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A quirky look at our quirky species

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Did you know that fruit and vegetables have personalities? According to research carried out by Robert Sommer at the University of California, Davis, in 1988, lemons are seen as dislikable, onions are stupid, and mushrooms are social climbers.

Sommer is not alone in his fascination with the stranger corners of the human mind. Each generation, a handful of psychologists have explored where their mainstream colleagues fear to tread. One team investigated whether local suicide rates are related to the amount of country music played on radio. Another made a beauty map of the UK by noting the number of good-looking people walking city streets (London was rated the best, Aberdeen the worst, since you ask).

I have called this discipline "quirkology" - the use of scientific methods to study quirky human behaviour, or quirky methods to probe weightier topics. Having conducted quirkological research for more than 15 years, on subjects such as luck, jokes and dating, I wish to pay homage to the small band of dedicated academics who have kept the quirky flag flying. Here are my eight favourite studies made in the pursuit of peculiar knowledge.

Hell hath no fury like...

John Trinkaus of the Zicklin School of Business in the City University of New York studies ordinary people going about their everyday lives - a rich seam for quirkological research, as you might imagine. One of his

specialities is the study of minor acts of dishonesty and antisocial behaviour. In his 25 years of research, one demographical group has come to stand out above all others as being most likely to push boundaries and break rules. These are not disaffected teenagers nor Italian football hooligans. They are women van drivers.

Trinka's important sociological finding is perhaps best illustrated by his extensive work covertly monitoring a supermarket's "10 items or fewer" checkout over a span of nine years. As many of us may have seen for ourselves, Trinka found that some shoppers using this lane had more than 10 items. Some cunningly placed their items in groups of 10 and paid for each group separately. Trinka found that about 80 per cent of all the supermarket lane cheats were female van drivers.

This is by no means the only time that these women have been linked with small-scale social transgressions. Trinka has also shown that 96 per cent of women van drivers break the speed limit, compared with 86 per cent of male ones, and in one study, a staggering 99 per cent of female van drivers failed to come to a complete stop at a T-junction with a stop sign, compared with 94 per cent of the total.

Trinka has speculated that women van drivers may have an unconscious need to outdo behaviour previously associated with men. Alternatively, he has noted, this group of drivers may simply reflect a moral decline in society. Perhaps it is an omen of things to come.

Take a letter

US psychologist Stanley Milgram is probably best known for his 1960s experiment at Yale University showing people's willingness to follow orders from someone in authority - even to the extent of giving seemingly lethal electric shocks to innocent victims (see [They made me do it](#)). Less celebrated is the ingenious method he devised in the mid-1960s for gauging public opinion without conducting a formal poll.

Milgram and his research assistants "accidentally" dropped 300 stamped and addressed envelopes in phone boxes, shops and on pavements all over New Haven, Connecticut. The addresses were identical apart from the first line, which read either "Medical Research Associates", "Friends of the Nazi Party" or "Friends of the Communist Party". Milgram predicted that people's likelihood of picking up and posting the envelopes would depend on how much they were in sympathy with the values implied by the recipient. The people of New Haven turned out to have little taste for extreme political views: they returned about 70 per cent of the envelopes

for the Medical Research Associates, compared with 25 per cent for either of the Party Friends.

The technique was not without problems - such as helpful passers-by frequently spotting an envelope being dropped and handing it back to the researcher - so Milgram experimented with different methods. Once he hired a light aircraft to drop envelopes over Worcester, Massachusetts. Unfortunately, many of the envelopes ended up on rooftops, and others put the plane in danger when they were swept into the ailerons of its wings.

Despite such setbacks, the envelope-dropping method has stood the test of time and is still employed by social psychologists to ascertain public opinion. Recent drops have examined attitudes to abortion, President Clinton's impeachment and Arab-Israeli relations. In 1999, school student Lucas Hanft dropped 1600 letters in Manhattan and Nassau County, addressed to fictitious organisations that supported or opposed gay marriage. Hanft discovered city inhabitants were more liberal than suburbanites but was also threatened with arrest for littering.

Liar liar, pants on fire

Law enforcement agencies have long had a keen interest in people's ability to tell lies and, conversely, to detect lie-telling. Sadly for them, study after study has found that few can tell when someone is lying. In tests, people tend to do no better than chance.

A mass participation experiment I carried out for the BBC a few years ago does suggest a valuable lie-detection technique, however. I interviewed the political broadcaster Robin Day, asking him about his favourite film. In the first segment he told me the truth, describing how he adored *Some Like It Hot*. In a second he lied, telling me how he loved *Gone With the Wind* when, in reality, he hated it. We asked viewers to watch the two clips and vote on which they thought was the truth. Almost 30,000 people telephoned, and the votes were evenly split between the two interviews. Viewers did no better than if they had simply guessed.

Then came the surprise. On the same day, we broadcast the two interviews on national radio and published the transcripts in *The Daily Telegraph* newspaper. An impressive 73 per cent of the radio listeners identified the falsehood and 64 per cent of the newspaper readers did.

Why should this be? It seems that body language and facial expressions give little guide to people's sincerity. The most reliable signs of lying seem to be in the words we use.

To help us further investigate deception detection, visit www.newscientist.com/liedetector and see if you can spot when Jeremy Webb, the editor of New Scientist, is telling the truth or feeding you a pack of lies.

The comedy K

In 2001 I joined forces with the British Association for the Advancement of Science in a search for the world's funniest joke (see [World's funniest joke revealed](#)). The experiment involved people from all over the world posting their jokes onto a website and rating the submissions of others. Early on in the study, someone entered the following:

"There were two cows in a field. One said: 'Moo.' The other one said: 'I was going to say that.'"

We decided to enter this joke into the archive several times, using different animals and noises. Two tigers said "Grr", two dogs "Woof", and so on. Would one animal and noise be rated better than another? The joke rated the funniest was:

"Two ducks were sitting in a pond. One of the ducks said: 'Quack.' The other duck said: 'I was going to say that.'"

Interestingly, the "k" sound (or the "hard c"), as heard in "quack" and "duck", has long been seen in the comedy world as especially funny. Why? It may be down to a rather odd psychological phenomenon known as "facial feedback". When people feel happy they smile, but some evidence suggests that the mechanism also works in reverse: smiling makes people feel happy.

In 1988, psychologist Fritz Strack of the University of Würzburg, Germany, asked two groups of people to judge how funny they found some cartoons. In one group, each person held a pencil between their teeth without it touching their lips, which forced a smile. The other group were asked to hold the pencil with their lips (not using their teeth), forcing a frown.

The results revealed that people experience the emotion associated with their expressions. Those with a forced smile felt happier, and found the

cartoons funnier than those who were forced to frown. The hard "k" often forces the face to smile (say "quack"), which may explain why the sound is associated with happiness. Whatever the explanation, if you want to make someone feel happy, offer them a cookie, not a sandwich, and a Coke, not a Pepsi.

One careful owner

Anthropologists and psychologists have long been interested in superstitions. One of the key categories of superstitious thinking is the "law of contagion", which says that when an object has been in contact with someone, it somehow acquires their "essence". Psychologist Paul Rozin and colleagues at the University of Pennsylvania have investigated how common such thinking is today.

They asked people to rate how they would feel about wearing a nice, soft, blue jumper that had been freshly laundered - but previously worn by someone else. As they varied the fictitious previous wearers of the jumper, it became clear how strongly people follow the age-old belief in magical contagion.

Perhaps unsurprisingly, the volunteers were unhappiest about wearing the jumper if they were told it had previously belonged to a serial killer. On the whole they would rather have worn a sweater that had been dropped in dog faeces and not washed - raising genuine health concerns - than a laundered sweater that had been worn by a mass murderer.

Even in the 21st century, we are far from being the rational creatures that we like to think we are, as a final part of the experiment made dismayingly clear. When asked to imagine that the laundered sweater had been worn by someone who had contracted HIV through a blood transfusion, most people once again said they wouldn't wear it.

The power of positive thinking

Psychologists and neuroscientists are fascinated by the power of the subconscious over our conscious thoughts and behaviours, but it is unclear just how strong these effects are, and whether, as the self-help books claim, they can be harnessed in any useful way. Two studies suggest that the subconscious can indeed have some profound effects.

In 1998 psychologists Ap Dijksterhuis and Ad van Knippenberg at the University of Nijmegen, the Netherlands, asked half a group of volunteers to carry out a simple mental exercise that involved imagining the mindset

of a typical university professor. The other half imagined a football hooligan. All then had to answer some general-knowledge questions. The professor group got 60 per cent of their questions right, while the hooligan group got only 46 per cent.

Focusing on the body rather than the mind, John Bargh and his colleagues at New York University asked their volunteers to do a mental task involving words relating to old age, such as "wrinkled", "grey" and "bingo" (see [Pigeonholed](#)). A second group were shown words unrelated to old age. The researchers then said the experiment was over and secretly recorded the time each participant took to walk down the long hallway to the exit. Those with old age on their mind took significantly longer to walk down the corridor.

So it seems that a just a few moments' thinking time can prime you to perform either better or worse than normal at both mental and physical tasks. Maybe some of those self-help gurus are onto something.

Hot and spicy

What's the best way of impressing a member of the opposite sex? In April 2006 I teamed up with the Edinburgh International Science Festival in the UK to examine the science of speed-dating. A hundred single heterosexual men and women came to the Edinburgh hotel that had been turned into our love laboratory for the night. Each got 3 minutes with 10 partners each, and at the end of each chat they gave details of the talk and rated their date.

Surprisingly, although men have a reputation for judging women quickly, our findings suggested that women judged a partner much faster - 45 per cent in under 30 seconds. Because of the importance of opening comments, we turned our attention to the chat-up lines that had most and least people ticking the "Yes, I would like to see this person again" box.

The results showed that the secret of a good chat-up line is to encourage someone to talk about themselves in a quirky, fun way. So the best line from the top-rated man was "If you were on Stars In Their Eyes, which celebrity would you be?" On a similar theme, the top-rated female asked "If you were a pizza topping, what would you be?". And what shouldn't you say? One of the least successful lines was "I have a PhD in computing."

The da Vinci code

In 1852, a young artist, Luc Maspero, threw himself from the window of his Paris hotel after writing, "For years I have grappled desperately with Mona Lisa's smile. Now I prefer to die."

The enigmatic expression of Leonardo da Vinci's Mona Lisa has obsessed many. Is she happy or sad? And how did daVinci contrive to make the world's most famous smile more apparent when looking at the figure's eyes rather than her mouth?

In 2003, Harvard University neuroscientist Margaret Livingstone came up with a theory concerning the retina, the layer of cells at the back of the eye that turns light into electrical signals to the brain (see [Shadows are hardwired into the brain](#)). When we look at something directly, the light falls on the central part of the retina, called the fovea, which sees only relatively bright objects well. When we see something "out of the corner of our eye", the light falls on the periphery of the retina, which is better at seeing in dim conditions.

Livingstone pointed out that the shadows from Mona Lisa's cheekbones make her mouth seem darker than the rest of her face. So when looking directly at Mona Lisa's mouth, it is seen by the fovea, and the dim smile barely registers. When looking at her eyes, however, the mouth falls into peripheral vision, making the smile more visible.

Let's hope that Livingstone's work will help prevent further unnecessary deaths of tormented artists.

Richard Wiseman is a psychologist based at the University of Hertfordshire, Hatfield, UK. His new book *Quirkology: The curious science of everyday lives* is published by Macmillan in the UK

