**2005**

**Text 1**

Everybody loves a fat pay rise. Yet pleasure at your own can vanish if you learn that a colleague has been given a bigger one. Indeed, if he has a reputation for slacking, you might even be outraged. Such behaviour is regarded as “all too human,” with the underlying assumption that other animals would not be capable of this finely developed sense of grievance. But a study by Sarah Brosnan and Frans de Waal of Emory University in Atlanta, Georgia, which has just been published in Nature, suggests that it is all too monkey, as well.

The researchers studied the behaviour of female brown capuchin monkeys. They look cute. They are good-natured, co-operative creatures, and they share their food readily. Above all, like their female human counterparts, they tend to pay much closer attention to the value of “goods and services” than males.

Such characteristics make them perfect candidates for Dr. Brosnan’s and Dr. de Waal’s study. The researchers spent two years teaching their monkeys to exchange tokens for food. Normally, the monkeys were happy enough to exchange pieces of rock for slices of cucumber. However, when two monkeys were placed in separate but adjoining chambers, so that each could observe what the other was getting in return for its rock, their behaviour became markedly different.

In the world of capuchins, grapes are luxury goods (and much preferable to cucumbers). So when one monkey was handed a grape in exchange for her token, the second was reluctant to hand hers over for a mere piece of cucumber. And if one received a grape without having to provide her token in exchange at all, the other either tossed her own token at the researcher or out of the chamber, or refused to accept the slice of cucumber. Indeed, the mere presence of a grape in the other chamber (without an actual monkey to eat it) was enough to induce resentment in a female capuchin.

The researchers suggest that capuchin monkeys, like humans, are guided by social emotions. In the wild, they are a co-operative, group-living species. Such co-operation is likely to be stable only when each animal feels it is not being cheated. Feelings of righteous indignation, it seems, are not the preserve of people alone. Refusing a lesser reward completely makes these feelings abundantly clear to other members of the group. However, whether such a sense of fairness evolved independently in capuchins and humans, or whether it stems from the common ancestor that the species had 35 million years ago, is, as yet, an unanswered question.

**2005**

**Text 2**

Do you remember all those years when scientists argued that smoking would kill us but the doubters insisted that we didn’t know for sure? That the evidence was inconclusive, the science uncertain? That the antismoking lobby was out to destroy our way of life and the government should stay out of the way? Lots of Americans bought that nonsense, and over three decades, some 10 million smokers went to early graves.

There are upsetting parallels today, as scientists in one wave after another try to awaken us to the growing threat of global warming. The latest was a panel from the National Academy of Sciences, enlisted by the White House, to tell us that the Earth’s atmosphere is definitely warming and that the problem is largely man-made. The clear message is that we should get moving to protect ourselves. The president of the National Academy, Bruce Alberts, added this key point in the preface to the panel’s report: “Science never has all the answers. But science does provide us with the best available guide to the future, and it is critical that our nation and the world base important policies on the best judgments that science can provide concerning the future consequences of present actions.”

Just as on smoking, voices now come from many quarters insisting that the science about global warming is incomplete, that it’s OK to keep pouring fumes into the air until we know for sure. This is a dangerous game: by the time 100 percent of the evidence is in, it may be too late. With the risks obvious and growing, a prudent people would take out an insurance policy now.

Fortunately, the White House is starting to pay attention. But it’s obvious that a majority of the president’s advisers still don’t take global warming seriously. Instead of a plan of action, they continue to press for more research -- a classic case of “paralysis by analysis.”

To serve as responsible stewards of the planet, we must press forward on deeper atmospheric and oceanic research. But research alone is inadequate. If the Administration won’t take the legislative initiative, Congress should help to begin fashioning conservation measures. A bill by Democratic Senator Robert Byrd of West Virginia, which would offer financial incentives for private industry, is a promising start. Many see that the country is getting ready to build lots of new power plants to meet our energy needs. If we are ever going to protect the atmosphere, it is crucial that those new plants be environmentally sound.

**2005**

**Text 3**

Of all the components of a good night’s sleep, dreams seem to be least within our control. In dreams, a window opens into a world where logic is suspended and dead people speak. A century ago, Freud formulated his revolutionary theory that dreams were the disguised shadows of our unconscious desires and fears; by the late 1970s, neurologists had switched to thinking of them as just “mental noise” -- the random byproducts of the neural-repair work that goes on during sleep. Now researchers suspect that dreams are part of the mind’s emotional thermostat, regulating moods while the brain is “off-line.” And one leading authority says that these intensely powerful mental events can be not only harnessed but actually brought under conscious control, to help us sleep and feel better, “It’s your dream,” says Rosalind Cartwright, chair of psychology at Chicago’s Medical Center. “If you don’t like it, change it.”

Evidence from brain imaging supports this view. The brain is as active during REM (rapid eye movement) sleep -- when most vivid dreams occur -- as it is when fully awake, says Dr, Eric Nofzinger at the University of Pittsburgh. But not all parts of the brain are equally involved; the limbic system (the “emotional brain”) is especially active, while the prefrontal cortex (the center of intellect and reasoning) is relatively quiet. “We wake up from dreams happy or depressed, and those feelings can stay with us all day.” says Stanford sleep researcher Dr. William Dement.

The link between dreams and emotions shows up among the patients in Cartwright’s clinic. Most people seem to have more bad dreams early in the night, progressing toward happier ones before awakening, suggesting that they are working through negative feelings generated during the day. Because our conscious mind is occupied with daily life we don’t always think about the emotional significance of the day’s events -- until, it appears, we begin to dream.

And this process need not be left to the unconscious. Cartwright believes one can exercise conscious control over recurring bad dreams. As soon as you awaken, identify what is upsetting about the dream. Visualize how you would like it to end instead; the next time it occurs, try to wake up just enough to control its course. With much practice people can learn to, literally, do it in their sleep.

At the end of the day, there’s probably little reason to pay attention to our dreams at all unless they keep us from sleeping or “we wake up in a panic,” Cartwright says. Terrorism, economic uncertainties and general feelings of insecurity have increased people’s anxiety. Those suffering from persistent nightmares should seek help from a therapist. For the rest of us, the brain has its ways of working through bad feelings. Sleep -- or rather dream -- on it and you’ll feel better in the morning.

**2005**

**Text 4**

Americans no longer expect public figures, whether in speech or in writing, to command the English language with skill and gift. Nor do they aspire to such command themselves. In his latest book, Doing Our Own Thing: The Degradation of Language and Music and Why We Should, Like, Care, John McWhorter, a linguist and controversialist of mixed liberal and conservative views, sees the triumph of 1960s counter-culture as responsible for the decline of formal English.

Blaming the permissive 1960s is nothing new, but this is not yet another criticism against the decline in education. Mr. McWhorter’s academic speciality is language history and change, and he sees the gradual disappearance of “whom,” for example, to be natural and no more regrettable than the loss of the case-endings of Old English.

But the cult of the authentic and the personal, “doing our own thing,” has spelt the death of formal speech, writing, poetry and music. While even the modestly educated sought an elevated tone when they put pen to paper before the 1960s, even the most well regarded writing since then has sought to capture spoken English on the page. Equally, in poetry, the highly personal, performative genre is the only form that could claim real liveliness. In both oral and written English, talking is triumphing over speaking, spontaneity over craft.

Illustrated with an entertaining array of examples from both high and low culture, the trend that Mr. McWhorter documents is unmistakable. But it is less clear, to take the question of his subtitle, why we should, like, care. As a linguist, he acknowledges that all varieties of human language, including non-standard ones like Black English, can be powerfully expressive -- there exists no language or dialect in the world that cannot convey complex ideas. He is not arguing, as many do, that we can no longer think straight because we do not talk proper.

Russians have a deep love for their own language and carry large chunks of memorized poetry in their heads, while Italian politicians tend to elaborate speech that would seem old-fashioned to most English-speakers. Mr. McWhorter acknowledges that formal language is not strictly necessary, and proposes no radical education reforms -- he is really grieving over the loss of something beautiful more than useful. We now take our English “on paper plates instead of china.” A shame, perhaps, but probably an inevitable one.

**2006**

**Text 1**

　　In spite of “endless talk of difference,” American society is an amazing machine for homogenizing people. There is “the democratizing uniformity of dress and discourse, and the casualness and absence of deference” characteristic of popular culture. People are absorbed into “a culture of consumption” launched by the 19th-century department stores that offered “vast arrays of goods in an elegant atmosphere. Instead of intimate shops catering to a knowledgeable elite,” these were stores “anyone could enter, regardless of class or background. This turned shopping into a public and democratic act.” The mass media, advertising and sports are other forces for homogenization.

　　Immigrants are quickly fitting into this common culture, which may not be altogether elevating but is hardly poisonous. Writing for the National Immigration Forum, Gregory Rodriguez reports that today’s immigration is neither at unprecedented levels nor resistant to assimilation. In 1998 immigrants were 9.8 percent of population; in 1900, 13.6 percent. In the 10 years prior to 1990, 3.1 immigrants arrived for every 1,000 residents; in the 10 years prior to 1890, 9.2 for every 1,000. Now, consider three indices of assimilation -- language, home ownership and intermarriage.

　　The 1990 Census revealed that “a majority of immigrants from each of the fifteen most common countries of origin spoke English ‘well’ or ‘very well’ after ten years of residence.” The children of immigrants tend to be bilingual and proficient in English. “By the third generation, the original language is lost in the majority of immigrant families.” Hence the description of America as a “graveyard” for languages. By 1996 foreign-born immigrants who had arrived before 1970 had a home ownership rate of 75.6 percent, higher than the 69.8 percent rate among native-born Americans.

　　Foreign-born Asians and Hispanics “have higher rates of intermarriage than do U.S.-born whites and blacks.” By the third generation, one third of Hispanic women are married to non-Hispanics, and 41 percent of Asian-American women are married to non-Asians.

　　Rodriguez notes that children in remote villages around the world are fans of superstars like Arnold Schwarzenegger and Garth Brooks, yet “some Americans fear that immigrants living within the United States remain somehow immune to the nation’s assimilative power.”

　　Are there divisive issues and pockets of seething anger in America? Indeed. It is big enough to have a bit of everything. But particularly when viewed against America’s turbulent past, today’s social indices hardly suggest a dark and deteriorating social environment.

**2006**

**Text 2**

　　Stratford-on-Avon, as we all know, has only one industry -- William Shakespeare -- but there are two distinctly separate and increasingly hostile branches. There is the Royal Shakespeare Company (RSC), which presents superb productions of the plays at the Shakespeare Memorial Theatre on the Avon. And there are the townsfolk who largely live off the tourists who come, not to see the plays, but to look at Anne Hathaway’s Cottage, Shakespeare’s birthplace and the other sights.

　　The worthy residents of Stratford doubt that the theatre adds a penny to their revenue. They frankly dislike the RSC’s actors, them with their long hair and beards and sandals and noisiness. It’s all deliciously ironic when you consider that Shakespeare, who earns their living, was himself an actor (with a beard) and did his share of noise-making.

　　The tourist streams are not entirely separate. The sightseers who come by bus -- and often take in Warwick Castle and Blenheim Palace on the side -- don’t usually see the plays, and some of them are even surprised to find a theatre in Stratford. However, the playgoers do manage a little sight-seeing along with their playgoing. It is the playgoers, the RSC contends, who bring in much of the town’s revenue because they spend the night (some of them four or five nights) pouring cash into the hotels and restaurants. The sightseers can take in everything and get out of town by nightfall.

　　The townsfolk don’t see it this way and local council does not contribute directly to the subsidy of the Royal Shakespeare Company. Stratford cries poor traditionally. Nevertheless every hotel in town seems to be adding a new wing or cocktail lounge. Hilton is building its own hotel there, which you may be sure will be decorated with Hamlet Hamburger Bars, the Lear Lounge, the Banquo Banqueting Room, and so forth, and will be very expensive.

　　Anyway, the townsfolk can’t understand why the Royal Shakespeare Company needs a subsidy. (The theatre has broken attendance records for three years in a row. Last year its 1,431 seats were 94 percent occupied all year long and this year they’ll do better.) The reason, of course, is that costs have rocketed and ticket prices have stayed low.

　　It would be a shame to raise prices too much because it would drive away the young people who are Stratford’s most attractive clientele. They come entirely for the plays, not the sights. They all seem to look alike (though they come from all over) -- lean, pointed, dedicated faces, wearing jeans and sandals, eating their buns and bedding down for the night on the flagstones outside the theatre to buy the 20 seats and 80 standing-room tickets held for the sleepers and sold to them when the box office opens at 10:30 a.m.

**2006**

**Text 3**

　　When prehistoric man arrived in new parts of the world, something strange happened to the large animals. They suddenly became extinct. Smaller species survived. The large, slow-growing animals were easy game, and were quickly hunted to extinction. Now something similar could be happening in the oceans.

　　That the seas are being overfished has been known for years. What researchers such as Ransom Myers and Boris Worm have shown is just how fast things are changing. They have looked at half a century of data from fisheries around the world. Their methods do not attempt to estimate the actual biomass (the amount of living biological matter) of fish species in particular parts of the ocean, but rather changes in that biomass over time. According to their latest paper published in Nature, the biomass of large predators (animals that kill and eat other animals) in a new fishery is reduced on average by 80% within 15 years of the start of exploitation. In some long-fished areas, it has halved again since then.

　　Dr. Worm acknowledges that these figures are conservative. One reason for this is that fishing technology has improved. Today’s vessels can find their prey using satellites and sonar, which were not available 50 years ago. That means a higher proportion of what is in the sea is being caught, so the real difference between present and past is likely to be worse than the one recorded by changes in catch sizes. In the early days, too, longlines would have been more saturated with fish. Some individuals would therefore not have been caught, since no baited hooks would have been available to trap them, leading to an underestimate of fish stocks in the past. Furthermore, in the early days of longline fishing, a lot of fish were lost to sharks after they had been hooked. That is no longer a problem, because there are fewer sharks around now.

　　Dr. Myers and Dr. Worm argue that their work gives a correct baseline, which future management efforts must take into account. They believe the data support an idea current among marine biologists, that of the “shifting baseline.” The notion is that people have failed to detect the massive changes which have happened in the ocean because they have been looking back only a relatively short time into the past. That matters because theory suggests that the maximum sustainable yield that can be cropped from a fishery comes when the biomass of a target species is about 50% of its original levels. Most fisheries are well below that, which is a bad way to do business.

**2006**

**Text 4**

　　Many things make people think artists are weird. But the weirdest may be this: artists’ only job is to explore emotions, and yet they choose to focus on the ones that feel bad.

　　This wasn’t always so. The earliest forms of art, like painting and music, are those best suited for expressing joy. But somewhere from the 19th century onward, more artists began seeing happiness as meaningless, phony or, worst of all, boring, as we went from Wordsworth’s daffodils to Baudelaire’s flowers of evil.

　　You could argue that art became more skeptical of happiness because modern times have seen so much misery. But it’s not as if earlier times didn’t know perpetual war, disaster and the massacre of innocents. The reason, in fact, may be just the opposite: there is too much damn happiness in the world today.

　　After all, what is the one modern form of expression almost completely dedicated to depicting happiness? Advertising. The rise of anti-happy art almost exactly tracks the emergence of mass media, and with it, a commercial culture in which happiness is not just an ideal but an ideology.

　　People in earlier eras were surrounded by reminders of misery. They worked until exhausted, lived with few protections and died young. In the West, before mass communication and literacy, the most powerful mass medium was the church, which reminded worshippers that their souls were in danger and that they would someday be meat for worms. Given all this, they did not exactly need their art to be a bummer too.

　　Today the messages the average Westerner is surrounded with are not religious but commercial, and forever happy. Fast-food eaters, news anchors, text messengers, all smiling, smiling, smiling. Our magazines feature beaming celebrities and happy families in perfect homes. And since these messages have an agenda -- to lure us to open our wallets -- they make the very idea of happiness seem unreliable. “Celebrate!” commanded the ads for the arthritis drug Celebrex, before we found out it could increase the risk of heart attacks.

　　But what we forget -- what our economy depends on us forgetting -- is that happiness is more than pleasure without pain. The things that bring the greatest joy carry the greatest potential for loss and disappointment. Today, surrounded by promises of easy happiness, we need art to tell us, as religion once did, Memento mori: remember that you will die, that everything ends, and that happiness comes not in denying this but in living with it. It’s a message even more bitter than a clove cigarette, yet, somehow, a breath of fresh air.

**2007**

**Text 1**

　　If you were to examine the birth certificates of every soccer player in 2006’s World Cup tournament, you would most likely find a noteworthy quirk: elite soccer players are more likely to have been born in the earlier months of the year than in the later months. If you then examined the European national youth teams that feed the World Cup and professional ranks, you would find this strange phenomenon to be even more pronounced.

　　What might account for this strange phenomenon? Here are a few guesses: a) certain astrological signs confer superior soccer skills; b) winter-born babies tend to have higher oxygen capacity, which increases soccer stamina; c) soccer-mad parents are more likely to conceive children in springtime, at the annual peak of soccer mania; d) none of the above.

　　Anders Ericsson, a 58-year-old psychology professor at Florida State University, says he believes strongly in “none of the above.” Ericsson grew up in Sweden, and studied nuclear engineering until he realized he would have more opportunity to conduct his own research if he switched to psychology. His first experiment, nearly 30 years ago, involved memory: training a person to hear and then repeat a random series of numbers. “With the first subject, after about 20 hours of training, his digit span had risen from 7 to 20,” Ericsson recalls. “He kept improving, and after about 200 hours of training he had risen to over 80 numbers.”

　　This success, coupled with later research showing that memory itself is not genetically determined, led Ericsson to conclude that the act of memorizing is more of a cognitive exercise than an intuitive one. In other words, whatever inborn differences two people may exhibit in their abilities to memorize, those differences are swamped by how well each person “encodes” the information. And the best way to learn how to encode information meaningfully, Ericsson determined, was a process known as deliberate practice. Deliberate practice entails more than simply repeating a task. Rather, it involves setting specific goals, obtaining immediate feedback and concentrating as much on technique as on outcome.

　　Ericsson and his colleagues have thus taken to studying expert performers in a wide range of pursuits, including soccer. They gather all the data they can, not just performance statistics and biographical details but also the results of their own laboratory experiments with high achievers. Their work makes a rather startling assertion: the trait we commonly call talent is highly overrated. Or, put another way, expert performers - whether in memory or surgery, ballet or computer programming - are nearly always made, not born.

**2007**

**Text 2**

　　For the past several years, the Sunday newspaper supplement Parade has featured a column called “Ask Marilyn.” People are invited to query Marilyn vos Savant, who at age 10 had tested at a mental level of someone about 23 years old; that gave her an IQ of 228 - the highest score ever recorded. IQ tests ask you to complete verbal and visual analogies, to envision paper after it has been folded and cut, and to deduce numerical sequences, among other similar tasks. So it is a bit confusing when vos Savant fields such queries from the average Joe (whose IQ is 100) as, What’s the difference between love and fondness? Or what is the nature of luck and coincidence? It’s not obvious how the capacity to visualize objects and to figure out numerical patterns suits one to answer questions that have eluded some of the best poets and philosophers.

　　Clearly, intelligence encompasses more than a score on a test. Just what does it mean to be smart? How much of intelligence can be specified, and how much can we learn about it from neurology, genetics, computer science and other fields?

　　The defining term of intelligence in humans still seems to be the IQ score, even though IQ tests are not given as often as they used to be. The test comes primarily in two forms: the Stanford-Binet Intelligence Scale and the Wechsler Intelligence Scales (both come in adult and children’s version). Generally costing several hundred dollars, they are usually given only by psychologists, although variations of them populate bookstores and the World Wide Web. Superhigh scores like vos Savant’s are no longer possible, because scoring is now based on a statistical population distribution among age peers, rather than simply dividing the mental age by the chronological age and multiplying by 100. Other standardized tests, such as the Scholastic Assessment Test (SAT) and the Graduate Record Exam (GRE), capture the main aspects of IQ tests.

　　Such standardized tests may not assess all the important elements necessary to succeed in school and in life, argues Robert J. Sternberg. In his article “How Intelligent Is Intelligence Testing?”, Sternberg notes that traditional test best assess analytical and verbal skills but fail to measure creativity and practical knowledge, components also critical to problem solving and life success. Moreover, IQ tests do not necessarily predict so well once populations or situations change. Research has found that IQ predicted leadership skills when the tests were given under low-stress conditions, but under high-stress conditions, IQ was negatively correlated with leadership - that is, it predicted the opposite. Anyone who has toiled through SAT will testify that test-taking skill also matters, whether it’s knowing when to guess or what questions to skip.

**2007**

**Text 3**

　　During the past generation, the American middle-class family that once could count on hard work and fair play to keep itself financially secure had been transformed by economic risk and new realities. Now a pink slip, a bad diagnosis, or a disappearing spouse can reduce a family from solidly middle class to newly poor in a few months.

　　In just one generation, millions of mothers have gone to work, transforming basic family economics. Scholars, policymakers, and critics of all stripes have debated the social implications of these changes, but few have looked at the side effect: family risk has risen as well. Today’s families have budgeted to the limits of their new two-paycheck status. As a result, they have lost the parachute they once had in times of financial setback - a back-up earner (usually Mom) who could go into the workforce if the primary earner got laid off or fell sick. This “added-worker effect” could support the safety net offered by unemployment insurance or disability insurance to help families weather bad times. But today, a disruption to family fortunes can no longer be made up with extra income from an otherwise-stay-at-home partner.

　　During the same period, families have been asked to absorb much more risk in their retirement income. Steelworkers, airline employees, and now those in the auto industry are joining millions of families who must worry about interest rates, stock market fluctuation, and the harsh reality that they may outlive their retirement money. For much of the past year, President Bush campaigned to move Social Security to a saving-account model, with retirees trading much or all of their guaranteed payments for payments depending on investment returns. For younger families, the picture is not any better. Both the absolute cost of healthcare and the share of it borne by families have risen - and newly fashionable health-savings plans are spreading from legislative halls to Wal-Mart workers, with much higher deductibles and a large new dose of investment risk for families’ future healthcare. Even demographics are working against the middle class family, as the odds of having a weak elderly parent - and all the attendant need for physical and financial assistance - have jumped eightfold in just one generation.

　　From the middle-class family perspective, much of this, understandably, looks far less like an opportunity to exercise more financial responsibility, and a good deal more like a frightening acceleration of the wholesale shift of financial risk onto their already overburdened shoulders. The financial fallout has begun, and the political fallout may not be far behind.

**2007**

**Text 4**

　　It never rains but it pours. Just as bosses and boards have finally sorted out their worst accounting and compliance troubles, and improved their feeble corporation governance, a new problem threatens to earn them - especially in America - the sort of nasty headlines that inevitably lead to heads rolling in the executive suite: data insecurity. Left, until now, to odd, low-level IT staff to put right, and seen as a concern only of data-rich industries such as banking, telecoms and air travel, information protection is now high on the boss’s agenda in businesses of every variety.

　　Several massive leakages of customer and employee data this year - from organizations as diverse as Time Warner, the American defense contractor Science Applications International Corp and even the University of California, Berkeley - have left managers hurriedly peering into their intricate IT systems and business processes in search of potential vulnerabilities.

　　“Data is becoming an asset which needs to be guarded as much as any other asset,” says Haim Mendelson of Stanford University’s business school. “The ability to guard customer data is the key to market value, which the board is responsible for on behalf of shareholders.” Indeed, just as there is the concept of Generally Accepted Accounting Principles (GAAP), perhaps it is time for GASP, Generally Accepted Security Practices, suggested Eli Noam of New York’s Columbia Business School. “Setting the proper investment level for security, redundancy, and recovery is a management issue, not a technical one,” he says.

　　The mystery is that this should come as a surprise to any boss. Surely it should be obvious to the dimmest executive that trust, that most valuable of economic assets, is easily destroyed and hugely expensive to restore - and that few things are more likely to destroy trust than a company letting sensitive personal data get into the wrong hands.

　　The current state of affairs may have been encouraged - though not justified - by the lack of legal penalty (in America, but not Europe) for data leakage. Until California recently passed a law, American firms did not have to tell anyone, even the victim, when data went astray. That may change fast: lots of proposed data-security legislation is now doing the rounds in Washington, D.C. Meanwhile, the theft of information about some 40 million credit-card accounts in America, disclosed on June 17th, overshadowed a hugely important decision a day earlier by America’s Federal Trade Commission (FTC) that puts corporate America on notice that regulators will act if firms fail to provide adequate data security.