests between rival frames rather than attempts to characterize the nature of reality. It undermines his tips in the political arena as well. Lakoff tells progressives not to engage conservatives on their own terms, not to present facts or appeal to the truth, and not to pay attention to polls. Instead, they should try to pound new frames and metaphors into voters' brains. Don't worry that this is just spin or propaganda." Again, Pinker suggests that I'm saying the opposite of what I have really said. Here's what I wrote about spin and propaganda (*Don't Think of an Elephant!*, pages 100-101):

Spin is the manipulative use of a frame. Spin is used when something embarrassing has happened or has been said, and it's an attempt to put an innocent frame on it--that is, to make the embarrassing occurrence sound normal or good.

Propaganda is another manipulative use of framing. Propaganda is an attempt to get the public to adopt a frame that is not true and is known not to be true, for the purpose of gaining or maintaining political control.

The reframing I am suggesting is neither spin nor propaganda. Progressives need to learn to communicate using frames that they really believe, frames that express what their moral views really are. I strongly recommend against any deceptive framing.

One of the findings of cognitive science that is most important for politics is that frames are mental structures that can be either associated with words (the surface frames) or that structure higher-level organizations of knowledge. The surface frames only stick easily when they fit into higher structures, such as the strict father / nurturant parent worldviews that I discuss in great detail in *Moral Politics* and elsewhere. Here's what I (and my colleagues and the Rockridge Institute) say on page 29 of *Thinking Points*:

Surface frames are associated with phrases like "war on terror" that both activate and depend critically on *deep frames*. These are the most basic frames that constitute a moral worldview or a political philosophy. Deep frames define one's overall "common sense." Without deep frames there is nothing for surface frames to hang onto. Slogans do not make sense

without the appropriate deep frames in place.

The same basic point is made in my other books applying cognitive science to politics. Again, Pinker claims that I say the opposite: "Cognitive psychology has not shown that people absorb frames through sheer repetition. On the contrary, information is retained when it fits into a person's greater understanding of the subject matter." But that is exactly what I said! The deep frames characterize the "greater understanding of the subject matter"; the surface frames can be "retained" only when they fit the deep frames.

I regularly talk about the fact that Americans typically have both strict and nurturant models in their brains. For example, here is what I say on page 70 of *Whose Freedom?*: "Finally and most important, just about every American has both models engrained in his or her brain." *Don't Think of an Elephant!* has a whole chapter (chapter ten) based on this phenomenon. *Thinking Points* also has a whole chapter on this phenomenon, called "Biconceptualism." Here is what Pinker says: "Nor is the claim that people are locked into a single frame anywhere to be found in cognitive linguistics, which emphasizes that people can nimbly switch among the many framing made available by language." Not everybody is all that nimble when it comes to conservative versus progressive worldviews, but many people can shift back and forth in a particular area of life--or an election--as I discuss.

In *Whose Freedom?*, I discuss the difference between *freedom from* and *freedom to* (page 30). Then, throughout the book, I show that both the progressive and conservative versions of freedom use both *freedom from* and *freedom to*. For example, progressives focus on freedom *from* want and fear, as well as *from* government spying on citizens and interfering with family medical decisions; they also favor freedom of access *to* opportunity and fulfillment in life (e.g., education and health care). Conservatives are concerned with freedom *from* government interference in the market (e.g., regulation) and they are concerned with *freedom to* use their property any way they want. In short, the old Isaiah Berlin claims about the distinction do not hold up.

Pinker acts as if I don't discuss the distinction: "Lakoff again makes little use of previous analyses. Freedom comes in two flavors." And then he writes as if he is informing me of *freedom from* and *freedom to*, when I have discussed both throughout the book. Even worse, he gets it wrong. He cites the old-fashioned claims that just don't work. This becomes clear all through the book if you actually read it.

In another case, chapter seven of *Whose Freedom?* discusses direct versus systemic causation. On the first page of the chapter, I say, "It is surely not the case that conservatives are simpleminded and cannot think in terms of complex systems. Indeed, conservative strategists consistently outdo progressive strategists when it comes to long term overall strategic initiatives." Pinker's version: "It takes considerable ignorance, indeed chutzpah, to boast that only a progressive such as himself can understand the difference between systemic and direct causation." The opposite of what I say. I'll leave off here, though the same tactics are used throughout the review.

The results coming out of neuroscience and the cognitive sciences show that, far from there being "old-fashioned ... disembodied universal reason," people really reason using frames, prototypes, image-schemas, and metaphors--and bring emotion into the mix as an inherent part of rationality. All of these mechanisms of thought are embodied--resulting from the nature of brain structure and neural computation on the one hand, and embodied experience on the other. They lie outside of the mechanisms of formal logic, which is the basis of the contemporary version of seventeenth-century rationalism.

What is one to do in the face of this reality? In *Whose Freedom?*, I argue (page 257) for a "higher rationality," a mode of thought that takes into account the understanding of the view of mind that comes from cognitive science and neuroscience--a rationality that talks about frame-based and metaphorical thought explicitly and discusses their effects, especially in politics. But this is only possible if the true nature of thought is widely understood, and that takes honest, open public discussion.

What is one to make of Pinker's essay? Why would he repeatedly attribute to me the opposite of what I say? I can think of two explanations. One is that he is threatened and is being nasty and underhanded--trying to survive by gaining competitive advantage any way he can. The other is that he is thinking in terms of old frames that do not permit him to understand new ideas and facts that do not fit his frames. Since he can only understand what I am saying in terms of his old frames, he can only make sense of what I am saying as being nonsense--the opposite of what I actually say. That is, since the facts I cite don't fit his frames, his frames stay and the facts are adjusted to fit them. I don't know Pinker well enough to know which is true, or whether there is some third explanation.

* * *

If you are a reader who wants to know what I have really said and what the overall evidence is, I direct you to the following books and to the long lists of references given there. I'm sorry the list is so long, but a lot of researchers have been working out the new view. Getting informed is well worth the trouble. The issues are large, deep, and vital to the preservation of our democracy.

Nonpolitical cognitive science books:

Metaphors We Live By (with Mark Johnson)

Women, Fire and Dangerous Things: What Categories Reveal About the Mind

More Than Cool Reason: A Field Guide to Poetic Metaphor (with Mark Turner).

Philosophy in the Flesh: The Embodied Mind and Its Challenge to Western Philosophy

Where Mathematics Comes From: How the Embodied Mind Brings Mathematics into Being

Applications to politics:

Moral Politics

Don't Think of an Elephant! Know Your Values and Frame the Debate

Whose Freedom? The Battle Over America's Most Important Idea

Thinking Points: Our American Vision and Values; A Progressive's Handbook (with the Rockridge Institute)

George Lakoff is the Richard and Rhoda Goldman Professor of Cognitive Science and Linguistics at the University of California, Berkeley, and a founding senior fellow of the Rockridge Institute, a center for research devoted to promoting progressive ideas.

RELATED LINKS

THE NEW REPUBLIC ONLINE

A response to George Lakoff.

Angels and Demons

by Steven Pinker

Only at TNR Online

Post date: 10.19.06

George Lakoff's **reply** is a perfect illustration of the problems I pointed out in my review: He divides the world into blocs of angels and devils, based on his own fantasies of what the devil believes. Here he tries to deflect my criticisms by placing me in a Chomskyan faction that is implacably hostile to his theories and worldview. Not true. For almost two decades, I have *defended* Lakoff's theories of metaphor and cognitive linguistics, both in **scholarly** and in **popular** books, and I have vehemently argued against some of Chomsky's major positions on language. Lakoff cannot use a clash of ideologies as an escape hatch.

He does it again with his accusation that "Pinker interprets Darwin in a way reminiscent of social Darwinists"--hoping that the taint of this unsavory and long-discredited political movement might rub off. But, contrary to Lakoff's pronouncement that competition in evolutionary science is merely an obsolete metaphor, it is inherent to the very idea of natural selection, where advantageous variants are preserved at the expense of less advantageous ones. This has nothing to do with Social Darwinism, which tried to rationalize the station of the poor as part of the wisdom of nature.

Lakoff's misses my point about the state of evidence in cognitive science. I don't disagree that metaphor can be a matter of thought and not just language. The question is when and how often. Lakoff takes all conceptual metaphors at face value, as a direct reflection of thought, ignoring the possibility that many or most conceptual metaphors are dead in the minds of current speakers. Though he correctly notes that some metaphors are thought of in terms of their concrete sources, he fails to consider the possibility that many or most are not. He ignores research by a number of **cognitive psychologists** showing that many metaphors are accessed directly in terms of their

intended meaning, skipping the metaphorical sources, especially when a metaphor is conventional rather than fresh. (Incidentally, Lera Boroditsky's major experiment aiming to show that people automatically use space as a metaphor for time has **failed to replicate**).

Likewise, Lakoff cannot wave off my criticisms by identifying me with some antiquated dogma in which people are always rational, disembodied, abstract calculators. Of course they're not. Lakoff repeatedly blurs two different ideas: (1) "universal disembodied reason" is not a good theory of how individual people instinctively think, and (2) universal disembodied reason is not a normative ideal that we should collectively strive for in grounding our beliefs and decisions, especially in arenas--like politics and science--that are designed to get at the truth. One can accept that the unaided human mind is not a perfect logician while rejecting Lakoff's messianic claim that "More than two millennia of a priori philosophical speculation about these aspects of reason are over" (from the opening lines of *Philosophy in the Flesh*).

As for the claims in *Whose Freedom?*: Lakoff writes that "most thought uses conceptual metaphors" (page 13), that "repetition of language has the power to change brains" (page 10), that "frames trump facts" (page 13), and that "since metaphors and frames may vary from person to person, not all forms of reason are universal" (page 13). It is hard to see how these statements, together with Lakoff's repeated claims that universal disembodied reason is obsolete, is not a form of relativism. As for systemic causation being a talent possessed only by people like himself, he writes, "I am using systemic causation to study the difference between systemic and direct causation. It makes me wonder whether such a book could be written only by a progressive" (page 130).

At the end of his reply, Lakoff offers a number of ad hominem speculations about what is wrong with me such that I could possibly disagree with him. Missing from his list is the possibility that, when someone claims to have overturned two thousand years of Western thought (and advises Democratic leaders that they can regain power by rebranding "taxes" as "membership fees"), there could be legitimate grounds for disagreement.

Steven Pinker is Johnstone Professor at Harvard University. His latest book, *The Stuff of*