Are you my mother?

In early life, chicks and ducklings learn important lessons very quickly. What they learn in this short space of time (about the first 18 hours) stays with them for the rest of their lives and is very difficult to reverse. Scientists call this form of learning ‘imprinting’.

Imprinting happens when a baby bird makes an immediate bond with its mother. The baby bird then follows the mother wherever she goes, becoming upset if she is not nearby. When a chick is upset, it will make a noise (peep). The more a chick peeps, the more upset it is. When a chick has its mother taken away from it, it will peep rapidly.

Imprinting experiments on both chicks and ducklings have shown that it is possible for these birds to bond with totally different animals, or even with objects such as balls or boxes. This can only happen if they are introduced to their ‘other mother’ soon after hatching. It seems that these birds are born with a desire to follow. Experiments have shown there is no need for the object that is being followed to be its mother.

Researchers have found that if a chick thinks that an object, like a ball or box, is its mother, it will also peep in distress when that object is removed. This distress is only stopped by the return of the ‘other mother’.
Olympic sports — then and now

We tend to think of Olympic sports as fixed throughout the noble history of Olympic competition. But the truth is that, like most things, the Olympic Games are influenced by trends.

The original Olympic events were based around skills necessary for Greek warriors. In the ancient Greek Games, Olympians competed in pankration—a cross between wrestling and boxing with disturbingly few rules. As useful as it may have been for Greek warriors and as entertaining for spectators, it didn’t make it to the modern Games.

The modern Games have seen a number of events, either for competition or demonstration sports, come and go. In Paris in 1900, you could have enjoyed watching live pigeon shooting. It is difficult to picture a modern-day audience relishing the killing of animals as an Olympic sport. The same Games also had an underwater swimming race. That would have been challenging for spectators, trying to cheer for contestants they couldn’t even see. There was a swimming obstacle race; that one sounds more like a novelty event at a school carnival.

Tug-of-war was only an Olympic event from 1900 until the 1920 Games which were held in Belgium. It joined club swinging, rope climbing and hot-air ballooning as events that just didn’t seem to have Olympic credibility. The ancient Greeks raced horse-drawn chariots in their Olympic arena and in the 1908 London Games, motor-boat racing made a brief appearance. Neither has lasted, but cycling and sailing are probably their present-day equivalents.

We may laugh at some of these events, but ancient Greeks would probably be equally amused by the inclusion of beach volleyball and synchronised swimming at our modern Games.
Chan clutched at the half-frozen plants and edged her feet along the narrow rock shelf. Mist swirled around her and she was exhausted. Below was the Mitzak River—still frozen solid at the edges, but flowing in the middle. As it flowed, the dark current broke off great chunks of ice and swept them downstream.

*It’s not easy being a comic strip character. Why is it always so stressful?*

The tree root Chan was holding snapped. Down she went, rolling and tumbling, until she slid onto the river ice. She desperately dug the sharp edges of her shoes into the ice and stopped herself just short of the rushing water. Quickly she scrambled up. *Too quickly, Ka-boom,* the ice between her and the bank cracked, trapping her on a jagged slab. The current flung it into the middle of the river, where it swirled crazily among other slabs of ice and floating trunks of trees. As she spun around, Chan saw a bridge ahead … but it would be too high to reach and she would be travelling too fast.

Beneath the confused noises of the swirling river she could now make out a steadier, deeper roar.

*A waterfall? Again? Seriously? Running out of ideas, are you?*

Chan’s ice island smashed into a pylon of the bridge. *Thwack! Bang!* The ice was still for a moment and Chan grabbed a tree branch as it swept past, just before the current again took hold of her island. Using the branch to prod away other marauding pieces of ice and pushing it against the bottom of the river where she could, she managed to guide her piece of ice towards the river bank. She could see a large drain ahead on the left bank, with wisps of steam rising from it into the icy air. It was her last chance before the waterfall. The warmer water from the drain had melted the ice up to its entrance. Frantically poling, Chan struggled towards the calmer waters near the drain. She pushed too hard. She lost her balance and toppled into the freezing water.

She concentrated all her efforts on pulling herself through the water. It was fifteen metres to the safety of the drain, but the current was taking her too quickly. She wasn’t going to make it.

*Where are you, writer? You’ve never let me down before. Get me out of here!*
What is an iceberg?

Icebergs are floating masses of freshwater ice that have broken off (calved) from a glacier or a polar ice sheet. They vary in size from a few square metres up to thousands of square kilometres in area.

The life cycle of an iceberg

About 10,000 to 15,000 new icebergs form each year, most from the ice sheets of Antarctica and Greenland. Icebergs float around in the northern and southern oceans following the ocean currents and winds. Those in the south last longer—an average of 10 years—while northern hemisphere icebergs last a mere two years.

An iceberg’s life ends when it reaches the warmer waters of the Pacific, Indian or Atlantic oceans. The melting of the ice is often accompanied by fizzing and popping sounds as compressed air bubbles, trapped for thousands of years when the ice was formed from compacted snow, are released.

Appearance

The appearance of an iceberg is affected by the type of ice it is made from and the shape of the land that the ice formed over. Antarctic icebergs generally break off from large ice sheets and form tabular icebergs that are broad and flat. Pinnacle, or castle, icebergs are steep peaks of ice and form in the Arctic where they are calved from steep-sided mountain glaciers. The largest observed northern iceberg towered 168 metres above sea level.

The most famous attribute of an iceberg is its deceptive appearance. Because of the difference in density between fresh water and salt water, only about one-ninth of an iceberg is visible above the waterline. This means that most of its mass is hidden from view. The expression ‘tip of the iceberg’ is used to describe a problem that is only a small part of a larger challenge.
Outside the triangle

Holly swung her school bag onto her back, feeling pleased. She liked walking home alone. Her brother Tom was staying back for football practice and her sister Trish was nowhere to be seen.

But then she heard Trish’s voice. ‘Holl-eee! Wait!’

Holly groaned. Trish arrived, panting beside her. Holly strode off, knowing that Trish would struggle to keep up.

Holly glanced at her sister; Trish had that pleading look. And sure enough …

‘Holly, you should go on Tuesday. He just … made a mistake.’

Holly flinched. Such a convenient way to put it. Just a mistake.

‘This award means a lot to him. You have to go.’

‘Really?’ said Holly, maintaining her pace.

‘Best and fairest player.’

‘So what? It’s only a school competition. You’re going to need a better reason.’

‘How about because he’s our brother?’ Trish panted.

‘He is. He’s a brother who reads his sister’s diary and shares his findings with the world.’

Trish grabbed Holly’s bag and forced her to stop. ‘You know he didn’t mean to hurt you.’

Despite her anger, Holly had to hide a smile as she turned to face her sister. Trish loved casting herself as the peacemaker but it was a role she never actually wanted to succeed in. Trish would already be rehearsing her response to Tom—‘I tried everything but Holly … she’s so stubborn …’ Holly studied Trish’s face. Yes, she was wearing the mask of the injured again.

They faced each other in silence. Images of her brother began to come unbidden into Holly’s mind: his first clumsy attempts to control the ball, his pride at being able to explain the intricate rules of the game, the hours of practice to perfect his skills.

Holly sighed. She was bored she realised; bored with the intrigues, the stupid alliances that formed and just as quickly disintegrated in their sibling trio.

What if she just stepped outside the triangle? Left them to themselves? What surprised her was that as she imagined that first step she did not feel, as she might have expected, more alone. Rather, it was as if Tom was already waiting for her outside. And suddenly it was obvious: of course she would go.

‘Actually Trish, you’re right. Let’s go to the awards night.’

‘Really?’ Holly saw the disappointment flicker across her sister’s face.

‘Sure,’ she said, resuming her walk home but more slowly now. ‘What are sisters for?’

Earthquakes are massive in their force, devastating in their impact and, despite intensive scientific research, still largely unpredictable. If we could predict earthquakes reliably and early, we could warn people and hundreds of thousands of lives could be saved. Many people (including some scientists) hold out hope that predicting earthquakes will soon be achievable—not by creating sophisticated, super-sensitive equipment but by observing the natural behaviour of animals.

Perhaps this hope is being built on shaky ground.

There are certainly many reports of animals behaving strangely before earthquakes: dogs running away, cats hiding, caged birds growing restless, wild birds moving their eggs from their nests, hibernating snakes waking up, zoo animals howling. These behaviours, however, are generally reported after the event. How trustworthy are these reports?

Before massive evacuations are authorised on the basis of animal behaviour and before hundreds of thousands of people can be convinced to move great distances at a moment’s notice, we need to be reasonably confident of two things:

• If an earthquake is about to happen, certain animals will act strangely.

• If an earthquake is not about to happen, these animals will act normally.

At the moment, we can’t be sure of either of these things. There seems to have been erratic behaviour by snakes, birds, cows and rats before the earthquake in Haicheng, China in 1975. However, in the same region the next year, when another earthquake caused the death of more than 200 000 people, the animals displayed no such behaviour.

There are animals all over the world that are behaving strangely at this very moment—nervous dogs, quirky snakes, befuddled ants—but tomorrow, after the ground has remained stubbornly still, no one will recall this behaviour and think, ‘Strange!’ Let an earthquake happen, though, and listen for the cries of ‘Rover knew!’ and ‘Those ants are smarter than scientists!’

Continue the research into animal behaviour by all means, if only because it may show up interesting evidence about how animals sense changes in the physical environment. But don’t start building up hopes that will almost certainly come crashing down.
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The cultural identities of Indigenous peoples have been undermined in multiple ways throughout the history of colonialism. These ways include cultural isolation; proscription of traditional language use and ritual; fragmentation of family groups; and the taking of artefacts, including human remains.

During colonial times in Australia, New Zealand, Canada and the United States, so-called 'exotic' Indigenous cultures were subjected to the systematic removal of their most precious cultural artefacts. Some of these found their way into private collections, others to scientific institutions and museums. This appropriation of the more tangible aspects of Indigenous cultures parallels the decimation that was also occurring as a result of land seizure, disease, hostility and forced relocation.

But these are no longer colonial times.

Thirty years ago, Indigenous groups from Australia, New Zealand and North America began to make requests for the return of artefacts and the remains of their ancestors. In Britain alone, it is estimated that there are at least 61,000 items in 132 different collections. Some scientists and museum curators resisted, arguing that the remains are a vital source of information on human history, including early migration and the impact of disease.

Further opposition to the repatriation of artefacts and human remains centres on concerns that local institutions and Indigenous peoples themselves may limit or deny access to, or even dispose of, remains and artefacts.

Perhaps the most disturbing feature of this opposition is that once again it fails to acknowledge that the right of Indigenous communities to regain ownership—in every sense of the word—of their cultural items is paramount. The arguments for preventing the return of these cultural artefacts are based on the misguided belief that the current guardians of these items know best how to determine their future. This view fails to give due weight to the rights of contemporary Indigenous peoples. It undermines their dignity and questions their integrity.

Beyond the beaches

Clara blinked slowly. The warm afternoon wind rushed across her face as her rented bicycle rolled easily along the winding back road and through the lush, green rice paddies of Ubud. On either side, Balinese men and women bent at the waist to tend to their green seedlings and children yelled ‘Hello! Hello!’ in English as she passed. ‘Not far now,’ said the man on the bike ahead, riding in convoy with his wife and daughter.

Clara had met the family recently and had struck up a conversation with the father. His name was Wayan and he told her they were riding to his elderly mother’s house in rural Ubud. Would she care to join them? Clara didn’t hesitate. This was her chance to see the real Bali.

The road narrowed until it was just a path of crunchy rocks leading to a traditional carved Balinese gate. The group dismounted and wheeled their bikes into a compound, where skinny chickens pecked at the dust. Three small buildings fronted onto a central courtyard, where an elderly woman in a sarong and an old purple T-shirt sat cleaning vegetables. She looked up, surprised to see this tall, white woman walk through her front gate.

‘This is my mother,’ said Wayan with a broad smile.

His wife disappeared for a moment, emerging with small cups of hot sweet tea and cakes brought from town.

Clara joined the family on tiny red plastic stools, politely sipping the oversweet tea. Small children from the village peered around the gate at the visiting stranger, laughing hysterically whenever she met their gaze. The conversation was mainly in the local Balinese dialect but occasionally Wayan stopped to translate. His mother had lived in this family compound since she was a child and had witnessed Bali’s rapid transformation—from Dutch rule to Japanese occupation; from colonial outpost to a favourite tourist spot.

Clara shifted uncomfortably at the mention of the holidaying foreigners. She thought of the rubbish lining Kuta Beach. Did this woman see her as just another guest with bad manners?

The elderly woman said something and pointed at her purple T-shirt, which bore a picture of a female legong dancer in traditional garb.

Wayan smiled.

‘My mother says: Do you want to buy a T-shirt?’

Clara realised she was still a tourist.
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END OF READING MAGAZINE
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