[http://sciencenews.org/view/generic/id/45494/title/%25%2B%23%24!_makes_you_feel_better]

Science News, August 1st, 2009; Vol.176 #3 / News item

"%&#$!" makes you feel better

Swearing like a sailor may alleviate pain

By *Laura Sanders*

Although the news probably won't stop parents from washing kids' mouths out with soap, it turns out that cussing a blue streak may be a good thing. A study appearing in the August 5 NeuroReport suggests that four-letter words may help alleviate pain.

"Swear words are unique," says Timothy Jay, a psychologist at Massachusetts College of Liberal Arts in North Adams, who has studied the role of naughty words in linguistics. "They're really the link between the language system and the emotional system."

Inspiration for the new study came to psychologist Richard Stephens as he listened to his wife let loose with some unsavory language during the throes of labor. So he and his colleagues at Keele University in England conducted an experiment to test whether uttering emotion-laden choice words can actually change the amount of pain people feel. Undergraduate students (38 males and 29 females) each immersed a hand in cold water (about 5º Celsius) for as long as they could stand it, while repeating either a swear word or an innocuous word.

Before the study, participants were asked to write down five words they might say after hitting their thumb with a hammer—to control for varying foulness thresholds. One of these choices served as a swear word, and control words were five words the participants might use to describe a table. "A word someone might find shocking and scandalous is a word someone else might use every day," Stephens says.

When people had a swear word for their mantra (popular choices: the s-word, the f-word, two b-words and a c-word), they were able to keep a hand in the chilly water longer. What's more, after the ordeal, people who swore reported less pain.

Stephens and his colleagues turned up some interesting differences between men and women. Although swearing helped both sexes keep their hands in cold water longer, women reported a greater decrease in perceived pain after the experiment.

Swearing increased heart rate in both men and women, but had a greater effect on women. Researchers thought the heart rate increase might signal the beginning of a fight-or-flight response. Such a response may allow the body to tolerate or ignore pain, they say.

Many more studies of different kinds of pain and different measures of effects are needed before researchers fully understand the impact of swear words, Stephens says.

Jay says the study gets past the question of whether swearing should be frowned upon in polite society and instead addresses a scientific question. "When you try to describe swearing in moral terms—is it good or bad—it keeps you from getting at the deeper evolutionary links," he says. "Where did this come from? Why do we do it?"

[http://www.scientificamerican.com/article.cfm?id=why-do-we-swear]

News - July 12, 2009

Why the #$%! Do We Swear? For Pain Relief

Dropping the F-bomb or other expletives may not only be an expression of agony, but also a means to alleviate it

By *Frederik Joelving*

Bad language could be good for you, a new study shows. For the first time, psychologists have found that swearing may serve an important function in relieving pain.

The study, published today in the journal *NeuroReport,* measured how long college students could keep their hands immersed in cold water. During the chilly exercise, they could repeat an expletive of their choice or chant a neutral word. When swearing, the 67 student volunteers reported less pain and on average endured about 40 seconds longer.

Although cursing is notoriously decried in the public debate, researchers are now beginning to question the idea that the phenomenon is all bad. "Swearing is such a common response to pain that there has to be an underlying reason why we do it," says psychologist Richard Stephens of Keele University in England, who led the study. And indeed, the findings point to one possible benefit: "I would advise people, if they hurt themselves, to swear," he adds.

How swearing achieves its physical effects is unclear, but the researchers speculate that brain circuitry linked to emotion is involved. Earlier studies have shown that unlike normal language, which relies on the outer few millimeters in the left hemisphere of the brain, expletives hinge on evolutionarily ancient structures buried deep inside the right half.

One such structure is the amygdala, an almond-shaped group of neurons that can trigger a fight-or-flight response in which our heart rate climbs and we become less sensitive to pain. Indeed, the students' heart rates rose when they swore, a fact the researchers say suggests that the amygdala was activated.

That explanation is backed by other experts in the field. Psychologist Steven Pinker of Harvard University, whose book The Stuff of Thought (Viking Adult, 2007) includes a detailed analysis of swearing, compared the situation with what happens in the brain of a cat that somebody accidentally sits on. "I suspect that swearing taps into a defensive reflex in which an animal that is suddenly injured or confined erupts in a furious struggle, accompanied by an angry vocalization, to startle and intimidate an attacker," he says.

But cursing is more than just aggression, explains Timothy Jay, a psychologist at the Massachusetts College of Liberal Arts who has studied our use of profanities for the past 35 years. "It allows us to vent or express anger, joy, surprise, happiness," he remarks. "It's like the horn on your car, you can do a lot of things with that, it's built into you."

In extreme cases, the hotline to the brain's emotional system can make swearing harmful, as when road rage escalates into physical violence. But when the hammer slips, some well-chosen swearwords might help dull the pain.

There is a catch, though: The more we swear, the less emotionally potent the words become, Stephens cautions. And without emotion, all that is left of a swearword is the word itself, unlikely to soothe anyone's pain.

[http://brainvat.wordpress.com/2007/09/19/pinker-on-grammar-swears-and-innuendo/]

Pinker on Grammar, Swears and Innuendo

September 19, 2007 · 1 Comment

In case you haven't heard, Harvard psychology professor Steven Pinker is touring the country in a thinly veiled campaign to sell his new book, The Stuff of Thought. Yesterday I heard him speak at the Philadelphia Free Library. It was very entertaining, though in retrospect, perhaps not super cohesive.

The first third of the lecture was about language as a window into human cognition. For instance, Pinker discussed how verb tenses reveal a primitive theory of physics. Things can either be determined and unchangeable, present and part of conscious experience, or undetermined and changeable. Though this tripartition does not really supervene on scientific truths, conventional use of tenses does allow us to communicate our ideas effectively. Pinker also stressed how we compartmentalize time with spatial metaphors; for instance, we are relieved when a difficult exam is 'behind' us. Pinker suggests that spatial metaphors help us separate events conceptually, but that some ambiguity remains. As an example, he asked whether "9/11″ refers to one event (a terrorist attack) or two (each plane as a separate event). This question seems besides the point, until you realize that the owner of the World Trade Center was supposed to receive 3.5 billion dollars for each destructive event that befell his property. In case you are wondering, a jury decided that it was only one event.

The second third of the lecture was filled with gratuitous swears. I'm not kidding. Pinker was trying to make a point about how language can serve as a window into our emotions, though in reality this point may have been obscured by the furious laughter that erupted every time the the distinguished professor uttered words like "fuck" or "doo-doo." He delineated five contexts in which we swear, devoting most of his discussion to cathartic swearing. Pinker dismissed the so-called hydraulic theory in which we swear to "let off steam." Instead, he suggested that crude interjections are analogous to situations in which lower-order animals let out a yelp or squeal to startle attackers. According to Pinker, swearing is mediated by the same primitive rage circuits, but over time these circuits have hijacked our language systems to produce expletives. He stressed the automaticity of these outcries, suggesting that they may have evolved to alert bystanders about our misfortunes.

Lastly, Pinker discussed how our use of innuendo might reveal interesting information about how we navigate social relationships. He brought up an example from the movie Fargo, in which Steve Buscemi's character hands over his wallet to a cop who pulls him over and asks for his driver's license. Buscemi lets a fifty dollar bill peak out of the wallet and suggests, "I was just thinking we could take care of it right here, in Brainerd." Buscemi's character hopes to bribe to cop, but chooses to veil his offer. Pinker examined this situation through the lens of Game Theory. While failing to offer a bribe brings about a moderately negative outcome no matter what (paying a fine) an overt bribe carries a high risk if the cop is honest (arrest). Innuendo provides a third option, in which Buscemi's character preserves a degree of plausible deniability while successfully suggesting a tit for tat. Thus, the cop is allowed to choose between a relationship of domination and one of reciprocity.

The lecture was very clean and well-rehearsed. In fact, it seems like the same one that he gave in New York. My summary leaves much to be desired, so I highly recommend checking out His Highness for yourself. Perhaps the most engaging part of the lecture was also the least scripted: Pinker does a fantastic job of answering questions pitched from all levels of sophistication....

UPDATE: Pinker has a piece in The New Republic that explains his theory of swearing much better than I could ever hope to do.

[http://www.tnr.com/article/politics/what-the-f]

What the F***?

Why We Curse

by Steven Pinker

F*ucking* became the subject of congressional debate in 2003, after NBC broadcast the Golden Globe Awards. Bono, lead singer of the mega-band U2, was accepting a prize on behalf of the group and in his euphoria exclaimed, "This is really, really, fucking brilliant" on the air. The Federal Communications Commission (FCC), which is charged with monitoring the nation's airwaves for indecency, decided somewhat surprisingly not to sanction the network for failing to bleep out the word. Explaining its decision, the FCC noted that its guidelines define "indecency" as "material that describes or depicts sexual or excretory organs or activities" and Bono had used *fucking* as "an adjective or expletive to emphasize an exclamation."

Cultural conservatives were outraged. California Representative Doug Ose tried to close the loophole in the

FCC's regulations with the filthiest piece of legislation ever considered by Congress. Had it passed, the Clean Airwaves Act would have forbade from broadcast

> the words "shit", "piss", "fuck", "cunt", "asshole", and the phrases "cock sucker", "mother fucker", and "ass hole", compound use (including hyphenated compounds) of such words and phrases with each other or with other words or phrases, and other grammatical forms of such words and phrases (including verb, adjective, gerund, participle, and infinitive forms).

The episode highlights one of the many paradoxes that surround swearing. When it comes to political speech, we are living in a free-speech utopia. Late-night comedians can say rude things about their nation's leaders that, in previous centuries, would have led to their tongues being cut out or worse. Yet, when it comes to certain words for copulation and excretion, we still allow the might of the government to bear down on what people can say in public. Swearing raises many other puzzles--linguistic, neurobiological, literary, political.

The first is the bone of contention in the Bono brouhaha: the syntactic classification of curse words. Ose's grammatically illiterate bill not only misspelled *cocksucker*, *motherfucker*, and *asshole*, and misidentified them as "phrases," it didn't even close the loophole that it had targeted. The Clean Airwaves Act assumed that *fucking* is a participial adjective. But this is not correct. With a true adjective like *lazy*, you can alternate between *Drown the lazy cat* and *Drown the cat which is lazy*. But *Drown the fucking cat* is certainly not interchangeable with *Drown the cat which is fucking*.

If the *fucking* in *fucking brilliant* is to be assigned a traditional part of speech, it would be adverb, because it modifies an adjective and only adverbs can do that, as in *truly bad*, *very nice*, and *really big*. Yet "adverb" is the one grammatical category that Ose forgot to include in his list! As it happens, most expletives aren't genuine adverbs, either. One study notes that, while you can say *That's too fucking bad*, you can't say *That's too very bad*. Also, as linguist Geoffrey Nunberg pointed out, while you can imagine the dialogue *How brilliant was it? Very*, you would never hear the dialogue *How brilliant was it? Fucking*.

The FCC's decision raises another mystery about swearing: the bizarre number of different ways in which we swear. There is cathartic swearing, as when we slice our thumb along with the bagel. There are imprecations, as when we offer advice to someone who has cut us off in traffic. There are vulgar terms for everyday things and activities, as when Bess Truman was asked to get the president to say *fertilizer* instead of *manure* and she replied, "You have no idea how long it took me to get him to say *manure*." There are figures of speech that put obscene words to other uses, such as the barnyard epithet for insincerity, the army acronym *snafu*, and the gynecological-flagellative term for uxorial dominance. And then there are the adjective-like expletives that salt the speech and split the words of soldiers, teenagers, and Irish rock-stars.

But perhaps the greatest mystery is why politicians, editors, and much of the public care so much. Clearly, the fear and loathing are not triggered by the concepts themselves, because the organs and activities they name have hundreds of polite synonyms. Nor are they triggered by the words' sounds, since many of them have respectable homonyms in names for animals, actions, and even people. Many people feel that profanity is self-evidently corrupting, especially to the young. This claim is made despite the fact that everyone is familiar with the words, including most children, and that no one has ever spelled out how the mere hearing of a word could corrupt one's morals.

Progressive writers have pointed to this gap to argue that linguistic taboos are absurd. A true moralist, they say, should hold that violence and inequality are "obscene," not sex and excretion. And yet, since the 1970s, many progressives have imposed linguistic taboos of their own, such as the stigma surrounding the N-word and casual allusions to sexual desire or sexual attractiveness. So even people who revile the usual bluenoses can become gravely offended by their own conception of bad language. The question is, why?

The strange emotional power of swearing--as well as the presence of linguistic taboos in all cultures-- suggests that taboo words tap into deep and ancient parts of the brain. In general, words have not just a denotation but a connotation: an emotional coloring distinct from what the word literally refers to, as in *principled* versus *stubborn* and *slender* versus *scrawny*. The difference between a taboo word and its genteel synonyms, such as *shit* and *feces*, *cunt* and *vagina*, or *fucking* and *making love*, is an extreme example of the distinction. Curses provoke a different response than their synonyms in part because connotations and denotations are stored in different parts of the brain.

The mammalian brain contains, among other things, the limbic system, an ancient network that regulates

motivation and emotion, and the neocortex, the crinkled surface of the brain that ballooned in human evolution and which is the seat of perception, knowledge, reason, and planning. The two systems are interconnected and work together, but it seems likely that words' denotations are concentrated in the neocortex, especially in the left hemisphere, whereas their connotations are spread across connections between the neocortex and the limbic system, especially in the right hemisphere.

A likely suspect within the limbic system is the amygdala, an almond-shaped organ buried at the front of the temporal lobe of the brain (one on each side) that helps invest memories with emotion. A monkey whose amygdalas have been removed can learn to recognize a new shape, like a striped triangle, but has trouble learning that the shape foreshadows an unpleasant event like an electric shock. In humans, the amygdala "lights up"--it shows greater metabolic activity in brain scans--when the person sees an angry face or an unpleasant word, especially a taboo word.

The response is not only emotional but involuntary. It's not just that we don't have earlids to shut out unwanted sounds. Once a word is seen or heard, we are incapable of treating it as a squiggle or noise; we reflexively look it up in memory and respond to its meaning, including its connotation. The classic demonstration is the Stroop effect, found in every introductory psychology textbook and the topic of more than four thousand scientific papers. People are asked to look through a list of letter strings and to say aloud the color of the ink in which each one is printed. Try it with this list, saying "red," "blue," or "green" for each item in turn from left to right:

red blue green blue green red

Easy. But this is much, much, harder:

red blue green blue green red

The reason is that, among literate adults, reading a word is such an over-learned skill that it has become mandatory: You can't will the process "off," even when you don't want to read the words but only pay attention to the ink. That's why you're helped along when the experimenters arrange the ink into a word that also names its color and slowed down when they arrange it into a name for a different color. A similar thing happens with spoken words as well.

Now try naming the color of the ink in each of these words:

cunt shit fuck tits piss asshole

The psychologist Don MacKay has done the experiment and found that people are indeed slowed down by an involuntary boggle as soon as the eyes alight on each word. The upshot is that a speaker or writer can use a taboo word to evoke an emotional response in an audience quite against their wishes. Thanks to the automatic nature of speech perception, an expletive kidnaps our attention and forces us to consider its unpleasant connotations. That makes all of us vulnerable to a mental assault whenever we are in earshot of other speakers, as if we were strapped to a chair and could be given a punch or a shock at any time. And this, in turn, raises the question of what kinds of concepts have the sort of unpleasant emotional charge that can make words for them taboo.

The historical root of swearing in English and many other languages is, oddly enough, religion. We see this in the Third Commandment, in the popularity of *hell*, *damn*, *God*, and *Jesus Christ* as expletives, and in many of the terms for taboo language itself: *profanity* (that which is not sacred), *blasphemy* (literally "evil speech" but, in practice, disrespect toward a deity), and *swearing*, *cursing*, and *oaths*, which originally were secured by the invocation of a deity or one of his symbols.

In English-speaking countries today, religious swearing barely raises an eyebrow. Gone with the wind are the days when people could be titillated by a character in a movie saying "Frankly, my dear, I don't give a damn." If a character today is offended by such language, it's only to depict him as an old-fashioned prude. The defanging of religious taboo words is an obvious consequence of the secularization of Western culture. As G. K. Chesterton remarked, "Blasphemy itself could not survive religion; if anyone doubts that, let him try to blaspheme Odin." To understand religious vulgarity, then, we have to put ourselves in the shoes of our linguistic ancestors, to whom God and Hell were a real presence.

Say you need to make a promise. You may want to borrow money, and so must promise to return it. Why should the promisee believe you, knowing that it may be to your advantage to renege? The answer is that you should submit to a contingency that would impose a penalty on you if you did renege, ideally one so certain and severe

that you would always do better to keep the promise than to back out. That way, your partner no longer has to take you at your word; he can rely on your self-interest. Nowadays, we secure our promises with legal contracts that make us liable if we back out. We mortgage our house, giving the bank permission to repossess it if we fail to repay the loan. But, before we could count on a commercial and legal apparatus to enforce our contracts, we had to do our own self-handicapping. Children still bind their oaths by saying, "I hope to die if I tell a lie." Adults used to do the same by invoking the wrath of God, as in *May God strike me dead if I'm lying* and variations like *As God is my witness*, *Blow me down!*, and *God blind me!*--the source of the British *blimey*.

Such oaths, of course, would have been more credible in an era in which people thought that God listened to their entreaties and had the power to carry them out. Even today, witnesses in U.S. court proceedings have to swear on the Bible, as if an act of perjury undetected by the legal system would be punished by an eavesdropping and easily offended God. But, even if these oaths aren't seen as literally having the power to bring down divine penalties for noncompliance, they signal a distinction between everyday assurances on minor favors and solemn pledges on weightier matters. Today, the emotional power of religious swearing may have dimmed, but the psychology behind it is still with us. Even a parent without an inkling of superstition would not say "I swear on the life of my child" lightly. The mere thought of murdering one's child for ulterior gain is not just unpleasant; it should be unthinkable if one is a true parent, and every neuron of one's brain should be programmed against it.

This literal unthinkability is the basis of the psychology of taboo in general, and it is the mindset that is tapped in swearing on something sacred, whether it be a religious trapping or a child's life. And, thanks to the automatic nature of speech processing, the same sacred words that consecrate promises--the oath-binding sense of "swearing"--may be used to attract attention, to shock, or to inflict psychic pain on a listener--the dirty-word sense of "swearing."

As secularization has rendered religious swear words less powerful, creative speakers have replaced them with words that have the same degree of affective clout according to the sensibilities of the day. This explains why taboo expressions can have such baffling syntax and semantics. To take just one example, why do people use the ungrammatical *Fuck you*? And why does no one have a clear sense of what, exactly, *Fuck you* means? (Some people guess "fuck yourself," others "get fucked," and still others "I will fuck you," but none of these hunches is compelling.) The most likely explanation is that these grammatically baffling curses originated in more intelligible *religious* curses during the transition from religious to sexual and scatological swearing in English-speaking countries:

> Who (in) the hell are you? >> Who the fuck are you?
> I don't give a damn >> I don't give a fuck; I don't give a shit.
> Holy Mary! >> Holy shit! Holy fuck!
> For God's sake >> For fuck's sake; For shit's sake.
> Damn you! >> Fuck you!

Of course, this transmutation raises the question of why words for these particular concepts stepped into the breach--why, for example, words for bodily effluvia and their orifices and acts of excretion became taboo. *Shit*, *piss*, and *asshole*, to name but a few, are still unspeakable on network television and unprintable in most newspapers. *The New York Times*, for example, identified a best-seller by the philosopher Harry Frankfurt as *On Bull****.

On the whole, the acceptability of taboo words is only loosely tied to the acceptability of what they refer to, but, in the case of taboo terms for effluvia, the correlation is fairly good. The linguists Keith Allan and Kate Burridge have noted that *shit* is less acceptable than *piss*, which in turn is less acceptable than *fart*, which is less acceptable than *snot*, which is less acceptable than *spit* (which is not taboo at all). That's the same order as the acceptability of eliminating these substances from the body in public. Effluvia have such an emotional charge that they figure prominently in voodoo, sorcery, and other kinds of sympathetic magic in many of the world's cultures. The big deal that people ordinarily make out of effluvia--both the words and the substances--has puzzled many observers. After all, we are incarnate beings, and excretion is an inescapable part of human life.

The biologists Valerie Curtis and Adam Biran identify the reason. It can't be a coincidence, they note, that the most disgusting substances are also the most dangerous vectors for disease. Feces is a route of transmission for the viruses, bacteria, and protozoans that cause at least 20 intestinal diseases, as well as ascariasis,

hepatitis A and E, polio, ameobiasis, hookworm, pinworm, whipworm, cholera, and tetanus. Blood, vomit, mucus, pus, and sexual fluids are also good vehicles for pathogens to get from one body into another. Although the strongest component of the disgust reaction is a desire not to eat or touch the offending substance, it's also disgusting to *think* about effluvia, together with the body parts and activities that excrete them. And, because of the involuntariness of speech perception, it's unpleasant to hear the words for them.

Some people have been puzzled about why *cunt* should be taboo. It is not just an unprintable word for the vagina but the most offensive epithet for a woman in America. One might have thought that, in the male-dominated world of swearing, the vagina would be revered, not reviled. After all, it's been said that no sooner does a boy come out of it than he spends the rest of his life trying to get back in. This becomes less mysterious if one imagines the connotations in an age before tampons, toilet paper, regular bathing, and antifungal drugs.

The other major source of taboo words is sexuality. Since the 1960s, many progressive thinkers have found these taboos to be utterly risible. Sex is a source of mutual pleasure, they reason, and should be cleansed of stigma and shame. Prudery about sexual language could only be a superstition, an anachronism, perhaps a product of spite, as in H. L. Mencken's definition of *puritanism* as "the haunting fear that someone, somewhere, may be happy."

The comedian Lenny Bruce was puzzled by our most common sexual imprecation. In a monologue reproduced in the biopic *Lenny*, he riffs:

> What's the worst thing you can say to anybody? "Fuck you, Mister." It's really weird, because, if I really wanted to hurt you, I should say "Unfuck you, Mister." Because "Fuck you" is really *nice*! "Hello, Ma, it's me. Yeah, I just got back. Aw, fuck you, Ma! Sure, I mean it. Is Pop there? Aw, fuck you, Pop!"

Part of the puzzlement comes from the strange syntax of *Fuck you* (which, as we saw, does not in fact mean "Have sex"). But it also comes from a modern myopia for how incendiary sexuality can be in the full sweep of human experience.
Consider two consenting adults who have just had sex. Has everyone had fun? Not necessarily. One partner might see the act as the beginning of a lifelong relationship, the other as a one-night-stand. One may be infecting the other with a disease. A baby may have been conceived, whose welfare was not planned for in the heat of passion. If the couple is related, the baby may inherit two copies of a deleterious recessive gene and be susceptible to a genetic defect. There may be romantic rivals in the wings who would be enraged with jealousy if they found out, or a cuckolded husband in danger of raising another man's child, or a two-timed wife in danger of losing support for her own children. Parents may have marriage plans for one of the participants, involving large sums of money or an important alliance with another clan. And, on other occasions, the participants may not both be adults, or may not both be consenting.

Sex has high stakes, including exploitation, disease, illegitimacy, incest, jealousy, spousal abuse, cuckoldry, desertion, feuding, child abuse, and rape. These hazards have been around for a long time and have left their mark on our customs and our emotions. Thoughts about sex are likely to be fraught, and not entertained lightly. *Words* for sex can be even more touchy, because they not only evoke the charged thoughts but implicate a sharing of those thoughts between two people. The thoughts, moreover, are shared "on the record," each party knowing that the other knows that he or she has been thinking about the sex under discussion. This lack of plausible deniability embroils the dialogue in an extra layer of intrigue.

Evolutionary psychology has laid out the conflicts of interest that are inherent to human sexuality, and some of these conflicts play themselves out in the linguistic arena. Plain speaking about sex conveys an attitude that sex is a casual matter, like tennis or philately, and so it may seem to the partners at the time. But the long-term implications may be more keenly felt by a wider circle of interested parties. Parents and other senior kin may be concerned with the thwarting of their own plans for the family lineage, and the community may take an interest in the illegitimate children appearing in their midst and in the posturing and competition, sometimes violent, that can accompany sexual freedom. The ideal of sex as a sacred communion between a monogamous couple may be old-fashioned and even unrealistic, but it sure is convenient for the elders of a family and a society. It's not surprising to find tensions between individuals and guardians of the community over casual talk about sex (accompanied by hypocrisy among the guardians when it comes to their own casual sex).

Another sexual conflict of interest divides men from women. In every act of reproduction, females are committed

to long stretches of pregnancy and lactation, while males can get away with a few minutes of copulation. A male can have more progeny if he mates with many females, whereas a female will not have more progeny if she mates with many males--though her offspring will do better if she has chosen a mate who is willing to invest in them or can endow them with good genes. Not surprisingly, in all cultures men pursue sex more eagerly, are more willing to have casual sex, and are more likely to seduce, deceive, or coerce to get sex. All things being equal, casual sex works to the advantage of men, both genetically and emotionally. We might expect casual *talk* about sex to show the same asymmetry, and so it does. Men swear more, on average, and many taboo sexual terms are felt to be especially demeaning to women-- hence the old prohibition of swearing "in mixed company."

A sex difference in tolerance for sexual language may seem like a throwback to Victorian daintiness. But an unanticipated consequence of the second wave of feminism in the 1970s was a revived sense of offense at swearing, the linguistic companion to the campaign against pornography. As a result, many universities and businesses have published guidelines on sexual harassment that ban telling sexual jokes, and, in 1993, veteran *Boston Globe* journalist David Nyhan was forced to apologize and donate $1,250 to a women's organization when a female staffer overheard him in the newsroom using the word *pussy-whipped* with a male colleague who declined his invitation to play basketball after work. The feminist writer Andrea Dworkin explicitly connected coarse sexual language to the oppression of women: "Fucking requires that the male act on one who has less power and this valuation is so deep, so completely implicit in the act, that the one who is fucked is stigmatized."

Though people are seeing, talking about, and having sex more readily today than they did in the past, the topic is still not free of taboo. Most people still don't copulate in public, swap spouses at the end of a dinner party, have sex with their siblings and children, or openly trade favors for sex. Even after the sexual revolution, we have a long way to go before "exploring our sexuality" to the fullest, and that means that people still set up barriers in their minds to block certain trains of thought. The language of sex can tug at those barriers.

"Which brings us back to *fucking*--Bono's *fucking*, that is..."

Which brings us back to *fucking*--Bono's *fucking*, that is. Does a deeper understanding of the history, psychology, and neurobiology of swearing give us any basis for deciding among the prohibitions in the Clean Airwaves Act, the hairsplitting of the FCC, and the libertinism of a Lenny Bruce?

When it comes to policy and law, it seems to me that free speech is the bedrock of democracy and that it is not among the legitimate functions of government to punish people who use certain vocabulary items or allow others to use them. On the other hand, private media have the prerogative of enforcing a house style, driven by standards of taste and the demands of the market, that excludes words their audience doesn't enjoy hearing. In other words, if an entertainer says *fucking brilliant*, it's none of the government's business; but, if some people would rather not explain to their young children what a blow job is, there should be television channels that don't force them to.

What about decisions in the private sphere? Are there guidelines that can inform our personal and institutional judgments about when to discourage, tolerate, and even welcome profanity? Here are some thoughts.

Language has often been called a weapon, and people should be mindful about where to aim it and when to fire. The common denominator of taboo words is the act of forcing a disagreeable thought on someone, and it's worth considering how often one really wants one's audience to be reminded of excrement, urine, and exploitative sex. Even in its mildest form, intended only to keep the listener's attention, the lazy use of profanity can feel like a series of jabs in the ribs. They are annoying to the listener and a confession by the speaker that he can think of no other way to make his words worth attending to. It's all the more damning for writers, who have the luxury of choosing their words off-line from the half-million-word phantasmagoria of the English language.

Also calling for reflection is whether linguistic taboos are always a bad thing. Why are we offended--why *should* we be offended--when an outsider refers to an African American as a *nigger*, or a woman as a *cunt*, or a Jewish person as a *fucking Jew*? I suspect that the sense of offense comes from the nature of speech recognition and from what it means to understand the connotation of a word. If you're an English speaker, you can't hear the words *nigger* or *cunt* or *fucking* without calling to mind what they mean to an implicit community of speakers, including the emotions that cling to them. To hear *nigger* is to try on, however briefly, the thought that there is something contemptible about African Americans and thus to be complicit in a community that standardized that judgment into a word. Just hearing the words feels morally corrosive. None of this means that the words should be banned, only that their effects on listeners should be understood and anticipated.

Also deserving of reflection is why previous generations of speakers bequeathed us a language that treats certain topics with circumspection and restraint. The lexical libertines of the 1960s believed that taboos on sexual language were pointless and even harmful. They argued that removing the stigma from sexuality would eliminate shame and ignorance and thereby reduce venereal disease, illegitimate births, and other hazards of sex. But this turned out to be mistaken. Sexual language has become far more common since the early '60s, but so has illegitimacy, sexually transmitted disease, rape, and the fallout of sexual competition like anorexia in girls and swagger-culture in boys. Though no one can pin down cause and effect, the changes are of a piece with the weakening of the fear and awe that used to surround thoughts about sex and that charged sexual language with taboo.

Those are some of the reasons to think twice about giving carte blanche to swearing. But there is another reason. If an overuse of taboo words, whether by design or laziness, blunts their emotional edge, it will have deprived us of a linguistic instrument that we sometimes sorely need. And this brings me to the arguments on the pro-swearing side.

To begin with, it's a fact of life that people swear. The responsibility of writers is to give a "just and lively image of human nature," as poet John Dryden wrote, and that includes portraying a character's language realistically when their art calls for it. When Norman Mailer wrote his true-to-life novel about World War II, *The Naked and the Dead*, in 1948, his compromise with the sensibilities of the day was to have soldiers use the pseudo-epithet *fug*. (When Dorothy Parker met him, she said, "So you're the man who doesn't know how to spell *fuck*.") Sadly, this prissiness is not a thing of the past: Some public television stations today fear broadcasting Ken Burns' documentary on World War II because of the salty language in his interviews with veterans. The prohibition against swearing in broadcast media makes artists and historians into liars and subverts the responsibility of grown-ups to learn how life is lived in worlds distant from their own.

Even when their characters are not soldiers, writers must sometimes let them swear in order to render human passion compellingly. In the film adaptation of Isaac Bashevis Singer's *Enemies: A Love Story*, a sweet Polish peasant girl has hidden a Jewish man in a hayloft during the Nazi occupation and becomes his doting wife when the war is over. When she confronts him over an affair he has been having, he loses control and slaps her in the face. Fighting back tears of rage, she looks him in the eye and says slowly, "I saved your life. I took the last bite of food out of my mouth and gave it to you in the hayloft. I carried out your *shit*!" No other word could convey the depth of her fury at his ingratitude.

For language lovers, the joys of swearing are not confined to the works of famous writers. We should pause to applaud the poetic genius who gave us the soldiers' term for chipped beef on toast, *shit on a shingle*, and the male-to-male advisory for discretion in sexual matters, *Keep your pecker in your pocket*. Hats off, too, to the wordsmiths who thought up the indispensable *pissing contest*, *crock of shit*, *pussy-whipped*, and *horse's ass*. Among those in the historical record, Lyndon Johnson had a certain way with words when it came to summing up the people he distrusted, including a Kennedy aide ("He wouldn't know how to pour piss out of a boot if the instructions were printed on the heel"), Gerald Ford ("He can't fart and chew gum at the same time"), and J. Edgar Hoover ("I'd rather have him inside the tent pissing out than outside pissing in").

When used judiciously, swearing can be hilarious, poignant, and uncannily descriptive. More than any other form of language, it recruits our expressive faculties to the fullest: the combinatorial power of syntax; the evocativeness of metaphor; the pleasure of alliteration, meter, and rhyme; and the emotional charge of our attitudes, both thinkable and unthinkable. It engages the full expanse of the brain: left and right, high and low, ancient and modern. Shakespeare, no stranger to earthy language himself, had Caliban speak for the entire human race when he said, "You taught me language, and my profit on't is, I know how to curse."