

cash; prostitutes are driven to sell their bodies by poverty, drug addiction, or other life circumstances. Sandel doesn't disagree, but the argument doesn't go far enough for him. What about cases in which there is no coercion? On a level playing field, are there no fundamental grounds for limiting markets?

Of course there are, and the reasons go back to why there are some things that money *can't* buy: The things themselves—from love to a Nobel Prize—would be completely corrupted by the transaction.

But there are plenty of potentially objectionable transactions that degrade the thing being sold without completely ruining it. And many of them are permitted. Consider honorary degrees, which universities often give to wealthy donors. The honor is some-

what diminished, but it survives.

What matters most in determining what's an acceptable transaction, according to Sandel, is "the moral importance of the goods that are said to be degraded by market valuation and exchange." That distinction, he admits, is not always clear. Is being a surrogate mother "morally analogous to baby selling"—as the New Jersey Supreme Court ruled in the 1987 "Baby M" case—or "more like sperm selling, a commonly accepted practice"?

What about vote buying? If one accepts today's prevailing "interest-based" view of politics, there's no meaningful argument against it. If "the purpose of democracy is to aggregate people's interests and preferences and translate them into policy," Sandel points out, then there's no basis for

objecting if a politician wants to change your preferences with a Thanksgiving turkey or a hefty tax cut.

The only argument against vote buying that makes sense, Sandel insists, is that suffrage is an aspect of "the ideal of citizenship as the republican tradition conceives it." Politics is more than a market mechanism for expressing individual choices. Each individual shares "a moral bond with the community," including "a sense of obligation for one's fellow citizens" and "a willingness to sacrifice individual interests for the sake of the common good." To sell one's vote would be to degrade and corrupt the ideal of citizenship itself.

There are certain things, Sandel concludes, "that markets do not honor and money cannot buy."

## SCIENCE & TECHNOLOGY

# Yawning Questions

**THE SOURCE:** "Yawning" by Robert R. Provine, in *American Scientist*, Nov.-Dec. 2005.

WHO KNEW? THE COMMON, CONTAGIOUS yawn repays close study by anyone interested in understanding the neural mechanisms of human behavior. So says Robert Provine, a psychologist at the University of Maryland, Baltimore County, who has become, he admits, something of "a yawn stimulus" himself after years of observing the activity. "Yawns are so infectious that simply reading or thinking about them can be the vector of an infectious response." And it's



**Yawns are almost irresistibly contagious, and therein lie neurological and psychological mysteries that scientists are still trying to understand.**

precisely their property of contagiousness that provides a basis for exploring "the neurological roots of social behavior, face detection, empathy, imitation, and the possible pathology of these processes in autism, schizophrenia, and brain damage."

We know that yawning appeared early in vertebrate history and that mammals and most other animals with backbones, including fish, turtles, birds, and crocodiles, engage in it. But we don't know *why* it appeared. (There's no basis for the popular notion that yawning is a response to high levels of carbon dioxide in the blood.) Contagious yawning evolved much later and has been shown to exist only in chimpanzees and humans (though not in children until they are several years old). The physical consequences of the yawn include "opening of the Eustachian

tube, tearing, inflating the lungs, stretching, and signaling drowsiness.” Yet all of these, Provine says, “may be incidental to its primal function—which may be something as unanticipated as sculpting the articulation of the gaping jaw during embryonic development.”

People begin to yawn early in their lives. Indeed, yawning has been observed in three-month-old fetuses—evolutionary evidence of how ancient the behavior is. It’s the contagious quality of the activity that’s especially intriguing. Provine reports that when test subjects watched a five-minute videotape of a man repeatedly yawning, they were more likely to yawn themselves (55 percent did) than when they viewed a tape of the same man smiling. In fact, viewers didn’t even have to see the man’s gaping mouth. It was apparently “the overall pattern of the yawning face and upper body” that produced a response, not any one facial feature. (That’s why politely putting a hand in front of your yawning mouth won’t halt the contagion.)

“Contagious yawning definitely does not involve a conscious desire to replicate the observed act,” Provine observes, but it’s possible, as some research into brain activity suggests, that someone who “catches” a yawn may be unconsciously expressing “a primal form of empathy.” Thus, contagious yawning can be linked to sociality. Some neurological and psychiatric disorders, such as schizophrenia and autism, that leave patients “deficient in their ability to infer or empathize with what others want,” apparently reduce as well their susceptibility to contagious yawning.

Provine believes that further study

will reveal the potential of using yawning to develop theories of mind and to help us better understand certain neuropathologies and psychopathologies. One day we may even come to grasp the circumstances of yawning’s evolutionary origin and define its primal purpose. Until then, the imperfectly understood activity will be, for Provine, “a reminder that ancient and unconscious behavior lurks beneath the veneer of culture, rationality, and language, continuing to influence our lives.”

## SCIENCE &amp; TECHNOLOGY

## It’s the Portions, Stupid!

**THE SOURCE:** “De-Marketing Obesity” by Brian Wansink and Mike Huckabee in *California Management Review*, Summer 2005.

WITH OBESITY ON THE RISE the food industry has been plagued by fears of becoming “the tobacco industry of the new millennium.” Its first response was denial. Then it took refuge in consumer choice. But Americans kept ordering Whoppers. It’s now time, argue Brian Wansink, of Cornell University’s Food and Brand Lab, and Arkansas governor Mike Huckabee, for the industry (and its critics) to come to grips with reality: Human nature follows the path of least effort. People eat what’s easiest to eat. And the genetically programmed taste for salt, fat, and sugar isn’t about to go away.

When researchers compared a group of office workers who had bowls of Hershey’s Kisses placed on their desks with another group whose chocolates sat six feet away, they

found that those with the easier access ate nearly twice as much candy. Bigger food packages also encourage more consumption. For example, consumers given a jumbo box of spaghetti and asked to create a

Human nature follows the path of least effort. People eat what’s easiest to eat.

meal for two will use 15 to 48 percent more food than people given a smaller box.

But research may also point to a solution: Making people more aware of how much they’re eating encourages them to cut back. In a University of Pennsylvania study, one group of participants was given a tube of potato chips with every seventh chip dyed red, a second group a tube with every 14th chip dyed red, and a third group a tube with no dyed chips. People in the first group ate an average of only 10 chips, those in the second group 15, and those with no marked chips 22.

The lesson for manufacturers: By offering smaller package sizes or pre-packaged individual servings, they can make it easier for people to stop eating. Coca-Cola’s new eight-ounce cans—a third smaller than the standard size—are an example. Consumers even seem willing to pay more for the additional packaging that smaller portions require.

When it comes to overcoming those hard-wired human tastes for salt, fat, and sugar, a bit of deviousness may be needed—though Wansink and Huckabee don’t put it that