

Twists the Facts

Learning the Art of Conversation

PAGE 50

Are Today's Bestsellers Dumber?

PAGE 42

New Life-Saving Treatments

A Caving Trip Turns Deadly

PAGE 116

Silent Thyroid Symptoms	18
Puzzles and Crossword	140

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56



Cover Story

26 FOOLING WITH THE FACTS

Sorting fact from fiction in *The Crown*, Netflix's retelling of the events of Queen Elizabeth II's reign. Donyale Harrison

Medical Advances

34 6 NEW TREATMENTS THAT CAN SAVE YOUR LIFE

Profound advancements changing the way we treat medical conditions.

ANITA BARTHOLOMEW AND SAMANTHA KENT



42 HAVE BESTSELLERS BECOME DUMBER?

Has there been a dumbing down of reading skills and tastes over the past 50 years?

BEN BLATT FROM THE BOOK NABOKOV'S

FAVORITE WORD IS MALIVE

Art of Living

50 CAN WE TALK?

How smartphones are affecting our communication with others. LISA FIELDS

Extraordinary True Tales

OPENING HEAVEN'S DOOR

A journalist investigates spiritual experiences. Patricia Pearson

FROM THE BOOK OPENING HEAVEN'S DOOR

Lifestyle

64 DATING E-STYLE

Will online dating help a mother get her love life back on track? LISA FIELDS





P. | 50



IUNE 2018



р. | **74**



P. | 108 📥

Recollections

68 MY MOTHER'S TORMENT

A traumatic event brings both happy and sad memories. NOELEEN GINNANE

Photo Feature

74 OUT OF AFRICA

A land of amazing beauty grapples with climate change. Barbara dombrowski

Psvchology

88 FALSE MEMORIES

We can be tricked into remembering events that never happened. Anna walker

Relationships

96 LIFELONG FRIENDS

Tips for keeping your friendships strong through the years. BRYCE GRUBER

Health

100 WARTS AND ALL

How to treat a common skin complaint.

First Person

102 DRIVEN TO DISTRACTION

As far as Olly Mann is concerned, cars are for getting from A to B. So how come he is surrounded by a family of petrolheads?

Travel

108 FROZEN

116

An adventure-filled trip to the Arctic Circle. PETER HELLER FROM TRAVEL + LEISURE

Bonus Read

TRAPPED UNDERGROUND

Stuck in a dark cave with rising water and no way out. LISA FITTERMAN

THE DIGEST

Health

- 18 Silent thyroid symptoms; blood pressure; face-ageing bad habits
 - Home
- **22** Fire dangers
 - Pets
- 23 Purrfect pets
 - Travel
- 24 Why you board a plane on the left side
 - RD Recommends
- 129 All that's best in books, films, podcasts and DVDs
 - My Discoveries
- 136 Norfolk Island enchantments
- News Worth Sharing
- 138 Positive stories that caught our eye

REGULARS

- 6 Letters
- 10 My Story
- 14 Kindness of Strangers
- 16 Smart Animals
- 82 Look Twice
- 95 Quotable Quotes
- 99 That's Outrageous
- 106 Who Knew?
- 135 Trivia, Puzzles & Word Power

CONTESTS

7 Caption and Letter Competition

HUMOUR

- 48 Life's Like That
- 62 Laughter, the Best Medicine
- 86 All in a Day's Work













SEE PAGE 8

Editor's Note

The Right Royal Story

LIKE MILLIONS OF PEOPLE THE WORLD OVER, I have sat and happily binged on *The Crown*. Since the Netflix series debuted in late 2016, it has become a huge hit, both for its acting and its bold portrayal of history. But watching the series can be challenging, and you can easily start to wonder, "Did that really happen?" For many, watching the first 20 episodes that cover life in the Royal House of Windsor between 1953-1964 has become a sport, putting viewers through a series of storylines that excite, entertain and challenge – often playing games with the truth. Viewers checking the events portrayed in the series saw Wikipedia experience huge peaks of traffic to the Queen's page during each episode. While we love

a good storyline, messing with the truth about people so much in the public eye for so long was bound to raise a few sighs. Coinciding with the 65th anniversary of Queen Elizabeth II's Coronation, this month's cover story, 'Fooling with the Facts' (page

26), answers questions about some of its

more baffling storylines.

Happy reading,

LOUISE WATERSON Group Editor

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EDITORIAL Group Editor Louise Waterson
Chief Subeditor Melanie Egan Art Director
Hugh Hanson Digital Content Manager
Greg Barton Digital Editor Michael
Crawford Content Editor Marc McEvoy
Associate Editor Victoria Polzot Senior
Subeditor Samantha Kent Subeditor
Margaret McPhee Contributing Editor
Helen Signy

ADVERTISING Group Advertising & Retail Sales Director Sheron White Advertising Marketing Manager Rochelle Hawes

Australia/Asia Sheron White, sheron.white@readersdigest.com.au

New Zealand Kerry McKenzie, kerry@hawkhurst.co.nz

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READERS' COMMENTS AND OPINIONS

The Power of the Hug

Tears came streaming down my face when I read 'A Touching Gesture' by Andrea Gaisa (Kindness of Strangers, February). My own difficult circumstances, like those of the writer, cause me to be quite emotional and to break down and weep. Hugs are powerful and can relieve the pain and grief temporarily. And I keep reminding myself that the bad times will be over soon and I just need to be brave now.



Happy Gut

Recently while in my doctor's waiting room, I picked up a copy of Reader's Digest and read an article ('Gut Bacteria', March) that I have found has really helped me and I wanted to say "thank you".

MARGARET SMITH

Who knew that when we eat, we're not just feeding ourselves – we're feeding a whole colony of gut bacteria that keep us healthy? D. FR'

Bridge on the Both

Boye Brogeland's courage and tenacity in removing the pair of cheats from the world stage of competition bridge ('House of Cards', March) deserves the highest praise. Reading this story brought to mind my first and only encounter with this fascinating card game back in 1945 when I was on board the troop carrier KPM Both.

About 300 troops crowded on the open deck, bored stupid with

LET US KNOW If you are moved – or provoked – by any item in the magazine, share your thoughts. See page 8 for how to join the discussion.

the limited activities available in the cramped space ... but then we discovered BRIDGE! All previous boredom appeared to have gone overboard RON SEWELL

For the Love of Pigs

I was amazed by the story 'Esther the Pig' (March). Not many people seem to care about these highly intelligent and devoted animals. Many commercial pigs are confined for their entire lives. They never see sunlight, never walk on grass or have the chance to nurse their young. as all mothers should. I cried with happiness for Esther that she ended up with two wonderful 'humane' beings. GINA MARTIN

Wasted Talent

I believe a lot of talent ends up wasted in prisons. The story 'The

WIN A PILOT MR METROPOLITAN BALLPOINT PEN

The best letter published each month will win a Pilot ballpoint pen bearing the Reader's Digest logo and an animal-print inspired barrel. From the Pilot MR Metropolitan collection crafted in Japan, this timeless ballpoint pen features stylish silver and bronze accents and is a joy to write with. Congratulations to this month's winner, PILOT Gina Martin.



It's a Shoe-in!

We asked you to think up a funny caption for this photo.

My tongue is tied, my stomach's in knots. You're my sole mate.

I ISA WATERREIIS

Smiling is good for the sole.

TIM BORTEN

Step Brothers. JAMES ROZARIO

Did you hear that, Lefty? They said the eyes are the windows to the solel

New shoes cure the blues.

ANA CUNTAPAY

I ALIDEN SKELLY

Congratulations to this month's winner. Lisa Waterreus.



CAPTION CONTEST

Come up with the funniest caption for the above photo and you could win \$100. To enter, see the details on page 8. Prisoner and the Guard' (April) has given me a new perspective; if prisoners are given due attention and facilities made available, they can have a chance to rewrite their stories. They would have something to aspire to. In many parts of the world, prisoners are treated inhumanely, but it would be a beautiful world if everybody could live knowing what they are born for.

ZULFIGAR ALI

A Long Acquaintance

An unabashed fan, I remember exactly where and when I picked up my first copy of the Reader's Digest magazine. It was more than 50 years ago, at a second-hand bookshop in the Old City of Jerusalem. It was most definitely a lucky chance encounter. The shop, outside the Cathedral of the Holy Sepulchre, was run by a Muslim shoemaker, who cobbled leather and purveyed literature at the same time.

The Child as Teacher

I was touched as I read through Wendy Chiapparo's 'Many Hands Make Light Work' (My Story, March). As the story shows, there is no doubt that we continue to learn till we reach the grave. Sometimes it's our young children that teach, enlighten, enrich and even correct us of our follies with their innocent comments and behaviour.

FIONA WALTAIR

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FOR DIGITAL EXTRAS AND SOCIAL MEDIA INFO. SEE PAGE 13

Anecdotes and jokes

Send in your real-life laugh for Life's Like That or All in a Day's Work. Got a joke? Send it in for Laughter Is the Best Medicine!

Smart Animals

Share antics of unique pets or wildlife in up to 300 words.

Kindness of Strangers/ Reminisce

Share tales of generosity or an event from your past that made a huge impact in 100-500 words.

My Story

Do you have an inspiring or life-changing tale to tell? Submissions must be true, unpublished, original and 800-1000 words – see website for more information.

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Ocean Challenge

Facing a long-held fear had an unexpected outcome

BY DENISE STRONG

Denise Strong lives in Cronulla, NSW, and is the mother of three children and grandmother of six. Denise enjoys walking, swimming, art, African drumming and creative writing.



FOR ME, SWIMMING IN THE OCEAN was more than a fear – it terrified me. As I had never had the courage to venture out past my depth, why I agreed to do the Bondi Beach Ocean Classic – an ocean swim of one kilometre – at the age of 63, is beyond me, but I did.

Together with a group of five long-time girlfriends – we dubbed ourselves the 'Six Pack' – I'd signed up to do the swim, which involved committing to three months of training leading up to the event in February. Training would be split into two sessions – Wednesday evenings in the pool, then Saturday mornings in the ocean.

Training began on a Wednesday evening at Sans Souci pool, in Sydney's south. It involved different swimming drills and doing lap after lap. The instructors were tough, yelling from the side of the pool as we swam: "Now get rid of those flippers, do another ten laps, stretch those arms, keep kicking."

To keep up with the others, I used flippers. They were



my security blanket. I'd groan at the thought of giving them up. It was tough going but as my confidence grew, I came to enjoy the sessions and the clean, sparkling water. Seeing the setting sun change the colour of the clouds from hues of red to mauve, and hearing birds chirping in the surrounding trees brought an unexpected pleasure. Added to this was the surprising sense of accomplishment I felt after each session.

Ocean training, on the other hand, was totally different. The second training session was on Saturday morning at Elouera Beach, and it filled me with dread. The power of the ocean, the thought of creatures, silent, lurking beneath me, frightened the hell out of me. Everything about ocean swimming was new: wading awkwardly through the foaming water, diving to the bottom, grabbing the sand as the turbulent waves washed over my body. I'm still haunted by the panic I felt after my instructor screamed out to me: "You're out the back, now swim!" Weeks of training soon turned into months, and the big day arrived.

A mini-bus had been organised to transport the Six Pack and our everso-proud partners and families to the big event. We felt euphoric, and with our enthusiastic entourage in tow, we were ready for the swim ahead of us. Banter and laughter filled the minibus as we weaved through the heavy weekend traffic to Bondi Beach.

The scene when we arrived at the beach is best described as organised chaos. We arranged a meeting place and manoeuvred our way through the vast crowds to pick up our brightly coloured swim caps.

Nerves raw, we donned our caps and goggles and headed to the start. We felt like celebrities, lining up and posing for photographs; the comradery we experienced as the Six Pack was incredible and has without doubt cemented our friendship.

I was thrilled with the weather, the cloudless blue sky reflected on the ocean turning it a sapphire blue. It was a magical summer's day. To my delight the ocean was just as I had hoped – and prayed. No foaming or crashing shore dumps, but a soft, unbroken swell that crept leisurely towards the beach,

breaking gently on the wet sand.

There was a buzz in the air as the participants, a sea of colour, from the very young to the very old, prepared for the start. When the starter's gun fired, the pack surged towards the water, some running at full speed, others more cautious, me a bundle of nerves.

Wading through the water, my heart was in my mouth but I was at the point of no return. My arms stroked, my legs kicked, one, two, three, take a breath, one, two, three, take a breath. Slowly I got into a rhythm. A nagging doubt entered my mind, "Will I overcome the fear of the ocean, will I succeed?"

As one of the slower swimmers at the back of the pack, I realised I was no longer afraid. I was surrounded by people encouraging me, looking out for me. To my surprise, I was actually enjoying myself: the water, so clean, so crystal clear; I could see small coloured fish below and I felt at one with nature.

My pool instructor appeared periodically, willing me to complete



Denise Strong, second from left, and her girlfriends, dubbed the 'Six Pack'

the swim. Volunteers on their boards ensured my safety, one even suggested swimming techniques.

As I wondered if I would ever finish, I counted my strokes, knowing that my determination would see me through.

As I edged closer to the shore, I became aware of how cold I was. Then, finally, after a gruelling 60 minutes or so, my feet touched the sandy bottom. My legs were like jelly and my knees buckled beneath me. I eased myself out of the water for the slow jog to the finish line. Words of encouragement reached my ears.

With the finish line in sight, I raised my arms in victory. I was the last swimmer to finish the one-kilometre swim, but who cares? I DID IT. I was excited, exhausted but most importantly, proud, that I had achieved what I thought was impossible: conquering the ocean.

Do you have a tale to tell? We'll pay cash for any original and unpublished story we print. See page 8 for details on how to contribute.

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MARGARET WALKER



We help you get motivated

#QuotableQuotes and #PointstoPonder to get you through the day







Need a Lift?

After an accident, I had a long journey to recovery in front of me

BY DINO VIRGILIO G.MONZON III

Dino Monzon lives in the Philippines and used to work as a local community juror. Writing is his passion and the works of Ian Fleming and Tom Clancy are among his favourite reads.

IT WAS EARLY ONE HOT MORNING in 2015 when, accompanied by my mother, I was gently wheeled across our quiet street in my wheelchair to the taxi stand. Three weeks earlier, I had broken my left ankle at home when it unexpectedly gave way. Now, with my ankle in a cast, I finally had an appointment at the Philippine General Hospital to be assessed for an operation to repair the bad break.

I was feeling nervous as I'd never had surgery before and the thought of it worried me. After waiting for a taxi for more than 90 minutes, we were still standing across the street from our house, trying to hail a ride. It usually only takes a few minutes, but on this particular Sunday taxis would pass by us either already filled with passengers or unwilling to take us. Perhaps they weren't equipped to carry my wheelchair. My mother was starting to get frustrated as we were fast running out of time; our appointment was scheduled for 10.45am and we still had





to go through the admissions process and it would take up to 40 minutes to get to the hospital. Then a black SUV pulled over and stopped in front of us. The driver, taking a look at us, said, "You two look like you could use a lift!" He told us he'd seen us earlier as he was taking his son to a weekend school activity. He was now returning home and saw that we were still waiting there.

With no questions asked, this good Samaritan welcomed us aboard and got us to the hospital in 45 minutes. We arrived at 10.30 – just in time for my appointment. He refused any compensation, saying people should help one another. He left with a smile.

As it turned out, there was an available slot for me and I was finally operated on. A lengthy rehabilitation process and physical therapy followed and now I am able to walk again.

To this day we have not crossed paths again with this friendly driver who went out of his way, but his generosity towards us has stuck in our minds. I am very grateful to this kind stranger who has taught me to keep watch for and help others in need.

Share your story about a small act of kindness that made a huge impact. Turn to page 8 for details on how to contribute and earn cash.



Smart Animals

Some animals are more like us than we think



BUBBA THE BUDGIE

CLARE ELLIS

Bubba, a handsome blue-and-turquoise budgie, was the best little companion I could have hoped for. At 88 years of age, I don't plan to have any more pets, but for 12 years, Bubba and I kept each other company throughout the day.

I bought him from my local pet shop, when he was a baby; the bigger budgies were pushing him away from the seed dish and off the end of the perch – so I had to save him.

I asked him his name, and he replied, "Bibbi". I changed it to "Bubba". He must have liked it because he learned to say it pretty quickly. I would always tell him what I was doing and always asked him if he liked the music I played.

He would make me laugh by practising new words, and if he didn't pronounce them correctly, he would mutter loudly, which I took to mean he was cursing himself.

I left Bubba's cage open unless he did something naughty, when I would shut him in till he behaved. It didn't take long and he soon learned to say, "Bubba's a good boy." When

You could earn cash by telling us about the antics of unique pets or wildlife. Turn to page 8 for details on how to contribute.

he came out, I got lots of kisses!

At bedtime I had to sing 'Unchained Melody' to him. He would kiss me a lot, particularly in the mornings when he would sit on my head watching the birds outside eat the food I had put out.

My favourite memory is of his last Christmas in 2014. He asked, "What doing?" I told him that the following day was Christmas Day and that the decorations would cheer us up. Next morning, he was out early kissing me, and it continued all day. That night, as I put him to bed he had a very satisfied look on his face.

On his last day, he clung to me and lay in my hand for hours. I placed him on a feather duster in a small box so that he could be on my walker tray while I cooked dinner.

At bedtime, he protested when I put him in his cage, so I asked him if he wanted to stay in my bedroom – lots of kissing noises followed. So I placed him back into the box with some water and seed. After the usual songs, I told him to lie down and get comfy. In the morning he was lying down, one wing over his head. I'm sure he still visits me.

PASTURES GREEN

ROBIN KEOWN

My friend Pamela and I are in an orchestra group. Last November, we drove to Marlborough, New Zealand, for a 'Top of the South' orchestra music workshop. We enjoyed each other's company, discussing the repertoire: a mixture of classical and modern music. I mentioned how much I was enjoying practising Beethoven's Pastoral Symphony on my cello, when Pamela exploded into a fit of laughter.

Stifling her laughter, she explained that recently, while she had been practising her violin for the workshop. her pet lamb, Baabie, had wandered into the house, as it often did. Not wanting to break her concentration. she ignored her pet and carried on with her practise until a strange noise caught her attention. The lamb was nonchalantly chewing on a piece of paper that lay on the floor. Realising that the sheet music must have fluttered off the music stand, she leapt up to rescue it. The clever lamb obviously had 'good taste' - it was the Pastoral Symphony!

I, too, broke into laughter and responded that the lamb would have done better with Bach's 'Sheep May Safely Graze'!

THE DIGEST



8 Silent Thyroid Symptoms to Look For

BY ALYSSA JUNG

THE THYROID. A BUTTERFLY-

shaped gland in the neck, produces hormones essential for metabolism and brain activity. Symptoms of a thyroid problem are often vague, but if you notice any of the following signs or have more than one, see your doctor for a simple blood test to gauge your hormone levels.

The symptoms of an overactive thyroid and an underactive thyroid are both easily treated.

If you've always been a good sleeper but suddenly can't snooze through the night, it could signal a thyroid problem. An overactive thyroid pumps out certain

hormones (triiodothyronine, known as T3, and thyroxine, known as T4) in excess, which can overstimulate the central nervous system and lead to insomnia, says Dr Hossein Gharib, a Mayo Clinic endocrinologist.

On the flip side, if you still feel tired after a full night's sleep (or need to sleep more than usual), you might have an underactive thyroid, in which your body doesn't produce

enough hormones.

2 SUDDEN ANXIETY

Ifyou've never struggled with anxiety but start to feel consistently anxious, your thyroid might be overactive.

Too many thyroid

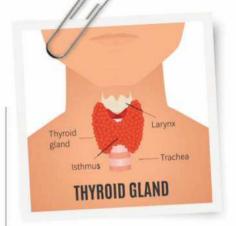


hormones often cause patients to feel anxious unrelated to anything specific, says Dr Ashita Gupta. an endocrinologist.

CHANGES IN BOWEL HABITS Frequent constinution could be an underactive thyroid symptom. "Thyroid hormones also play a role in keeping your digestive track running," says Gupta, "If you produce too little, things get backed up." An overactive thyroid can create the opposite effect.

THINNING HAIR Another thyroid symptom is thinning hair, particularly on your eyebrows. An underactive or overactive thyroid throws off your hair growth cycle, says Gupta. Usually, most of your hair grows while a small portion rests. When thyroid hormones are imbalanced, too much hair rests at one time. which means hair looks thinner.

SWEATING AT RANDOM TIMES Excessive sweating when you're not exerting yourself is a common sign of an overactive thyroid. The thyroid regulates the body's energy production. Higher-thannormal hormone levels mean your metabolism is revved up, which causes people to feel overly warm.



UNUSUAL WEIGHT GAIN Olf your jeans feel snug but you haven't changed your eating or exercise habits, an underactive thyroid might be to blame, "Lack of hormones decreases metabolism and kilojoule burning, so you may see gradual but unexplained weight gain." says Gharib.

FEELING RAVENOUS BUT NOT GAINING WEIGHT

On the other hand, if you're suddenly able to squeeze into smaller-size clothes that haven't fitted into in years - without a major change to your diet or workout regimen - you may have an overactive thyroid, which causes an increase in metabolism.

BRAIN FOG With an underactive thyroid, some people report feeling a 'brain fog', says Gupta. Others report subtle memory loss or overall mental fatigue. An overactive thyroid can make it difficult to concentrate.





Lowering Blood Pressure

Tweaks to help get a better, more accurate reading BY ANDREA AU LEVITT AND ALYSSA JUNG

DOCTORS are increasingly focusing on the lifesaving benefits of lowering your systolic blood pressure, the top number in readings. A 2015 study showed that volunteers who lowered their systolic pressure to 120 had a 25 per cent lower risk of heart attack and a 43 per cent lower risk of death from cardiovascular causes, compared with those whose systolic pressure was 140.

Losing weight, eating less sodium, exercising more and quitting smoking are among the best non-medicinal ways to reduce systolic blood pressure. These tips may also help.

SIT PROPERLY

For your reading, sit with your back flat against the chair back and your feet flat on the floor (no leg crossing!).

SUPPORT YOUR

ARM Position your arm at heart level on a flat table. If your arm is too high or too low, your heart might have to pump harder, which can raise your blood pressure.

BREATHE SLOWLY A Japanese study found that patients who took six deep breaths in 30 seconds before a reading had a more than three-point drop in their systolic blood pressure compared with those who rested for 30 seconds without deep breathing.

NIBBLE DARK CHOCOLATE Studies of 856 healthy participants showed that flavanol-rich cocoa products, eaten daily for at least two weeks, can lower systolic blood pressure by four

points in those with hypertension.



A 2014 study showed healthy adults who did 15 minutes of hand-grip exercises three times a week for ten weeks reduced their systolic pressure by almost ten points.



Bad Habits That Can Age Your Face



Hard living can lead to hard looks, according to new research. Are you at risk? BY ELISA ROLAND

THE OLDER WE GET, the more we obsess over looking younger. Genes are the main indicator of how well (or poorly) you'll age, but if you tend to indulge in two less-than-healthy habits – heavy drinking and smoking – your face will age much faster, according to a study in the *Journal of Epidemiology & Community Health*.

Danish researchers tapped data from the Copenhagen City Heart Study to track visible signs of ageing in 11,500 adults for 11.5 years. Study participants were queried about how much they drank and smoked as part of a general review of their lifestyle habits. Researchers also examined their ears, eyes and hairlines.

The results revealed that, yes, hard living equals fast ageing. Women who downed 28 or more drinks a week were 33 per cent more likely to develop discolouration in the eyes linked to ageing, compared to women who had fewer than seven drinks a week. For men, the risk jumped to 35 per cent when they had 35 or more drinks a week. Smoking a pack of cigarettes a day for more than 15 years raised the odds that a woman's eyes would betray signs of ageing by 41 per cent, compared to a non-smoker; the risk was 12 per cent for male smokers.

"This is the first prospective study to show that alcohol and smoking are associated with the development of visible age-related signs and thus generally looking older than one's actual age," the researchers told Science Daily. "This may reflect that heavy drinking and smoking increases general ageing of the body."

Light to moderate drinkers didn't have any greater visible ageing signs than non-drinkers, so drinking in moderation gets a pass.





Fire Safety Tips

Little heaters can pose a major house fire risk

BY MARISSA LALIBERTE

ELECTRICAL APPLIANCES and

electrical faults are a major cause of house fires. Other fires are started by faults in appliance cords, receptacles and switches. Never use an appliance with a worn cord which can send heat onto combustible surfaces like floors, curtains and rugs that can start a fire.

A compact electric heater is convenient and cost-effective, because it directs heat to a specific location. But it is also potentially dangerous because of the fires it can cause. The high temperatures of these heaters create a fire risk. Many fires start because the heater is sitting within one metre of bedding or flammable furnishings that get too hot and catch fire. Keep children and pets away from heaters, and place the heater on a hard, nonflammable

The fire risk can be

compounded if you plug the heater into the wrong outlet.

Plugging a room heater into a power board is never a good idea. Power boards simply aren't designed to handle the energy load required of a heater. Power boards are designed for low-power items, such as televisions, DVD players and stereos. As radiant room heaters require so much start-up energy and also heat up quickly, if used for a prolonged time, the heat can transfer back along the power cord and into the power board, causing it to overheat. Manufacturers recommend plugging

room heaters directly into the wall socket.

And, as a general rule, for any appliance that needs to stay plugged in for a long period, always use a board that has a surge protector.

surface.



Proof That Cats Are Good for You

Science shows cats are purr-fect pets for your health

BY SUSANNAH HICKLING

YOUR CAT CAN CUT YOUR RISK OF HEART DISEASE Our feline friends lower stress levels and blood pressure, and you're less likely to die of a heart attack or stroke, according to an American study. The effect even extended to people who'd owned cats in the past.

PURRING HELPS HEAL MUSCLES, BONES AND TENDONS Research suggests the sound your contented cat makes has a therapeutic effect. It's all to do with the frequency. A cat's purring falls within a frequency range that has been found to improve bone density and promote healing.

FOR HEALTHIER
CHILDREN There's
evidence that cats
can help children
with autism
communicate
better and be more
assertive, and that

babies have fewer respiratory and other infections when there's a moggy around. Children are also less likely to develop allergies.

GET A SHOT OF FELINE FEEL-GOOD FACTOR A Cats Protection survey found that 87 per cent of cat owners believed their pet had a positive effect on their sense of wellbeing and 76 per cent said that it helped them cope with everyday life.

Half of cat owners enjoyed the companionship, while a third found stroking their cat to be calming.

DON'T OWN A CAT? Don't

despair. People who watch cat videos had more energy and were more positive afterwards and felt fewer negative emotions, such as anxiety or irritation, according to a survey from the University of Indiana.





Why We Board on the Left Side

You know you've always been curious

BY BROOKE NELSON

WHETHER YOU'RE A FIRST-TIME

FLYER or an experienced jetsetter, we're willing to bet there are plenty of air travel questions you've always had. For example, what's the deal with that triangle sticker on the wall near your seat? And why do you always get stuck sitting beside someone who snores?

But amid all of these mindboggling mysteries, you might have failed to notice something rather important: the side on which you board the plane. No matter where you're travelling, you will always embark and disembark from a door on the left-hand side of the aircraft. What's the deal?

There's a method to this madness, it turns out. First of all, doing so directs foot traffic away from the ground crew on the right-hand side, who are fuelling up the plane and loading luggage.

What's more, the pilot usually sits in the left-hand seat. So, back in the day, "it was useful for the pilot to be able to judge wing clearance from the terminal building and to put the aircraft door in front of the terminal doors" if it was on the left side, notes a former Air Force pilot.

Yet another explanation has its roots in nautical tradition. Thanks to the placement of the 'steerboard' – the rudder-like part on the righthand side of a boat – passengers had to board from the boat's left side, also called the port. Aircraft designers followed the same convention, says Andrew Stagg, a commercial pilot.

The only time you won't embark or disembark from the left-hand side? When you're flying in small, two-seater planes. But for the most part, commercial flyers will get the left-side treatment.

WHAT'S THIS BUTTON FOR?

Ever been into a cockpit? There was a time when children and enthusiasts were invited to get a glimpse of what it was like in the business end of the aeroplane.

Still, much of it remained a mystery. So what do all those buttons do?

According to the book *How to Land*



A Plane, written by Mark Vanhoenacker, a huge effort goes into making it all very simple.

very simple.

In a piece
published by
telegraph.co.uk, he
says the External
Power Control switch
usually gets the most
attention. It's the
button that keeps
the aircraft powered
while it is parked.

"You may hear a click or notice a brief flicker of the lights just before departure. That's the pilots turning on the APU (Auxiliary Power Unit) and deselecting the external power – an auspicious signal that your jet is at last unplugged from the world, and your journey is about to begin."





FOOLING with the FACTS

For first-rate entertainment, you can't look past *The Crown*. But Netflix's epic series isn't exactly an accurate history lesson

BY DONYALE HARRISON

t's almost expected that a television series based on a book will have a slightly different storyline. But when a series portrays someone's life - a life that is well documented - you'd expect accuracy would be important. Not necessarily so.

A few episodes into watching *The Crown*, something odd begins to happen – so assiduously detailed is the Netflix series that it takes on the flavour of a documentary. After

spending more than \$130 million making the ten episodes in season one, Netflix went to great lengths portraying the British royal family's super-rich lifestyle. Season two was no different, taking 398 different sets to recreate the opulent interiors of royal aeroplanes, trains and yachts – as well as Windsor, Balmoral and Sandringham Castles, and Buckingham Palace. The scenery and fashion are first-rate, but the series plays fast and loose with historical facts.

In October last year, Peter Morgan, the series writer, an anti-monarchist, publicly described the monarchy as "deranged" and "insane". With a string of hit movies including *The Queen* (2006), *Frost/Nixon* (2008) and *American Sniper* (2014), in an interview with *The Sunday Times Culture* magazine, Morgan went on to say the Queen's length of reign was like a "mutating virus" – impossible to stop. Firm words, indeed.

To see how free with the facts Morgan is, we set out to separate real-world fact from fiction in the award-winning series.

PHILIP, THE 'FAILURE'

t's hard to escape the idea that the Duke of Edinburgh must have, at some point, snubbed Peter Morgan. Throughout the series, he portrays Philip as rude, unsuitable, childish and obsessed with titles. While he can be rude, the rest makes for drama at the expense of truth.

Philip was born Prince Philip of Greece and Denmark and was a decorated naval officer when he began his relationship with Elizabeth. Doubts about his suitability as a husband were over his perceived 'foreignness', not character or rank. Parts of his childhood were spent in Germany, but most of his education was completed in England and Scotland. While his sister and her family did die in a plane crash, the idea that



Complex character: Matt Smith as Prince Philip



it was his fault and that his father blamed him is pure fiction. Philip did make a stand for his children to take the name Mountbatten, and both he and the Queen fought to stay at Clarence House after her ascension to the throne, because it was a better family home than Buckingham Palace.

But far from demanding a title, as portrayed in episode nine, there had been discussions for years about styling Philip as a Prince. The Royal Archives reveals an exchange between Winston Churchill and the Lord Chancellor from 1954 where they discuss him being either Prince Consort or Prince of the Realm. A minute from Churchill dated June 23, 1954, states the Queen "made the suggestion to the Duke of Edinburgh and that His Royal Highness refused to consider accepting any new title at present".

His 1956 tour of the Commonwealth wasn't a junket, but it did mean he avoided testifying at the divorce hearing of his friend, Mike Parker. The tour was a complex diplomatic undertaking and was well received. When he was named Prince in 1957, the official reason was to thank him for his work with the Commonwealth.

The Prince's most famous actual flaw – his old-school racism – is barely touched on in the script. The incidents of snubbing Kenyan chieftains never happened and represent unlikely breaches of protocol.

There are, of course, a few moments that capture the kindness Philip is known for among family and friends. When John F. Kennedy muffs his entire meeting with the Queen, Philip steps in and puts him at ease, a job he carried out for thousands of people for more than 60 years as the self-described "world's most experienced plaque unveiler".

PHILIP'S MOTHER, ALICE

he first episode of the series opens with Princess Elizabeth and Philip's 1947 wedding. It's here that Queen Mary and the Queen Mother (then Queen) peer over at Philip's mother, Alice, Princess Andrew of Greece and Denmark: "Look at the mother, just out of a sanatorium," says the Queen Mother. "And dressed as a nun," sighs Queen Mary. "A Hun nun," replies the Queen Mother.

Alice was diagnosed with paranoid schizophrenia in 1930 and spent two years at a Swiss sanatorium – an issue returned to in season two. Before her breakdown, Alice served as a nurse in field hospitals during the Balkan Wars, was exiled during World War I, fled Greece with her husband, Prince Andrew, and five children in 1922, and endured her husband's philandering during their exile in Paris. Many commentators suggest her stay in the sanatorium was convenient for her husband

The Greek monarchy was restored in 1935, and Alice returned to Athens. During World War II, far from being 'a Hun', she hid a Jewish family on the top floor of her house in Athens, near the Gestapo headquarters; an act for which she was honoured by the Israeli government.



Philip's mother, Alice, Princess Andrew of Greece and Denmark



In 1949. Alice founded her own religious order that gave aid to Greece's poor. She returned to England after the revolution of 1967 While she did wear a habit to the coronation, she is clearly shown wearing a fetching gown and floral hat in photos of the 1947 wedding. Alice was born in Windsor Castle and was Oueen Victoria's great-granddaughter, George V - Queen Mary's husband - honoured her for her nursing and sent the cruiser that rescued her family from Greece during the revolution. Mary and her daughterin-law treating Alice as a deranged stranger is unfair and unlikely.

PHILIP'S INFIDELITY

t's entirely possible the Duke of Edinburgh has not always been a faithful husband. Biographer Sarah Bradford asserts he has had liaisons with women who were young, beautiful and "highly aristocratic". But, The Crown's contention he had an affair with ballerina Galína Ulánova is unlikely. A famed dancer for the Bolshoi Ballet (not the Royal Ballet, as in the script), visiting London for the first time. Galína was 46 in 1956 and there is no record of her meeting the much younger Duke. Her schedule allowed little time for socialising. Despite having several husbands during her career, in retirement she settled down happily with a 'female companion, so he was probably not her type.



Duty comes first: Claire Foy plays the young Elizabeth II



THE CORONATION

he actual crown is a focus of the series, but it is often wrongly depicted. For her coronation on June 2, 1953, the young Queen wore the St Edward's Crown. Yet viewers see the St Edward's Crown trotted out for a photo session later in the first season. That would never have occurred. St Edward's Crown has been locked away in the Tower of London since 1953 until a 2018 BBC documentary The Coronation, where the Queen discussed the day. The Queen wore the Imperial State Crown to the state opening of Parliament each vear up until 2017. when she wore a hat instead.

The events leading up to the coronation are fudged. The long delay was always planned as Britain still had rationing after the war. Elizabeth installed Philip as Chairman of the Coronation Commission early on – and, unlike the script, it was the Archbishop of Canterbury, not the Duke of Norfolk, who tried to constrain the modernising Duke. Royal historian Hugo Vickers wrote in *The Times* that the Archbishop was able to push him out entirely from "the process and rite of coronation", but Philip had his way when it came to televising.

Philip did not hesitate in paying homage to the Queen, according to Vickers' research into the Archbishop's papers, which state that he accepted going after the Archbishop himself, despite having the right to go before.

When the Duke of Windsor made it clear he wanted to attend the coronation, the Queen's Private Secretary, Sir Alan 'Tommy' Lascelles, wrote to the former King's lawyers to quash the idea. It's true that Windsor watched it on television with friends.

SIR WINSTON CHURCHILL, PM

he congregation standing for Sir Winston and Lady Churchill as they arrive at Westminster Abbey for the Royal Wedding in 1947 is a fact; but Winston's disdain for Prime Minister Clement Attlee is not. Far from mocking Attlee, saying "an empty taxi arrived at 10 Downing St and Attlee got out," Churchill's Private Secretary Sir John 'Jock' Colville went on record saying Winston chastised others for

using that joke at Attlee's expense.

After winning the 1951 election, Churchill was expected to retire in favour of Conservative heir apparent Sir Anthony Eden. But after King George VI died, he stayed on to help the new Queen. Always one for a parade, he wanted to stay leader until the coronation on June 2, 1953. By then, Eden was gravely ill after a botched gall bladder operation and had remedial surgery on June 10. Winston suffered a stroke on June 23 – at a dinner party, not in bed and not following the shock of Eden's operation, as the TV version portrays.

His confidants kept quiet about the stroke: Colville shooed the guests home and Winston's family and doctor kept him going for a few days until he made it to Chartwell, his country home, where he deteriorated.



Fatherly advice: Prime Minister
Winston Churchill



It's likely the Queen didn't know, but it wasn't Lord Salisbury's fault.

Churchill bounced back and remained PM until his 80th birthday in November 1954. The story about Graham Sutherland's portrait is mostly true: Churchill did hate it, but a member of Lady Churchill's staff burnt the portrait.

PRINCESS MARGARET

rincess Margaret suffers badly on screen with her romance with Group Captain Peter Townsend, depicted as thwarted by the Queen Mother and Tommy Lascelles, then PM Anthony Eden and the Queen. In 2004, it was revealed that in 1955 the government was prepared to change the law to make the marriage possible, while allowing Margaret to





keep her royal title and income. Then in 2009, a letter surfaced from Margaret to Eden in which she tells the PM she is yet to "properly decide whether I can marry him or not", saying "everything is so uncertain".

It seems she had simply fallen out of love, rather than become a tragic, bitter figure. In reality, she was funny. When asked in New York in the 1960s how the Queen was, she reportedly replied: "Which one? My sister, my mother or my husband?" Though her fondness for drink is definitely not overstated.

THE QUEEN IN GHANA

■ he Oueen's foxtrot with Ghana's President Kwame Nkrumah did happen. That's almost the totality of fact in The Crown's coverage of the event. While socialist. Ghana was never a Soviet state: rather, Nkrumah was a canny politician who needed funding to build the Akosombo Dam to provide hydroelectric power. The USSR did offer loans to African nations, loans that had better terms than British loans. The Queen's dance did not end Nkrumah's relationship with the Soviets, as he won the Lenin Peace Prize the following year.

The Crown depicts the Queen's visit to Ghana as a reaction to being outshone by the Kennedys during their visit to England in June 1961. Towards the end of the episode, John

F. Kennedy congratulates Jackie for being rude to the Queen and inspiring her Ghanaian visit, as it's worked out perfectly for his ends. While Jackie was scathing about both Buckingham Palace and the Queen, the political balance was actually reversed between the UK and the US. Nkrumah's power had been wobbling before the November royal visit and its success served to stabilise him, with the local press hailing the Queen "the greatest Socialist monarch in the world".

After the visit, PM Harold Macmillan insisted Kennedy underwrite the dam project, saying, "I have risked my Queen. You must risk your money."

EDWARD, DUKE OF WINDSOR

he biggest flight of fancy is *The Crown*'s portrayal of the Queen asking her uncle, the Duke of Windsor, for advice. Despite his abdication and cruel nicknames and letters (mostly true), she remains fond of him until Tommy Lascelles bitterly explains the depths of the Duke's Nazi connections during the season two episode 'Vergangenheit' (German for 'past').

In reality, relations were cool. The Queen Mother loathed him – scenes where she accuses him of having killed her husband by abdicating are based on fact – and the Queen sided with her parents, though she remained courteous towards the Duke and was kind to him in his old age.



Rift with his relatives: the Duke of Windsor, played by Alex Jennings



While some details of the Duke's Nazi sympathies may be sketchy, the general picture drawn is accurate. In 1936, when King, he phoned the German ambassador directly, and also met with Adolf Hitler on a visit to Germany in 1937. He revealed to the Germans that their plans for invasion were known to the French and there is a report from 1940 by Windsor's friend, Don Javier Bermejillo, stating that Windsor encouraged Nazi bombing of England, recounted by Dr Karina Urbach in her book *Go-Betweens for Hitler*.

While some insist the Duke was a fool, not a traitor, there's no reason he wasn't both. One thing is certain: he was not so much a fool as to come to Britain angling for an official job with Elizabeth's government, as he does in episode six.

Cancer, stroke and hepatitis are words we once feared. Thanks to great medical breakthroughs, there are now ...

New **Treatments That Can**

BY ANITA BARTHOLOMEW AND SAMANTHA KENT

In the past, some disease diagnoses used to strike fear in all of us. But these days, this is no longer always true. Today, vaccines protect us from once-deadly diseases. Antibiotics vanquish infections that used to kill tens of thousands. Cancers that



PHOTOS: SHUTTERSTOCK

once were highly lethal are now more like chronic illnesses that people can live with for many years. We can all take heart from these amazing advances in prevention and treatment.

Hepatitis C

Around 230,500 Australians and 50,000 New Zealanders are infected with hepatitis C.

THE GOOD NEWS

Now there is a cure.

HOW IT HAPPENED

In 2013 a new class of anti-viral drugs became available.

It was the early 1990s, and 62-yearold Leigh-Anne Maxwell had no idea why, for years, she'd felt so awful; neither did her doctors. They'd tested for mononucleosis, anaemia and other obvious causes. Nothing. She was constantly exhausted. She was nauseated. She got yeast infections.

No one connected her symptoms to the emergency surgery she'd had years before. It wasn't until she tried giving blood that she finally got a diagnosis. A new screening test confirmed she was infected with hepatitis C, and could not be a donor.

Because the virus is transmitted by blood, she knew immediately the transfusion that had saved her life during her emergency surgery had infected her with hepatitis C. For the next 25 years, she continued to suffer.

According to epidemiologist Dr Shruti Mehta, although some will clear the infection on their own, about 75–85 per cent of those infected with hepatitis C go on to develop chronic infections, "Which puts them at risk for all sorts of long-term complications associated with liver disease, primarily liver cirrhosis, liver cancer and end-stage liver disease."

While most people with the virus can be asymptomatic for years, even decades, this was not so for Leigh-Anne. And the only treatment available when she was diagnosed offered just a 50 per cent success rate, but Leigh-Anne wasn't a candidate.

Then, beginning in 2013, newer drugs became available that were "nothing short of revolutionary," says Mehta. But they were extremely costly, and most drugs only worked against certain strains of the virus. Again, Leigh-Anne wasn't a candidate.

Then, in January 2017, she was offered a chance to try a brand-new medication, Zepatier. "Within a week [after treatment completion] there was a profound difference," Leigh-Anne says. She now has the energy to do all the things she's been missing.

Today there are treatments for all major strains of hepatitis C, and in Australia, treatment is subsidised (in New Zealand, treatment is subsidised for some strains of the virus).

But because the disease can hide in someone's body for years without symptoms, finding the people who need treatment is a big challenge.

Cardiovascular Disease

Cardiovascular disease is the leading cause of death in Australia (with 45,392 deaths in 2015) and New Zealand (where more than 10,000 people die every year).

THE GOOD NEWS

Eighty per cent of premature deaths from heart disease and stroke are preventable.

HOW IT HAPPENED

Lifestyle changes and better treatments have lowered mortality rates from heart disease and stroke.

Although CVD (including coronary heart disease, heart failure and stroke) is the number one cause of death globally, at least 80 per cent of premature deaths due to heart disease and stroke are preventable, says the World Health Organization (WHO).

"Since the 1970s, mortality from heart disease has decreased by 70 per cent in Australia," says Professor Garry Jennings, chief medical advisor for the Australian Heart Foundation. "We believe that about half of the reduction in the number of deaths are due to better treatments, while the

other half are due to lifestyle changes through education. There are also new and improved drugs to prevent clotting. We have more ways to reduce blood cholesterol, in particular, a new class called PCSK9 inhibitors."

Until recently, stents were only used in people with heart disease who were stable. Today stents can be used during a heart attack. The technology around stents has been refined, and there are now stents that contain drugs that can prevent plaque from regrowing after surgery.

Stroke treatment, too, has made great leaps. Quick treatment is still important to survival, and to limit damage to the brain. Developments over the last few years include acute intervention, where a special catheter is used to 'suck' the clot blockage out of the artery as the stroke is happening, but also up to eight hours later.

Along with treatment, lifestyle changes have helped prevent countless deaths from heart disease and stroke. A large international study published in *The Lancet* in September 2017 found that just 150 minutes of moderate physical activity a week decreases the risk of heart disease by eight per cent. A healthy diet is

also important for protecting your heart. A 2014 study found that eating a diet rich in fruit, vegetables, nuts, reduced-fat dairy and whole grains decreased heart disease risk by 20 per cent.

Back in 2013, Mark Oakley, father of two young children from Preston, Victoria, was in good shape. Aged 39, he had a reasonably healthy diet, walked six kilometres every day, had never smoked, and was a light social drinker. His family had a history of high blood pressure, but he'd been on medication for 18 months to control it, and his doctor was monitoring him on a regular basis. All that changed suddenly one afternoon.

"I can't explain it, but my whole body felt odd," he recalls, "I felt totally different, but I couldn't pinpoint what was wrong." Most imagine that a heart attack would be painful, but Mark felt no pain, no tingling - only a slight discomfort in his collarbone. He visited his GP immediately, where he was given an ECG. His doctor was puzzled by the reading, so called an ambulance. The paramedics carried out their own ECG, transmitting the results live to the nearby hospital. They confirmed that Mark was having a heart attack, but concerned that he had no pain, they decided to rush him to nearby Austin Hospital. "When they put me in the ambulance, I knew it was real," he says.

From the moment he was brought out of the ambulance, to be greeted by the anaesthetist, to the moment he emerged from surgery – with a stent inserted into his main coronary artery – just 26 minutes had passed. It turns out his main coronary artery was completely blocked. Two weeks

later he went back for a stent to be inserted into another main artery, which had been 75 per cent blocked. It took eight months for him to make a full recovery.

Mark is on a rigorous course of medications, and he's now more conscious of salt and fat in his diet. "I always read the labels for salt and fat content," he explains, with a laugh. "Plus, I'm even more conscious of the importance of a healthy lifestyle."

Cancer

138,321 new cases of cancer will be diagnosed in Australia in 2018, with around 22,000 new cases expected in New Zealand

THE GOOD NEWS

Even with advanced cancers, people are enjoying longer survival times.

HOW IT HAPPENED

New immunotherapy drugs.

The most promising news in cancer treatment today is immunotherapy, which encourages the body's immune system to rally its own forces against disease. The newest advance in this field is CAR T-cell therapy (CAR stands for chimeric antigen receptor). In the lab, a person's own T-cells (a type of white blood cell) are re-engineered into cancer-fighting machines.

The first such therapy was approved in the United States in

August 2017 to fight acute lymphoblastic leukemia in children and young adults.

In a clinical trial, 83 per cent of those receiving CAR T-cell therapy experienced remission within three months.

It's also being used to treat certain non-Hodgkins lymphoma patients.

Several other immunotherapy drugs are currently being used against cancer, sometimes with dramatic results. But most immunotherapies only work for a small percentage of people. Usually, a biopsy of the tumour is required to find out who's a good candidate for which therapy. But now, a new blood test, called a liquid biopsy, is being studied to determine whether, by looking for DNA markers in an individual's blood, they can quickly and easily determine which immunotherapy will help which patients.

Liquid biopsies might also be the future of early detection of cancer, according to an August 2017 paper in *Science Translational Medicine*, which reported their use to detect genetic changes linked to early-stage colorectal, breast, lung and ovarian cancer, and may help detect cancer recurrence.

One very different type of immunotherapy is a vaccine for lung cancer called CIMAvax. It has significantly increased survival times in patients in Cuba, where it was developed, and is now being tested in clinical

trials in the US. What makes CIMAvax unique is that unlike most immunotherapies, which are only effective against very specific cancer sub-types, CIMAvax suppresses a 'growth

factor' called EGF in the patient's body, and numerous different types of cancers require EGF in order to proliferate.

"The possibility is that this vaccine would be useful in a large number of cancers," says Dr Kelvin Lee, professor and chair of the immunology department at Roswell Park Cancer Center. Among those are breast, prostate, pancreatic, colon, and head and neck cancers

Bowel Cancer

Bowel cancer is the third most common cancer in Australia and second highest cause of cancer death in New Zealand.

THE GOOD NEWS

Many more people are surviving today.

HOW IT HAPPENED

More widespread and accurate screening allows doctors to catch it early.

Australia and New Zealand have some of the highest rates of bowel cancer in the world, but over the last ten years, earlier detection has resulted in a 20 per cent fall in the overall mortality rate. The most common screening tool in Australia is the faecal occult blood test (FOBT), which detects the presence of blood in the stool. Advances over the last few years have produced a more accurate version of the faecal test: the faecal immunochemical test (FIT). A positive result may require a follow-up colonoscopy, which can both locate and remove growths in the colon or rectum.

"In a perfect world, we'd all have colonoscopies to screen for bowel cancer," says Dr Graham Newstead, director of Bowel Cancer Australia. "But it's expensive, invasive and resource-dependent." The faecal occult blood test, he says, is an accurate screening tool – and the next best thing – for the general population.

Forty per cent of males and 30 per cent of females will develop a polyp in their bowel - most of which will not develop into cancer. "But in the cases that become cancerous, by the time you have significant symptoms, the polyp will have grown through the bowel, and possibly into the lymph nodes or liver." The best prevention is early detection, with screening every two years between ages 50-74. "Screening can save lives when followed up by timely diagnostic colonoscopy, by detecting bowel cancer at its early stages when 90 per cent of cases can be successfully treated," says Newstead.

Breast Cancer

In 2018, an estimated 18,235 new cases of breast cancer will be diagnosed in Australia, and around 3000 in New Zealand.

THE GOOD NEWS

Many breast cancers are so slow-growing that may not need treatment. For those needing treatment, survival times are greatly improved.

HOW IT HAPPENED

Genetic testing now allows doctors to pinpoint which treatment will work best for which cancer, making long-term survival possible.

The incidence of breast cancer in Australia and New Zealand is, at first glance, alarmingly high. About one in eight women will get the disease. But a breast cancer diagnosis no longer needs to be a death sentence. Amazingly, a good portion of breast cancers don't need treatment.

Most small tumours (under two centimetres), found only by mammogram, will never grow large enough to lead to symptoms or death, according to a 2016 study in *The New England Journal of Medicine*. Even when a

breast cancer is an aggressive type, it has become a very treatable, survivable disease.

"We're finding breast cancers earlier and earlier, when they're much smaller and haven't spread elsewhere in the body," says medical oncologist Dr David Shiba. "Cancers that have spread to the lymph nodes, liver, lung, bone or brain are becoming few and far between." A good deal of credit goes to the discovery that one treatment doesn't fit all. Using the right treatment for an individual's cancer subtype saves lives and prolongs survival times for many women.

Newer drugs have turned even static disease into a chronic illness that patients can live with for years.

Living Transplants

Too few people donate organs to keep up with the need.

THE GOOD NEWS

From 2015 to 2016, living donations (kidney and liver) in Australia and New Zealand increased by nine per cent.

HOW IT HAPPENED

More people understand that most of us can live with just one kidney; live donations of livers are even lower risk.

Daniel Germanos of North Rocks, New South Wales, was just 17 years old when he was diagnosed with kidney disease back in 2014. He embarked on a regime of medications, including steroids, but his condition deteriorated rapidly.

It was obvious to all concerned that dialysis was Daniel's next step.

But Daniel and his parents were confronted by a stark truth: to have any chance of living a normal life, Daniel would have to undergo a kidney transplant. There was just one problem: the waiting list for a donor kidney was between five to ten years.

"We knew we couldn't let him wait that long so we started looking into live donations in the hope one of us would be a suitable match," says Rita Germanos. Daniel's father was ruled unsuitable, and Rita was ruled out due to being too overweight.

So Rita began a regime of training and weight loss. "Not many mothers get to test their unconditional love like this," she says. Over 12 months, Rita lost 32 kg until Daniels' doctors finally gave her the go-ahead. In December 2017, Rita and Daniel underwent surgery, which was a success.

Daniel urges people to join the organ donation register [www.donatelife.gov.au or www.donor.co.nz]. "Everyone should be on it because there are so many people that need one," he says.

We now have new, better treatments for some of our most dreaded conditions. We've discovered that it might be possible to prevent some of these illnesses. Even those diseases still lacking an effective remedy have begun to reveal their secrets. What was once a death sentence is today often treatable, even curable. And tomorrow? With ongoing research, each year brings better news.



The language in today's most popular novels is far simpler than it was just a few decades ago

BY BEN BLATT

FROM THE BOOK NABOKOV'S
FAVORITE WORD IS MAUVE

Have Bestselers Become DUMBER?



f you've ever read a Dr Seuss book, you may be familiar with words such as *Fizza-ma-Wizza-ma-Dill*, *Fiffer-feffer-feff* and *Truffula*. You may also be familiar with these words: *a*, *will*, *the*.

Besides made-up words and rhymes, Dr Seuss's biggest trademark is simple writing. We can partly thank William Spaulding, his Houghton Mifflin editor, who wanted Seuss to go after an even younger audience than he had reached with his first books, Horton Hears a Who!, And to Think That I Saw It on Mulberry Street and If I Ran the Zoo. Spaulding's challenge: "Write me a story that first-graders can't put down!"

Spaulding sent along a list of about 350 words with the instructions to make a book out of them. The result, *The Cat in the Hat*, clocks in at 236 words and ranks as the secondhighest-selling book of Seuss's career. The book ahead of it? *Green Eggs and Ham*, which uses just 50 words – all but one of them, one syllable. (The long one: *anywhere*.)

Seuss's word selection came from lists created by readability experts such as Rudolf Flesch, who argued in his seminal 1955 book *Why Johnny Can't Read* that literacy education in the US needed reform. It was Flesch who introduced young readers to phonics, which enabled students to

sound out words rather than having to memorise them. He also helped to create a mathematical formula, the Flesch-Kincaid Grade Level test, to measure the complexity of US military training manuals. It and similar tests are now commonly applied to insurance policies and other official documents, but it makes for a handy literacy scale as well.

The formula itself is fairly simple:

0.39
$$\left(\frac{\text{total words}}{\text{total sentences}}\right)$$
 + 11.8 $\left(\frac{\text{total syllables}}{\text{total words}}\right)$ - 15.59

The resulting score is the grade level required to understand the text. If a book gets a 3, that means you'd need at least a third-grade education to understand it.

For instance, *Green Eggs and Ham* actually yields a score of –1.1. On the other end of the spectrum is *Absalom, Absalom!* Because William Faulkner frequently disregards punctuation, it contains one 'sentence' composed of 1288 words, earning that passage a grade-level score of 503.

As part of my research, I collected every digitised number one *The New York Times* bestseller from 1960 to 2014 and ran the Flesch-Kincaid test on all 563 of them. Most books meant for a general audience will fall within the fourth- to 11th-grade range, as did all of these bestsellers. If you look at the scores over the decades (see chart below), an unmistakable trend becomes clear: the bestseller list is full of much simpler fiction today than it was 40 or 50 years ago. In the 1960s, the median book had a grade level of 8. Today the median grade level is 6.

On the upper end, James A. Michener's 1988 novel *Alaska* had a grade-level score of 11.1. Of the books I analysed, 25 had a grade level of 9 or higher. But just two of these were written after 2000.

On the low end, eight books tied for the lowest score of 4.4. All were writ-

ten after 2000 by one of three high-volume writers: James Patterson, Janet Evanovich and Nora Roberts.

There's no way around it. While prize-winning literary novels such as Jonathan Franzen's *The Corrections* make the number one spot on occasion, overall, the books we're reading have become simpler. They aren't the only example of words that seem less wise today. For instance, US presidential State of the Union addresses have

gone from a 17th-grade level pre-1900 to a 12th-grade level in the 1900s to below a 10th-grade level in the 2000s, prompting a *Guardian* headline to declare, "The state of our union is ... dumber." Does that mean that books – and therefore their readers – are getting 'dumber' too?

It is true that today's bestsellers have much shorter sentences than the bestsellers of the past, a drop from a median of 17 words per sentence in the 1960s to 12 in the 2000s. Also, today's list is much more often topped by commercial novels than in the past.

This supports my 'guilty pleasures' theory. Of course, there have always been 'guilty pleasure' books on the list. In the 1960s, it was *Valley of the Dolls*; in the 1970s, *The Exorcist*;



This chart shows the difficulty of The New York Times bestsellers, indicated by the grade level needed to comprehend the text. The black bar represents the median book in each decade. The shaded region represents the middle 50 per cent of all books analysed.

in the 1980s, the Bourne books; and in the 1990s, the *Jurassic Park* sequel, *The Lost World*

But if we break down bestsellers by genre, we find that there has been a long-term shift within these guilty pleasures. Thrillers have become 'dumber'. Romance novels have become 'dumber'. There has been an across-the-board 'dumbification' of popular fiction. Among current authors who have written at least five number one bestsellers, most.

including Stephen King, Danielle Steel and Harlan Coben, rank at or below the sixth-grade level.

It would be easy to lump in *The New York Times* list's reading-level decline with the rise of knee-jerk arguments that intellect in the US is at an all-time low, but I don't think this is fair.

Writing doesn't need to be complicated to be considered powerful or literary. The winner of the 2014 Pulitzer Prize for fiction, *The Gold-finch*, was also a bestseller and has a

SIMPLE AND SATISFYING

Reader's Digest editors have rounded up some of their favourite writers who keep it simple, along with first lines that let you sample their less-is-more literary styles.

AGATHA CHRISTIE

Her novels are direct and unadorned, even when the hero is a fussy Belgian. Her language couldn't be simpler, but her plots continue to fool readers generation after generation.

MURDER ON THE ORIENT EXPRESS: "It was five o'clock on a winter's morning in Syria."

MICHAEL CONNELLY

There's nothing in the pages of his crime

novels but simple, get-going writing. No froufrou, no distractions, just the facts, making him perhaps the best procedural writer in the business. Ever.

THE BLACK ECHO: "The boy couldn't

"The boy couldn't see in the dark, but he didn't need to."

JANET EVANOVICH

Her books are short, sharp and funny. That's rare in any kind of writing, and she's prolific in a variety of genres.

ONE FOR THE MONEY:

"There are some men who enter a woman's life and screw it up forever."

STEPHEN KING

It's his ideas and imagination that are superior; his writing, while uniquely his, pulls readers from page one with its accessibility.

THE DARK TOWER - THE GUNSLINGER: "The man

GUNSLINGER: "The main black fled across

reading level of 7.2. While many classics have high scores (*The Age of Innocence* at 10.4, *Oliver Twist* at 10.1, *The Satanic Verses* at 10.1), just as many have surprisingly low scores: *To Kill a Mockingbird* at 5.9, *The Sun Also Rises* at 4.2 and *The Grapes of Wrath* at 4.1. These books are revered, but they are also accessible enough to be taught in high school.

It's logical that our bestselling books

are not complex – by definition, popular means they appeal to the masses. For what it's worth, plenty of successful 'literary' writers have embraced the beauty of 'easy' writing. As one best-selling writer put it, "One day I will find the right words, and they will be simple." His name: Jack Kerouac. By the way, Kerouac's most popular book, *On the Road*, scores a reading level of 6.6.

EXCERPTED FROM NABOKOV'S FAVORITE WORD IS MAUVE BY BEN BLATT, © 2017 BENJAMIN BLATT.

PEPPINTED WITH PERMISSION BY SIMON & SCHUSTER SIMONANDSCHUSTER COM

the desert, and the gunslinger followed."

SOPHIE KINSELLA

Through her conversational writing, she creates wonderfully sympathetic narrators: average young English women who are full of quirks and always funny.

CONFESSIONS OF A SHOPAHOLIC:

"OK. Don't panic.
Don't panic. It's only
a Visa bill. It's a piece
of paper; a few
numbers. I mean, just
how scary can a few
numbers be?"

ELMORE LEONARD

His prose is lean and easy, even when the action is hard and fast. His mysteries and Westerns pick you up and carry you along and never sound like writing.

OUT OF SIGHT: "Foley had never seen a prison where you could walk right up to the fence without getting shot."

WALTER MOSLEY

Deliberately bringing black male heroes into the mainstream, Mosley's Easy Rawlins detective stories revive the classic Raymond Chandler and Dashiell Hammett style.

A LITTLE YELLOW DOG:

"When I got to work that Monday morning, I knew something was wrong."

J.K. ROWLING

Yes, the Harry Potter books are ostensibly for children, but many adults read them for their sheer joy.

HARRY POTTER AND THE SORCERER'S STONE:

"Mr and Mrs Dursley, of number four, Privet Drive, were proud to say that they were perfectly normal, thank you very much."

NICHOLAS SPARKS

This penner of tearjerkers writes in the affectless voice of the heartland, creating authentic characters every time.

THE NOTEBOOK:

"Who am I? And how, I wonder, will this story end?"



Life's Like That



It was a Friday afternoon, and one of our friends gave little thought to having his power mower borrowed by a neighbour, until he happened to mention it to another neighbour. Then he discovered that this neighbour's mower had also been borrowed. Later, he was even more surprised to learn that three more mowers had been loaned to the same man.

When the hoarder was pressed for an explanation, he assured the men that all mowers would be returned bright and early Monday morning. "This is one weekend," he added with a grin, "that I intend to sleep late – in peace."

SNAP JUDGEMENT

The other day, someone asked me if I knew what self-effacing meant.

Using my smartphone to demonstrate, I pointed out the camera and said, "Other people facing..."

Then I turned it around and said, "Selfie-facing."

SUBMITTED BY DWAYNE CLIPPERTON

KNOW YOUR LIMITS

You think you're pretty OK at doing stuff, then you try to plug something into an outlet you're not looking at directly.

@IANYARDIGAN ON TWITTER

COMEDY COMES IN THREES

My three-year-old granddaughter, Olivia, was playing with her two-

year-old cousin Nathan on the gravel patio when I spotted them throwing stones. I called them both over and told them to stop.

"OK, Grandma," they responded before scampering off.

About an hour later, I caught them throwing stones again. I took my granddaughter aside and asked, "How many times do I have to ask you to stop?"

She thought about that for a moment before responding, "Three, Grandma."

SUBMITTED BY JEAN DOBSON



AFTER YOU

I was standing in a long lunch line with my husband when the guy in front of us looked down at my very pregnant belly, smiled, and asked, "What are you having?"

My impatient husband replied, "A steak sandwich."

SUBMITTED BY KAYLEN WADE



The Great Tweet-off: Awkward Moments Edition

Some painful memories are worth reliving for millions to enjoy on Twitter.



I took a call at work and tried to transfer it. I was the only person there. I pretended to be someone else with a British accent. @MORTICAT

I texted my boss at the end of my FIRST DAY in the new job with: "Heading out. Love you." Intended for my boyfriend. @ANGEBASSA

Pulled in to gas station and was on wrong side of the pump for my gas cap. Drove around to other side and did it again. Drove away.

@SKIMBLECAT

After flunking a job interview, got up, shook everyone's hands and walked into the coat closet.

@NOAHVAIL



Why more conversations, and fewer texts, are good for your relationships and your emotional health

Can We TALK?

BY LISA FIELDS

ot long ago, when out-of-town relatives would stay with me for the weekend, my favourite part of each visit happened after the kids went to sleep. We'd pour ourselves a wine and chat until nearly midnight, laughing about old memories and sharing new stories.

These days, the dynamic is completely different. The first adult who returns from bedtime duty doesn't reach for the wine glasses; he parks himself on the couch and reaches for his smartphone. Just until the others show up, he tells himself.



One by one, everyone gathers where we used to regale each other with amusing anecdotes, but there's silence instead of laughter as everyone checks email accounts, text messages and Facebook feeds.

We might eventually pour some wine and talk, but everyone keeps a smartphone in his or her lap the whole night, and the conversation is often interrupted with an alert that someone elsewhere has something (better?) to say. Whenever this



WE'RE RESIGNED TO
COMPANIONS WHO
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INSTEAD OF FULLY
ENGAGING WITH US

happens, I yearn wistfully for the days when my relatives and I would focus all of our attention on each other and really connect.

My experience isn't unique. More than half the people in the world have smartphones. In countries such as the US, Britain, Australia, New Zealand and Singapore, the figure is more than 80 per cent. Phones really are everywhere.

Smartphone usage is so widespread that people like me – who value quality conversation – have become resigned to the fact that sometimes our companions prefer to use their devices instead of fully engaging with us. Today's instant-gratification, short-attention-span lifestyle has trained people to seek new information at every moment, so for many people, face-to-face encounters aren't as engaging as smart devices with constant news and updates. And relationships are suffering.

"Smartphones have become a safety blanket – whenever there's a moment of potential boredom, people turn to their smartphones," says psychology lecturer Daria Kuss, who studies smartphone usage. "Since the development of the first smartphones 15 years or so ago, that behaviour has been so normalised. Everyone has them."

A Constant Distraction

Because smartphones can produce a never-ending stream of interesting things to look at, they often rival real-life companions.

"Phones communicate themselves," says Oliver Bilke-Hentsch, a psychiatrist who studies internet addiction. "You don't need a phone call from someone. The device itself shows you new information. You have to control yourself just to look."

Nicole Gommers, 38, has grown tired of competing with a smartphone for her partner's attention.

"It is hard to have a conversation with him, because he is constantly



distracted by his phone," Gommers says. "When I ask something, he will answer, but I can tell that his mind is elsewhere. There is always someone who sends a text, and that means the end of the conversation, because it requires an answer.

"For a while, he was totally addicted to Wordfeud, an online word puzzle game you can play with anonymous others. As soon as he started a game, you were no longer allowed to speak, because he couldn't focus."

Because younger people grew up with a lot of exposure to technology, they're more likely than older folks to use smartphones in social settings, and they're considerably more likely to sit silently with a group of peers, each person staring at a phone. This has impacted the generation's communication skills.

"Young people find it very difficult to develop the skill of talking to another person and paying attention to another person without engaging with a smartphone," Kuss says. "They may have trouble having real-life conversations in a way that we older generations may be used to connecting to people and engaging in deep and meaningful conversation."

A Silent Force

Smartphones are so influential, they can have power over

a conversation even when they aren't in use. Researchers have found that when a smartphone is placed on a table – even if the phone's owner isn't actively using it – the depth of meal-time conversation plummets.

"Our study found that when the phone was within sight of one or both conversation partners, the participants reported poorer quality of conversations and lower levels of empathetic exchange," says study author Shalini Misra. "Rather than being a benign background object, smartphones that are in sight can distract individuals from their in-person context."

Because people may realise that they can be interrupted, they're less likely to engage in conversations about feelings or problems, instead leaning towards superficial small talk.

"Meaningful conversations require attentive participants," Misra says. "We need to listen to the words, tone and pauses, observe facial cues and body movements, and think about what we are hearing to understand what it means and respond appropriately. This is a complex task and requires a lot of cognitive resources. If our attention is split, our complex tasks – like conversations – will suffer. And the visibility of the phone prompts us to direct our thoughts to other things."

A Negative Influence

In 2010, a ground-breaking study by researchers at the University of Michigan found that American college students had lower levels of empathy than college students did 30 years earlier. The researchers considered the effect of technology and social media on this deficit of empathy, but they didn't draw conclusions about the cause for the drop between 1979 and 2009. Talking back then, study author Sara Konrath conceded that they didn't have the evidence to support the idea that smartphones or social media were causing the loss of empathy. "There are probably multiple reasons for the change: changes in family dynamics and sizes, political activities."

Since then, Konrath's subsequent research has found that young adults have the lowest empathy levels, while middle-aged women have the highest levels. Why? Middle-aged women may have more opportunities to flex their empathy muscles: caring for their children, looking after their older parents and mentoring younger colleagues. Fortunately, Konrath says, you can increase your empathy levels with practice, and leaving your phone out of the equation can help.

"We are wired to react face-to-face – our ancestors didn't have phones," Konrath says. "It's good to practice empathy in a face-to-face way. You have the capacity to see facial expressions and hear tone of voice. There are more signals about how they're doing, so you can tune in better."

Feeding an Addiction

Because smartphones are so distracting, people become preoccupied with them everywhere, even at work. Fabien Guasco, 43, gets frustrated when it disrupts his meetings.

"People are concentrating on the messages that arrive in their email box instead of listening to what is being said," Guasco says. "That's why I got into the habit of quickly turning silent if one of my staff is tapping away at their smartphone. As a result, everyone pays attention!"

Researchers have found out why it's hard to put those devices down: they feed an addictive nature.

"Every time you get a 'Like' on social media or a reward in a game," Bilke-Hentsch says, "you get a little injection of dopamine in your reward centre in your brain. You want to have it again. It's like smoking a cigarette or eating a sweet. Maybe from your spouse you don't get these rewards."

A Hopeful Solution

If you're tired of playing second fiddle to a handheld device and you'd like to curtail a loved one's smartphone usage without a heated argument, try these ideas:

- DETAIL YOUR NEEDS Spell out what you'd like no phones at mealtime, perhaps, or no answering texts while you're conversing but speak calmly, and don't accuse or blame. "Use more 'I' statements than 'you' statements," Kuss says. "Say 'I would like to spend more time with you,' instead of 'You spend all of your time on technology."
- NEGOTIATE FOR FEWER ALERTS Your partner doesn't just look at his phone when he wants to; the phone alerts him to check it whenever something happens on social media. If he disables the alerts, he'll use his phone less often.

"Notifications will increase your actual use of the mobile phone," says

- Joël Billieux, who studies the addictive use of information and communication technologies. "Research suggests that when you receive notifications, you generally check more applications than just the one that has sent the notification."
- BE 'PRO-POCKETS' Encourage your partner to keep her unused phone in her pocket, not on the table. "When the phone is in sight, it becomes salient to the person, even if they don't consciously realise that their attention is divided," Misra says. "Out of sight" may very well be "out of mind".
- CITE USER STATS Your partner may not realise how much time he spends on his phone, but his phone tracks how much time he spends on each app. Ask him to check his numbers.

"These make you realise the kind of time you are spending on your phone," Kuss says. "Seeing that may decrease your use."

• BUY YOUR PARTNER A WATCH Then they won't have to reach for their phone to check the time. Says Billieux, "A recent study showed that people wearing a watch reduced their time spent using smartphones."



SHOW BUSINESS

"I don't care what the newspapers say about me as long as they spell my name right."

"Every crowd has a silver lining."

P.T. BARNUM, CIRCUS OWNER AND REAL 'THE GREATEST SHOWMAN'

OPENING Heaven's DOOR

I had no idea there was this kept-hidden world all around me

BY PATRICIA PEARSON

FROM THE BOOK OPENING HEAVEN'S DOOR

Y FATHER DIED UNEXPECTEDLY of cardiac arrest in his bed in the spring of 2008. He was 80. The next day, we all got the phone call. But my sister Katharine, 160 km away, received her message differently.

"It was about 4.30am," she said at his funeral, "and I couldn't sleep, as usual, when all of a sudden I began having this amazing experience. For the next two hours I felt nothing but joy and healing."



She sensed a presence in her bedroom. "I felt hands on my head, and experienced vision after vision of a happy future." Unaware that our father had died the night before, she described her experience to her elder son the next morning, and wrote about it in her diary.

We were in shock. Katharine had had a vision? My sister wasn't prone to spiritual experiences. Stress she

was familiar with, as the mother of two teenagers. Laughter she loved. Fitness of any kind. Fantastic intellect, fluent in three languages. But she hadn't been paying much attention, in essence, to God.

Later, I would learn that this sort of experience when someone

has died is startlingly common. Families shelter their knowledge like a delicate heirloom. At the time, I only understood what a gift this was for Katharine, who was about to face her own death, from breast cancer.

Just two months after Dad died, Katharine was moved to a hospice. In her final ten days, she spoke little, yet seemed profoundly content. "Wow, that was strange," she remarked once upon waking up, her expression one of smiling delight. "I dreamed I was being smooshed in flowers." She looked gorgeous, as if lit from within.

Sometimes she would have happy, whispered conversations with a person I couldn't see. At other times, she would stare at the ceiling as a full panoply of expressions played across her face – puzzled, amused, sceptical, surprised, calmed – like a spectator in a planetarium.

The sister with whom I'd shared every secret couldn't translate this for me. "It's so interesting." she be-

gan one morning, and then couldn't find the language. Forty-eight hours before she died, she told us, "I am leaving." She left in silence and candlelight, while I lay with my cheek on her chest and my hand on her heart.

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That autumn and summer, people came out of the woodwork to tell me their tales

WHY HAD MY SISTER

had a powerful spiritual experience in the hour of my father's unexpected death? Why did she be-

told me if she could?

That summer and autumn, people came out of the woodwork to tell me their tales. Some were friends and colleagues, others were strangers sitting beside me on an aeroplane. If I told them about my father and sister, they reciprocated. Almost invar-

iably, they prefaced their remarks by saying, "I've never told anyone this,

but ..." Or, "We've only ever discussed

come increasingly joyful in her dying experience? What would she have



this in our family ..." Then they offered extraordinary stories – deathbed visions, sensed presences, near-death experiences, sudden intimations of a loved one in danger.

A friend once told me that, as a boy, he had come down to breakfast and seen his father, as always, at the kitchen table. Then his mother broke the news that his father had died in the night. He briefly wondered if she'd gone insane. "He's sitting right there," he told her. It was the most baffling and unsettling moment of his life.

I had no idea there was this kept-hidden world all around me. I wanted to understand what we knew about these mysterious modes of awareness. For four years, as a journalist, I pursued the questions.

A 2014 STUDY by The Palliative Care Institute and Hospice Buffalo in New York state found that 60 per cent of their dying patients, over an 18-month period, had comforting visions and dreams of living or deceased family members in the lead-up to their own deaths.

There is pain in loss, and then there is further pain in the silence borne by fear of being dismissed. Tell someone about it and the explanations come. Hallucination. Wishful thinking. Coincidence.

I went to a Christmas party with old friends, and caught up with a man who works for a bank. I told him some of what had transpired with Katharine. He said gently: "I don't mean to be unkind, but it is very likely that she was imagining these things." Why did he feel he could speak with authority about what the dying see?

Spirituality used to be considered an ordinary part of the human experience, but now it qualifies as an extraordinary state requiring extraordinary evidence. Why should this be? It has to do with the rise of scientism, a prejudice that believes anything that eludes scientific measurement cannot exist.

For my Irish and Scottish Highland ancestors, an extraordinary way of knowing things was always embedded comfortably within their culture. One summer afternoon, my elder aunts and cousins, women in their 80s and 90s, all gathered around the dining table.

Here, my grandmother had painted a
saying on the wall: "Fra
ghosties and ghoulies
and long-leggedy
beasties, and things
that go bump in the
night: the guid lord deliver us." A playful nod
to our witchy Celtic
ancestresses. But now
we had come to talk of
such things seriously
for the first time over lunch.

We spoke of how great-grand-mother Maude had absolute confidence in her way of knowing things; how, when my grandfather telephoned his mother to report her husband's fatal heart attack on his sailing boat, Maude replied disconsolately: "I know". My Aunt Bea recalled, "Granny would be in the living room reading a book, and she'd suddenly slam it down and mutter, 'Damn! So-and-so is coming and I don't want to see them.' Sure enough," Aunt Bea said, "so-and-so would show up ten minutes

later." The Norwegians have a word for this uncanny anticipation of visitors: *vardoger*.

Our Highland ancestors called the perception of a person's double 'second sight'. Cousin Marion offered that she had been working at a resort as a teenager when the hotel caught fire, prompting her mother – more than 3000 km away – to wake

> in distress and call her. And my mother, the uber-rationalist, conceded she awoke suddenly one morning in her university dorm and phoned my grandmother, whom she somehow knew to be in crisis. Granny was; her dearest friend had

died that night.

Each experience was different, but all were ways of knowing, and they tilted the world on its axis for a moment. Why hadn't we talked of them before?

CAMBRIDGE PHYSICIST and Nobel Prize winner Brian D. Josephson told *The New York Times* in 2003: "There's really strong pressure not to allow these things to be talked about in a

Harold Puthoff, a physicist at the Stanford Research Institute appointed to oversee the CIA's remote viewing (or clairvoyant) experiments in the 1970s and 1980s, described

positive way."

Often we are held back from embracing the comfort and reassurance of spirits

this pressure in conversations with psychoanalyst Elizabeth Lloyd Mayer, as reported in her book *Extraordinary Knowing*, published in 2007. "The evidence we had (on clairvoyance) was rock hard," he wrote. "I saw that. But I was having terrible trouble giving up my beliefs about how the world worked, even in the face of evidence that said my beliefs were wrong."

The prejudice in the Western world is beginning to change, particularly in the area of grief therapy, as counsellors take note of other cultural approaches. One influential study of Japanese widows found that their continuing bond with the presence of their deceased spouses – setting up altars in the home, leaving food, incense – made them much more psychologically resilient than their British counterparts.

Neuropsychiatrist Dr Peter Fenwick of King's College, London, has commented on the 'sensed presence' experience. "Often its emotional impact is so great that it remains a lasting source of comfort to the recipient and often has the power to alter their own perception of what death means. For them.

whether it's dismissed by others as 'simply coincidence' is irrelevant. The fact that it's happened is enough."

But often we are held back from embracing the comfort and reassurance of spirits by a society that belittles the experience.

ONE AUTUMN, with my sister Anne and her husband, Mark, we spend the afternoon shutting the cottage up for winter, which means confounding the squirrels, who appear to have spent most of the autumn hiding acorns. Each time we strip a bed, acorns tumble out. Anne and I laugh.

As I shutter the windows, I wonder what will have happened when they are next thrown open to soft spring light. What will have transpired in my life, in ours, in the history of the world? Who else will have died?

But the grace I see now comes from the comfort I draw from this tribe, with my cousins and aunts and uncles and friends. The extended family has drawn ever closer. It's like a footprint in the sand that needs to be filled in. Where the water rushes in, where love rushes in.

FROM *OPENING HEAVEN'S DOOR* BY PATRICIA PEARSON, © 2014 BY PATRICIA PEARSON, PUBLISHED BY RANDOM HOUSE CANADA, RANDOMHOUSE.CA



SLEEP TIGHT

The cubicle did not get its name from its shape, but from the Latin *cubiculum*, meaning bed chamber. MENTAL FLOSS



Double Takes

When you ask Internet photo whizz James Fridman to 'fix' a picture you submit, you never know what you'll get - other than laughs.



James, can you put me in Star Wars?

A:
There you go.

Curlbacca.





Can you please close my girlfriend's eyes in this picture? :)

Hope this helps.





James, can you make me taller than my dad, please?

Of course.



PERFECT JOKE

A woman walked into a library and wondered whether they had any books about paranoia. The librarian replied, "They're right behind you."

Source: Reddit com

WATERI OGGED

At a boat rental stand, the manager spots a boat out on the lake and yells through his megaphone, "Number 99, come in please, your time is up." Several minutes pass, but the boat doesn't return. "Boat number 99," he again bellows, "return to the dock immediately, or I'll have to charge you overtime."

"Something's wrong, boss," his assistant says. "We only have 75 boats."

The manager pauses, then raises his megaphone: "Boat number 66, are you OK?"

Source: Mariniste.livejournal.com



"They must be grown-up ducks, because they're eating the crusts, too."



Is there a spin doctor in the house?!

Get your BA in BS by learning these marketing euphemisms:

ACQUIRED TASTE

A food writer described this as "something people only ever say about foods that are horrible".

AHEAD OF ITS TIME

A book-publishing euphemism for "it bombed".

COURTESY CALL

An unsolicited phone call from a telemarketer.

FIXER-UPPER

A real-estate term for a property that might be more accurately described as a "tearer-downer".

FRIENDLY REMINDER

Urgent warning.

LEARNING OPPORTUNITY A mistake

ROBUST EXCHANGE OF VIEWS

A shouting match.

ZERO-TASKING

An impressive-sounding business term to use instead of admitting that you're doing absolutely nothing.

Source: Spinglish, by Henry Beard and Christopher Cerf

Dating e-Style







Recently divorced, writer **Lisa Fields** navigates the e-minefield of online dating in search of new and true love

ast year, after the dust from my recent divorce had settled, I felt ready to attempt a romantic relationship again. For the first time in my life, I created an online dating profile. I selected a flattering, wide-grinned photo of myself, explained that I was seeking a clever, charming man in my age bracket (give or take four years) and then sat back to find out what would happen.

I don't know what I was expecting from online dating, but it certainly wasn't this. For the first month that my profile was live, I was only contacted by men who were ten to 20 years older than me, none of whom I would consider for a serious relationship while raising two young children.

After the third or fourth silver-haired doctor flirted with me electronically, I started to worry. Maybe the mention in my profile of my two children was holding me back. I began thinking about the dating website's success stories that featured couples who had married after meeting online, giving hope to unattached folks like myself. Most were stories about two single people who clicked, but two stories featured divorced dads who married single women. Suddenly, it hit me: none of the stories had featured divorced mums.

Of course, I know that plenty of divorced mums get remarried. My kids have friends with stepdads, and I know women with second husbands. But as a divorced mum with no serious online suitors to consider, I was feeling discouraged, and I figured that I wasn't alone.

To see if my experience was typical, I spoke with Paula Bisacre, founder of RemarriageWorks.com. "Single mums often have a more difficult time dating," she told me. "A higher percentage of men will remarry within five years of a divorce than women."

I had to see those numbers. I found a report that showed that 87 per cent of divorced men remarry compared to 65 per cent of divorced women. And my hunch about older men and younger women wasn't totally wrong. The age gap between spouses in second marriages is five years or more compared to 2.5 years for first marriages.

Once I knew what I was up against, I decided to be more aggressive about my online dating. No more sitting back and waiting to get noticed.

I tapped out a note to a cute, single 42 year old who seemed interesting (although he sounded like a picky eater, and I'm an adventurous cook). For days, I hovered over my email, waiting for Picky to reply. Nothing. Gradually, it occurred to me that I was too old for Picky and he didn't have the decency to tell me (just as I'd ignored a grandpa or two). He was seeking women aged 25 to 40 and he

wanted kids. I was 40, so I qualified, but Picky probably wanted a younger woman so he could start his own brood, not join a ready-made family with my six- and eight-year-old kids.

After that epiphany, I thought that I might have better luck with divorced dads. They probably wouldn't want more children, so why wouldn't they date a contemporary?

I began an online dialogue with a divorced dad who had similar interests. We both work for magazines and enjoy swimming. For days, Swimmer and I asked each other meaningful questions, and I began mentally preparing for my first date in 14 years. But then Swimmer disappeared. I'm still not sure why. It felt like a failed first date, even though we never met for the proverbial cup of coffee. At least he didn't lie and say that he'd call me, I reasoned – the silence from our dating website was loud and clear.

Next, I met a divorced dad from my town. We emailed for a bit; then he asked for my number. One night after the kids were asleep, Hometown called. He was nice, but I felt absolutely no spark. Our conversation was the mindless chit-chat that you have at a cocktail party with a stranger you don't plan to see again. Still, I was pleased when Hometown asked me out. Scheduling our proposed date was tricky, though, because we both had our kids on different weekends. We had to settle for a day that was several weeks away. That didn't give me

a great feeling. How would I get alone time with this divorced dad regularly if I ended up liking him?

While I was contemplating Hometown's pros and cons, I learned that I had a Secret Admirer. Amused, I checked to see who it was. My dating website prompted anyone who

used its search engine to play its Secret Admirer game by clicking on people who were appealing. It seemed like a gimmick to keep people on the website poring over prospective dates, so I hadn't given much credence to past alerts. This time, I realised that my Secret Admirer had secretly admired me before, so I gave serious consideration to his pro-

file. He was cute, witty, well-read and an adventurous cook. He was 40 and wasn't sure if he wanted kids. I crossed my fingers that he'd be content with someone his own age.

I emailed him and soon we began texting. Within days, Texty and I were sharing deep insights about ourselves, thumbs tapping our mobile phones. I'd never revealed myself this completely to a stranger before. I hadn't even heard Texty's voice, but it felt like a real connection.

A week later, Texty and I met for lunch. Our lunch was as warm as our texting sessions. After a two-hour meal, Texty and I were hooked.

Sometimes I marvel at my luck. I found someone special after going on only one date. But I now realise that I actually had my share of bad dates before I met Texty – they'd simply happened online, via email and by phone.

A few months after our first date, Texty met my son and daughter. He approached them with such enthusiasm

and kindness (which they eagerly returned) that all of my fears about my children holding me back from a meaningful new relationship melted away. While everyone chatted comfortably, I revelled in the moment, smiling secretly to myself. Then I dived into the conversation with three of my favourite people.



WHAT'S YOUR AGE?

Scientists can tell how old you are from the fingerprint smudges on your phone.

FROM 1,423 Q.I. FACTS TO BOWL YOU OVER



One woman's life is changed forever in a single day. It's only years later that she is called to ponder what could have been

MY MOTHER'S lorment

BY NOELEEN GINNANE

FIFI D FDITOR



hen I was little, my mum was often unwell and had to go to hospital for long periods of time. To my delight, after a long separation, Mum came home to celebrate my sixth birthday.

I was ecstatic. She gave me a doll along with doll's clothes she had made while in hospital. Dad and my three older sisters all sang 'Happy Birthday'.

I can't remember whether there was cake or candles – all I remember is the chorus of my family singing 'Happy Birthday'. Mum's voice was the loudest, and I remember feeling very special. It was a Friday, and I had my family around me. It had been a while since we'd all been together and I remember – in that moment – that my world felt right.

Two days later, on Sunday, March 5, 1972, she died.

Mum was just 38, but had been unwell for much of my life. She'd been in and out of mental hospitals, her own life ruined by what I can only guess was an inner torment – and mental illness.

Mum's curse was ours to share – by this time, my three sisters and I had already spent time in a number of orphanages and foundling homes. Never more than four weeks at a time, it had always been my father's last-resort option.

I don't remember being told of Mum's death. I only remember Dad, himself unwell with depression, coming home very late. It was dark outside and my sisters and I were in the kitchen when Dad appeared at the door with tears streaming down his red, pinched face.

The next thing I remember is packing. I was afraid we were leaving Mum behind. I asked Dad if Mum was coming with us, and he said, "No". My heart cried that we were going somewhere without Mum knowing.



MUM WAS JUST 38, BUT HAD BEEN UNWELL **FOR MUCH OF MY LIFE**, IN AND OUT OF MENTAL HOSPITALS

Even today, some 46 years later, it's impossible for me to celebrate a birthday without thinking of Mum's suicide. I have made peace with it by figuring that she just couldn't bear to go back to the mental hospital, and I came to understand that her poor



health meant she couldn't care for us. Over time, I forgave Mum. I also found comfort in knowing I was her excuse for leaving the hospital that weekend, her escape from her pain.

Mum was a Polish refugee. After World War II, she was sent to Siberia in a convoy of cattle trucks with her mother and sister. From there they were sent to Africa, before arriving in Australia. Her father was killed in Auschwitz. Mum had experienced so much sadness.

But really, suicide never steals the life of just one person.

After Mum's funeral, Dad moved us to Melbourne where his family lived. It was here that he suffered a breakdown, and my sisters and I

were placed into St Catherine's, an orphanage in North Geelong, while he recovered.

After two years, St Catherine's was sold and the children were relocated to homes. My two eldest sisters moved to a family group home, while my other sister and I went to live with our Aunty Betty. A devout Catholic, Aunty Betty had three adopted children. Her daughter, Louise, was my age and we became great friends.

Aunty Betty worked for the Society of St Vincent de Paul and was a published writer. One day, Aunty Betty took Louise and me to St Vincent de Paul to help with a big office clean-up. I was supposed to put old books into boxes, but I was

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SCHOOL LAST ATTENDE	D. On Lady Help of Bustian Vic Park
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spellbound by the dusty volumes, some with handwritten words in the front cover, passing on the tome from one person to another in time. I remember Aunty Betty telling me to hurry along, but holding the old books in my hands was magical. It was there, surrounded by all those books, that I realised the importance of recording your life.

When I turned ten, Dad's health had recovered, and he had been in a stable job long enough to convince the authorities to let us live with him again. He was given a Housing Commission house and set about bringing us all home.

It was around this time that one of my aunties gave me a diary. I took to writing the ups and downs of my life in it, as if by instinct. Even at that young age, I felt compelled to record my existence. Looking back, I believe I did this because I was aware just how delicate our existence is.

In early January 2001, I was a single mother living in Perth. I had unresolved issues and felt detached from that little girl who I once was.

So just before my 35th birthday, I contacted the foundling home where my sisters and I had stayed from time to time while Mum or Dad or both had been unwell. I was astonished to discover there were records of my past, and I was invited to come and view them. A case worker showed me 'my file', which contained admission sheets in my father's handwriting, dates and reasons – "Occupation of

Father: Factory Worker", "Address of Mother: Heathcote Mental Hospital", "Father cannot look after them during mother's illness. Admitted in 1967 and again on three occasions - mother's illness", "Other Agencies Involved - Catholic Welfare Department".

Words were swimming on the pages in front of me as the woman made me a cup of tea, then sat quietly as I read my file. One typewritten letter held my attention longer than the others: it was dated 6/2/72 - 29 days before Mum's suicide.

It was written by Bill Hickey, a social worker, and was addressed to the Admissions Sister of the orphanage.



WINSTON CHURCHILL SAID. "IF YOU FIND YOURSELF GOING **THROUGH HELL. JUST** KEEP GOING"

His concern for our family's situation was clear: "This is not a full report, just a few words to let you know the situation," he wrote, appealing to the orphanage to take us in. "The father came to me late on Friday night, and since it seems an emergency, I want to submit a few notes now, and draft out a proper report on Monday."

His letter details my parents' separate illnesses, and the dire need for us to be accepted into the orphanage. "With the family background they seem to have. I would expect some disturbance among them."

I stopped reading, stared at the cup of tea on the table. Tears came to my eves. The "disturbance" Bill Hickey anticipated was my mother's suicide.

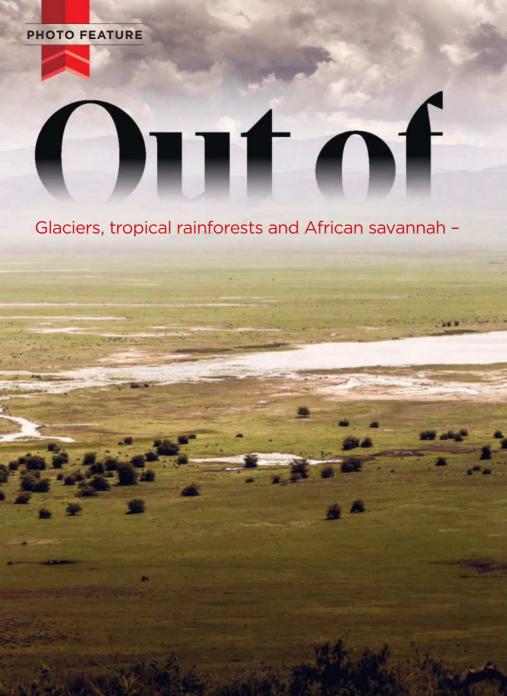
I was struck by how close we had been to help. This social worker had been concerned for this family of four young girls aged 6, 8, 10 and 12, and their parents. He clearly understood that our situation wasn't likely to right itself.

Winston Churchill said, "If you find yourself going through hell, keep going." Hell takes the form of many different struggles - mental illness. physical affliction, money problems. homelessness. Some of us reach that point of hopelessness and think there is no other way. But there is, there always is - we just have to find it.

Who knows how Bill Hickey could have helped us, could have helped Mum, could have changed our path. If Mum could have held on just a little bit longer ... vou just don't know. So. my message to anyone "going through hell" is to just keep going. R

CRISIS SUPPORT LINES

Lifeline Australia: 13 11 14 Lifeline New Zealand: 0800 543 354 Life Line Association Malaysia: (03) 42657995 Samaritans of Singapore (SOS): 1800 221 4444 Hopeline (Philippines): (02) 8969191





Tanzania is a land of diversity. But for how long?

PHOTOS: BARBARA DOMBROWSKI TEXT: CORNELIA KUMFERT

he majority of people in Tanzania live as subsistence farmers. Periods of drought and the water shortages pose a threat to both humans and animals alike, but so too do heavy rain and floods. The Masai especially are bearing the brunt of these

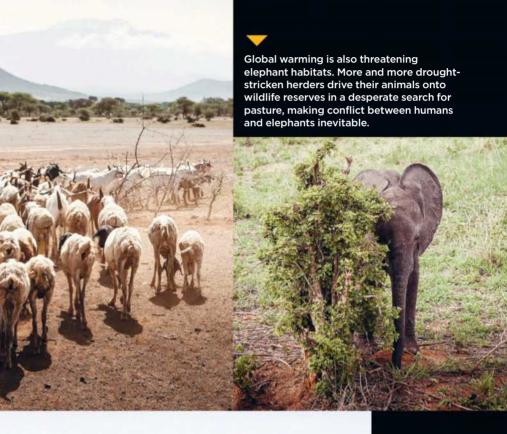
extreme changes in the weather.

For eight years, photographer Barbara Dombrowski has visited people particularly affected by the results of climate change, as part of her photography project Tropic Ice. Tanzania is her fourth stop after the Amazon region, Greenland and Mongolia.

At daybreak a voung Masai drives his herd of goats out to graze. There's virtually nothing for the animals to eat in the area immediately surrounding the villages, especially in times of drought. So the Masai are forced to go further and further afield in order to feed their livestock.



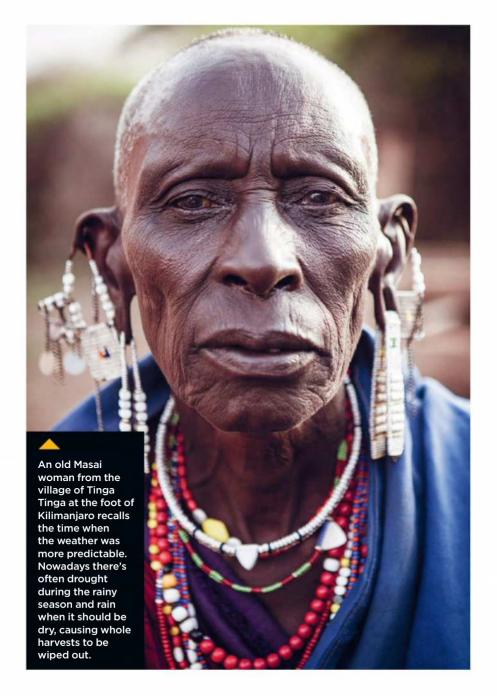


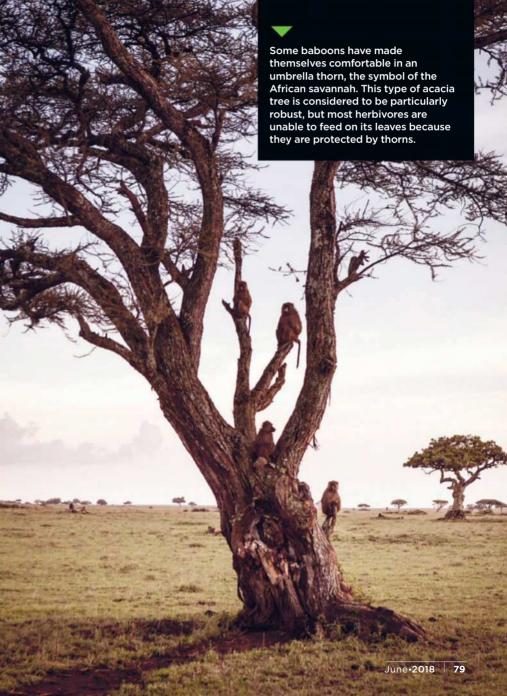


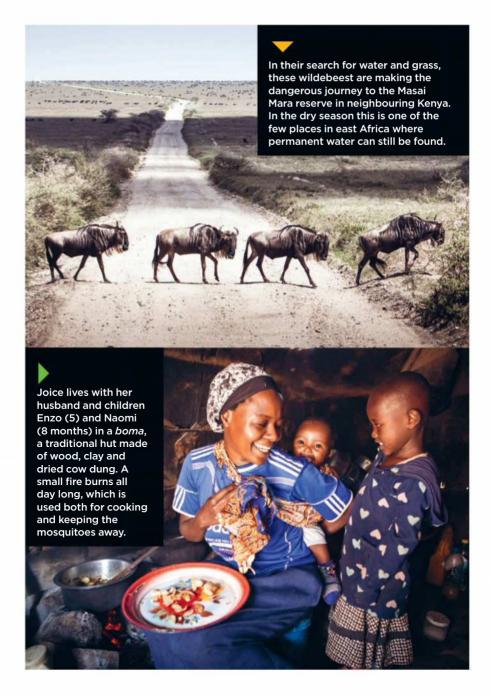




Masai weddings last for several days. On the second day of celebrations all the women from the village gather to accompany the bride to the house of her future husband.













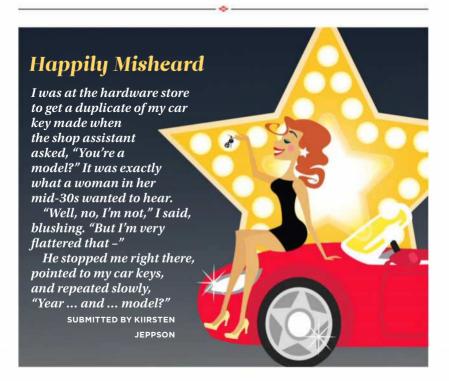






All in a Day's Work

HUMOUR ON THE JOB



OVER MY HEAD

My six-year-old son asked to see the academic book I'd written recently. I handed him a copy, and he carefully examined the pages. When he was done, he closed the book and, looking perplexed, asked, "Dad, do you understand any of this?" SUBMITTED BY TANNI HAAS

CALLED TO ACCOUNT

It's tax time. Don't try these excuses for being late; they didn't work the first time they were used:

- "I could not complete my tax return because my husband left me and took our accountant with him."
- "I suffer from late-filing syndrome."
- "I haven't had time because a baby



"Don't mind me, I'm just a little under the weather today."

magpie flew into my house and I have to stay in to feed it."

• "A wasp in my car caused me to have an accident, and my tax return, which was inside, was destroyed."

Sources: Accountingweb.com and The Telegraph

OVERHEARD

An associate to his employer: "Sorry I'm late. I got stuck behind someone going the speed limit."

SUBMITTED BY MARY JO MARSH

TIME MANAGEMENT

I just realised that "Let me check my calendar" is the adult version of "Let me ask my mum."

SUBMITTED BY NOELLE CHATHAM

THE GREAT ESCAPE

While supervising students on the playground during recess, I asked a six-year-old boy to stop climbing a fence overlooking the school's

parking lot. Reluctantly, the boy made his way back down to the ground.

His friend walked by and told him, "There's no escaping from school."

SUBMITTED BY LENA DESTADDINES

SKIN OF HIS TEETH

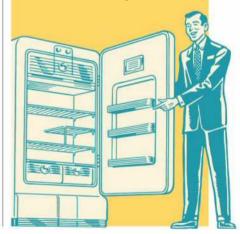
After photographing my client for a few minutes, I felt compelled to stop shooting and say, "I've got to tell you, that's a great smile you have."

Beaming, he said, "Thanks, I got it for my birthday."

SUBMITTED BEVERLY GUHL

Office Anarchist

I'm starting a blog that's just reviews of the food
I steal out of the fridge at work.





Think you can trust your recollections? Think again. Scientists are uncovering the shockingly common phenomenon of...

False MEMORIES

BY ANNA WALKER

EIGHTEEN-YEAR-OLD PETER REILLY sat in the interrogation room in a daze. After 25 hours of intense questioning, he'd just signed a confession confirming that he'd brutally murdered his own mother, 51-year-old Barbara Gibbons. "We got into an argument," he told interrogators. "I remember picking up the straight razor, and I slashed towards her throat."





Just a day after Barbara's body was found, the murder was an open and shut case. Based on his confession, a jury sentenced Peter to between six and 16 years in prison. The only problem? He was innocent.

The teenager's memory of his mother's murder was entirely false. In 1975, two years after his conviction, Peter was set free, exonerated by evidence that proved he couldn't have been at the scene of the crime.

By claiming that he'd failed a liedetector test and that mental illness had likely caused him to 'black out' the crime, the interrogators convinced Peter – by all accounts a quiet, good-natured boy who loved his

mother dearly - that he must have been the killer.

Not only did Peter believe his interrogators, he eventually provided detailed memories of the attack, explaining both his motive (his mother was an alcoholic who rarely showed him affection) and plan for disposing of the weapon (tossing it behind a

nearby service station).

So why did this young man from a

So why did this young man from a sleepy town in Connecticut confess to a crime he never committed?

The Innocence Project movement in the US, which seeks to exonerate innocent prisoners through modern DNA testing, says false memory plays a role in more than 70 per cent of the wrongful convictions they overturn. In ten per cent of those cases, their clients originally pleaded guilty, serving an average of 14 years for crimes that they didn't commit.

Dr Julia Shaw is a criminal psychologist at London Southbank University and the author of popular psychology book *The Memory Illusion*. She conducts research into how and why our brains form these complex false memories. It's a phenomenon, she explains, that's far more common than we might imagine.

"We like to think we're able to distinguish between imagination

and experiences, but the brain can't actually do this very well. Certainly not once you've pictured what a fantasy might feel, smell or taste like. Then you're adding in the markers we usually use to separate fact and fiction, and you're making them indistinguishable."

our brains are home to approximately 86 billion neurons. Each is equipped with stringy arms called dendrites, allowing them to stretch out to other cells. Each dendrite has 'spines', which act like fingers, enabling them to reach out across synapses and communicate from one



False memory plays a role in 70 per cent of the Innocence Project's overturned convictions cell to another. Memories are formed when particular connections between these neurons are strengthened. False memories and real memories seem to rely on the exact same mechanisms to become lodged in the brain.

It's tempting to think of memory as a personal CCTV system, recording everything we see or do. In actuality, as the founder of applied memory science Professor Elizabeth Loftus explains, it's more like a Wikipedia page. "You can go in there and change it, but so can other people."

When we recall a memory, we aren't flipping through the Rolodex of our minds to produce the correct file – we're writing that file out anew. We actively recreate our memories every time we think of them, adding room for potential fabrication or misremembering each time.

Think about your earliest memory. Perhaps you remember the birth of a sibling, your first taste of birthday cake or a traumatic trip to the dentist. Maybe you're even one of the few who can recall their own birth. Well, if any of those memories occurred before you turned three years old, bad news: they're definitely false.

As Shaw explains, it's physically impossible for our brains to form long-lasting memories when we're that young. "Almost everybody thinks they have a memory from childhood that's actually impossible."

These false childhood memories are often caused by a process called



Peter Reilly pictured the weekend after his conviction

'memory conformity', where details we've learned through the accounts of others can implant entirely false memories, or lead us to accept the experiences of others as our own. Perhaps you remember telling someone a story about yourself, only to realise that it had actually happened to them. That's memory conformity.

THIS PHENOMENON has serious implications for the criminal justice system. If eyewitness accounts can mutate through discussion or the process of remembering itself, then their reliability becomes compromised. And research has shown that emotional memories are no less



vulnerable to fabrication. In fact, because we tend to be more confident about our memories of emotional or traumatic events, they can be even less reliable than their humdrum counterparts.

committing a crime in

70 per cent of people

Not only are false memories possible, psychologists have proved that they can actually create false memories, hacking into our brains to implant recollections of events that never took place.

Shaw is one such psychologist. "I get people to repeatedly imagine

committing a crime – theft, assault with a weapon and police contact – and after three interviews using leading techniques and imagination exercises, we see that 70 per cent of them accept that they're guilty of a crime that they didn't commit."

But not everybody accepts the explanation that false memories are a by-product of our imperfect brains. Fiona Broome, a paranormal consultant from Florida, coined the term the 'Mandela Effect' in 2010 when she realised she wasn't the only person to remember Nelson Mandela's funeral, 30 years before he actually died. She discovered that hundreds of people across the world shared the same richly detailed false memory.

So what causes these eerily similar collective false memories? Broome speculates that we're all "sliding between parallel realities ... that somehow have glitches." She proposes a version of the quantum mechanic 'multiverse' theory, which speculates that there could be many universes all existing simultaneously.

Multiverse theory was hypothesised to explain physics experiments, but nevertheless, Mandela Effect enthusiasts enjoy speculating that their false memories are windows between worlds, not simple human errors.

Professor Chris French, from Goldsmiths University, in London, is sceptical.

"We have a tendency to put

ourselves at the centre of the action and I think that explains a lot about the so-called Mandela Effect. We all knew Mandela had a long sentence and many assumed he'd die in prison. Perhaps some people thought about it, imagined it happening and subsequently became convinced.

"False memories can arise without anyone deliberately implanting them. Take the 'crashing-memories' paradigm. Studies have shown that if you ask a random sample of British people if they saw the footage of Princess Diana's car crashing in Paris, about 50 per cent will say they did, when no such footage exists."

Perhaps another explanation is that those who experience the Mandela Effect are particularly susceptible to false memories. As a paranormal psychology specialist, French has worked on many studies examining connections between a belief in the paranormal and a predisposition to form false memories.

"Anything that's likely to make you confuse something you've imagined with something that really happened makes you susceptible to false memories," he explains. "Fantasy proneness, being creative, having a vivid imagination or simply a tendency to be away with the fairies."

What does the future hold for false-memory science? Developments in optogenetics, a technique that modifies brain cells to make them sensitive to light, and then uses laser beams to target specific memories, have already successfully implanted false memories in mice. Researcher Susumu Tonegawa, a neuroscientist at the RIKEN-MIT Centre for Neural Circuit Genetics, hopes future findings will help to alert legal experts as to the unreliability of eyewitness accounts.

Shaw explains that optogenetic research is now going a step further, with ground-breaking applications. "My French colleagues are doing some

of that work on humans, trying to cut out trauma from the memories of veterans. So in extreme cases, there are potential future applications for severe PTSD. It's very invasive, though, as you're physically modifying the brain, so it's a last resort."

These rapid developments are raising a host

of moral concerns.

"The idea that techniques could be developed that would allow the powerful manipulation of memory raises a host of tricky ethical issues," says French. "There are no easy answers, but it would be wise for such issues to be discussed by everyone – not just scientists.



Future findings may help to alert legal experts as to the unreliability of eyewitness accounts

DIY MEMORY HACKING

To see how easily the brain creates false memories, try this test on a friend.

Read them the following list of words: bed, rest, awake, tired, dream, wake, snooze, blanket, doze, slumber, snore, nap, peace, yawn, drowsy.

A minute later, ask them to recall the words. If one of their remembered words is "sleep", congratulations – you've just successfully implanted a false memory by association.

From the study Creating False Memories: Remembering Words Not Presented In Lists by Henry L. Roedigger III and Kathleen B. McDermott "Memory is rightly considered fundamental to our sense of who we are and many people instinctively feel it's wrong to interfere with a person's sense of self, even if they consent."

Nevertheless, one of the most important focuses of future memory research relates to the criminal justice system and educating law enforcers on the subject.

"A lot of police don't know about this. A lot of lawyers. It's shocking," Shaw states. "It should be part of their core curriculum."

NOW 62, PETER REILLY works as a car-parts salesman in Connecticut, but he remains interested in cases similar to his own.

In an interview with *The New York Times* in 1997, Peter explained, "I'd just as soon forget and move on, but it's such an important issue and it could affect anybody. I have a responsibility to make people aware." The mystery of his mother's murder remains unsolved.

Accepting that our memories are vulnerable and that our past is always a fiction (to some degree) doesn't have to be depressing.

"In some way, if you remove the weight that people often place on their past, it's freeing," says Shaw. "We're storytellers, and what matters is now. Accepting that only makes us stronger."

Quotable Quotes

I WISH I HAD TREASURED THE DOING A LITTLE MORE AND THE GETTING IT DONE A LITTLE LESS.

ANNA QUINDLEN, writer

I've been very lucky in my life in terms of people who are able to tolerate me.

PATTON OSWALT, comedian





You can't move mountains by whispering at them.

PINK, singe

It is the greatest of all mistakes to do nothing because you can only do little.

SYDNEY SMITH, English clergyman



NOTHING IN LIFE IS SO EXHILARATING AS TO BE SHOT AT WITHOUT PESULT.

> WINSTON CHURCHILL, British prime minister

Art isn't your pet – it's your kid. It grows up and talks back to you.

JOSS WHEDON, screenwriter



Make it a rule of life never to regret and never to look back. Regret is an appalling waste of energy; you can't build on it; it's only good for wallowing in.

KATHERINE MANSFIELD, writer

Lifelong FRIENDS

The deepest, most committed friendships span time, continents and life experiences





The keys to maintaining strong, long-term friendships often take a lifetime to learn. We asked some of the longest-lasting duos (and trios!) how they've managed to make their bonds unbreakable

Honesty is always the best policy

Heather Hopkins credits her decadeslong best friendship (and that's saving a lot because she's only in her 30s) to her commitment to honesty. "Never be scared to tell your best friends how you are really feeling about any situation. A true friend will always appreciate and be grateful for honesty, even in the stickiest of situations. If your real friends can't be honest and truthful, do you think the transients and acquaintances in your life will be?"

Always assume the best

"Assume that everything they do is with good intentions, even when that assumption seems unreal," explains Yael Lustmann, a mum in her 40s who has managed to make her best friendship last for around 30 years (and counting!). She adds that laughing off the bad stuff is a big help, too, and admits that she picked a sort of "wild and crazy guy" to be best friends with

See the other person's differences as a way to balance your own personality

"It helps that we both evolved and became educated over the 21 years of being friends since university." shares Max Zaslavsky. "But we accept our personality differences as things that balance us out. He is the only person allowed to call my mum 'Ma' besides me. When my parents almost died in a car accident in 1998, he and his now ex-wife rushed to be with me and help take care of my folks who were both in different hospitals. When I graduated in 2004, he got my 83-year-old father, who was battling cancer, in and out of a wheelchair so he could see me walk."

Just keep calling, even if there's nothing to really say

Nicki Bandklayder's 20-plus-year friendships are going strong because she's always eager to get on the phone. "Pick up the phone just because! You don't need a reason to call. This is what keeps some of my 20-plus-year friendships alive and strong. When you start needing a reason to call, you lose that every-day sort of connection. This goes for several of my bridesmaids who are in different states."

Don't pretend, real life isn't like Facebook at all

"The trick is to not pretend and just be you," tells Chetna Singh, of her 26-year friendships with her medical school friends. "Share your joys and your sorrows. Laugh together and be there for each other. Nobody's life is Facebook-perfect."

Sometimes one party forgets to be present, but that's OK

"My best friend Helen and I are going on 32 years, and we never call out the other person on being an absentee friend," shares Angela Randall. "Life happens and when you are in different places and going through different things, just pick up where you both are."

Use technology to your advantage

"It's said that technology is ruining relationships, but there are few things as nice as being connected with your best friends since primary school by an ongoing group text," says Lauren Schwartz Gamsey. "We are seven busy working parents

spread across seven cities, and we can still share everyday thoughts, big news and silly stories as if we had never moved away from each other."

Be realistic and keep it casual

"My four best friends from childhood and I are all married with kids. Restaurant gatherings once we had kids were always a disaster," tells Stacey Feintuch. "So we decided to switch things up. Now we each host a meal at our home throughout the year. It may be a brunch or a pizza dinner. The host helps organise the long email chain to choose a date, does the brunt of the work and food preparation. But we all bring something to help ease the burden. It ensures that we get together at least four times a year."

Don't be afraid to put in the work so you can relax and let the good times roll

Real friendship is an ongoing, neverending work in progress, and that's something Stacy Goldstein Lettie knows so well of her 30-plus-year friendship. "Friendship takes work and planning, but true friends fall in step with each other no matter how long it's been. Our favourite tradition is that every New Year's Eve since 1998 we get the families together. We cook a big fancy meal and stay up half the night playing karaoke or some other silly game. We always have a family sleepover and each year it's at a different house." R



That's Outrageous!

BLOODY MARVELLOUS

BY MEAGAN BOISSÉ

KARMIC JUSTICE

Canadian court judge Mark Tyndale has given blood a whopping 870-plus times. Now 60 years old, donating was a simple way to save lives But in 2013 he found himself on the other side of the equation when he was rushed to hospital with a deadly flesh-eating disease. Fortunately, what goes around comes around. Tyndale survived after receiving 11 litres of gamma globulin, which, given his prolific donor record, quite possibly contained his own plasma.

CALL TO ACTION

Australian James Harrison received a life-saving blood transfusion in 1951, at age 14. Inspired, the boy pledged to become a donor himself. It's a good thing he did: 16 years later, his blood was found to contain an antibody that was used to create a vaccine to prevent haemolytic disease, a blood disorder in which pregnant women form antibodies that attack their unborn children. While Harrison's

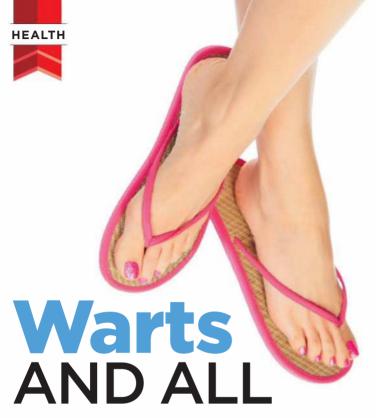
blood has since saved an estimated 2.4 million babies, this year he'll be too old to legally donate. He's calling on others to step in:

"Roll up your sleeve, put out your arm and save lives," he says.

VERY PECULIAR PROCEDURE

The fountain of youth really is filled with young blood, according to a US start-up company, Ambrosia, founded by Stanford University medical graduate Jesse Karmazin, has developed a consumer-funded 'clinical trial' in which participants pay \$8000 to receive an injection of blood plasma from donors who are 25 and younger. The plasma will make recipients feel smarter and more youthful, Karmazin claims. He attributes the benefits to growth factors and proteins, vital to cell function, which appear in greater volume in young blood. Ambrosia has completed 120-plus transfusions, but medical researchers have raised doubts over the trial, which features no control group and isn't peer-reviewed.





How to treat these unsightly skin growths

BY SAMANTHA RIDEOUT

CAUSED BY HUMAN PAPILLOMA-VIRUS (HPV) and transmitted via touch or contaminated surfaces, warts are so common that you're nearly guaranteed to get one over the course of your life. These small, rough skin growths can show up anywhere, but typically affect the face, hands, knees and feet. They're usually harmless, but can be bothersome and embarrassing. Part of what makes warts so frustrating is that they can take months or even years to go away on their own – and some never do. If you're tired of waiting, you could try salicylic acid, which is available in over-the-counter treatment kits. It won't resolve matters overnight but could speed up the process by eroding the wart a little bit at a time.

Another option is visiting your

doctor or a dermatologist, who can administer more aggressive removal methods such as freezing the wart off with liquid nitrogen or using laser surgery to burn it away.

Particularly obstinate warts might

respond to immunotherapies, which aim to give the body's natural defences the boost needed to suppress the virus. For instance, the chemical diphenylcyclopropenone may be applied to the affected area to trigger a mild reaction and kick the immune system into gear.

Because warts are contagious, until removal is complete, it's best to practise 'wart etiquette' to avoid passing on your infection. Plantar warts, which mostly affect the soles of the feet, are caused by viral strains that thrive and spread in wet environments; therefore, wear thongs or cover your warts with waterproof tape in locker rooms and public swimming pools as well as in the shower.

Don't share personal items – socks, towels – that come into contact with warts. And resist picking at them, which helps to propagate the underlying viruses.

See a doctor if a wart is painful.

If it bleeds easily or if it changes colour or appearance, you'll want to make sure it isn't skin cancer.

If it is indeed a wart, then it's 'just a cosmetic nuisance', says Dr Colm O'Mahony, a member of the European Academy of Dermatology and Venereology.

Feel free to get your lesions treated if they distress you; otherwise, you may choose to just get on with life, warts and all.

However, warts that occur on the groin region – genital warts – are sexually transmitted and require different treatment from other warts. If you think you may have genital warts, see your doctor for treatment, don't wait for them to go away on their own.



within two years



"I was thinking about getting rid of the beard, but I've had it for so long that at this point it makes the decisions for me."

DAN ST. GERMAIN

Q: Who shaves up to ten times a day and still has an awesome beard? A: The barber

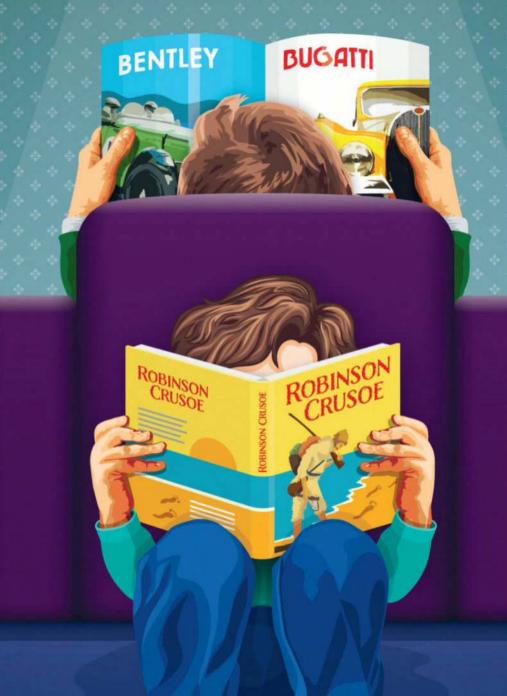




Driven to DISTRACTION

Olly Mann finds he can't keep up with his son's burgeoning interest

NEVER MUCH LIKED CARS. This was something of an issue in my family, as my father very much liked cars. His first business was a start-up selling 'funky' hub cap covers. His cufflinks had Bugattis on them. I don't remember him ever reading anything apart from *Classic* and *Sportscar*. By the time he was my age, he'd established himself as a foremost specialist in the art of restoring vintage Bentleys. Our house was full of memorabilia. The vaguest sniff of a doer-upper would have him out in the snow, blazing a trail to West Sussex. As I say, he very much liked cars.



So, when I came along, there was an expectation I'd like cars too. My bedroom was plastered with Bentley wallpaper, which, as a teenager, I painted over (I had to paint it racing green. the only colour we had).

My bed was in the shape of a car I even had a little Bentlev of my own - a standard kids' ride-on I guess, to which a bespoke body had been added (but I can't be certain, because it scared me, so Dad sold it). I was very nearly actually called Bentley - a fate I escaped only thanks to my mother, who presumably recognised that such a name would only

be acceptable if I were an aristocrat or a rap artist. Or both.

ven when my own interests came into focus - film and drama - Dad would surreptitiously sneak in a motoring angle. My primary school show-andtell, delivered to the whole school at assembly, was about the evolution of the four-and-a-half-litre Bentley. No prizes for guessing who wrote it. (And no prizes for the speech, either: I delivered the talk adequately, but floundered spectacularly on the Q&A - I didn't even know who W.O. Bentley was.)

My disinterest continued into

adulthood. I mean, I enjoy a Sunday drive - if the scenery is right and I've chosen the soundtrack. I took a role in selecting our family car (I checked it had a Bluetooth connection). I

> can, after a couple of beers, endure Top Gear. I do appreciate the form and function of motorcars, in the same way I admire the slickness of Amazon's supply chain - it's just not something I think about much

> When I hear other men (it's usually men) vapping about carburettors and crankshafts and brake fluid, my mind wanders to a list of

to-dos, like Homer Simpson dreaming about doughnuts. Cars aren't my thing.

But apparently the motoring gene can skip a generation. My son Harvey, who has just turned two, is infatuated with all things vehicular. Initially it was construction vehicles: his first word was "digger", employed when pointing at anything yellow. His next interest was Thomas the Tank Engine, a 'character' who, let's be honest, is just a train with a face drawn on it. much like those infuriating anthropomorphised chocolates that advertise M&Ms. Now it's matchbox cars - ambulances, fire engines, Porsches, Minis, whatever. He carries half a



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dozen of them with him constantly, even when it's entirely impractical to do so, eg, while crawling upstairs.

here are upsides: matchbox cars are cheap, so we buy him one each time we go to the supermarket, thus making the entire expedition tolerable. Boring car journeys are dressed up as a treat ("We're going in Daddy's CAR! It goes brum-brum! We will see other CARS!"). But we're getting to the stage – it'll arrive at some point later this year – where my toddler will know more about cars than I do.

This doesn't feel right. As a parent, I'm supposed to be the omniscient authority on all things, whether that's when we're having dinner, why trees are green or how Thomas can talk (he's magic, obviously). As Daddy, it falls to me to explain the intricacies of engines, and show enthusiasm when a car ad comes on. I cannot perform this function. I cannot.

I console myself with the knowledge that, though my father isn't around any more, my father-in-law is, and he's the kind of chap who lurks in Ferrari forums. He'll step in where my knowledge fails me. And, just because Harvey is passionate about cars, that doesn't mean he won't also grow to enjoy theatre, or theme parks or country walks – all of which I am amply qualified to discuss with him

But here's the thing. I inherited a real Bentley from Dad; a 1920s three-litre. It's in storage. I'd planned one day to sell it, for school fees, or mortgage payments, or perhaps to exchange for a car I can actually drive – you know, with a roof and an automatic gearbox. But now I'm not so sure. Should I keep it for Harvey? Do I really want him at the wheel of what will be, by then, a 100-year-old car?

Is it too late to get him interested in computers?



TAXING TIMES

Still strugging to complete your tax forms? Tax officials were recently unimpressed with the excuse of someone who said their ex-wife had left the tax return upstairs and they couldn't retrieve it because they suffered from vertigo.

In the same vein, expense claims rejected by officials included veterinary fees for a rabbit, birthday drinks at a nightclub and 250 days' worth of sausages and chips.

REUTERS



Japan's Blue Traffic Lights

This is what happens when you have one word for two colours

BY BRANDON SPECKTOR

t's a lesson most of us learn years before we're old enough to see over the dashboard: red means 'stop', green means 'go'. Simple enough. But what happens when you live in a culture where the word for green also means blue?

That's when you see things like this. Drive around Japan long enough and you'll probably run into one of the country's mythical blue traffic lights. Elsewhere around the country you'll find 'go' signals that are decidedly teal, turquoise and aqua. "Is this signal broken?" you might wonder. "Did some overworked lightmonger install the wrong bulbs?" The answer, as *Atlas Obscura* points out, is not in the wiring: it's in the Japanese language.

Hundreds of years ago, the Japanese language included words for only four basic colours: black, white, red and blue. If you wanted to describe something green, you'd use the word for blue – ao – and that system worked well enough until roughly the end of the first millennium, when the word midori (originally meaning 'sprout') began showing up in writing to describe what we know as green. Even then, midori was considered a shade of ao. As you can imagine, this sudden switch-over had lasting effects in Japan.

Today you'll still see green things dubiously labelled blue. A fruit vendor might sell you an *ao-ringo* ('blue apple') only to disappoint you that



it's actually a green Granny Smith apple. Likewise, green bamboo is called *aodake* ('blue bamboo') and an inexperienced employee who could be described as 'green' in English-speaking countries may be called *aonisai*, meaning a 'blue two year old'. And that brings us to traffic lights.

Initially, Japan's traffic lights were green as green can be. Despite this, the country's official traffic documents still referred to green traffic lights as *ao* rather than *midori*. While international traffic law decrees all 'go' signals must be represented by green lights, Japanese linguists objected to their government's decision to continue

using the word *ao* to describe what was clearly *midori*. The government decided to compromise. "In 1973, the government mandated through a cabinet order that traffic lights use the bluest shade of green possible – still technically green, but noticeably blue enough to justifiably continue using the *ao* nomenclature," Allan Richarz writes for *Atlas Obscura*.

So, while it may appear that Japan uses blue traffic lights, the government assures us it's actually just a very blue shade of green – green enough to satisfy international regulations, blue enough to still be called *ao*. Don't ever say bureaucracy never solved anything.



Adventure and beauty awaits anyone willing to



brave the Arctic wilderness of Swedish Lapland

ZEN

BY PETER HELLER FROM TRAVEL + LEISURE



The author and his wife take their first dog sled adventure en route to the Fjellborg Arctic Lodge

down through a layer of ice fog and shuddered hard, as if at the sudden view: a mist-shredded scrap of forest, all but buried in

ded scrap of forest, all but buried in snow. "Welcome to the Arctic," the pilot said, as we bumped down on a runway of ice and packed powder.

It was the end of January, and we had arrived in Kiruna, the northernmost town in Sweden, 144 kilometres north of the Arctic Circle. Around us, snow-clad forest spread away for nearly 390,000 square kilometres. Squalls shook the cabin as we taxied. The storm was out of the north-northeast, and I tried to picture where that wind had recently been – a strip of Finland, a ribbon of Norway, the Barents Sea, and before that, probably the polar ice cap. *Brrr*.

"Tell me again," I said to my wife, Kim. "Why are we coming to the Arctic in the winter?"

"To see the aurora borealis," she answered cheerfully. She loves the cold, she says – it wakes her up.

Minutes later, we were escorted out of the airport building towards a pack of yelping dogs. An apple-cheeked guide named Espen Hamnvik, who wore a fur-trimmed parka, handed us each a coat, heavy snow pants, a hat and boots. "There is your sled, Kim. Pete, this is yours," he said. "There are your dogs." After showing us how to use the brakes on our sleds,

he gave a mittened thumbs-up and mushed off into the snowy woods.

Our Alaskan huskies barked and yowled and strained against their ropes. Another guide yanked the lines loose, the sleds jerked, and we were off, into the heart of Swedish Lapland.

What we had come for, aside from the northern lights, was a taste of the indigenous, historically nomadic Sami culture and an understanding of why the northern Swedes are so crazy about winter. We'd stay first at a remote lodge accessible in winter only by dog team or snowmobile, then we'd take a train some 260 kilometres south to sleep in Sami-style canvas tents. From there we'd move to the vertiginous Treehotel. We'd be outside most of the time, and we'd try not to lose any digits to the cold.

My dogs were the size of border collies. Bred for racing over long distances at great speed, they were running so fast that I had to grip

Clockwise from top left: Guests at Kenth Fjellborg's Arctic lodge return from an expedition; the UFO at the Treehotel is one of several rooms suspended above the ground, including the Mirrorcube and Bird's Nest; the aurora borealis lights the sky over the sauna cabin at the Aurora Safari Camp, located just south of the Arctic Circle; Lars Eriksson, a member of Sweden's indigenous Sami population, has been working with reindeer for six decades







the handlebar as hard as I could. The trail was narrow, and twisting through trees with limbs bent with snow. There were sudden swoops and dips, branches to duck under. The dogs careened around the corners and we almost capsized; they charged down hills. Every time I stepped on the brake to slow down, one of the lead dogs threw a look back over her shoulder, and I could read



WE THROTTLED OUT
OF THE WOODS
ONTO THE WHITE
EXPANSE OF THE LAKE,
WHERE TWO REINDEER
WERE SUNBATHING

her thought like a cartoon balloon: *Let me run!*

We swished out of the trees and onto a frozen lake. It was 10.05am and the light was muted, like the onset of dusk. The wind was driving the snow sideways, and I lost the lead sled in the squall. Then there was only white – above, below. Only the smooth slip and jostle of the wood runners underfoot, the biting frost on cheeks, the panting of the dogs.

We followed Espen as he turned his team into the woods. In the trees there was a small conical hut. Pale smoke wreathed from the stovepipe. We tied up the sleds and went inside to find a popping open fire, and a veteran dogsled racer and master chef named Stefan Lundgren, who served us reindeer stew and lingonberry cider. I glanced at Kim. "Magical." she said.

At dusk, which fell at 2.50pm, we ran the sleds up to a cluster of low, pine-clad buildings at the edge of another lake. This was Fjellborg Arctic Lodge, our accommodation for the night. The storm had spent itself, and candles flickered in carved ice sconces outside the half-dozen cabins. Under its covering of fresh snow, the world looked like a scene from a Christmas card

We sat on reindeer skins around the fire as the light faded behind the treetops, and the temperature plummeted. The only sounds were the crack of flames, the creak of snowladen trees, the murmur of quiet conversation.

Our cabin had a sauna, and we baked in it. Then we sat outside in a hot tub and peered into the lidded sky, hoping it would clear for the northern lights. It didn't. I admit I wasn't too bothered: for dinner Stefan had made us cured-reindeer brioche, arctic char and a dessert with three kinds of chocolate, served with rich black coffee.

NEXT MORNING, the sky had cleared. Kenth Fjellborg, the proprietor of Fjellborg Arctic Lodge, showed up on a snowmobile, and as Espen had done with the sleds, he kept it simple. "This is your machine. Here is the ignition, the throttle, the brake. Keep your feet tucked in here in case you tip over." Big smile. "Let's go!"

Kenth is a master dog sledder and a consummate storyteller. In 1994 he ran the Iditarod dog sled race – 1600 kilometres through Arctic Alaska. In 2006, he guided Prince Albert II of Monaco to the North Pole. I asked him what he did in his free time. "Moose hunting. It's my Arctic-male version of yoga."

Off we went. We throttled out of the woods onto the white expanse of the lake, where two reindeer were sunbathing. We zoomed onto the river Torne and along a well-beaten track marked with storm poles. Our faces froze, our eyes squinted against the blast. There was Kenth's village, Poikkijärvi, a string of small houses along the southern bank.

Across the river was the hamlet of Jukkasjärvi, home to the Icehotel, the famous hotel that melts every spring and is rebuilt every autumn, when artists from all over the world come to each carve one of the dozens of rooms. There is an ice bed with a reindeer skin inside each – essentially an ice cave with a steady temperature of around –5°C.

Kim and I walked into a room with a herd of ice sheep jumping over an ice fence, their fluffy wool made of thousands of little ice balls stuck together. We laughed. The artist, Luca Roncoroni, said he created it so that guests who were worried about sleeping in sub-zero temperatures could count the sheep and fall asleep more easily.

That night, no aurora. The next morning I woke very early to see if I could catch it. The Swedes have a name for the polar twilight, usually at its most pronounced around dusk. when the long shadows merge. They call it blå timmen, the blue hour. At dawn, as I walked to the edge of the lake, that name came to me. The sky was the softest blue. And the snow. And the trees. Every shade of blue - blue merging to slate beneath the trees, to ultramarine in the water-clear sky overhead. And in the south-west, a silver-blue half-moon was setting.

I felt giddy. So often, when we travel, we come for one thing and are blindsided by something else. I realised that I was loving winter again, the way I had as a child, when there was nothing better than sledding.

THE AURORA SAFARI CAMP outside of Luleå was our next stop. Its name virtually guaranteed a sighting. It was also a chance for even deeper immersion: we were staying in conical tepees with cloth skins inspired by traditional Sami *lavvu* shelters. The mercury pegged at –23°C for two days. At night, Kim and I took turns stoking the little woodstove every

hour and a half, stepping outside each time to scan for northern lights - and seeing only icy stars.

The camp was perched on a wide river covered with snow. One morning we took out snowmobiles. The sun, just over the treetops, was brilliant, and it turned the distant rime-frosted ridges to gold. On the islands, the trees were sheathed in ice. I accelerated over the unbroken, glittering snow. Behind me, a plume of powder sprayed six metres into the sunlight, where it blazed with gold.

That night, Fredrik Broman, the camp's proprietor, fired up his sauna: a big tent with a woodstove, on a float, frozen into the river. Outside were blocks of clear virgin ice. I sweated away happily, before flipping back the door and tumbling out into the sub-zero darkness in a gush of steam.

But still no lights. Four nights down, two to go. We'd been ice fishing with Kenth, snowshoeing with Fredrik and today we were going to see a legendary Sami named Lars Eriksson. He

TRAVEL TIPS

Fjellborg Arctic Lodge, located on the shores of frozen Lake Väkkärä, fjellborgarcticlodge.com; The Icehotel.icehotel.com:

Aurora Safari Camp, aurorasafaricamp.com; Treehotel, treehotel.se

came out of his weatherboard house in traditional dress of dark blue felt trimmed with strips of yellow, green and red – sun, earth, fire – and reindeer-fur boots. He had a flowing white beard. "It's Santa Claus!" Kim whispered.

We walked in chill sunlight into a field among Lars's reindeer, where he fed them handfuls of spongy moss. "My family has been here for seven generations," he said. "In 1958 I started with the reindeer." When the animals migrated up to the forests in the west, his family would move behind the herd on skis and camp for weeks at a time

"We follow nature and how we feel – slow, slow, no stress." Now, he said, the 3000 Sami families that still herd reindeer move them with all-terrain vehicles and trucks; they have to take other jobs to pay for the machines and fuel, and there is too much stress. "Not good for the deer."

He took us into a log cabin for lunch, and Kim asked him if anyone still *joiks*, or practices the Sami singing she had heard about. Lars inhaled deeply, then he sang. A deep, strong descant with the broken melody of a forest wind. He stopped and smiled. "Wow," Kim murmured. "What does it mean?"

"Having friends," he said. "The sun is out."

OUR LAST NIGHT was at Treehotel, on par with the Icehotel in terms of

weirdness. Owners Kent and Britta Lindvall commissioned different architects to build rooms up in the pines. The most famous may be the Mirrorcube, skewered on a single tree, with mirrored surfaces that reflect the sky and boughs such that it seems to disappear.

We were staying in the UFO. Standing at the base of a pine tree in the sub-zero darkness, we pushed a button on the trunk and *zmmmmm*, a ladder descended. Inside, the pod had a projector that threw swimming galaxies onto the curved walls. We lay in the dark and drank tea and watched them, knowing that this might be as close as we would get to a light show.

At 10.30pm we put on long underwear, boots and parkas, and climbed down from the UFO. We tromped through the snow to a clearing. Nothing. Not nothing – a billion heedless stars. We climbed back into our spaceship. "It's okay," Kim said. "This whole trip has been like

a dream - who needs the aurora

But she woke me up at 1am anyway, and again we tramped up into thigh-deep snow. Stars, stillness. At 3.30am she started awake from a dream. "C'mon," she said. "One more look." We trudged back up to the clearing.

"Oh," I murmured. There was Orion shooting his arrow, Cassiopeia, the Pleiades. And there was something moving between us and them. A scrim of pale light, almost like a cloud, except that it was crowning over the trees and shooting rays across the sky.

Slowly, without sound, it was cascading in great waterfalls of light, shimmering in curtains the colour of clouds. It felt, to me, like the spirit of winter, who has sung silently to these forests since the beginning of time. Kim reached a mittened hand for mine, and we stood in the clearing, transfixed, until we could no longer feel our fingers or toes.

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A Frenchman who drank excessive amounts of alcohol and

then drove 17 times round a roundabout said he had not heard the sirens when police finally brought him to a halt. The dizzying drive was not the 73-year-old's first offence of its kind, *Ouest France* newspaper, which reported the tale, said of the incident in Brittany, north-western France. The driver's licence was confiscated, it said.

REUTERS



TPAPPED UNDERGROUND

They were in a kilometre-long, 100-metre-deep cave when a flood of water blocked their way out

BY LISA FITTERMAN



THE RAIN COMES DOWN STEADILY.

Jason Storie hears it but is not worried. He listens to it as he prepares for a day of caving with five friends in a remote spot 130 kilometres northwest of his home in Duncan, on Vancouver Island, Canada. *It's caving, not hiking*, he tells himself. *I'm not worried about some rain.*

Quickly, he dons a T-shirt, then two sweatshirts, a pair of overalls, neoprene socks, a water-resistant jacket and rubber boots. Under his arm, he proudly carries his new helmet and headlamp, the first pieces of equipment he has not borrowed from his buddy, Andrew Munoz.

"Sleep in," he whispers, bending down to kiss his wife, Caroline, goodbye.

"Have a good time. Be careful," she says.

"Always."

It is 6am on December 5, 2015. A newcomer to the sport, Jason has gone caving only four previous times. This will be his toughest outing yet: a cave called Cascade, in scrubland near the city of Port Alberni. The cave's difficulty rating is so high, the entry is blocked by a locked rectangular metal door in the ground, and the key can be obtained only after everyone going in signs a liability waiver.

At 1.1 kilometres long and 103 metres in depth – deep enough to drop a 30-storey building into – it is full of turns and tight squeezes, including a narrow passage that leads into a short, tight downhill called the

Bastard's Crawl, which in turn leads to a waterfall not quite a metre wide that is known as Double Trouble because a jutting rock splits the stream in two.

It's going to be so great, he thinks. A little water has never scared me!

Jason is the outlier among the group, with the least experience and, at 43, older by a decade and more. A shaven-headed father of two young children, he's stocky, like a wrestler, not slim and wiry like the others. It was Andrew, 33, a paramedic and extreme athlete who lives nearby with his wife and infant daughter, who introduced him to the sport.

"There are over 1000 caves and tunnels on Vancouver Island," Andrew would say. "Come with us. It's never the same." Although the danger level was high, Andrew was the perfect person to start out with, a former guide in the famous Waitomo Caves on the North Island of New Zealand, a patient teacher and a paramedic who would know what to do if something went wrong.

EACH TIME HE HAS CAVED, Jason has felt awe. Underground, he is



The caving group, from left: Andrew, Arthur, Jason, Matt and Zac

an old-time explorer in an ancient, ever-changing world wrought by Mother Nature and water, inexorable and inconstant – a world where he relies on quick wits, courage and working as a team rather than mobile phones equipped with text messaging and GPS. In a cave, there is no room for showboating or competition.

Not if you want to survive.

Jason gets into his utility and drives north along the highway for 15 minutes to the Ambulance Service in the town of Chemainus, where he meets Andrew and Adam Shepherd, also a paramedic, who have just completed shifts. Adam has also done some caving; they all pile into Andrew's 4WD

van and go to Ladysmith to pick up Zac Zorisky, chef and volunteer firefighter.

It is raining lightly as the van rolls north, but the mood is light as the guys try to outdo each other with statistically remote possibilities.

"Imagine if we get stuck."

"Yeah, or a rock falls on us!"

"Or one of us breaks a leg."

"Keep it light, keep the stress at bay," says Andrew, the group's defacto leader because he has the most experience. His short brown hair sticks up in patches at the crown of his head and he sports big, black discs in his earlobes.

At about 8.30am, he turns off the





The cavers enter through a metal door in the ground, then descend a ladder

highway and stops at a shop where he picks up and signs for the key to the cave opening. It is here that they rendezvous with the last two cavers, Matt Watson and Arthur Taylor. They all pile into the two vehicles and drive up an unmarked trail for about a kilometre, before coming to a stop in a clearing. Here, they take inventory to make sure they aren't missing anything.

Waterproof gloves and liners? Check. Ropes, harnesses and carabiners? Check.

Two bags that contain a

lightweight, gas-fuelled 'Jetboil' stove, dehydrated packets of soup and stew, bottles of water, snacks, a first-aid kit and a 'space' blanket that resembles a sheet of aluminium foil. Check, check and check again.

They all know the cardinal rule of caving without having to say it aloud: always be prepared for the worst.

Down a steep, short hill they hike, occasionally grabbing onto tree branches for leverage, before coming to a stop at the door in the ground.

You'd never know it was here if you weren't looking for it, Jason thinks.

IT'S A BIG PART of what he loves about caving, the unexpected: you never know what you're going to find. Some of the most interesting caves are the ones you have to squeeze into, where there might not be an obvious way forward – features like a pile of boulders blocking the way that you have to figure a way through. *That's what I love.* Jason thinks.

It is 10am. The door is pulled open and one by one they climb nine metres down a rickety ladder made of steel cables with aluminium rungs into the black, each anchored with carabiners to a rope just in case they slip. As their eyes adjust, the black shows glints of gold, grey and charcoal, limestone carved by water, forbidding and sharp. It is damp and chilly, about 5°C.

Once they're all at the bottom, they make their way down a narrow

passage studded with jagged boulders, taking turns to carry the bags of equipment. At first, the silence is broken only by heavy breathing. But as they move further in, there is a constant drip-drip-drip from above, like coins being dropped on the rock. Soon, the drip turns into a light but steady flow, and they are wading, up to their shins.

It would be nice to have a half wetsuit like Andrew does, Jason thinks. Maybe next time.

"Everyone OK?" Andrew calls.

"Yeah," comes the reply.

"Yup."

them: the rock wall, a jagged outcropping, a pile of rocks, a pool of mud. And always, always, the water, which at times they must wade through.

For the next 90 minutes they are explorers, crawling and striding and sliding through pipe-like passages and chambers that are like the nave of a church, big but not overwhelming. They manoeuvre their bodies through the tight, wet passage that leads to the Bastard's Crawl, another small passage studded with rocks, with a slightly sharper incline. Sometimes, there is just a trickle of water in this passage. Today, there is



Their challenge is to reach the end of the cave; to take it slowly and notice everything around them

"Me. too."

About 45 minutes in, Adam announces he can't go any further; his back, injured a few months earlier, is twinging and he doesn't want to slow down the others. Matt escorts him back to the entrance to let him out, then closes and locks the metal door again. The others wait.

THEIR CHALLENGE is to reach the end of the cave. On a previous visit, they didn't make it, forced to turn back because of the late hour. Now, they have plenty of time to take it slow and notice everything around

more, and it is flowing quickly.

"Crabwalk!" Andrew calls.

They do, going single file and feet first, their bodies shifting slightly from side to side as they make their way, keeping their heads up so that their headlamps illuminate each step.

AT THE TOP of the waterfall, Double Trouble, they set up ropes and harnesses to rappel down.

"Careful!" they call to each other. Boots find purchase on slippery ledges. Gloved hands claw for leverage. So far, so good, Jason thinks. You wanted a harder challenge. You got it.

There is something intangible yet wonderful about making it down a waterfall. It's a feeling of accomplishment mixed with relief, tossed in with lots of adrenaline. The water gushes on either side of a rock formation that juts out from the wall, landing at the bottom in a spray of bubbles.

We do it because it's there, Jason thinks. We do it because most people will never experience this.

back. No one wants to slip on a rock that cannot be seen, maybe turn an ankle, injure a knee or sprain a wrist.

As it nears 2.15pm, the cavers approach the bottom of Double Trouble. Now, the sound of the water has turned into a roar, and at the bottom, it churns in an angry white froth.

It has been raining pretty steadily for two days and caves act as the earth's drainpipes. But no one was nervous at the start. They are prepared. They have a stove. They have



At Double Trouble, the sound of water has turned into a roar, and it churns in an angry white froth

A few minutes beyond Double Trouble, at around 1pm, they stop for a quick lunch. Andrew fires up the Jetboil to make beef and chicken stew with rice. They start out again 20 minutes later to get to the cave's end, only a quarter of a kilometre away. But within minutes, they have to turn back; Zac is shivering. Although the temperature hasn't changed, the cold can hit you at anytime, no matter how warmly you're dressed. They decide to turn back. Together.

First Matt goes, then Arthur, then Jason, Zac and Andrew. They retrace their route, ten minutes, then 30. The sound of rushing water is growing louder.

"Careful!" the cavers up front call

food, water, the thermal blanket and first-aid supplies. For cavers, the watchwords are to expect the unexpected, and the trip was not going to be long.

This is going to be fine.

MATT ATTACHES THE ROPE that was left attached at the top of Double Trouble to his harness and starts hauling himself up. The journey is not long, maybe four storeys high, but it's tough, precise work, hoisting one leg, finding a tiny, wet shelf in the rock wall, then a gloved hand, then the other leg. Once he is up, he lets the rope back down and Arthur makes the climb, then Jason, straddling the water and determined not

to slip. At the top, Jason gets on his stomach to pull himself up the incline of Bastard's Crawl

One, two, three - the water smashes into his face as he powers through it. *God, it's cold!* Finally emerging through the opening into the next tight passage, he pauses, puzzled, because it splits into two.

I don't remember this. Which way do I go?

He can't see the two cavers ahead of him and he is nervous about waiting at the top because there is really only room in this spot for one person at a time

I'll just go back down and ask, he decides.

He starts to make his way down the crawl in a careful crabwalk. He's glad he's wearing thick, blue plastic gloves, which protect him from the slick sharpness of the rocks. Suddenly the force of the water pushes him to the ground, submerging him, and he feels the pressure of more water building up behind him.

If he doesn't get out fast, the merciless, freezing surge of water will pop him out like a champagne cork, over Double Trouble and onto the rocks below.

Don't panic, he tells himself. Then: But I can't move! My boot's stuck!

Lying on his back with the water rushing over him, he tries to call for help, but instead he gasps frantically for air. It has been about five minutes, but feels longer. He thinks of his family: Caroline, whom he has been married to for 16 years. Jack, 7, who loves paper aeroplanes and Poppy, his princess, who is 3.

Then Zac, who has reached the top of Double Trouble, sees Jason stuck and thrashing midway up Bastard's Crawl

"Andrew! Jason's in trouble!" he shouts, his voice somehow carrying over the thunder of the water.

Then Jason sees Andrew at the bottom of the crawl, calm and steady, gesturing with his gloved hands.

"Solid hands, Jase. Keep your hands to the side. Head up," Andrew calls out. "You're not stuck. Keep on coming, dude. Keep on breathing. Hands out. Stay up."

Jason's gloved hands emerge from the water, flailing, then his wet face framed by his helmet. He is gasping for air.

"Towards me," Andrew continues. "Good hands. Come on. Hands out. Keep breathing. Come towards me. Come this way, feet towards me, head up. Head up. ... Come on, Jase, keep breathing." Finally Jason makes it to where Andrew waits for him.

"It's scary but you made it. Let's chill out for a second, okay?" But not much later, Andrew encourages Jason to start going again.

"Now, I need you to start moving."

"In a second. My leg's caught." Jason doesn't recognise his own voice because it comes out so slurred and slow. Like I've had a stroke. He tries to





Jason (far right) at Double Trouble on a different expedition

dislodge his boot, wedged into a gap between two rocks. It won't budge.

Am I going to drown?

"It's all right, dude," Andrew says, reaching into the rushing water and fishing around for the stuck boot. He grasps something solid. "That's your foot?"

"Yeah."

"We're going to do this together. You need good hands. Don't let this water take you."

It takes about 20 minutes to free Jason and get him moving. With Andrew's coaching, Jason emerges from Bastard's Crawl like a baby being birthed, wet through, eyes shut tight and gasping.

"You're OK," Andrew says, grasping his shoulders and settling him on a narrow ledge near where Zac is waiting. "Zac, stay with Jason while I go get some meals, the blanket and the first-aid kit from the supply bags up ahead. And I have to fill Matt and Arthur in on what's happened."

It takes him about 15 minutes. On his return, he tells Zac the water is still rising, so now is the time to leave.

"Matt and Arthur are waiting for you just beyond Bastard's Crawl," he says. "I have to get Jason warmed up before we try to get out. If all goes well, we'll be right behind you. But if we don't catch up to you in 30 minutes, notify Search and Rescue."

UNSPOKEN IS Andrew's fear that Jason is turning hypothermic. He is conscious, but so cold he has stopped shivering. He wraps his friend in the blanket and fires up the Jetboil, deciding to warm Jason by pouring heated water down his clothes. Once, twice, three times, then four, slow and sure. Doing it this way is preferable to preparing a hot drink, which Andrew fears would not work as fast.

Come on, Jason!

And: Catch up in 30 minutes? What was I thinking?

Out loud, he says: "Jase, you're going to be fine."

Jason's colour starts returning to normal.

"Welcome back, buddy. Do you feel ready to get out of here?"

Andrew is feeling the pressure – and lots of guilt. Because he is the expert, the one who has always promised Jason's wife that her husband would be safe. He had figured the trip today was going to be straightforward. But now, they have more than an hour's slog back to the entrance, and with Jason soaked through, exhausted and depleted, he fears it will take even longer.

They need to leave now.

Jason takes a deep breath, readying himself to tackle Bastard's Crawl again. They collect the bags, the stove

is on; although the wall is at an awkward 45-degree angle, there is room enough for them both. Andrew, in the half wetsuit that comes to his waist, perches in front of Jason so that he takes the brunt of the spray, his legs uncomfortably braced against a ledge on the other side of the waterfall. It is 6pm. It has been three hours since Tac left them

There is no room on the ledge for blame or second-guessing. This is about survival. They settle in with ropes and share the blanket. There is no fuel left in the stove, because Andrew used it all to heat the water to warm Jason.



There is no room on the ledge for blame or second-guessing. It is about survival

and the blanket, and they start to climb, continually fighting the thundering water – or it's fighting them, crushing them, pushing them back.

Jason has barely begun to climb when he has to scramble onto a ledge. There is too much water, and he was too weak.

There are barely ten centimetres of air left between the water and the ceiling, not enough for them to keep their heads up to breathe. Until it recedes, they're stuck.

Looking around for some shelter, Jason spots a ledge above the one he Andrew tries a joke: "If we don't get out of here, our wives will kill us!"

The water keeps rising, almost to the ledge, and the sheer force and fury of it cause a wind to come up. With nowhere to go, it whistles and keens. The two men huddle even closer together, trying to find shelter from the storm.

ZAC MAKES IT to the top of Bastard's Crawl at 3.15pm to find Matt and Arthur waiting for him; the trio wait another hour for Jason and Andrew but there is nothing. Finally,

they make their way to the ladder, emerging from the cave at 5.20pm, exhausted and wet where Adam, worried, is waiting. It is still raining. As Matt drives down the trail to find a spot where his phone will work, the other three rotate between the cave entrance and keeping warm in Andrew's van. Waiting. Watching. Hoping for their friends to emerge.

At 7.15pm, they hear Matt's SUV coming back up the trail.

"Ground, and Cave Search and Res-

trapped cavers out; they may be injured or too tired and depleted to attempt climbing the ladder. Or they may be dead.

At 10.30pm, John and Charlene descend into the cave with emergency supplies, including thermoses of hot chocolate and coffee.

"Andrew!" they call. "Jason?"

There is no response. Slowly, they make their way through the mud, rocks and boulders that lead to Bastard's Crawl but they're finally

0

Rescuers make their way through mud, rocks and boulders until they are stopped by the water

cue is on the way," Matt says. "They'll be here as quickly as possible."

At 9pm, both teams arrive. The ground rescue crew from the Alberni Valley is there to provide support, setting up lights and a makeshift camp with paramedics on standby.

The initial cave rescue team is made up of four of their own – cavers who live on Vancouver Island, including married couple John Lay and Charlene Forrest. Driving up, they worry that it's a recovery operation. But when they learn that one of the trapped cavers is Andrew, they know the two men have the best shot at surviving.

When they arrive, the first task is setting up a system of ropes and pulleys called a Z-drag to haul the stopped by the water, which continues to gush in the opening unabated. The wind makes it difficult to hear themselves, never mind people who are stuck on the other side.

They leave the supplies and some lights, then turn around to make their way back. Nearly three agonising hours after they first went down, they exit the cave. It is 1.20am.

Arthur, Matt, Zac and Adam are determined to stay. The rescuers hold onto the thought that it is not a recovery but a rescue. That becomes the group's prayer, recited throughout the night as they keep watch, drink coffee and try to stay warm. Andrew will get Jason out. He has to.

But please, please let the rain stop.

BACK IN THE CAVE, Andrew and Jason sit, each wrapped in his own thoughts and the thermal blanket. Conserving the batteries in their headlamps, they sit in the dark, which makes them forget what a tight space they are in. With black all around, it's easy to imagine they are somewhere else. At home with their kids. Or in a theatre.

Jason, his damp sweater pulled up over his face to give him some warmth, draws on his theatrical training, forcing his breathing to slow down. And in the dark, as clear as day, he sees his son standing at the side of his bed in his pyjamas with the red collar and aeroplane pattern. What will life be like for his family without him? How much life insurance coverage does he have?

Breathe! Please, Mum, Dad, God, whoever is out there, help guide me through this. Help me live.

Andrew silently recites a mantra that has helped him through scary times before. It's based on a passage from *Dune*, the 1965 science fiction novel by Frank Herbert, and it goes like this: *Fear is the mind killer. When the fear is gone, I will win.*

There is no sign of rescuers. Did the other three even make it out? Maybe they're lying on the other side of Bastard's Crawl, blocked by water and injured. Or dead.

The hours pass. Beyond cold, they don't dare to move for fear of slipping. They doze off, then jerk themselves

awake, and they check in with each other every 20 minutes or so, short sentences to conserve their energy.

"You still with me?" Andrew asks

"Yup. You still good?"

"Yup."

The wind continues to shriek. Every once in a while, one of them turns on his headlamp to scan the water level in the crawl and passage. Around 5am, bleary-eyed, they notice that it seems to be receding.

"Let's wait for a bit and see," Andrew says.

The minutes tick by. Will the water go down? After an hour, it has gone down to the point that they can keep their heads above it and try an escape. Stiff from sitting in one position for about 12 hours, they unfold their bodies bit by bit, surprised at how well they've weathered the ordeal. Then, Jason tries to lift a leg and screams from the pain. A muscle in his groin is badly strained – but it can't stop him.

I have to get out. I have to try.

Going up on all fours through Bastard's Crawl, each time Jason moves a leg, he cries out in pain.

Andrew says: "You can do this."

UP TOP, the rain has finally subsided. It is 6am and the sky is still dark as three cave rescuers, including Charlene and John, prepare to go in again. More cavers – a back-up rescue crew – have arrived.

Meanwhile, Andrew and Jason



Andrew and Jason continue to explore Vancouver Island's caves together

have been moving for about 90 minutes as they make their way to the entrance, once in water that comes up past their chests. Now, in a passage that is high enough for them to walk upright, Jason, who is a bit ahead, sees something flicker in the distance.

"There are lights, Andrew! I see lights!" Part of him wants to be calm but the other part is too excited.

Jason ploughs ahead, exhausted, sensing an end to the ordeal.

Soon, they hear voices.

"Hey," they call. "We're here!"
It is 7.30am. The rescuers, back in the cave to check the water level, can't believe what they're hearing.

"Andrew? Jason?" Charlene calls.

"It's us! Get us out!" they shout.

For the first time since he nearly drowned 16 hours earlier, as he is attached to the pulley and pulled up towards the entrance by rope, Jason's eyes fill with tears.

"We made it."

R

LIP SERVICE

Cleopatra had a special lipstick made for her, consisting of a crushed mixture of ants and deep red carmine beetles.

MENTAL FLOSS

RDRecommends



Lean on Pete (Drama, Action)

fter a series of hard knocks, 15-year-old Charley Thompson (Charlie Plummer) and his single father, Ray (Travis Fimmel), move to a new city for a fresh start. All Charley wants is a home, food on the table and to attend the same school for more than one year. But Ray soon descends into personal turmoil.

forcing Charley to find work. He takes a summer job caring for an ageing horse – Pete – at a nearby racecourse, where things start to improve.

Based on Willy Vlautin's muchloved novel, *Lean On Pete* is the compassionate and moving story about the fundamental human need for love, acceptance and family.

COMPILED BY LOUISE WATERSON, VICTORIA POLZOT AND MELANIE EGAN



Jurassic World: Fallen Kingdom (Science Fiction)

t's been three years since the Jurassic World theme park on Isla Nublar closed down, and since then, its dinosaurs have been roaming freely. But when Claire Dearing (Bryce Dallas Howard), the former

park manager, learns the island's volcano is threatening to erupt, she convinces Owen Grady (Chris Pratt), a dinosaur trainer, to return with her to save the remaining dinosaurs. Along the way. Owen sets out to find Blue, the last of four raptors he trained, but he and Claire soon discover a conspiracy that could disrupt the natural order of the entire planet. Fans of Jurassic World will not be disappointed.

Mary Magdalene (DVD Drama)

irector Garth Davis (*Lion*) tells the story of Mary Magdalene as never before. Mary (Rooney Mara) is portrayed as a strong young woman who leaves her family and fishing village to join a radical new social movement. Its leader, Jesus of Nazareth (Joaquin Phoenix), promises that the world is changing. Mary, his 13th and only female disciple, is searching for a new way of living, wanting more than to be married and live under



the rigid strictures of the day.

As the notoriety of the group spreads and more are drawn to follow Jesus, Mary's spiritual journey places her at the heart of a story that leads her to Jerusalem, where she must face the reality of Jesus's fate and her place in it.

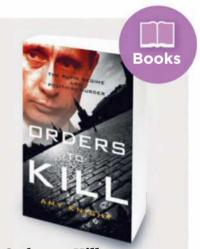
Ocean's 8

(Action, Crime, Comedy)

ontinuing the exploits of the Ocean family, Sandra Bullock stars as Debbie Ocean, sister of Danny (George Clooney) from the original Ocean's trilogy. Debbie is fresh out of prison and recruits an all-woman team to pull off a heist at New York 's annual Met Gala charity ball. Their objective is to steal a necklace worth over \$150 million, worn by one of the wealthy quests

The crew comprises Lou (Cate Blanchett), Debbie's right-hand woman; Constance (Awkwafina), a gifted pickpocket; Amita (Mindy Kaling), a jeweller; Nine Ball (Rihanna), a hacker; Rose (Helena Bonham Carter), a fashion designer; and Tammy (Sarah Paulson), a suburban mother who has left her life of crime behind. Anne Hathaway plays celebrity Daphne Kluger, wearing the targeted necklace.





Orders to Kill: The Putin Regime and Political Murder Amy Knight (BITEBACK PUBLISHING)

ladimir Putin has certainly been in the news often over the past few months. With the Football World Cup starting on June 14, the world's eves will focus on a Russia transformed by this leader's enthusiastic, single-handed drive to rebuild the former Soviet Union, Amy Knight, an American historian of the Soviet Union and Russia, and an expert on the KGB, traces Putin's transformation into one of the Kremlin's most powerful modern leaders. Consolidating his position has involved building and maintaining a tight grip on power using stateendorsed murder of all serious political or public opponents.





Cockpit Confidential: Everything You Need to Know About Air Travel

Patrick Smith (SOURCEBOOKS INC)

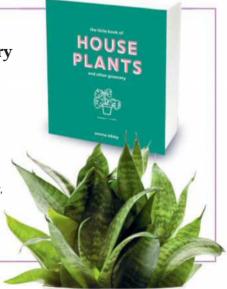
ommercial air travel is a strangely fascinating and complicated business. This new edition of the 2013 bestseller looks into the latest trends, controversies and changes that have entered the business in the

past five years. Anyone with a passion – or even just a passing interest – in the world of airports, departure lounges and airlines will enjoy the insider's viewpoint offered by pilot and travel enthusiast Patrick Smith.

The Little Book of House Plants and Other Greenery

Emma Sibley (HARDIE GRANT)

ndoor plants are very fashionable at the moment, or so it appears to those of us just discovering their appeal. Whether starting out or simply seeking to ensure your current plants flourish, Emma Sibley has all the tips to make a small space appear grander, more colourful and relaxing by choosing the right indoor plant. This directory of 60 plants is a great indoor décor resource.





Michael Connelly

Author of The Wrong Side of Goodbye

ichael Connelly has been busy. The Wrong Side of Goodbye is the bestselling author's 29th novel, and his 19th Harry Bosch entry. Connelly is also involved in the Amazon television series Bosch, both as a writer and executive producer. In fact, it was an experience on the set of Bosch that sparked an idea for The Wrong Side of Goodbye.

In book 18, Bosch had finally retired from the LAPD. In this next book, he keeps busy with private investigative work and is hired by a very wealthy, very old, business tycoon who's searching for a possible long-lost heir.

But that's only half the plot. The other half came about by accident.

during filming of season two of the television show.

While on a three-day shoot to film a complex scene in a shopping centre in San Fernando, the town's real-life off-duty officers served as security.



One of them told Connelly. "I see Harry's retiring. We could sure use him here." Thus, Bosch's volunteer job at the San Fernando Police Department was born. And thus a second plot - the hunt for a dangerous serial rapist - was also born. Bosch may be getting older, but he's sure not slowing down when it comes to fighting crime and speaking up for victims' justice.

Connelly is not slowing down either. He already has a new novel percolating, this one a stand-alone featuring a female cop. We can't wait to read it.



You'll find the condensed version of *The Wrong Side of Goodbye* in the latest release of Reader's Digest Select Editions. To join the Select Editions Club, phone 1300 300 030.

Strangers

From Lea Thau, former director of The Moth, comes the storytelling podcast *Strangers*. Whether the topic is homophobia or fleeing war in Somalia, each episode features true and intimate stories about the people we meet, the kindness we encounter and the connections we make, from the hilarious to the heartbreaking.



WorkLife with Adam Grant

We spend a fourth of our lives at work, but not enough time thinking about how to make it better. In a new TED-produced podcast, organisational psychologist Adam Grant examines unconventional workplaces for secrets to more meaningful, creative and productive work.



Fierce Girls

Forget about princesses and fairies, Fierce Girls is a kidfriendly podcast about athletes and aviators, scientists and spies. Created by ABC Audio Studios for shared listening by children and adults, it's about adventurous girls and women like solo round-the-world sailor Jessica Watson who broke stereotypes.

HOW TO GET PODCASTS TO LISTEN ON THE WEB: Google the website for 'Fierce Girls', for example, and click on the play button. **TO DOWNLOAD:** Download an app such as Podcatchers or iTunes on your phone or tablet and simply search by title.

Puzzle Answers See page 140

ARITHME-PICK $3 \times 6 \div 2 + 6 \div 5 = 3$

THE LONG AND THE SHORT OF IT

A = Jane. B = Jasmine.

C = Jacqueline. D = Jin.

E = Juanita.

FAMILY RELATIONS
Sister or first cousin.

CROSSWORD

ACROSS 1 Brolly 4 Sitcom 9 Introduce

10 Nod 11 Tinge 12 Hateful 13 Robust

15 Dwarfs 19 Diagram 21 At Sea 23 Ask

24 Go to Sleep 25 Hatter 26 Stoker DOWN 1 Blister

2 Often 3 Lioness 5 Inept 6 Conifer

7 Model 8 Cushy 14 Bracket 16 Whatsit

17 Scarper 18 Smith 19 Death 20 Roque

22 Speck.

MAKE IT WORK



PHOTO: (JESSICA WATSON) GETTY IMAGES



TEST YOUR GENERAL KNOWLEDGE

Trivia

- **1.** In 1971, Alan Shepard struck a golf ball that went for "miles and miles and miles". Where was he? *I point*
- **2.** The orange carrot that we are familiar with today was first bred in which European country? *1 point*
- **3.** What movie's soundtrack was the bestselling album worldwide in 2014? *I point*
- **4.** Which organ makes up only two per cent of your body's weight but requires around a fifth of its energy? *I point*
- **5.** Who was the first person to fly solo non-stop across the Atlantic? *1 point*
- **6.** What type of animal is a drongo? *1 point*
- 7. Which country's Qassim University hosted a 2012 conference about women in society with no women in attendance? 2 points

- **8.** Which country issued a rectangular coin in 2010 to mark its 45 years of independence? *2 points*
- **9.** What website redesigned its logo in 2012 to look like a "mountain bluebird with a dash of hummingbird"? *1 point*
- **10.** Who turned out to be wrong when she predicted, "Later on, neither I nor anyone else will be interested in the musings of a 13-year-old schoolgirl"? *2 points*
- 11. The Brick Testament is a website that illustrates the Bible in what unusual medium? 2 points
 - 12. What animal's scientific name,
 Ailuropoda
 melanoleuca, me
 - melanoleuca, means "black-and-white cat-foot?" 2 points
 - 13. Which was the last habitable land mass to be populated? *I point*

14. Which structure was erected closer to the time of Cleopatra: the Great Pyramid of Giza or the pyramid-shaped Luxor casino-hotel in Las Vegas? 2 points

16-20 Gold medal

11-15 Silver medal

6-10 Bronze medal

0-5 Wooden spoon

panda. 15. New Zealand. 14. The casino-hotel.

HOTOS: GETTY IMAGES

My Discoveries



Five Reasons Why Norfolk Island Enchants

Tiny, remote and intriguing, Norfolk Island is a world of its own that offers visitors real downtime and a portal into the past, writes **Michelle Hespe**.

NORFOLK'S OWN LANGUAGE

After the famous 1789 mutiny on HMS *Bounty*, Fletcher Christian and his men settled on Pitcairn Island with Tahitian women they'd met on a five-month mission in Tahiti collecting breadfruit. The English men and the Tahitian women took elements from each language to communicate. By 1856, the 194 Pitcairn Islanders, having outgrown their island, were permitted by the British government to move to Norfolk Island. They

brought their language – a mixture of Polynesian and 18th-century English, now simply called 'Norfolk', with them.

2 DOWNTIME

The island is only 34.6 km square, so you can walk or ride a bike to most places. Nightlife takes the form of theatre and comedy performances and dinner under the stars. There's live music and entertainment at the Jolly Roger bar and restaurant, but you'll likely be tucked up in bed by 11pm, as there are no nightclubs or rowdy pubs.

LOCAL ORGANIC PRODUCE

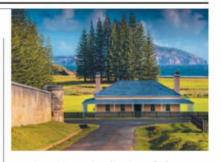
The produce on Norfolk Island is mostly homegrown, organic and

delicious, so it's hard to choose what to snack on while at the markets and in the local cafés. On the Hilli Goat Farm Tour, guests can learn how goat's cheese is made and then indulge in a mouth-watering spread of produce straight from the farm. In town, enjoy lunch in the garden courtyard at the Hilli Restaurant and Café, and for dinner, indulge at Dino's at Bombora's, a magical restaurant in an old settler's cottage.

4 RICH, INTRIGUING HISTORY

Visit the graveyards where the *Bounty* crew and their descendants are buried; take a ghost tour at night; explore the ruins of one of the most remote penal colonies in the world; and visit Pitcairn Settler's Village to experience the history of the 1856 settlers to the present day. Don't miss Fletcher's Mutiny Cyclorama – an awe-inspiring 360° panoramic painting that captures some of Norfolk's history.





Top: No. 11 Quality Row; below: Fletcher's Mutiny Cyclorama

5 COLLEEN MCCULLOUGH'S HOME

On this fascinating tour, explore the ostentatious home of famous Australian author Colleen McCullough, gaining some insight into this remarkable woman's life and mind, and viewing her incredible art collection. Colleen wrote 25 novels, including the best-selling *The Thorn Birds*, which sold more than 30 million copies.

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To enter, and for terms and conditions, visit www.mydiscoveries.com.au/win before 30 June 2018

News Worth Sharing



"IT IS ABOUT THE FUNDAMENTAL RIGHT OF ARTISTS TO EXPRESS THEMSELVES FREELY."

Luca Bergamo, Rome's deputy mayor, on the decision to revoke the banishment of the poet Ovid from Rome to present-day Romania by Emperor Augustus after 2000 years.



COMPILED BY TIM HULSE



A Neat Way to Keep Fit

new, environmentally aware fitness trend that started in Sweden is catching on fast.

'Plogging' involves collecting litter while jogging. (The word combines the Swedish word for 'pick up' with 'jogging'.)

The idea came to exercise fanatic Erik Ahlström (pictured), while the Swede was living in Åre, where he launched a local initiative. But it was only when he moved to Stockholm that he realised plogging's true potential.

"As I cycled to work, I saw that the same trash remained where it was for weeks," he says. "So I thought I could make an effort here too."

As Ahlström's efforts gained publicity, his initiative turned into a national movement that has now spread far and wide.

Chernobyl Goes Solar

t was the site of the worst nuclear accident in history, but now Chernobyl in Ukraine is producing energy again - this time with no threat to the environment

A one-megawatt solar energy facility has begun operating just 100 metres from the ruins of the damaged reactor. Its 3800 photovoltaic panels can generate enough electricity to power a small town.

Back in 1986, the reactor's meltdown produced a radioactive cloud that spread over much of Europe. Around 115,000 people were evacuated from a 2600-square-kilometre zone around the site. But now new life is being breathed into the region.

"We want to optimise the Chernobyl zone," says Yevgen Varyagin, head of Solar Chernobyl. "It shouldn't be a black hole in the middle of Ukraine."



TEST YOUR MENTAL PROWESS

Puzzles

Challenge yourself by solving these puzzles and mind stretchers, then check your answers on page 134.

BY MARCEL DANESI

ARITHME-PICK (MODERATELY DIFFICULT)

Place one of the four basic arithmetic operations $(+, -, \times, \div)$ in each box to make a correct equation. Symbols may be repeated, and you don't have to use all four. All operations are performed from left to right, ignoring the mathematical order of operations. The result at each step must be a positive whole number. What's the equation?

THE LONG AND THE SHORT OF IT (EASY) The current heights of five growing girls - Jane, Juanita, Jasmine, Jin and Jacqueline - were marked with chalk on a wall, as shown. Can you figure out which line indicates the height of which girl based on the information that follows? Jin is taller than Juanita but shorter than Jane. Jacqueline is shorter than Jane and Jasmine but taller than Juanita and Jin. Jane is taller than Jasmine.

FAMILY RELATIONS (EASY)

Carmela receives a text message from an unfamiliar number, so she texts back: "Who is this?"

The strange response: "It's one of your female relatives. Your mother's mother is my father's mother-in-law." Even assuming that this information is true, it doesn't help Carmela pinpoint an individual, since there are two relationships it could describe. What are they?



MAKE IT WORK (DIFFICULT)

Arrange the whole numbers from 1 to 9 in a three-by-three grid so that all of the following conditions are satisfied:



- The numbers in the right-hand column add up to 7.
- The numbers in the left-hand column add up to 16.
- 3 doesn't share a row, column, or long diagonal with 1 or 4.
- The numbers in the bottom row add up to 20.
- There is a row that contains only prime numbers.

BRAIN POWER

brought to you by



JUICE UP





TEST YOUR MENTAL PROWESS

Crosswise

Test your general knowledge, then check your answers on page 148.

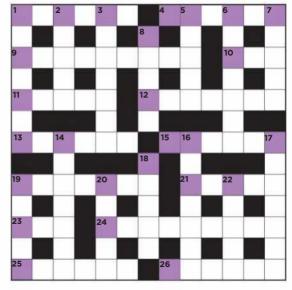
BY MARCEL DANESI

ACROSS

- 1 Portable rain-shield (6)
- 4 Funny TV show based on everyday life (6)
- 9 Present formally(9)
- 10 Move your head in agreement (3)
- 11 Hint of colour (5)
- **12** Loathsome (7)
- Strong, vigorous (6)
- 15 Snow White's companions (6)
- 19 Graph, chart (7)
- **21** On a ship (2,3)
- 23 Make an enquiry (3)
- **24** Take a nap (2,2,5)
- 25 The Mad ____,
 Alice in Wonderland
 tea-party host (6)
- **26** Bram _____, author of *Dracula* (6)

DOWN

- 1 Sore bubble on the foot (7)
- 2 Frequently (5)
- **3** Female of a pride (7)
- 5 Unfit, bungling (5)



- 6 Pine or fir (7)
- 7 Demonstrate clothes (5)
- **8** Easy (job) (5)
- 14 Shelf support (7)
- 16 Thingummy (7)
- **17** Run away (7)
- **18** Will _____, *I, Robot* actor (5)
- 19 Sudden ____, extra time in sport (5)
- 20 Scoundrel, rascal (5)
- 22 Dust particle (5)



IT PAYS TO INCREASE YOUR

Word Power

Mixed Messages

Purists grind their teeth when they encounter words that mix Latin and Greek origins. See if you can root out the meanings of these hybrid words.

BY GEORGE MURRAY

- **1. amoral** *adj.* A: point of a story. B: outside the scope of moral judgement. C: small mushroom.
- **2. monolingual** *adj.* A: speaking one language. B: a repetitive sound. C: having a tongue that isn't forked.
- **3. neonate** *n*. A: newborn. B: a new employee. C: illuminated sign.
- **4. bigamy** *n.* A: marriage to more than one person. B: twofold increase in size. C: twice-removed relative.
- **5. geostationary** *adj.* A: world map on paper. B: designed for digging soil. C: matching the Earth's rotation.
- **6. dysfunction** *n*. A: abnormal workings. B: power surge. C: fire prevention.
- **7. hexadecimal** *adj.* A: of a number system with a base of 16. B: six-sided die. C: one sixth of a dollar.
- **8. sociopathy** *n*. A: culture shock. B: antisocial personality disorder.

C: pathological friendliness.

- **9. periglacial** *adj.* A: light blue in colour. B: of an area next to a glacier. C: involving skiing.
- **10.** meritocracy *n*. A: underwater city. B: society controlled by billionaires. C: group run by the most accomplished and talented.
- **11. bioluminescence** *n.* A: production of light by living organisms. B: electrostatic discharge. C: generating power.
- **12. quadraphonic** *adj.* A: on four legs. B: signalled from a drone. C: using four sound channels.
- **13. liposuction** *n*. A: removal of fat. B: carpet-cleaning solution. C: the creation of a vacuum.
- **14. biodiversity** A: ability of living organisms to reproduce. B: variety of life forms in a specific area. C: species with varied forms.

Answers

- **1. amoral** [B] outside the scope of moral judgement. A wild animal is an amoral creature that simply follows its natural instincts, with no capacity to discern good from evil.
- **2. monolingual** [A] speaking one language. As a monolingual English-speaker, James was unable to follow the conversation in Italian.
- **3. neonate** [A] newborn. Dr Jane Atkinson asked her marine biology students to count the neonates in the sea-lion colony.
- **4. bigamy** [A] marriage to more than one person. We were shocked to learn that our grandfather had been jailed for bigamy.
- **5. geostationary** [C] matching the Earth's rotation. In order to prevent signal loss, the satellites remained in geostationary orbit above the base.
- **6. dysfunction** [A] abnormal working. Sidney blamed family dysfunction in his childhood for the problems he experienced later in his life
- 7. hexadecimal [A] of a number system with a base of 16. Hexadecimal numerals are used in computer programming because it's easy to convert them into binary.
- **8. sociopathy** [B] antisocial personality disorder. Donald's

- bullying behaviour indicated a certain level of sociopathy.
- **9. periglacial** [B] of an area next to a glacier. Iris gazed over the boulder-strewn periglacial landscape, marvelling at its beauty.
- **10. meritocracy** [C] group run by the most accomplished and talented. The company wasn't a meritocracy; instead, the older employees were in charge, and had no regard for the ability of younger workers.
- **11. bioluminescence** [A] production of light by living organisms. Glow worms are an enchanting example of bioluminescence.
- **12. quadraphonic** [C] using four sound channels. Jay stood admiring the resonance of his new quadraphonic speaker system.
- **13. liposuction** [A] removal of fat. Liposuction is a form of cosmetic surgery that is very popular with celebrities.
- **14. biodiversity** [B] variety of life forms in a specific area. Rainforests provide the conditions for the greatest biodiversity of any ecosystem on the planet.

VOCABULARY RATINGS

7-9: Fair

10-11: Good

12-14: Word Power Wizard

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