

# BtN: Episode 04 Transcript 28/02/17

Hi I'm Nathan Bazley and this is BTN!

Coming up today

- Young hackers now on the hiring list, we find out why.
- BTN Investigates why palm oil is being blamed for endangering orangutans.
- Plus the kids that attend school through a robot!

You can see more on that later, but first:

## Israel & Palestine History

Reporter: Amelia Moseley

*INTRO: Last week, Australia had a historic visitor, the Prime Minister of Israel, Benjamin Netanyahu. But while some people celebrated his visit others protested it. Let's find out why.*

It's always a big deal when the leader of another country pays a visit to ours, especially if there's never been a leader from that country here before. Last week, Israel's Prime Minister Benjamin Netanyahu became the first sitting Israeli PM to visit Australia.

**BENJAMIN NETANYAHU:** We admire Australia, we embrace Australia.

But the visit came with a lot of controversy. People gathered in cities around Australia to protest, holding signs mentioning Palestine. That's because there's been fighting between Palestinian and Israeli people for many, many years over land in the Middle East.

This is Israel and here is Gaza, and the West Bank. Those last two areas aren't technically separate countries, but most of the people who live there call themselves Palestinians and they have their own government. But take a step back in time and this map was very different. Before 1948, there was no Israel. All this area was known as Palestine and it was under the control of Britain. The people who lived here were from different ethnic groups, and while the majority were Muslim there were also Christians and Jews and other religions.

Around the time of the Second World War, Jewish people were treated horribly. More than six million were killed and thousands fled to Palestine. Some decided to set up their own Jewish country in the place their ancestors lived and a place they believed was promised to them by God. But the area's also sacred to Muslims and Christians,

and the people who were already living there were afraid they would lose their homes. So the United Nations came up with an idea to split Palestine into two separate countries, one Arab and one Jewish. The Jewish leaders agreed and created the state of Israel. But the Arab leaders didn't accept the plan and a war broke out. Israel won that war and others that followed. They then claimed the area of Israel as their own. After that, many Palestinians left their homes and became refugees in Gaza and the West Bank, and fighting has continued in those regions since, as many people who live there still feel like they're being forced off their land.

Lately, there's been a lot of arguing about the West Bank in particular. It's home to 2.6 million Palestinians but it's controlled by Israel. Israel's government has allowed more and more Jewish settlers to move in and keeps a big military presence there. But Palestinians consider the West Bank their land and often protest. They say it's hard to move around because there are lots of Israeli check-points and no-go zones.

Last year, world leaders at the United Nations Security Council voted and decided Israel was breaking international law by allowing its people to settle in the West Bank. The UN says Israel should stop and the land should instead be divided into two separate states, but Israel's current government says it won't support that happening any time soon.\*

Within the UN, 136 nations currently recognise Palestine as a state. Now, two former Australian PMs say they think our country should do the same, but Mr Netanyahu disagrees.

**BENJAMIN NETANYAHU:** What kind of state will it be that they're advocating for? A state that calls for Israel's destruction?

Our PM Malcolm Turnbull said he thinks the UN's decision was unfair and that Israel should protect itself. But he also said Australia could support a two-state agreement, like the UN suggested.

**MALCOLM TURNBULL:** The key is direct negotiations between the parties and I would add such that this could be a good time to come back to the table, for the parties to come back to the table and reach an agreement. But of course as with any agreement it needs two to tango.

Leaders from Israel and Palestine haven't met for peace talks since 2014, and no leaders before them have ever been able to come to an agreement. But on both sides, there are many people who genuinely want peace. The really difficult question is how to achieve it and it seems no one has a clear answer to that just yet.

\* Editor's note: This sentence has been changed to clarify the Israeli Government's position on a two-state solution.

## This Week in News

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People who work at shops and restaurants on Sundays are set to earn less money.

Australia's Fair Work Commission, which looks at workers' rights and pay, decided to cut rates on those days for hospitality, fast food and retail workers.

At the moment some workers get paid 75 percent more on a Sunday. But soon it'll go down by between 25 and 50%. Retailers say the cuts will help them keep shops open longer. But a lot of workers aren't happy.

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NASA has discovered seven earth-sized planets that have the potential to support life!

The planets are orbiting a single star about 39 light-years away and at least three of them seem to be in just the right spot to hold oceans of liquid water on their surface.

Which means there could be life forms too! NASA's hoping to get a closer look with its new space telescope next year and in the meantime it's looking for help to name them.

Let us know if you have any great ideas!

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50,000 new types of seeds have just been added to the seed vault, an underground bunker in the Arctic built to protect plants in the case of a worldwide disaster.

Thousands of seeds for Australian trees have just been shipped there along with seeds from many other countries too.

The seed vault was built in 2008 and is underground in a secret location roughly 1000ks from the North Pole.

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And Hollywood's handed out this year's golden statues at the 89th annual Academy Awards. Zootopia took the Oscar for Best Animated Feature. Best Actor and Best Actress went to Casey Affleck and Emma Stone. While the big one Best Picture went to Moonlight.

Even though the presenters got it wrong first and actually announced La La Land first.

Awkward!

## Cyber Security Jobs

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Reporter: Amelia Moseley

*INTRO: Now, last week tech giant Google announced it's on the lookout to hire Australia's best and brightest hackers. Hackers are normally known for trying to steal other people's information or take down websites. So why would one of the biggest technology companies in the world want to hire them? Here's the answer.*

KID 1 What's happened?

KID 2 They've hacked into our mainframe. They'll have control in a matter of minutes.

KID 1 The whole nation's security is at risk. Ok, I'll make the call.

KID 3 Who is this?

KID 1 The system. It's been hacked.

KID 3 On my way.

KID 3 Step aside. I've got this.

Ok, so being in the cyber security business is probably not as dramatic as this.

KID 2 So how do I get rid of that?

KID 3 Have you tried turning it off and on again?

But it really is all about protecting the security and privacy of people, businesses, even governments, from the bad guys online.

Hacks happen every day all around the world. The ones we hear about most are done by 'black-hat' hackers. They know a lot about computer systems and software and they use their skills to break in so they can steal, change or destroy information. They can do stuff like disrupt or shut down important websites, steal personal details, share secret documents, or take control of accounts.

But did you know that hackers can also be the good guys? Ethical or 'white-hat' hackers are people who know how to hack, but they use those powers for good. With their knowledge and skills, they can protect systems from bad hackers, investigate hacks that have already happened and work out if security systems are good enough by testing if they can hack them.

ALEX LINKER, STUDENT: The thing that interests me about cyber security is you have to take something someone's already built up and you have to basically put yourself in their frame of mind and figure out how to break it.

These IT students are wannabe white-hat hackers and once they've learnt the skills they need they're going to be in high demand. Australia's government says it needs

good hackers to help keep information safe and even to do super-secret spy things for its intelligence agencies! But big businesses need these skills too. Recently, Google announced it wanted to hire Australia's best hackers to keep the search engine - which is used by more than one billion people - secure.

PARISA TABRIZ, GOOGLE'S TOP SECURITY EXPERT: We're looking for people who are smart, who sometimes want to think like a hacker and break systems, but ultimately want to make software more secure for people.

But 'Cyber Security Whiz' is still a pretty new job description that changes as technology does, and experts are already worried Australia doesn't have enough good hackers to go 'round. So they say we need more young people to think about studying hacking and cyber security, and universities are still trying to work out the best way to teach students to do that! But experts say you're never too young to learn how to hack.

PARISA TABRIZ, GOOGLE'S TOP SECURITY EXPERT: It doesn't matter how old you are. Just try something early on and see if you like it and, yeah, happy hacking!

So kids might eventually help save us all with their super cyber skills.

KID 3 And shut down! Your system is secure.

KID 1 Oh, man! Ah well, maybe next time.

## Quiz

The company Google was named after the word googol. What is that?

- A mythical creature
- A powerful computer
- Or a really large number

It's a really large number - 1 with 100 zeros after it in fact.

## Palm Oil Problem

Reporter: Matt Holbrook

***BTN INVESTIGATES:*** *Hi BTN, this is Alice from Tasmania, and my question is why does palm oil affect the orangutans so badly?*

AMELIA: Matt, what are you doing?

MATT: I'm investigating. You know, BTN investigates. I'm the investigator. Alice wants to know why palm oil affects orangutans so badly.

AMELIA: So what do you need the magnifying glass for?

OK, so I don't need the magnifying glass. Or the hat. But this is a topic worth investigating, because it's something that affects almost all of us.

First, let's find out what it actually is. Palm oil is a type of, well, oil that we get from the fruit that grows on palm trees. And it's used in lots, like up to a half of the things you'd find at the supermarket, from food to cleaning products.

But palm oil itself isn't a problem. Farming it, though, can be. That's why I'm off to Adelaide Zoo to speak to an orangutan expert about how it affects them in the wild. This is Carla. She's studied orangutans for years now, and even written a book about them.

DR CARLA LITCHFIELD, ANIMAL BEHAVIOURIST: They're basically my hairy relatives. You get really attached to them when you work with them in the wild or in zoos. They're just so beautiful, so smart, and so incredible, and there are so few.

She told me that there are two types of orangutan and they're found in Indonesia and Malaysia. But both species are critically endangered.

MATT: What are some of the threats to orangutans?

DR CARLA LITCHFIELD, ANIMAL BEHAVIOURIST: The major threats are deforestation and habitat loss, and also illegal pet trade. So one of the problems is the forest is cut down for oil palm, or palm oil plantations, and that takes away the home from the orangutans and other species as well. There's a great risk they're going extinct, maybe within the next 10 years, and we're all very worried about that.

Palm oil is a massive business worth tens of billions of dollars. So in both Malaysia and Indonesia huge areas of rainforest are being bulldozed to make room for palm oil plantations. On the upside, it gives jobs to tens of thousands of people in those countries. But many animals, like orangutans, pay the price.

While some companies have agreed to stop clearing rainforests, and produce palm oil sustainably, Carla says it's still a problem because the palm oil industry's now moving into other countries where other animals could be affected. But there's another issue conservationists are passionate about a bit closer to home: labelling.

MATT: At the moment there are no laws that say palm oil has to be stated clearly labelled. Most of the time it just says "vegetable oil", which means if you want to avoid products that do contain palm oil, it's kinda hard.

There are palm oil products you can buy that have been farmed safely, but many don't say so on the label. And while some companies have agreed to start using only sustainably farmed palm oil, there's still debate about whether it's actually happening.

Which is why some people are pushing for stricter labelling laws in Australia, and wider changes to farming practices to protect orangutans. But with the huge demand for palm oil, farmers, companies, and conservationists will have to work together to have a hope of solving this one in the future.

MATT: There you go, Alice, I hope that answered your question. And thanks for giving me a reason to use the magnifying glass.

## Ask a Reporter

Have you got a question about palm oil? Ask me live on Friday during Ask a Reporter! Head to our website for all the details.

## Poll

And we'd like to know what you think about palm oil. Hit us up online to have your say  
Meanwhile. Here's how you voted in last week's poll.

## Planet Nine

Reporter: Matthew Holbrook

*INTRO: Next up, as we mentioned earlier NASA recently discovered 7 earth-like planets orbiting 1 star 39 light years away. It's an amazing find from the experts at NASA. But how would you like to discover a planet all by yourself a whole lot closer to home? Take a look.*

If you've ever wanted to be the first to discover something, you'll know it can be tricky.

MATT: What happens if I mix all the colours together? It's a kind of a poeey brown.

MATT: It's tea and coffee together! I call it toffee.

But now, you really can be the first to make an important discovery. A huge one, in fact. A possible 9th planet in our solar system. Scientists are asking people all over the world, just like you, to get involved in a project called Backyard Worlds: Planet 9. They

want people to look through images online captured by NASA's WISE telescope from the edges of our solar system, comparing infrared images taken of the same area a few years apart. If you can spot an object that looks like it's moved in that time, there's a chance it could be a 9th planet.

At the moment this is what we know of our solar system. There are eight planets that orbit the sun. The closest is Mercury, followed by Venus, Earth, which is us. Yay. Mars, Jupiter, Saturn, Uranus, and finally Neptune, a whopping 4.5 billion kays from the Sun. When I was a kid, we already had a 9th planet way out past Neptune called Pluto. But back in 2006, scientists decided Pluto was no longer a planet. It's now called a dwarf planet. But that doesn't mean there's no real 9th planet out there. Out near Pluto, scientists have found other objects, more than a thousand in fact, in a region known as the Kuiper Belt.

And it's out in the Kuiper Belt that some scientists reckon we might find planet number 9. While not all scientists agree it's out there, they do agree there could still be things to discover. Like brown dwarfs, balls of gas too big to be called planets, but too small to be called stars

Scientists say finding them would help us better understand how stars and planets form. So even if you don't find a new planet, you can still help make some important discoveries. More important than mine, anyway.

MATT: This is disgusting. I don't know why anyone would drink this. Toffee?

## Quiz

Which planet is the hottest in our solar system?

- Mercury
- Venus
- Mars

The answer is: Venus

## Sport

Australia has shocked India by taking a 1-nil lead in the 4-match test series in India. Beating India at home is considered one of the toughest challenges in world cricket and in the past 47 years Australia has only ever won 1 test series there.

Rookie spinner Steve O'Keefe starred with 12 wickets as Australia cruised to a 333 run win. The second match of the series will be played this weekend.



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The Adelaide Crows have continued their undefeated streak in the Women's AFL downing the Dockers by 23 points in Fremantle. Adelaide failed to score a single point in the first quarter but dominated the second half of the match to come away with the win.

Meanwhile the comp's other undefeated team Brisbane was too good for the Giants on Sunday with the highlight of the match being this goal of the season contender from Kaitlyn Ashmore.

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If you thought Basketball was just a game for tall people, well, check this out. Nate Robinson a famously short NBA player absolutely bamboozled his giant opponent by running between his legs.

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And this Venezuelan skier is proving anything's possible. Adrian Solano took part in the Nordic world ski championships. Even though he'd never even seen snow before and had only ever practised on wheels!

Sports commentators described him as the worst skier alive after witnessing his slipping and sliding. But Adrian said he loved every second of his debut and hopes to one day make the Olympics!

## Robotic Student

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Reporter: Carl Smith

*Finally today, being stuck at home because of sickness can be a real problem. Kids can miss out on important lessons at school and the chance to hang out with their friends. Well now, remote controlled robots are stepping in to help. Well, rolling in really.*

This is how Jacob goes to school.

Using an iPad at his home in the US, he's controlling a Segway with another iPad on top. It lets him see and hear everything going on in class, while his classmates and teacher can see and hear him too.

The reason Jacob needs this amazing system is because unfortunately he can't go to school in person. A couple of years ago Jacob got really sick. Doctors haven't been able to figure out what's wrong yet, so in the meantime he can't go to class.

He started off doing school from home but his mum says it wasn't quite the same as being in class.

ASHLEIGH (MUM): It still wasn't around his friends. It still wasn't being able to talk with his teachers. It just - something was missing.

So his classmates and his school got together and figured out a way to help! Jacob's friend's dad just so happened to have one of these new robots. So he let Jacob use it to attend school in robot-form!

STUDENT/FRIEND MARY: I didn't want him to miss school because he's sick.

His friends and his teacher were really happy to have him back in class too!

TEACHER BECKY: Oh it's so exciting the first day he rolled up and I got to say hi and hug him around the little robot and it was so much fun.

These robots are really helpful for people like Jacob who can't get to school. They're even being used here in Australia.

AUSTRALIAN STUDENT AUDREY TANGE: I had to spend two weeks at home, so it was good talking to everyone because I was starting to get kinda bored. I could look at the board, I could look at other people's workbooks for help and I could speak to my friends.

Back in the US, Jacob says his robot can be tricky to control, but he's getting the hang of it!

JACOB: It's kinda weird at first but then I progressed on and knew how to control it.

And although it's really useful for Jacob to help him see his friends and get back to class, he mainly just loves the fact that now he can say he has his very own robot!

JACOB: It's been an awesome journey so far.

## Closer

And that's it for today! But there is heaps more for you on our website including resources and class activities for this ep. Thanks for joining me, and I'll see you next week for more BTN.