

## **Super Freakonomics**

**Steven Levitt, Stephen Dubner—2009.**

### **INTRODUCTION: PUTTING THE FREAK IN ECONOMICS**

- Doing the math, you find that on a per-mile basis, a drunk walker is eight times more likely to get killed than a drunk driver. There's one important caveat: a drunk walker isn't likely to hurt or kill anyone other than her- or himself. That can't be said of a drunk driver. In fatal accidents involving alcohol, 36 percent of the victims are either passengers, pedestrians, or other drivers. Still, even after factoring in the deaths of those innocents, walking drunk leads to five y times as many deaths per mile as driving drunk.
- Only 10 percent of Indian families with two sons want another child, whereas nearly 40 percent of families with two daughters want to try again. Giving birth to a baby boy is like giving birth to a 401 (k) retirement fund. He will grow up to be a wage-earning man who can provide for his parents in their sunset years and, when the time comes, light the funeral pyre.
- Why such a high fail rate? According to the Indian Council of Medical Research, some 60 percent of Indian men have penises too small for the condoms manufactured to fit World Health Organization
- This means that a New Yorker was nearly twice as likely to die from a horse accident in 1900 than from a car accident today.
- In vacant lots, horse manure was piled as high as sixty feet.

### **CHAPTER 1: HOW IS A STREET PROSTITUTE LIKE A DEPARTMENT-STORE SANTA?**

- This is pretty typical. As with other illicit markets—think about drug dealing or black-market guns—most governments prefer to punish the people who are supplying the goods and services rather than the people who are consuming them. But when you lock up a supplier, a scarcity is created that inevitably drives the price higher, and that entices more suppliers to enter the market. The U.S. “war on drugs” has been relatively ineffective precisely because it focuses on sellers and not buyers. While drug buyers obviously outnumber drug sellers, more than 90 percent of all prison time for drug convictions is served by dealers.
- It turns out that the typical street prostitute in Chicago works 13 hours a week, performing 10 sex acts during that period, and earns an hourly wage of approximately \$27. So her weekly take-home pay is roughly \$350. This includes an average of \$20 that a prostitute steals from her customers and acknowledges that some prostitutes accept drugs in lieu of cash—usually crack cocaine or heroin, and usually at a discount. Of all the women in Venkatesh's study, 83 percent were drug addicts.
- Prostitution paid about four times more than those jobs.
- 20 percent of American men born between 1933 and 1942 had their first sexual intercourse with a prostitute. In his generation, only 5 percent of men lose their virginity to a prostitute.
- The data don't lie: a Chicago street prostitute is more likely to have sex with a cop than to be arrested by one.
- In 1960, about 40 percent of female teachers scored in the top quintile of IQ and other aptitude tests, with only 8 percent in the bottom. Twenty years later, fewer than half as many were in the

top quintile, with more than twice as many in the bottom. It hardly helped that teachers' wages were falling significantly in relation to those of other jobs. "The quality of teachers has been declining for decades," the chancellor of New York City's public schools declared in 2000, "and no one wants to talk about it."

- Her price hikes revealed another surprise: the more she charged, the less actual sex she was having. At \$300 an hour, she had a string of one-hour appointments with each man wanting to get in as much action as he could. But charging \$500 an hour, she was often wined and dined—"a four-hour dinner date that ends with a twenty-minute sexual encounter," she says, "even though I was the same girl, dressed the same. And had the same conversations as when I charged \$300."

## **CHAPTER 2: WHY SHOULD SUICIDE BOMBERS BUY LIFE INSURANCE?**

- Mastery arrives through what Ericsson calls "deliberate practice." This entails more than simply playing a C-minor scale a hundred times or hitting tennis serves until your shoulder pops out of its socket. Deliberate practice has three key components: setting specific goals; obtaining immediate feedback; and concentrating as much on technique as on outcome.
- The probability that an average American will die in a given year from a terrorist attack is roughly 1 in 5 million; he is 575 times more likely to commit suicide.
- But consider the collateral costs as well. In just the three months following the attacks, there were one thousand extra traffic deaths in the United States. Why?
- Holding off death by even a single day can sometimes be worth millions of dollars. Consider the estate tax, which is imposed on the taxable estate of a person upon his or her death. In the United States, the rate in recent years was 45 percent, with an exemption for the first \$2 million. In 2009, however, the exemption jumped to \$3.5 million which meant that the heirs of a rich, dying parent had about 1.5 million reasons to console themselves if said parent died on the first day of 2009 rather than the last day of 2008.
- The bulk of this spending goes to chemotherapy, which is used in a variety of ways and has proven effective on some cancers, including leukemia, lymphoma, Hodgkin's disease, and testicular cancer, especially if these cancers are detected early. But in most other cases, chemotherapy is remarkably effective. An exhaustive analysis of cancer treatment in the United States and Australia showed that the five-year survival rate for all patients was about 63 percent but that chemotherapy contributed barely 2 percent to this result. There is a long list of cancers for which chemotherapy had zero discernible effect, including multiple myeloma, soft-tissue sarcoma, melanoma of the skin, and cancers of the pancreas, uterus, prostate, bladder, and kidney.
- And, to further put things in perspective, think about this: since 1982, some 42,000 active U.S. military personnel have been killed—roughly the same number of Americans who die in traffic accidents in a single year.
- Unlike most other metrics in the algorithm, which produce a yes or no answer? Variable X measures the intensity of a particular banking activity. While not unusual in low intensities among the general population, this behavior occurs in high intensities much more frequently among those who have other terrorist markers.

### **CHAPTER 3: UNBELIEVABLE STORIES ABOUT APATHY AND ALTRUISM**

- For more than half an hour 38 respectable, law-abiding citizens in Queens watched a killer stalk and stab a woman in three separate attacks in Kew Gardens. Not one person telephoned the police during the assault; one witness called after the woman was dead.
- What do those freed prisoners do? A whole lot of crime. In the three years after the ACLU wins a case, violent crime rises by 10 percent and property crime by 5 percent in the affected states.
- But by 1970, violent crime was twice as high in the cities that got TV early relative to those that got it late. For property crime, the early-TV cities started with much lower rates in the 1940s than the late-TV cities, but ended up with much higher rates.
- It may be that kids who watched a lot of TV never got properly socialized, or never learned to entertain themselves.
- The final version of his experiment, with the envelope-stuffing, was perhaps most compelling. It suggests that when a person comes into some money honestly and believes that another person has done the same, she neither gives away what she earned nor takes what doesn't belong to her.
- Our behavior can be changed by even subtler levels of scrutiny. At the University of Newcastle upon Tyne in England, a psychology professor named Melissa Bateson surreptitiously ran an experiment in her own department's break room. Customarily, faculty members paid for coffee and other drinks by dropping money into an "honesty box." Each week, Bateson posted a new price list. The prices never changed, but the small photograph atop the list did. On odd weeks, there was a picture of flowers; on even weeks, a pair of human eyes. When the eyes were watching, Bateson's colleagues left nearly three times as much money in the honesty box. So the next time you laugh when a bird is frightened off by a silly scarecrow, remember that scarecrows work on human beings too.

### **CHAPTER 4: THE FIX IS IN—AND IT'S CHEAP AND SIMPLE**

- Consider the Americans with Disabilities Act (ADA), which was intended to safeguard disabled workers from discrimination. A noble intention, yes? Absolutely—but the data convincingly show that the net result was fewer jobs for Americans with disabilities. Why? After the ADA became law, employers were so worried they wouldn't be able to discipline or fire bad workers who had a disability that they avoided hiring such workers in the first place.
- A quick look at the raw EARS data from nearly thirty years of crashes reveals a surprising result. For children two and older, the rate of death in crashes involving at least one fatality is almost identical for those riding in car seats and those wearing seat belts:
- Since a plain old seat belt can meet the government's safety standard for car seats, perhaps it's not very surprising that car-seat manufacturers turn out a product that can't beat the seat belt. Sad, perhaps, but not surprising.
- Do you really think the best solution is to begin with a device optimized for adults and use it to strap down some second, child-sized contraption? Would you really stipulate that this contraption be made by dozens of different manufacturers? And yet had to work in all vehicles even though each vehicle's seat has its own design? So here's a radical thought: considering that half of all passengers who ride in the backseat of cars are children, what if seat belts were designed to fit them in the first place? Wouldn't it make more sense to take a proven solution—one that happens to be cheap and simple—and adapt it, whether through adjustable belts or fold-down seat inserts

(which do exist, though not widely)—rather than relying on a costly. Cumbersome solution that doesn't work very well? But things seem to be moving in the opposite direction. Instead of pushing for a better solution to child auto safety, state governments across the United States have been raising the age when kids can graduate from car seats.

- The ring might be made from old truck tires, filled with foamed concrete and lashed together with steel cable. The cylinder, extending perhaps six hundred feet deep into the ocean, could be fashioned from polyethylene, aka the plastic used in shopping bags. “That’s it!” Nathan crows. How does it work? Imagine one of these skirted inner tubes—a giant, funky, man-made jellyfish—floating in the ocean. As a warm wave splashes over the top, the water level inside the ring rises until it is higher than the surrounding ocean. “When you have water elevated above the surface in a tube like that,” Nathan explains, “it’s called ‘hydraulic head.’” Hydraulic head is a force, created by the energy put into the waves by wind. This force would push the warm surface water down into the long plastic cylinder, ultimately flushing it out at the bottom, far beneath the surface. As long as the waves keep coming—and they always do—the hydraulic head’s force would keep pushing surface water into the cooler depths, which inevitably lowers the ocean’s surface temperature. The process is low-impact, non-polluting, and slow: a molecule of warm surface water would take about three hours to be flushed out the bottom of the plastic cylinder.

## **CHAPTER 5: WHAT DO AL GORE AND MOUNT PINATUBO HAVE IN COMMON?**

- How so? Because cows—as well as sheep and other cud-chewing animals called ruminants—are wicked polluters. Their exhalation and flatulence and belching and manure emit methane, which by one common measure is about twenty-five times more potent as a greenhouse gas than the carbon dioxide released by cars (and, by the way, humans). The world’s ruminants are responsible for about 50 percent more greenhouse gas than the entire transportation sector.
- Found that buying locally produced food actually increases greenhouse-gas emissions. Why? More than 80 percent of the emissions associated with food are in the production phase, and big farms are far more efficient than small farms. Transportation represents only 11 percent of food emissions, with delivery from producer to retailer representing only 4 percent. The best way to help, Weber and Matthews suggest, is to subtly change your diet. “Shifting less than one day per weeks’ worth of calories from red meat and dairy products to chicken, fish, eggs, or a vegetable-based diet achieves more greenhouse-gas reduction than buying all locally sourced food,” they write.
- “On balance, the role of clouds is to produce a cooling,” says Latham. “If clouds didn’t exist in the atmosphere, the earth would be a lot hotter, than it is now.” Even man-made clouds—the contrails from a jet plane, for instance have a cooling effect. After the September 11 terrorist attacks, all commercial flights in the United States were grounded for three days. Using data from more than four thousand weather stations across the country. Scientists found that the sudden absence of contrails accounted for a subsequent rise in ground temperature of nearly 2 degrees Fahrenheit, or 1.1 degrees Celsius.
- That’s what Intellectual Ventures has in mind for global warming and that is what public-health officials have finally embraced to cut down on hospital-acquired infections. Among the best solutions: using disposable blood-pressure cuffs on incoming patients; infusing hospital equipment with silver ion particles to create an antimicrobial shield; and forbidding doctors to wear neckties because, as the U.K. Department of Health has noted, they “are rarely laundered,”

“perform no beneficial function in patient care,” and “have been shown to be colonized by pathogens.

EPILOGUE: MONKEYS ARE PEOPLE TOO