

Bijlage HAVO  
**2012**

tijdvak 1

**Engels**

Tekstboekje



## Tekst 1

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### Jet-setters get the needle

The new Sofitel hotel opening this week at Heathrow's terminal five will be offering guests all the usual luxuries: fine dining, Egyptian cotton sheets and Botox. Botox? A Sofitel guest is most likely in town on business and as they have passed through terminal 5 good chance their luggage has gone astray. In short, this person is very stressed. As we know in times like these, though, showing signs of stress can lead to grave assumptions about your health or, worse, that of your firm. So a few jabs followed by a tasty drink and, well, you're smiling.

*The Sunday Times, 2008*

## Tekst 2

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### Say no to Speedos

Less than 1 percent of the male population can get away with wearing Speedos — Olympic swimmers, Armani models and so on — but pasty Brits who last went to the gym in January? We think not. So we're right behind fun park Alton Towers which has banned 2 from its water park and thus spared us all from a fate worse than death-by-Lycra. The opposite to *nos amis* over the Channel, who swing the other way and ban baggy swim shorts in their public pools.

*The Times, 2009*

The following text is the beginning of the novel *Dark Spectre* by Michael Dibdin

### One

Jamie shot Ronnie Ho four times. Once in the head, twice in the chest, and once in the gut, where he'd heard it hurt real bad. Two shots went wide.

'Jamie!' yelled his mom from the porch. She'd been talking to Marsha Dawson for about an hour, and had gone outside, still talking, to pick up the mail.

'What?' he yelled back.

His mother appeared in the doorway, portable in one hand, her blue bathrobe billowing around her, sorting through the mail.

'What'd I tell you about using that thing in here?'

'But Mom ...'

'Junk, junk, bill, junk. How come no one ever sends me a real letter?'

Jamie sulkily unpoped the suction caps of the darts from the mirror. Two misses wasn't bad, and if it'd really been Ronnie Ho he'd have got in closer before he squeezed the trigger.

'I bet Wayne gave you that darn thing, just to bug me.'

'I bought it with my allowance.'

'Get him to pay a dime in child support, no way. But any crap guaranteed to drive me crazy, no problem.'

'I'm *bored*, Mom!'

His mother sashayed through to the kitchen, pushing buttons on the phone.

'Do your homework.'

'I've done it.'

'Yeah, right!'

'I have *too*!'

He knew she knew he was lying, but if she called him on it he'd ask her to help him out, and she didn't know diddly about math. They'd changed it all since she was at school. Plus he was getting OK grades, she'd back off.

'Did you get new batteries for my Game Boy?' he said, following her down the hall into the kitchen.

'Hi, Kelly!' his mom said in the chirpy voice she used for leaving a message. 'Friday's our girls' night out? I was wondering if I could catch a ride with you. Call me, OK?'

'Mom? Did you get those new ...'

'I forgot.'

'Oh, *Mom*!'

'Why don't you go downstairs and play with Kevin and Ronnie?'

'They won't let me. They keep saying I'm too little.'

‘Well, they’ll just have to ...’

The phone rang. His mother drifted around the corner, through the dining area and back into the living room.

‘Hello? Oh hi, honey. You are? Is it OK with her mom and dad? Uh huh. Sure, as long as they don’t mind. What time’ll you be home? OK. See you.’

‘Who was that?’ demanded Jamie.

‘Megan. She’s spending the day with Nicole.’

‘Not fair!’

Just then the Accident started up in the next room. Dawn sighed loudly and went to stick a pacifier in its face. Jamie threw himself down on the sofa, feeling sulkier than ever. Megan was fourteen and got to go to sleep-overs and goof off for the whole day with her friends, but what was *he* supposed to do? Once he and Kevin had taken care of themselves, tearing around the basement, staging fights, gradually stepping up the noise level until Mom had to come and tell them to shut up. But since Ronnie Ho came along, his brother had no time for him. Ronnie Ho was five-and-half months older than Kevin and smart and his parents were Chinese and took their shoes off at the door and ate wonton soup the whole time and neat stuff like that. Kevin thought he was the best thing since microwaveable popcorn. As for Jamie, he was just a kid. No one was interested in him.

His mom reappeared, the baby in one arm, its bottle and the portable in the other.

‘What am *I* supposed to do?’ Jamie exploded.

His mom heaved another sigh. She set the Accident down on the sofa, where it started to howl again, and jabbed at the phone. She’d got Kevin and Megan their own private line, so they could firm up their social lives without bothering her.

‘Kevin? Listen, I’ve got to take care of the baby and I want you and Ronnie to do something with Jamie. He’s driving me nuts with that dart-gun his dad bought him.’

# What's cooking?

## The evolutionary role of cookery

(1) 'YOU are what you eat', or so the saying goes. But anthropologist Richard Wrangham, of Harvard University, believes that this is true in a more profound sense than the one implied by the old proverb. It is not just *you* who are what you eat, but the entire human species. And with *Homo sapiens*, what makes the species unique in  
5 Dr Wrangham's opinion is that its food is so often cooked.

(2) Cooking is a human universal. No society is without it. And the consumption of a cooked meal in the evening, usually in the company of family and friends, is normal in every known society. Moreover, without cooking, the human brain (which consumes 20-25% of the body's energy) could not keep running. Dr Wrangham thus believes that  
10 cooking and humanity have evolved together. In fact, he thinks that cooking and other forms of preparing food are the evolutionary change that underpins all of the other – and subsequent – changes that have made people such unusual animals.

(3) Humans became human, as it were, with the emergence 1.8m years ago of a species called *Homo erectus*. This had a skeleton much like modern man's – a big,  
15 brain-filled skull and a narrow pelvis and rib cage, which imply a small abdomen and thus a small gut. Hitherto, the explanation for this shift from the smaller skulls and wider pelvises of man's apelike ancestors has been a shift from a vegetable-based diet to a meat-based one. Meat has more calories than plant matter, the theory went. A smaller gut could therefore support a larger brain.

(4) Dr Wrangham disagrees. When you do the sums, he argues, raw meat is still  
20 insufficient to bridge the gap. He points out that even modern "raw foodists" – members of a town-dwelling, back-to-nature social movement – struggle to maintain a high enough weight, while they have access to animals and plants that have specifically been bred for the table. If restricted to raw food pre-agricultural man would have starved.

(5) Start cooking, however, and things change radically. Cooking alters food in three  
25 important ways. It breaks starch molecules into more digestible fragments. It "denatures" protein molecules, so that their amino-acid chains unfold and digestive enzymes can attack them more easily. And heat physically softens food. That makes it easier to digest, so even though the stuff is no more calorific, the body uses fewer  
30 calories dealing with it.

(6) In support of his thesis, Dr Wrangham has looked closely at other scientific studies and has come up with impressive material. Cooking increases the amount of food digested in the stomach and small intestine, where it can be absorbed, from 50% to 95%  
35 according to work done on people fitted for medical reasons with collection bags at the ends of their small intestine. Another telling experiment, conducted on rats, did not rely on cooking. Rather, the experimenters ground up food pellets and then recomposed

them to make them softer. Rats fed on the softer pellets weighed 30% more after 26 weeks than those fed the same weight of standard pellets. The difference could be explained by the lower cost of digestion. Indeed, Dr Wrangham suspects the main cause  
40 of the modern epidemic of obesity is not overeating but the rise of processed foods. These are softer, because that is what people prefer.

**(7)** It looks as if Dr Wrangham is relying on a compelling chain of thought. And in doing so he may have cast light not only on what made humanity, but also on one of the threats it faces today.

*www.economist.com, 2009*

## The Waiting Game

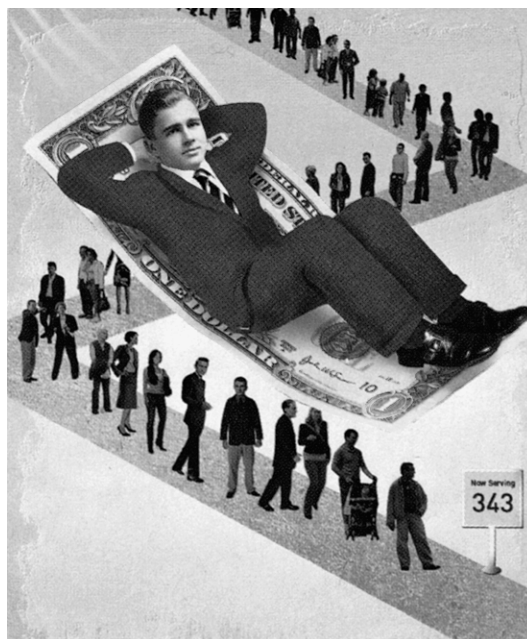
BY STEVE RUSHIN

1 **D**EPENDING ON WHOM YOU believe, the average American will, over a lifetime, wait in lines for two to five years. The crucial word is *average*, as wealthy Americans routinely avoid lines altogether. Once the most democratic of institutions, lines are rapidly becoming the exclusive province of suckers. Poor suckers, mostly.

2 Airports resemble France before the Revolution: first-class passengers enjoy “élite” security lines and priority boarding, and disembark before the unwashed in coach – held at bay by a flight attendant – are allowed to foul the Jetway. At amusement parks, too, you can now buy your way out of line. This summer I unhappily watched kids use a \$52 Gold Flash Pass to jump the lines at Six Flags New England, and similar systems are in use in most major American theme parks, from Universal Orlando to Walt Disney World.

3 Flash Pass teaches children a valuable lesson in real-world economics, namely, that the rich are more important than you, especially when it comes to waiting. An NBA<sup>1)</sup> player, for example, once said to me, with a chuckle of disbelief, that when playing in Canada – get this – “we have to wait in the same customs line as everybody else.”

4 Almost every line can be breached for a price. In several U.S. cities, early arrivers among the early adopters waiting to buy iPhones



offered to sell their spots in the endless lines. Prospective iPhone purchasers offered to pay “waiters” or “placeholders” to wait in line for them outside Apple stores.

5 Some cultures are not renowned for lining up: the Chinese actually practiced queuing in preparation for the 2008 Olympics. Then again, some cultures are too adept at lining up: a citizen of the former Soviet Union would join a queue just so he could get to the head of that queue and see what everyone was queuing for.

6 And then there is the U.S., where society seems to be cleaving into two groups: Very Important Persons, who don’t wait, and Very Impatient Persons, who do – unhappily. For those of us in the latter group – by coach, without Flash Pass, too poor or proper to pay a placeholder – what do we do? We wait. We are bored.

*Time, 2007*

noot 1 NBA: National Basketball Association



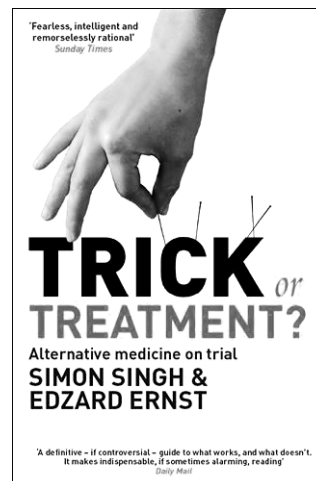
Books and computing

# Alternative Medicine

NON-FICTION

## TRICK OR TREATMENT?

Simon Singh and Edzard Ernst (Bantam Press, £16.99)



- 1 This engaging book, written by two eminent scientists, is about the contest between science and opinion over alternative medicine, which is on the increase in this country and is big business. It is the fastest-growing area of medical spending, but is it any good?
- 2 Acupuncture, homeopathy, and herbal medicine each get their own chapter, with an explanation of the treatment, followed by the evidence for its success. Their stark conclusion is that acupuncture does not work for a whole range of conditions, except as a placebo. Some studies say it may be effective for some types of pain and nausea, but there are other equally high-quality trials that contradict this. The authors assert that hundreds of trials have failed to deliver convincing evidence to support the use of homeopathy for the treatment of any ailment, so people who pay for homeopathic treatments are at best only receiving an elaborate placebo. Then they look at herbal medicine. They list the ones that work and those that don't, with cautionary information about some that are downright dangerous.
- 3 Finally, a valuable appendix gives a one-page resumé of each of more than 30 less common treatments, including ear candles, where thin tubes of wax are put in the ear and ignited, apparently to remove toxins from the body.
- 4 This book is a must-read for all those who use alternative medicine (and that's about 50 per cent of us in this country), or indeed anyone who just wants to find out more about a topic.

**Phil Bloomfield**

*Oxford Times, 2008*

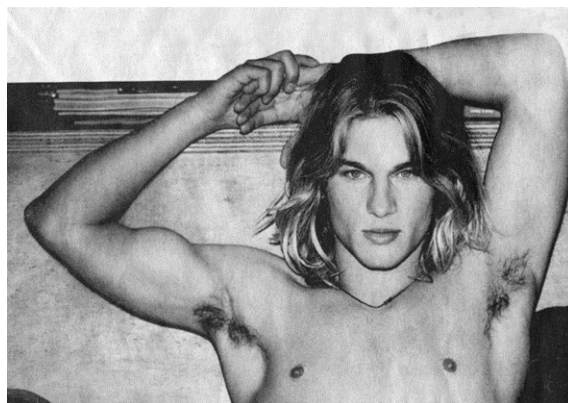
# Lads' mags cause obsession

by Jonathan Leake and Roger Waite  
*The Sunday Times, 2008*

The laddish culture promoted by men's magazines has spawned a new medical condition: *athletica nervosa*, or an obsession with exercise.

New research shows that the magazines may be trapping them into an unhealthy obsession with their own bodies. Some readers become so anxious about their own physique that they 18 excessive exercise, spending hours running, swimming or in the gym. *Athletica nervosa* is already known to affect young women, but this is thought to be the first British study to link the phenomenon to men.

David Giles, a psychologist at Winchester University, who co-wrote the research, said: "We found that the more such magazines a man reads the more likely he is to be anxious about his physique." In the study, Giles and co-author Jessica Close carried out interviews and surveys of 161 men aged 18-36 to find out how many lads' mags they read and for how long. They also scored them for dietary habits, exercise regimes and attitudes towards 19. "Men who read the most lads' mags seemed to internalise the appearance ideals portrayed by them," said Giles. "Models in these magazines are impossibly good-looking and seeing them can make readers insecure about their own bodies." Recent features in lads' mags targeted men's 20, with one claiming that the right gym kit adds to a man's sex appeal, and another claiming that superb physical fitness is the only way to snare a good-looking girlfriend.



21, single men are the most likely to be influenced. Giles said: "All men who read these magazines were affected, but 22 men much more so than those in stable romantic relationships. It could be that they become less anxious or it could be they just have less time to go to the gym when they have a partner. People get their ideas of what they should look like from the media and the amount of imagery of men and women just keeps growing. None of us is immune."

A recent study by researchers at the University of Florida showed that young men's beliefs about the perfect body shape had changed over the past two decades, moving towards a much more 23 ideal. Magdala Peixoto Labre, who conducted the study, said: "Adolescent males are increasingly experiencing body dissatisfaction, engaging in disordered eating and using anabolic steroids and untested dietary supplements to gain muscle. The behaviour can have serious, long-term health consequences."

The emergence of *athletica nervosa* comes despite 24 in some parts of the lads' mags sector. *Loaded* lost 47,000 sales, nearly 30% of its circulation, recently. *FHM* lost 56,114 sales and *Maxim* 53,034. However, sales of *Men's Health* are stable.



### Take My Kidney, Please

based on an article by Sally Satel

- 1 She stole his heart so he gave her his kidney. And now he wants it back. So goes the story of 49-year-old Long Island physician Richard Batista and his estranged wife. Batista gave one of his kidneys to Dawnell, 44, who had suffered from kidney disease for many years. According to the *NY Daily News*, he said that Dawnell initiated an affair with her physical therapist two years later. She then filed for divorce to end their 15-year marriage. “I saved her life,” Batista told the *Daily News*. “But the pain is unbearable.” At a news conference, Dr. Batista’s lawyer said his client was demanding return of the kidney or \$1.5 million (its estimated worth).
- 2 It is not difficult to sympathize with Dr. Batista, who is having an extreme form of donor remorse. While the vast majority of donors report a lasting feeling of self-worth and experience a deep sense of gratification from the act — according to surveys, about 95 percent of donors say they would do it again — some regret having donated. It may be that a hoped-for closeness with the recipient failed to materialize, an anticipated demonstration of gratitude was not forthcoming, or the donor felt he did not get the social recognition he deserved. For Dr. Batista, the betrayal he felt led to outrage and a demand for restitution. But it is easy to get carried away with the ‘comic potential’ connected to the Batista drama. Should pre-nuptial agreements now specify the fate of a kidney given during the marriage? Should human organs be counted as marital assets like bank accounts and property?
- 3 The dark side of organ donation was laid bare with the Dutch television program *The Big Donor Show* (2007). In the show a terminally ill woman, Lisa, was to select which of three needy contestant-patients would receive one of her kidneys after she died. To international relief, the show was a hoax. As Lisa was about to announce her choice, viewers learned that she was really an actress, not a cancer patient looking for a worthy recipient. Lisa and the potential recipients, all of whom were real people in need of kidney transplants and aware of the show’s deception, were part of an enactment to dramatize the shortage of transplantable organs.
- 4 The Batista tale touches the same issues highlighted on *The Big Donor Show*. There are now over 100,000 Americans waiting for a new kidney, liver, heart or lungs. Kidney patients represent more than three-fourths of the national waiting list, according to the United Network for Organ Sharing. Only one in four people on the list will get a kidney transplant this year. The rest will have to make do with dialysis while their names crawl to the top of the list, an ordeal that can take five to eight years in big cities, which often proves to be too long.



- 5 Last year 6,000 people gave a kidney to a loved one — the lowest number since 2000. Policy makers must face the fact that altruism<sup>1)</sup> alone isn't enough. The government should devise a safe, regulated system in which would-be donors are offered incentives to donate a kidney. The sick person would not personally reward the donor; rather the government would provide the benefit, perhaps a tax credit or lifelong health insurance. It has never been strictly forbidden for the government to use incentives to encourage organ donation, even though organ brokering and direct patient-donor payments are illegal.
  
- 6 Which brings us back to the Batistas. Within hours of Dr. Batista's news conference, his story was making international tabloid headlines. But if this episode is to serve any purpose greater than satisfying our inevitable thirst for the scandalous, we need policy makers willing to press for reforms in transplant policy that can bring hope and life to thousands in need.

*www.thedailybeast.com, 2009*

noot 1 altruism: unselfish concern for other people's happiness and welfare

# Ms. Fix-It

By KAY HYMOWITZ

- 1 The home-improvement industry has always been a no-woman's land known for its drab shelves lined with nail bins and mysterious steel objects whose purpose was understood only by grunting guys in flannel shirts. Now it is going designer pink. Companies such as Tomboy Tools, Barbara K Enterprises and Girlgear Industries are offering the female do-it-yourselfer fabulous pink hammers and saws in stores and on the Web. There has been an explosion of woman-targeted self-help books, videos, radio shows, TV spots and home-improvement Web sites. Some are specifically for women, while others offer female-friendly links and columns. Even schoolgirls are joining the revolution. The Girl Scouts now offer a Ms. Fix-It badge for members eager to learn how to rewire a lamp or fix a leaky toilet.



- 2 It's not hard to see what's driving the fad: Women are home alone more and more and confident enough to take matters into their own hands. Perhaps the largest group eager to seize the pink hammer is single young women. The National Association of Realtors reports that in 2006 single women made up 22% of the U.S. real-estate market; the average age for first-time single female buyers was 32. It helps that having grown up with computers, cellphones and iPods, this you-go-girl! generation doesn't look at small machinery the way Barbie looked at math. These women are not only enthusiastic about buying a home on their own dime; they're ready to lay the tile and patch the drywall too. Other women learn the drill when they find themselves on their own after a divorce. Barbara Kavovit says that the insight that ultimately led her to launch her tool company, Barbara K!, came when her husband moved out of the house and took the family tool box with him. However, not every female tool-user is single or divorced. Sometimes she's a wife sick of pestering her husband to make time to hang a bookshelf.
- 3 When you think about it, while the pinking of home improvement is new, it's not all that radical. Women are not trying to join the construction trades in any great numbers. Women make up at least half of the country's medical and law students, yet they still constitute fewer than 3% of construction workers; blue-collar sexual discrimination can't fully explain these discrepancies. No, the pink-hammer brigade is less interested in expanding career opportunities for women than in enlarging the traditional art of homemaking. Not so long ago, custom limited women's activities in that area to cleaning, sewing, cooking and perhaps a few crafts projects for those with extra time on their hands. Installing smoke

alarms and reconfiguring a closet are simply an extension of the old domestic urge.

- 4 The only thing to give pause in the pinkhammer revolution is the feminist ideology that occasionally comes from its leaders. Hang around the movement's Web sites and before long you'll hear rhetoric that implies that learning to install a dimmer switch is not simply a practical means of increasing domestic pleasure; it's a Radical Statement for Women's Progress. "My true desire is to inspire women to become more self-reliant and confident in their abilities," Barbara K! writes on her Web site. "We all have 'it' within ourselves to do things we never imagined we could."
- 5 Well, maybe. But the truth is that while women may want a lovely home, most of them would also like a good man to share it with. You can be sure that, unlike their female counterparts, few single men are spending their weekends restoring the ornaments on their ceilings. Men's domesticity has always been a group affair; they fixed the faucets and built the shelves not for themselves but for their wives and children. Women ought to know that self-reliance isn't everything.

*www.online.wsj.com, 2008*

## Joint gladness

It seems that when times are hard, liberal attitudes to drugs tend to triumph.

Euan Wilson of the Socionomics Institute in Gainesville, Georgia, finds that anti-drug laws in the US tend to coincide with high share prices, and legalisation with low.

Comparing today's situation with alcohol prohibition in the US between 1920 and 1933, Wilson says that just as alcohol was legalised when the economic slump reached its lowest point, so concessions to marijuana use could be 38. "The current mood is very similar to the 1930s," says Wilson.

He argues that during economic downturns people have more serious worries, and view drug use as relatively 39, while drug-runners become more desperate and violent as their markets shrink. This makes society more willing to end the bloodshed by lifting prohibition.

*New Scientist, 2009*



### TV: Pick of the day

#### When Beauty Goes Wrong

(28 July, BBC3, 9pm)

Across the world there are many variations in the idea of what it means to be beautiful, but most cultures are in broad agreement that a rotting nose, festering tongue or oozing foot growths do not fall into that category. This documentary follows the former BBC *Blue Peter* presenter Konnie Huq as she investigates some of the problems that can accompany our endless quest for beauty: the eyelash tint that nearly blinded a bride on her wedding day, a home hair-dye treatment that triggered a life-threatening anaphylactic shock<sup>1)</sup> and the excruciatingly painful and unsightly growths that can be the price to pay for a love of high heels.

Huq does not come across as an experienced investigative journalist: her interviewing technique largely consists of looking disgusted as some poor person reveals how their desire to be wrinkle-free nearly cost them their nose, then squealing, "That's so mad." There is, however, a public service element lurking behind the wacky graphics and shock tactics: while the news that the regular use of sun beds can double your chances of skin cancer is far from revealing, the information about the dangers of having a piercing if you suffer from an existing heart condition might possibly stop someone from making not only a grave fashion mistake but also a potentially fatal one.



Konnie Huq on the beauty industry

Victoria Segal

*The Sunday Times, 2008*

noot 1 anaphylactic shock: een acute, ernstige allergische reactie van het immuunsysteem op een bepaalde stof

*Lees bij de volgende teksten steeds eerst de vraag voordat je de tekst zelf raadpleegt.*

## Tekst 12

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### **Multitasking: Is there a gift?**

Adapted from an article by ADAM GORLICK

#### **The case**

- 1 High-tech jugglers are everywhere - keeping up several e-mail and instant message conversations at once, text messaging while watching television and jumping from one website to another while plowing through homework assignments.
- 2 Social scientists have long assumed that it's impossible to process more than one string of information at a time. But many researchers have guessed that people who appear to multitask must have superb control over what they think about and what they pay attention to.
- 3 So communication Professor Clifford Nass and his colleagues, Eyal Ophir and Anthony Wagner, set out to learn what gives multitaskers their edge. What is their gift? "We kept looking for what they're better at, and we didn't find it," said Ophir, the study's lead author and a researcher in Stanford's Communication Between Humans and Interactive Media Lab.

#### **The procedure**

- 4 In each of their tests, the researchers split their subjects into two groups: those who regularly do a lot of media multitasking and those who don't.
- 5 In one experiment, the groups were shown sets of two red rectangles alone or surrounded by two, four or six blue rectangles. Each configuration was flashed twice, and the participants had to determine whether the two red rectangles in the second frame were in a different position than in the first frame. They were told to ignore the blue rectangles, and the low multitaskers had no problem doing that. But the high multitaskers were constantly distracted by the irrelevant blue images. Their performance was horrible. Because the high multitaskers showed they couldn't ignore things, the researchers figured they were better at storing and organizing information. Maybe they had better memories.
- 6 The second test proved that theory wrong. After being shown sequences of alphabetical letters, the high multitaskers did a lousy job at remembering when a letter was making a repeat appearance. "The low multitaskers did great," Ophir said. "The high multitaskers were doing worse and worse the further they went along because they kept seeing more letters and had difficulty keeping them sorted in their brains."

- 7 Puzzled but not yet stumped on why the heavy multitaskers weren't performing well, the researchers conducted a third test. If the heavy multitaskers couldn't filter out irrelevant information or organize their memories, perhaps they excelled at switching from one thing to another faster and better than anyone else. The test subjects were shown images of letters and numbers at the same time and instructed what to focus on. When they were told to pay attention to numbers, they had to determine if the digits were even or odd. When told to concentrate on letters, they had to say whether they were vowels or consonants. Again, the heavy multitaskers underperformed the light multitaskers.
- 8 "They couldn't help thinking about the task they weren't doing," Ophir said. "The high multitaskers are always drawing from all the information in front of them. They can't keep things separate in their minds."

### **The verdict**

- 9 So maybe it's time to stop e-mailing if you're following the game on TV, and rethink singing along with the radio if you're reading the latest news online. People who are regularly bombarded with several streams of electronic information do not pay attention, control their memory or switch from one job to another as well as those who prefer to complete one task at a time. By doing less, you might accomplish more.

*www.physorg.com, 2009*

### How much carbon dioxide does *your* computer emit?

- 1 AVIATION has long been blamed for its share of global warming caused by humans. Indeed, some travellers now ask themselves whether their flight is strictly necessary and, if they decide it is, ease their consciences by paying for the planting of trees. These, so they hope, will absorb the equivalent of their sinful emissions. But you, dear reader, indulge regularly in an activity that is just as polluting as air travel: using a computer.
- 2 According to a report published by the Climate Group, a think tank based in London, computers, printers and mobile phones accounted for the emission of 830m tonnes of carbon dioxide around the world in 2007. That is about 2% of the estimated total of emissions from human activity. And that is the same as the aviation industry's contribution. According to the report, about a quarter of the emissions in question are generated by the manufacture of computers and so forth. The remaining three quarters come from their use.
- 3 Yet computing can also be used to tackle climate change. For example, domestic consumption could be cut by the large-scale employment of smart meters in houses and flats. Households are the biggest users of electricity after manufacturing and transport. In Britain, they accounted for 29% of consumption in 2004, according to a government report.
- 4 Small and medium-sized businesses, meanwhile, could save electricity by switching to distributed computing, rather than running their own servers. The delivery of computer services over the internet, from vast warehouses of shared machines, enables firms to hand over the running of their e-mail, customer databases and accounting systems to someone else. Companies that do so use computers more efficiently and thus reduce not only their costs but also their carbon footprints.
- 5 Another way to improve the situation is virtualisation — the creation of “virtual” machines — so that multiple operating systems and programs can run on the same computer. Sun Microsystems, a maker of servers, reckons that 70% of the servers in most organisations have only one program running on them. Running these applications on fewer and fewer machines, by virtualisation, would be more efficient and thus greener.
- 6 Ironically, of course, environmental research itself relies heavily on computers. So, perhaps the best thing the home user can do is donate his inefficiencies to the cause by signing up to [climateprediction.net](http://climateprediction.net), which uses the idle capacity of home computers to test the accuracy of various computer models of the climate.

*www.economist.com, 2009*