BtN: Episode 21 Transcript 09/08/16

Hello, I'm Nathan and this is BtN.

Coming up today:

- We travel nearly 3000 years back in time to attend the opening ceremony of the very first Olympic Games.
- Australia moves up in the world but not in a good way.
- And we join 11 year old app creator Hamish as he travels to the US to promote his games.

Census Stats

Reporter: Matt Holbrook

INTRO: All that soon but first today it's census time in Australia. That's when every household and person in Australia is counted and surveyed. As you can imagine it's a massive job which is why it only happens every five years. So why does the government go to so much effort to collect so much data? Take a look.

August the 9th is a really important date. It's the day Anna Kendrick celebrates her 31st birthday. It was the day 80 years ago that US athlete, Jesse Owens won his fourth gold medal at the Berlin Olympics. And in 1979, Britain's first nudist beach opened. It's also the date this year when people around Australia have to fill out the census. Hopefully with clothes on.

The census is a really important survey held every five years. Every household gets a form, and the aim is to count every person in that household, on one night. The census is compulsory, and it asks a range of questions on all kinds of topics. Like your age, gender, family size, education, where you were born and the languages you speak.

But while we know what information the census collects, what will all of that data actually be used for? To find out, I met up with Lisa, who works at the Australian Bureau of Statistics, the organisation in charge of running the whole thing.

LISA MOUTZOURIS, SA CENSUS DIRECTOR: We call it a snapshot of Australia. So that we understand what our population looks like, how many people, where they were born, how old they are, whether they're at school, whether they're working. So that we have a really good understanding of the population so that government and other people can plan for the future.

Having an idea of the size of the population of Australia can be really helpful.

MATT HOLBROOK, REPORTER: 24 million people in Australia.

It helps explain how Australia's changed over time, and gives governments a good idea of where funds are most needed for things like schools, roads and nursing homes. All of that data is also used in important studies. For example, the last census helped to work out the life expectancy of Indigenous Australians which helped set the government's *Closing the Gap* targets.

MATT: What happens if I don't fill out the census?

LISA: We'll come knocking on your door and saying hey, this house has not responded to the census.

MATT: Will you really do that?

LISA: We will, we'll remind you.

Lisa says it's really important not just to do the census, but to fill it out properly. And while 65,000 Aussies said they belong to the Jedi religion in the last census, mostly as a joke, Lisa doesn't recommend it.

MATT: Should I say I belong to the Jedi religion on the census?

LISA: Probably not a good idea. At the end of the day they all get lumped into a category called "Not applicable" or "not further defined" because Jedi is not a recognised religion.

MATT: Don't use the force?

LISA: Don't use the force.

But Jedi aren't the only ones worried about filling out the census this year. For the first time, names and addresses collected in the census will be kept for four years instead of eighteen months. So some people are concerned their personal information could be revealed if not kept securely. But the ABS says that info is really important for future studies, so they'll be very careful to look after it properly. And around April next year, the ABS will start releasing stats that show how you fit into this massive snapshot of Australia.

This Week in News

The Rio Olympics are now in full swing but while a lot of people are enjoying the festivities some Brazilians are angry that their government is spending billions of dollars hosting the games when so many locals there live in poverty.

There were protests about the issue last week during the torch relay and even some attempts to put out the Olympic flame.

Passengers on this flight from India to Dubai had a very close call recently when the Emirates plane crash landed at Dubai airport then burst into flames. Luckily all 300 passengers onboard made it off the plane just in time. Some even grabbed their cabin bags on the way out which experts say is a really dangerous thing to do.

The first round of results from this year's NAPLAN tests are in giving us a snapshot of how Aussie students are doing in years 3, 5, 7 and 9. Overall the ACT performed best in reading and grammar while Victoria topped writing and numeracy.

But while everyone's numeracy scores improved there hasn't been much change in reading or writing levels. Some say that's not good enough and suggest we need to make big changes to the way kids are taught these subjects or invest more money into schools.

And finally the new Harry Potter script is breaking records around the world! Since it was released Aussie Muggles have bought more than 170 thousand copies. In the UK it's more than 600 thousand and US sales have topped two million!

While that's less than the last Harry Potter novel it's still one of the fastest-selling books in history and the publishers say that's unheard of for a script.

Olympic History

Reporter: Amelia Moseley

INTRO: Now as you heard earlier the biggest sporting event on the planet has kicked off. This is the 31st running of the modern Olympic Games but did you know there have actually been many more Olympics than that? We travelled back in time to see where this huge competition first started.

It all began in ancient Greece around three thousand years ago. No one's quite sure who actually started the games or why, so let's just say it was this guy.

KID 1: You know what, we should do this thing where a bunch of people come and run and wrestle and do javelin and then everyone comes and sits and watches and then the winner, they get a crown or something.

KID 2: Hmm that sounds mildly entertaining, let's do it!

Anyway, they decided the first known Olympic Games should be held in an area named Olympia in 776BC in a rectangular stadium, and the games were dedicated to the Greek God Zeus. The only people who could take part were men of Greek origin. They were picked by their cities and trained for months to compete.

At first there was only one sport - a 200m sprint. Then they added longer running events, boxing, equestrian, pankration - that's an extreme mix of boxing and wrestling - and pentathlon, made up of five sports including javelin, discus and long jump. Oh and every athlete competed in the nude.

ATHLETES: What!

But for the purposes of this story, we won't worry too much about that.

Finally, all athletes and judges took an oath to take part honourably and abide by the rules.

KID 3: Wait, does that mean I can't cheat?

KID 1: No, of course not!

At the end of an event, there was only ever one award winner known as the Olympionic. They were crowned with sacred olive branches and they were seen as a hero in their hometown. Statues were often made in their likeness and poems written about their athletic feats.

KID 4: He ran with the fierceness of a goat; dainty and hoofed of feet.

KID 5: I approve! I approve!

The Olympics were held like that every four years and at first it was only a one-day thing, but eventually it became even longer as the event became more and more popular.

REPORTER: The Games drew tens of thousands of spectators, and even when some Greek cities were at war they were brought together by a sacred truce which meant that nobody could fight during the Games so everybody could watch.

After more than a thousand years of games, this guy Emperor Theodosius the First decided he didn't like it very much and scrapped it and that was the end of the ancient Olympics. It wasn't until centuries later in 1894 that this guy, a French teacher and historian named Pierre de Coubertin, founded the International Olympic Committee. The IOC then organised the very first modern Olympic Games in Athens, Greece in 1896.

Over the years, the Olympics continued to change a lot. Competitors started coming from all over the globe and of course female athletes were finally included. One award changed to three medals. Heaps of new sports were added, although some didn't last! And huge ceremonies and TV broadcasts eventually became part of the experience.

But if you watch closely, there are still plenty of traditions in the modern Olympics that originated from ancient times, like running races and the pentathlon. The Olympic torch and of course the four years between games. So the next time you watch your favourite athlete go for gold, spare a thought for the ancient, ah nude, Olympians who started it all.

Ask a Reporter

Amelia Moseley: Got a question about the history of the Olympics? Well, you can ask me live on Friday during Ask a Reporter!

Just head to our website for all the details.

Did you know?

Rio gold medals weigh 500g. The bad news - it's 494g of silver and only 6g of gold. That's about \$260 worth of gold - so probably not worth melting it down!

Coordinate Changes

Reporter: Jack Evans

INTRO: Next, it's been revealed that over the past 22 years Australia has shifted north by 1.5m. That might not sound like a lot but many new technologies rely on precise measurements to function properly. So now, researchers want to fix our coordinates. Here are the details.

Australia is a country on the move, no really it's actually moving. Not that you can feel it.

JACK: That's because we're only moving at about 7 cm every year which is about the same speed that your fingernails grow.

MATT, AMELIA & NATHAN: Ooooh.

The reason it's moving is all to do with the way the earth is made up. It might look like one giant rock, but it's actually made up of different layers. The ground we stand on is called the crust and it's made of huge slabs of rock called tectonic plates. They float on top of a different layer of hot molten rock, called the mantle. But over time these floating plates move around and that's starting to cause issues for our maps and GPS devices.

They work using sets of coordinates called latitude and longitude. Think of it like a graph over the top of the earth. Latitude goes this way, longitude goes this way and each line has a number. So if you want to tell someone where you are on earth, you can tell them your latitude and longitude number.

AMELIA: Hey, where should we go for lunch today?

JACK: We should go to 55 degrees 32 minutes 54.65 seconds south and 138

degrees 54 minutes 32.56 seconds east. AMELIA: I was thinking more like Sushi.

But the trouble is, because Australia's tectonic plate is moving, its latitude and longitude coordinates are now a bit off. In fact they're out by more than 1.5 metres. Take the Opera House for example - maps and GPS devices say the opera house is at these coordinates. But actually it's here and it's only getting worse. Scientists say in 4 years the coordinates will be about 2 metres out and in 10 millions years Sydney will be where Brisbane is. Although you probably don't need to worry too much about that.

JACK: But scientists say it's an issue that needs to be fixed soon. Because it's starting to become a problem for people who rely on maps each day and no, not just for Pokémon trainers.

MATT: It says the Pikachu is there but it's here!!

The military use GPS devices for navigation on land, sea and air. And driverless cars need accurate coordinates to navigate the roads safely. Fixing the issue will be a big job and scientists say it hasn't been done since 1994. But they say it's important to put Australia back on the map.

Quiz

Quiz time!

One major circle of latitude runs through Australia. What is it called?

- The Tropic of Capricorn
- The Tropic of Cancer
- The Tropic of Caterpillar

The answer is: The Tropic of Capricorn

Left-Handed

Reporter: Matt Holbrook

INTRO: Okay I have a question to ask you before our next story. Are you a leftie or a rightie? If you're part of the 10% of the population that prefer your left then you're in luck because the 13th of August is International Left-handers' Day. To celebrate, we thought we'd find out why people prefer different hands and how being left-handed wasn't always seen as okay.

What do these people have in common? If you answered with "they're all awesome" you'd probably be right. But there's one more thing. Me and my close friends here are all left handed! Yay.

Around one in every ten people are left-handed. And they're often pretty easy to spot. But no-one really knows why left-handed people are actually left-handed. Some theories are that there's a left-handed gene, that the brains of lefties are just wired differently, or that left-handers might be copying the behaviour of their left-handed parents.

MATT HOLBROOK, REPORTER: Hi Dad! He really is left-handed.

MATT'S DAD: Hello son.

MATT: He really is left-handed

Anyway, however we came to be, us lefties aren't alone in the world. Scientists have found almost all kangaroos are left-handed, too. Well, left-pawed, really. And while that hasn't stopped our kangaroo friends from hopping about enjoying life, throughout history it's been a different story for humans.

Lefties have been called witches, unclean, possessed by the devil, or just clumsy in the past. And back when everyone wrote with ink, kids were actually forced to use their right hand, even if they were left-handed.

MATT: Sounds pretty unfair, but having said that this is really messy.

Today, no-one's going to call you a witch for being left handed. But there are still some pretty big disadvantages to living in a right-handed world.

KID 1: If we want to try and use instruments it's pretty hard to learn how to play the instruments, because the instruments are mostly made for right-handed people.

KID 2: Sometimes it's hard to write.

ALEX: I do magic and I have to learn certain moves with my hand, and I have to force them to do those positions and it can be really annoying.

Being a leftie has encouraged Alex to work really hard at perfecting his magic act. But that's not the only unexpected benefit. Some studies have shown that being left-handed means you're more likely to be good at subjects like music and maths. There's also a really high proportion of geniuses that have been left-handed. Although that could just be a coincidence. And it can be a big advantage when you're playing sport against right handed people too.

KID 1: People say when you're left-handed you're writing's more neater, and you draw better, so I'd rather stay left handed.

KID 3: I kind of find it nice being left handed. Don't think you're different in a bad way, think you're unique in a special way.

Anyway, that's what left-handed day is all about. Celebrating left-handedness, and why we're proud of it. Plus it's a really good excuse to make right-handed people, do all your right-handed work.

MATT: Can you cut this out for me?

AMELIA: No.

MATT: But I'm left handed!

AMELIA: Ok, fine!

Poll

Now we want to see if 10% of our BtN audience are lefties too. So we're making that our poll for this week!

Let us know your preferred hand on our website.

Quiz 2

And let's stay with left Vs right for quiz number 2 today!

True or false? Most people also have a dominant eye, ear and foot.

And that's true!

Sport

In Sport the International Paralympic Committee has decided to ban Russia's entire <u>Paralympic</u> team from competing in this year's Games.

It's a massive blow for Russian athletes getting ready for the Games. But the IPC says it made the decision because Russia's anti-doping system isn't reliable.

Meanwhile the current Olympics may have only just begun but the International Olympic Committee has already announced there'll be six new sports in the next Olympic Games in 2020.

Baseball, softball, surfing, climbing, skateboarding and karate will all feature at the Tokyo games. The IOC says it hopes the new events will encourage more young people to tune in.

Back home now and Jarryd Hayne made his return to the NRL on Sunday for new team the Gold Coast Titans. The Hayne plane showed glimpses of his talent throughout the match. But it wasn't enough to grab the win as the Titans went down by 10 points.

And finally, dogs and their owners travelled from around Australia recently to take part in the Mt Buller Sled Dog Quest.

URSI: You can see the joy that they're having going out on the snow.

As you can see it was a howlingly good time for all.

App Designer

Reporter: Amelia Moseley

INTRO: Finally today an 11-year old app designer from Queensland recently travelled to the US as the special guest of an international entrepreneurship summit. He was the youngest kid in the world invited to go and while there he got to see President Obama and the creator of Facebook, he also filmed the trip exclusively for BtN. Here's what happened.

Hamish might be in primary school, but that hasn't stopped him from becoming a successful software developer. He creates apps about topics he's passionate about, like the environment and Autism Spectrum Disorder or ASD. That's a condition Hamish and many other Aussie kids have.

HAMISH: Sometimes you like can't stand loud noises or you have to follow a certain pattern when you're like walking in the mall.

Hamish has made four apps so far, and the main character of all of them is this guy a little turtle called Triple T who has ASD. One app features games, quizzes and tips to help people with, and without, autism to learn more about the disorder. While the others are about the environment, like this one which focuses on sea turtles and the need to protect them from pollution. So players help Triple T to clean up the ocean!

HAMISH: He just runs around and collects rubbish bags that have been left by people who don't care.

But recently, Hamish and his apps caught the attention of someone very important, the US Ambassador. He was so impressed with them, he invited Hamish to a big Global Entrepreneurship Summit in America to hear special guest US President Barack Obama! To make sure Hamish could go his family set up a crowd funding page and luckily they raised enough money to send him to see the President.

HAMISH: I've actually made some t-shirts and business cards. Tell him to wear it on some of his speeches.

HAMISH: Right now I'm in the Brisbane International Airport lounge and I'm waiting for my flight to go to the US.

Hamish set off for San Francisco; the home of hundreds of tech companies like Google, Apple and Facebook!

HAMISH: Here I am at the birthplace of Silicon Valley!

While there, he got to visit lots of cool places like NASA's research centre and Stanford University, where he met other software designers and tried out some cool new technology that will help other kids with autism, just like him.

HAMISH: I see like faces, it's really kind of funny.

Then of course, it was time for the big summit and the chance to learn from amazing people like Facebook creator Mark Zuckerberg and of course, President Barack Obama!

US PRESIDENT BARACK OBAMA: This is the place that made nerd cool.

Hamish was the youngest person invited to attend, and he even got a few moments in the spotlight!

SILICON VALLEY TV SHOW ACTOR: Listen to this, this is Hamish, he's developed four apps. How old are you? He's 11! What are your apps, tell us about your apps, Hamish?

HAMISH: Three of the four apps teach people about litter and about the environment and oceans.

SILICON VALLEY TV SHOW ACTOR: Oh, about littering? Wow! Let's give him a round of applause.

And it seems everyone's excited to see what this whizkid will do next.

SILICON VALLEY TV SHOW ACTOR: He's going to be President of the World!

Closer

Great work Hamish! And that's it for today! But the fun will continue on Friday during our live Ask a Reporter session. I'd love to see you all then! Stay well and bye for now.