

Things get trickier when the name of the color is different from the color in which the word is printed; for example, when the word "green" is printed in blue ink. Then, subjects are inclined to read the word "green" rather than to name the color "blue." It takes longer for subjects to state the correct ink color, indicating that the meaning of the word itself creates "cognitive dissonance" that interferes with the ability to name the color of the ink. (To take the Stroop test, go to <http://www.at-bristol.org.uk/stroopeffect.html>.)

Stroop's conclusion: it is impossible for us to ignore the literal meanings of words, even when the literal meaning produces the wrong answer. Glucksberg postulated that it is also impossible for us to ignore the metaphorical meanings of words. To prove it, he and his team carried out a Stroop test with metaphors, using literally false and metaphorically true statements.

The researchers listed four different types of sentences: literally true ("Some birds are robins"), literally false ("Some birds are apples"), metaphors ("Some jobs are jails"), and "scrambled metaphors," sentences with no ready interpretation ("Some jobs are birds"). Participants had to identify the literally false sentences as quickly as possible.

If subjects were able to ignore metaphorical meanings, Glucksberg reasoned, they should be just as quick to reject the metaphors as the scrambled metaphors since both are literally false. If, however, people involuntarily register metaphorical meanings, they should take longer to reject as false the metaphors than the scrambled metaphors, because the metaphors are figuratively true. Glucksberg believed that rejecting a metaphorically true statement as false would set up the same kind of cognitive dissonance as naming the color "blue" when the word "green" is printed in blue ink.

Glucksberg found that the Stroop effect is indeed at work with metaphors. Participants took longer to reject metaphors as false than they did to reject literally false statements or scrambled

metaphors. They understood the sentence "Some jobs are jails," for example, as quickly and as effortlessly as the sentence "Some birds are robins."

Glucksberg found evidence of the Stroop effect even in cases in which the metaphor and the literally false sentence differed by just a single word. Participants quickly identified the statement "All surgeons are butchers" as literally false; they took longer to identify the sentence "Some surgeons are butchers" as literally false—because it is, unfortunately, metaphorically true. (It could be literally true, of course, if the surgeon in question happens to also sell meat.) "Metaphorical meanings are apprehended whenever they are available," Glucksberg concluded. "We can no more shut off our metaphor-understanding machinery than our literal-understanding machinery."

Perhaps it should not be surprising that our metaphor-understanding machinery is always on, that fleeting, irrelevant associations—like whether a briefing is held in Winston Churchill Hall or Dean Rusk Hall—can impact major decisions such as whether to go to war. After all, just before Romeo compares Juliet to the sun, Juliet herself famously asks, "What's in a name?" Apparently, quite a lot, when that name carries powerful political associations.

In March 2003, just before the U.S.-led invasion of Iraq, Republican Congressman Robert W. Ney, head of the committee in charge of the cafeterias in the House of Representatives, decreed that henceforth the fried potato slivers served in House eateries would be known as "freedom fries" and the fried slices of bread dipped in egg batter would be known as "freedom toast." France had refused to back military action against Iraq, and Ney said his decision was "a small but symbolic effort to show the strong displeasure of many on Capitol Hill with the actions of our so-called ally."

In making this bold declaration of culinary independence, Ney

followed the lead of Neal Rowland, owner of Cubbie's, a North Carolina fast-food joint. Inspired by World War I euphemisms for German food—sauerkraut became "liberty cabbage," hamburgers became "liberty steaks," and frankfurters became "hot dogs"—Rowland struck French fries and French toast from his menu.

Such symbolic re-namings are common in times of conflict, and the obstreperous French often seem to be on the receiving end of them. In the late 1990s, after France resumed nuclear weapons testing in the Pacific, French bread became "Kiwi loaves" in New Zealand. Danish baked goods were also renamed in anger when cartoons of Muhammad, regarded as blasphemous by many Muslims, were printed in one of Denmark's leading daily newspapers. In response, some Iranians dubbed Danish pastries "roses of the prophet Muhammad."

Names matter because they prime us to respond in specific ways. Some argue that the term "global warming," for example, is far too mild, suggesting a relaxed and possibly pleasant condition rather than one that is urgent and potentially catastrophic. Instead, they suggest that terms like "climate crisis" or even "climate cancer" would be more accurate and more likely to motivate changes in behavior.

Metaphors matter when it comes to changing attitudes as well as behavior. Ask the average voter what he or she thinks about the government and the answer is likely to be a burst of derisive laughter. That's what Joe Grady and colleagues from the Providence, Rhode Island-based firm Cultural Logic discovered when they asked people this very question as part of a research project for a nonprofit involved in public service provision. Cultural Logic is a consultancy that uses insights from the cognitive and social sciences to advise nonprofits on how to effectively communicate issues of public interest. Grady, the linguist who coined the term "primary metaphor" and who has collaborated with conceptual

metaphor theorist George Lakoff, co-founded Cultural Logic to devise more productive ways of discussing topics of political and social import. Metaphor is one of his tools.

"Many of our most important challenges—climate change, politics, the economic meltdown—are poor targets for human cognition," Grady says. "Expert explanations are complex and jargon-filled and often fail to engage or even inform the public. Yet public engagement and understanding are essential to finding solutions. Metaphor helps bridge that gap."

The term "greenhouse gases" is a case in point. Cultural Logic did hundreds of consumer interviews around the subject of climate change and hardly anyone spontaneously referred to greenhouse gases in their responses. When specifically asked about the term, few could explain how it related to global warming. Perhaps this should not come as a surprise, since few people have any direct knowledge of greenhouses these days. As a result, when prompted, subjects in the Cultural Logic study typically described greenhouses as "nice places where plants live," according to Grady—hardly the right connotations for a discussion of global warming. Which suggested to the folks at Cultural Logic that "greenhouse gases" is an unhelpful metaphor. So they alighted on a more productive one—"carbon dioxide blanket," which has the virtue of explicitly naming the offending gas (CO_2) but the drawback of suggesting that its embrace is warm and cuddly.

In quizzing people about their views of government, Cultural Logic found (after waiting for the derisive laughter to subside) that most respondents operated according to an "us and them" metaphor. The government (them) does things to the people (us) in the form of laws, taxes, regulations, etc., and we (the people) do things to them (the government) every four years or so in the form of voting. A consequence of this metaphor is that voters tend to personalize government, focusing exclusively on high-profile elected

officials as individuals (who can be greedy, venal, and feckless) rather than on other, equally valid aspects of government, such as the government's role in maintaining essential public services. One important casualty of regarding government in this way is the idea of the common good. "While most Americans have some sense of the common good," Grady says, "the 'us and them' metaphor does not give them a way of expressing or even thinking about this important idea." So, as in the climate change exercise, Cultural Logic came up with a better metaphor: "public structures."

As a deft and beautiful use of metaphorical language, "public structures" just can't compete with "Juliet is the sun" or "My love is like a red, red rose." But as a vehicle for introducing the idea of the common good into discussions of government, it has been very successful. Cultural Logic knows this because company co-founder Axel Aubrun is an anthropologist, so fieldwork is a central part of every project.

To test drive its metaphors in the real world, Cultural Logic plays a version of the children's game "Telephone." In Telephone, one person says something to another person, which that other person must then repeat as accurately as possible to another person, who then must repeat it to another person, and so on and so on and so on. When the game is played in a large enough group, the original message usually comes back to the initial speaker completely distorted and often unrecognizable. Cultural Logic calls its version of the game a "talkback chain." Talkback chains are good measures because effective metaphors tend to be easily remembered and retransmitted. This is, in fact, what enables them to become clichés.

Grady and colleagues recruited about 120 people to take part in public structures talkback chains based on paragraphs like the following:

Economists now agree that what has made America so successful is the effectiveness of our Public Structures. The Public Structures

tures Americans have created—such as laws, highways, health and safety agencies, and schools and colleges—are the machines that produce American success and quality of life. Without them, it would be difficult or impossible to get lots of important jobs done. Developing countries may have many smart, hard-working individuals, but they don't have the Public Structures that are essential for overall prosperity.

Talkback testing showed that paragraphs like this one survived reasonably intact and that participants explicitly used the public structures metaphor to think about government in the context of the common good. The same people who laughed in researchers' faces at the mere mention of the word "government" gave thoughtful, deliberate answers to questions about public structures. For example, when asked to explain what public structures are, one respondent said: "Things that we need like the post offices and stuff that keep our country running . . . Without those things, we'd be relying on individuals to do things." When asked how public structures are maintained, another said: "Well, obviously taxes, but also a common belief by everybody that they should be maintained. An agreement by everyone. Traffic lights are Public Structures but if everyone didn't agree that red meant stop then they wouldn't function . . . So I think a combination of government funding and a common belief that they are necessary."

The original text, of course, never mentioned the word "government." Yet the public structures metaphor prompted respondents to focus on government's less visible but no less vital role of providing and maintaining public services—in other words, of working for the common good. The idea of public structures made people less likely to personalize government as "fat cats" or "the nanny state" and more likely to frame government as a collective undertaking with shared responsibilities. The public structures concept even

generated consensus on the issue of taxes, regardless of whether participants identified themselves as Republican or Democrat, conservative or liberal. Of nineteen people who read a paragraph about government services that did not contain the public structures metaphor, 75 percent expressed negative or critical views about taxes. Of fifty subjects responding to the public structures text, 4 percent expressed negative or critical views about taxes.

To be successful, though, a metaphor should not be too, well, metaphorical. If the concept is too novel or the language too flowery, people tend to regard the metaphor as merely decorative, thereby depriving it of any explanatory power. This is why lofty political rhetoric can sound insipid as often as it sounds inspiring; without a practical connection to the real world, voters quickly conclude it's all just fancy words.

The best metaphors are sticky. Once attached to a particular idea, they start to work as an organizing principle through which everything pertaining to that idea is seen. Though the public structures metaphor might seem pretty pedestrian, it does effectively direct people's thinking toward less familiar and perhaps more valuable roles of government.

The surest sign of a successful metaphor is its ability to reproduce. In the Cultural Logic project, subjects routinely extended and embellished the public structures metaphor, spontaneously applying it to new aspects of government (post offices and traffic lights) and teasing out its implications for other areas of public life (taxes). Indeed, other research has shown that people not only remember metaphors better than the actual wording of texts but they also continue to use those metaphors when thinking further about the same topic.

In one study, participants read a short passage about the economy, either one that explicitly compared economic development to auto racing or one that did not. Subjects in the auto-racing group

read "China and India have turbocharged ahead economically," for example, while those in the control group read "China and India have pulled ahead economically." Those who read the passage with explicit auto-racing metaphors continued to use auto-racing metaphors when they talked about the economy, even several days later when they could only vaguely recall the actual content of the original passage. The effect was most pronounced when the metaphor was signaled with a simile, such as "Economic development is like auto racing."

"Metaphor is an indispensable tool for informed decision-making," Grady says. Faced with massively complex issues like climate change and good governance, "it can be difficult to imagine what our responsibility could be. Metaphor helps by putting things on a human scale. Any metaphor is a distortion, but some are more constructive than others. The challenge is to find metaphors that do some good."

The Obama administration has discarded some metaphors it decided weren't doing any good. Soon after taking office, the White House announced it was decommissioning the term "war on terror." Around the same time, Gil Kerlikowske, head of the White House Office of National Drug Control Policy, said he was surrendering the phrase "war on drugs," too. "Regardless of how you try to explain to people it's a 'war on drugs' or a 'war on a product,' people see a war as a war on them," Kerlikowske told the *Wall Street Journal*. "We're not at war with people in this country."

States of war, in fact, tend to rally the metaphorical troops—and most of these metaphors have to do with football.

There are around 1,700 sports metaphors in common use. One study of the figurative language deployed during the Gulf War identified fifty-nine different football metaphors alone. Diplomats fumbled relations with Saddam Hussein before he attacked Kuwait. Opponents of the war sat on the sidelines as air strikes kicked off