Hi everyone, welcome to this week's episode of No Such Things as a Fish, where we were joined at the Soho Theatre in London by the incredible Cariad Lloyd. Now if you are a regular listener to No Such Things as a Fish, you will know of course who Cariad is. She's a very good friend of ours, she's a comedian, she's an actor, she's a podcaster, she's just an all-round genius, let's be honest. She has a book out which you definitely should check out, it's called You Are Not Alone, it's about death but that sounds like it's going to be depressing but it really isn't, it's extremely uplifting that book and there's loads of facts in there as well, it's definitely one that I think you'll really really enjoy. And the other thing to say is that Cariad does an improvised show called Ostentatious. Now this is a really amazing show, what happens is you turn up,

someone in the audience gives them a hitherto lost let's say Jane Austen play title that they've made up, the guys have never heard it before and they do an entire Jane Austen play completely improvised. It is absolutely stunningly brilliant, if you haven't seen it you can't miss it, if you have seen it go again because it's different every single night. And they are about to do another run at London's West End at the Arts Theatre. Now the best way to find out about those tickets is to go to ostentatiousimpro.com that's a-u-s-t-e-n-t-a-t-i-o-u-s-i-m-p-r-o.com but let's be honest who types in URLs these days, just go to a search engine search for ostentatious and you will find all the information there. Anyway really help you enjoy this week's show with Cariad Lloyd, all that's left to say is on with the podcast.

Hello and welcome to another episode of No Such Thing as a Fish, a weekly podcast this week coming to you live from the Soho Theatre in London! My name is Dan Schreiber, I am sitting here with

James Harkin, Andrew Hunter Murray and Cariad Lloyd and once again we have gathered around the microphones with our four favorite facts from the last seven days and in no particular order here we go, starting with fact number one and that is Andy. My fact is that the maximum PDF file you can send is bigger than Belgium.

Can we replace Belgium? Just with a PDF?

Of Belgium, yes we can. Okay in fact it's bigger than that, okay right the maximum PDF size you can send is the square with sides that are 381 kilometers long, that is bigger than Belgium, Monaco, San Marino, Liechtenstein, Malta, Andorra, Luxembourg, Montenegro, Slovenia, Albania

and Moldova combined. It is huge, it's mega, has anyone sent something that big? Unclear, I worked out that if you wanted to print it out on A4 paper it would take 2.3 trillion pieces and if I did it on my printer at home I could have started it off at the time when the first human fossils were appearing in the fossil records and it would be just about finishing now. Subject to jams and cartridge replacements, that's brilliant, that's incredible, I should say where I got this from, I saw a guy called Steve Bobrick put it up on Twitter and basically we should say this appears to only be an adobe acrobat limit. Damn them controlling us as always. Theoretically there could be a bigger PDF out there. What? I know. So this is what in the adobe rules it says that this is the maximum you're allowed or something. Yeah it's the adobe acrobat, it's 15 million inches by 15 million inches you know. Oh okay. Well it's just the rules, it's not even... No it's their internal limit but the file format itself might not be bound by the adobe. They would probably just have to click and write 25 million and maybe we'd be able to get even bigger. Maybe. But I don't think anyone's ever actually sent one that's this big. No why would you? Why

he'll be insane. Is that an email attachment or are we talking WeTransfer here? Oh I think that's a dropbox, I don't think you can WeTransfer that. So PDFs? Yeah. Pretty dry. Pretty dry. It's amazing when we send each other our facts round we have to then go and research them of course and Andy sent us the PDF and said maybe it's the most boring fact you've ever sent. Yeah and James said it's not even close. Not even top 10. But I mean we can get on to more general stuff but I do just want to say that adobe, you know adobe acrobat the program that do the PDFs is named after some mud. Named after some mud. Adobe it's a building material isn't it? It is. You make it half like poo and wool I think. Here is mud. James don't attempt poo and wool. And be like this is it we can make a house. That's the worst three little pigs ever is it? And the fourth little pig made his house out of poo and wool. And the wolf said I'm all right actually. You guys you stay in there it's fine. I should just explain the mud thing sorry I want to call it. Because otherwise I could feel the tension in the room. Oh they were waiting they were just desperate to know. When's he going to explain about the mud? The founder of adobe. I'm sorry.

You thought you can't do like podcast this is a conference for adobe and this is how they get their employees in. There's a creek which goes past the home of the founder who's called John Warnock and it has this it has this mud in it. It's this very malleable clay. I did go on a little while goose choice trying to find out who the original adobe acrobat actually was. There wasn't one there wasn't. Right. That would make it an interesting story. Okay and so you named it after some mud. Some mud by the. Yeah exactly yeah. But it's malleable but PDFs are famously inflexible you're right completely untangible. Are you just like I'm just sending you paper like why did you think oh yeah this clay this reminds me of mine. An acrobat's so flexible as well. Yeah everything is completely wide open. The rules the idea that this is what they would say this is the limits to what you have. I find it kind of funny when there are computer rules that just are just so makeshift and and sort of seemingly why would you ever say that out loud. Apple three I don't know if anyone is old enough to remember Apple three but so it was there it was their third. No wait Apple three was the third. This is crazy. Yeah it was a it was a hard drive basically that suffered because there was no fan on it and Steve Jobs had this thing where he just hated the sound of fans and so he was like let's not include going yeah and so it overheated all the time and when it overheated it meant that any disk going in would suddenly just melt and so you're pulling out the hard drive disk and so yeah so it was a big big problem and one of the employees of Apple was so angry with it that he slammed it down out of frustration onto his desk and discovered that that made it work again so if you called up Apple saying it does not work their official line was lifted up lift the computer up by two inches and just drop it on the table and that's what fixed it that was the official line that came from them. Percussive maintenance they call that don't they? What's that? Just whacking something and hope it works. Oh yeah right yeah yeah. I don't

I don't think we've mentioned this before we might have done do you know what the longest a computer has been left running is or the longest running computer ever? I haven't turned my laptop off since 2016. You don't need to just rest it's asleep then it wakes up again. Yeah yeah nothing works. Do you mean not even closing the lid? I reckon this one might not even have a lid. Whoa. Right. James is right. I didn't and I was about to say the longest uh like the running computer on earth but then I didn't say that. Clue. So it's not an earth. That's right. Right. Is it at a spaceship? It's in a spaceship right? It's the Voyager ones. The Voyager ones which

have been on since um what with more than 40 years now. The 70s I guess? Yeah since the 70s yeah and they're still working. They're still working. There are it's a pair of link computers on board Voyager which just sent towards the edge of the solar system and it's it's still going. Each one has 70 kilobytes of memory. I mean they're really tiny. Are they like 1970s computers though? Are they like old school? They're not huge. They're not room size. Oh right. But they're much smaller than that. If they stop working they'll slam them into Pluto won't they? They've got a big monitor and you have to run like CS DOS on it. Yeah yeah um but no they they had a I know some things about

computers. Um they had this really big problem in 2015 because the last of the original programmers

was a guy called Larry Zottarelli and he retired and they were stuffed because it was like they you need to learn ancient cuneiform of computer languages. Right. To get it. To get this. Like no one is teaching these computer languages. He's still alive. You're not dead. Just call him up. He's retired. He's old. He's retired. He doesn't want to be. Get him to write out a hand oversheet. People know. I'm sure NASA know about. He's like no I'm done. That's it. You've had my time. It's hard. It's hard to learn the systems required. No. Okay. Yeah. There was a computer that analyzed

4,000 computer science papers and it came up with what they call the best computer scientists in the world. They describe them as the Michael Jordan of computer science. Wow. Do you know who it is?

No. It's Michael Jordan.

Is it someone with the same name or is it the actual name? Okay. The Michael Jordan of computer science. It's Michael Jordan. Call your kids Michael Jordan. That's clear. It's nominative determinism. Just Michael Jordan. That's really fun. Yeah. Yeah.

Have you had a Fernando Corbato?

I can't tell until you pronounce it properly.

I want to be the Fernando Corbato of something. Yeah. Well, he was. He was the Fernando Corbato of

he died in 2019. He was 93 years old and he invented something we all have. Oh, and we've got loads

of them. Oh, personalities. Daddy issues.

Not yourself closer to the topic at heart. I'll go for transistors. No. Passwords. Oh, did he? He invented the computer password. Always his mother's maiden name. Michael Jordan. Michael

Jordan. But with the numbers changed for the letters. I think it was the fifties that he invented it. And it was because most computers worked on one thing at a time because they were the size of rooms and they were, you know, they had processing power, but not much. And he was trying to work out a way like a timeshare system so lots of people could work on the same computer different tasks. And so he just reasoned that that's the best way of hiding your files from each other inside the computer. Wow. And I've entered that. Yeah. In 2003. That is, you're right. It was a sexy fact. But the thing is we don't whistle at facts anymore.

Well, wait, I mean, it's just, it's not okay. I'm sorry. I don't want to be a downer, but actually, Carrie, it made me feel empowered. There's always one working against the movement.

What can I say? In 2003, a survey found that 90% of office workers passing through Waterloo station would give away their computer password in exchange for a Byro.

Really? Just a Byro, not even a chocolate. Well, another one, another survey in 2003 found that 70% of people would do it in exchange for some chocolate. 100%. 34% of people just gave their password without even needing the bribe. So once your password, they just told them. That's so good.

But that was in the past when you, you only needed like four, right? There's no way you can even remember them. Yeah, that's amazing. I got a quick story about a Microsoft laptop that there was a mystery. It kept crashing. This is 2005. So the culprit of the problem was Janet Jackson. Is it the real Janet Jackson? The real Janet Jackson. And it was her song Rhythm Nation. And what it was is that the frequency of it was at such the same level of which the disc was spinning that it would send the disc into a wobble and it would crash. And even if Rhythm Nation was playing from one laptop, but being heard by another laptop, that would crash as well. Like dog whistles, just be like, is it me? Yeah, yeah, exactly. So it was, yeah. So, so Janet Jackson was responsible for a whole software update or whatever of a Microsoft laptop. She's constantly innovating. She is. Do you know the, you won't know this, but can you guess the picture? What is it? What is it? We need more. We need more. That was almost a sentence, but not quite. Sorry, sorry, sorry. So the picture which has the most pixels in it, so the image that has the most pixels in the world has 102 terapixels. Okay. Security, security. No. It feels nice, doesn't it? No, no, that did not feel nice. That fact was just minding its own business. Okay, get ready to whistle. Can you guess what the picture is of? Belgium. Is it like Tetris, just to give you a t-shirt? Or is it like very pixelated? No, it's, it's pixelated in the fact that it has a lot of pixels in it, but it's not like, oh, okay, okay. But basically, if you made it really small, it would be really clear. That's the point. I'll say a big telescope thing like the universe. Mona Lisa. Oh gosh, no, it is the world's biggest penis. Wow. Well, welcome to the whistle. This is your perfect partner. Wait, do you mean it's the world's biggest picture of a penis or the world's biggest penis? Clarify, we need that. It's a picture of a normal sized penis, but it's the world's biggest image. And what's a normal sized penis? Just asking for a friend. So many issues. If they, if they made each pixel one inch. That's not a normal sized penis, you see. That also wasn't really an inch, but we'll not go into that. If you made each pixel an inch, it would wrap around the earth 2.7 times this image. And if you, if you are printed it out to the same specs as a billboard, it would be as tall as 16,408 Empire State buildings. Right. And if you 3D printed that, you would be able to poke the International Space Station. And you need permission before you do that. Okay. It was invented by a former NASA intern who does, does not wish to be identified. Stop the podcast. Stop the podcast. Hi everyone. We'd like to tell you that this week we are sponsored by Babbel. Yes. Babbel is the brilliant language learning app. It allows you to learn wherever, whenever they've got loads of languages and it expands your horizons. You know, Charlemagne once said possibly that he who speaks a second language has a second soul. Interesting. He probably would have said that in French, which if you did a bit more Babbel Andy, you'd probably be able to translate. Even if you do a job like we do, where you do a lot of like mental stuff. I don't really like crazy stuff. I mean, like lots of reading, coming up with ideas, stuff like that. I learned a language in my spare time and it, it really uses a different part of your brain and it's almost like refreshing. Exactly. And if you do want to learn a language,

Babbel makes it very easy. The lessons are about 15 minutes long. If you're just waiting for a bus or a train, you just pop onto Babbel, have a lesson and exactly it's fun. It makes it enjoyable the way Babbel do it. And right now Babbel is offering our listeners three months for free with the purchase of a three month subscription. And the way you get that is to go to Babbel.com. That's B-A-W-B-E-L.com forward slash podcast 23. That's the numbers two three and use the promo code no fish. That's all one word. That's right. You can get three months of a second soul for free. Just go to Babbel B-A-B-E-L.com slash podcast two three and put in that promo code no fish. Babbel language learning that works. Okay on with the podcast. On with the show. We need to move on to our next act guys. It is time for fact number two and that is Cariad. Cariad. During the 17th century when you died, your relatives were legally forced to bury you wearing wool whether you liked it or not. And there was for no other reason than to support the ailing wool industry. I love this fact. Okay so basically there was an act by parliament in 1666 that overnight said everybody has to be buried in wool. And it sounds like oh okay but previously to that nobody was buried in wool ever. Ever. That was like an unusual thing to happen. You were buried in a linen shroud like Jesus in the Bible. And no coffin. No coffin right. Sometimes they did have coffins. Sometimes they had coffins. It was unusual. But it was very unusual. You would mostly be wrapped in a shroud and just shoved in the earth. Yeah. And because the wool industry was so important and they were so worried about linen coming from France basically. Classic fucking French linen coming over here taking our coffins. The government basically said I know. How is your GB news show coming on? Very well. Listen the British wool. I am sweating but I am British. So so many people employed in the wool industry. Twelve percent of the population worked in the wool industry. And it bought in a huge amount of money. So they said well we'll just make it a law that you have to be buried in a wool suit in a coffin lined with wool. And if you weren't you were fined five pounds which is the equivalent of 550 pounds today. Yeah. So and you had to then because so basically initially everyone was like no fuck you. Why would we where are we going to get this from no one has this. We have a history of this. And like the linens they used to wrap them in would be like your family linen. You know so you would have something that's been like a table cloth and you would keep it all night and then you would sew them together. The women would sew it together and wrap everybody up. So it's like a very like nice thing. And so people weren't following the law. So then they made it that you had to go to the keeper of the peace. Two members of your family had to sign an affidavit saying we have done this otherwise you'd be fine. So you had to go to the church and swear like based on the Bible go we buried them in wool. Sorry. Yeah there was an oath you had to read right. Yeah a special oath which I've got here saving no corpse or any person

except any person that shall die of the plague. Fuck them. That's because they thought it lived on in the wool. Shall be buried in any shift sheet or shroud or anything whatsoever made or mingled with flax, hemp, silk, hair, gold or silver in any stuff or thing other than what is made of sheep's wool only. That's yeah and they had to say that. But the fine that you mentioned the five pound fine you if you grasped someone up as being buried in non-wool yeah then you could get half of the five pounds. Yeah and this is the really clever thing if you had buried your relative in linen and you knew that you were likely to be caught anyway you could go and grasp up on your own relative get half the fine back into the family you've only paid half the fine. Did they do that? Yeah they did. So rich people did that. So some people who like there were certain areas where it

was very much didn't they didn't approve of it and so rich people be like well fuck it was a bit too fine. Well you said that like one of the rules was you couldn't bury in gold. Yeah. So I think if you're burying someone in gold probably you can afford the five pounds. Yeah yeah exactly. So there was a study that was done between 1678 and 1707 less than one percent and this was in Henstridge. Yes. Less than one percent of burials in the churchyard were in linen so following this rule but then when you went inside the church itself it was between nine and 13 percent that were then rich people who were in the church. Yeah yeah exactly. One interesting part of this is that okay so you started to have loads more extra linen and extra cloth around because you were using the wool for the burials and newspapers were made out of recycled cloth. So that's why you call that a rag now because they used to use the rags turn into newspaper and then make newspapers. And so they had all of these extra bits of linen which meant they could make more newspapers and there was a huge boom of newspapers around that time and this sort of fed into that. They were pleased about it. Everyone else was pissed off. And there's amazing have you heard of Deca Mittford and I've talked to you guys about her before. Yeah one of the one of Jessica Mittford Jessica Mittford the Mittford sisters who are like these social like 20th century British figures who were involved in every single thing that happened. She went to America she was a communist went to America kind of disowned her family. In the 60s she wrote this book called An American Way of Death. Okay. It was like it's very odd because she was a British socialite that had like gone to fight in Spain and then moved to America very unusual story. But the book that she wrote basically changed the American funeral industry because what was happening was they were just basically rinsing people for money and when someone died they used to kind of perform plastic surgery on them and then barmed them and so make them look I mean or she describes like basically nip and tuck the tissue across the body with implants pins and fillers to mask blemishes and swellings that come with age and illness before sewing the face into the most attractive and youthful expression possible. Sewing it. Teeth were whitened makeup applied and the corpse was dressed in its final outfit. Yes I would like all of this. There was a special kind of bra designed for post-mortem form restoration. I'll pass on that. So she wrote this book exposing. Why is it handy in a bra? It was part of the package. She wrote this amazing book that exposed basically they were they were preying on the vulnerable so these poor people who had no money would end up paying like thousands of dollars for what was considered like a proper funeral and her book was like in the bestsellers for years. David Bowie listed it as one of his favorite ever books top 100 books because she changed everything and they were putting so many chemicals in at that time. It was so dangerous and that's why like funeral makers were dying of cancer from inhaling on the formaldehyde. Grim. There's one kind of fun thing they used to do. I bought it down as I do. Bring this back to the fun stuff and this is in ancient Roman funerals. You could pay an actor and a lot of people did this. You would pay an actor to dress up and wear a mask as the person who died and then in the party they'd kind of mingle with everyone. Yes. Pretending that they were still alive and like parodying the things that they did. Oh wait. Wait is it. I don't want to be parodied but I would love someone to be doing some of my good stuff. You know like some I'd even write some lines for them to I think that's a great idea for Andy at a funeral. Some dude walking around going did you know the largest PDF file? God thank God. Thank God he died. That's amazing. Look wool. I'm sorry bring it back to wool. We went off to death.

Wool is an amazing material. It's like a super substance that I had no idea about. So have you not heard of wool before now? I didn't know how good wool was basically. So it's covered in scales. If you look if you zoom in you look at it with a microscope it's covered in scales so liquid water slides off the outside right. So it's very hydrophobic I guess so it's good at protecting you from water but it not absorbs it adsorbs water easily right. So if you have water vapor near it it kind of makes its way into the wool like underneath the scales. So once the water gets in that keeps you nicely cool for example. Wait so sorry it's pushing off water. It pushes liquid water but it takes in water vapor okay and that releases heat. So you're supposed to wear like a wool jumper in summer and then in winter as well. It releases heat so that can also warm you up even if it's got water vapor inside it so that's the way of keeping you warm. So if you fall in a river that's freezing cold and then you get to dry land be wearing wool. Like don't wear cotton if you've done that. Right. Basically it's like because you'll be much less harmed if you're wearing wool which has repelled the outside water it's not wet on the inside. That's a top tip. It's a top tip. If there's two of you on like a raft and only one of you can stay on the raft the one who's wearing wool gets pushed in is what you're saying. Yeah exactly right. No, don't be on a raft with James. They've invented a new kind of sheep this year that's exciting. A new kind of sheep. They've bred a multifunctional sheep for the first time which is very exciting. Let's go for the functions. Does it do your diary organised on a cook? It just does wool and meat basically. That's new. And have the two been mutually exclusive before that? I think this is the most multifunctional sheep they've ever come up with. Wow. The sheep

three. It's a sheep three. Is it not working? Just drop it. Drop it from a short height. Well yeah that's incredible. I knew shakes. That's amazing. Oh I saw an amazing picture online which I want to go see in person. If you go to which museum is it? I think it's in the Science Museum. Yeah so Science Museum. There's a jumper there made of wool which is on display. Can you

guess why the Science Museum would have a notable jumper of wool? Knitted by expedition. That's good. No no so it's not not been to the North Pole. Not been to the North Pole. Knitted by Einstein. Knitted by some famous scientist. No. Was there a famous sheep? There we go. It is it is wool from the first mammal ever cloned Dolly. The sheared wool turned into a jumper. And they've only made one. It is. Yeah and it's got sheep on it. It's really beautiful. That's not beautiful but it's you know it's it's a bit cartoony. Pretty cool though. It's very cool. The wool industry was so important for Britain that they they had to do loads of laws for it so there was this thing with the with the burials but there was another thing where they tried to get rid of all the wolves because obviously the wolves were killing the sheep so Edward the first paid one guy Peter Corbett to destroy all the wolves in Britain which he managed. And William the Conqueror would grant land to people in Northumberland and Cumberland on the condition that they would defend the land from any wolves and any Scotsman. Just mean putting them second. Did you know I'm sure you knew about the wool sack? That is in the House of Parliament. Oh it looks like a sort of giant cushion called the wool sack and it's where the Lord Speaker sits and that is was introduced by some I just had it written down. I've lost it. Some king basically a long time ago to commemorate how important the wool trade is and now it's stuffed with wool a blended wool from Britain and the other wool producing nations of the Commonwealth the ones we stole and now it's there. Common wolf more like

a slow hand clap. It didn't feel empowering I didn't feel. No just on the wool sack they I think that it was it's centuries old like it's really really old and in 1938 they opened it up and they found out oh it's horse hair completely full of horse hair full of wool scandal that is so now they filled it with the Commonwealth wool. Do you know where we almost had wool? Where? It's such a like on our bodies. Do you mean like humans used to have? On our bodies yes. The legs. No. The arms. No. What do you mean almost like wool? The teeth. The teeth were

more. No no inside the body. Yes. Oh. What? How drunk are we? We used to have some kind of order. No no no we didn't used to we almost had. We almost had wool in our in our in lungs. Lungs. Hearts. Boobies.

We almost had woolen boobies. Extraordinary claims require extraordinary evidence. So in the 1950s there was a lot of experiments going on. In the 1950s? Yeah we didn't get boobs in the 1950s as a species. Oh we did. We did. But what we did have was plastic surgery where people were having their breasts enhanced and there were many materials that were tested out as what we would be using for breasts. That is an itchy tit. You do get itchy tits if that is made of wool. Itchy on the inside. They tried wool. They tried sponges. They tried ivory balls. Yeah they tried a lot of stuff and then eventually it was the silicon implants that they worked in. Sponges so you could maybe decrease and increase and putting how much water you put.

Yeah yeah. Sounds good. Anyway I need to move us on to our next fact. Do you want to say one more thing before we do? Well I was just going to talk about the wool factories that we had. So a lot of the wool factories in the north they would have families who basically lived in the shadow of them and their factories would kind of look after them feed them. They would go to church with the factory owners. All that kind of stuff. And I was reading about one called the fox's woollen mill. They invented khaki. The thing you used to get into your car. That's not what I thought you said. No the khaki material. Cool. And they said that the children would get free woollen clothing and they would be sewn into their woollen underwear in September and then let out again in May. Wow. I think they must have had an opening. Yeah there's an engineering problem there. I think so. Wow. But yeah imagine that. Put a tube in. You stay warm. But being sewn into your underwear for six months of the year. Livie Newton-John was sewn into those

trousers in Greece. That's true. And they had to unpick her every time she needed to. There was a story wasn't there that Franz Ferdinand when he was shot he'd been sewn into his uniform. You went the bad. I was like what? They're going take me out. Take me out.

It is time for fact number three and that is my fact. My fact this week is that in 1914 women were only allowed to visit the Natural History Museum if a man agreed to sign a note promising that they would behave themselves. So this is yeah this is as I say 1914. I got this fact by the way from Dr. Fern Riddell. She's a historian. She's written in books about suffragettes and and the history of sex and all that sort. She's brilliant. You can find her on Twitter.

And she she put up this link which was for one of the museums by an author called Kerry Lotvaz. And it was the story of suffragettes and during 1912 to 1914 there was so much damage that was going on in the name of trying to get their message out much as much the way that we see modern protesting that they would take they would they would do quite sort of big acts when they have destroying things and museums were a particular target. And so museums basically had to shut

down for a while. You had to go by appointment in some cases. But women specifically had a note that was presented to a man and they would have to hand in at the door that then gave them access. And if they did damage something the man would be liable for the damage that they did and the woman. Yeah. Honestly. Yeah it was it was wild wasn't it. The Natural History Museums weren't sure exactly what they might target. The head of the museum said that unless explosives are used the large mammals are not likely to suffer very seriously. But they did like they were bombing things at the time. So there was a chance. They're not worried about women's rights. They're like fucking hell those elephants. Oh yeah. They need protecting. Well they were mostly bothered about the coral apparently famously order priorities men coral women. Yeah. But it was it was

such a big deal. Lloyds of London actually started issuing householders comprehensive insurance policies that covered damages by airplanes riots and suffragettes. No. Yeah. That was part of your insurance. If as a woman you did go to a museum you had to surrender your parcels your muff and your umbrella at the door because they were all they were all used to conceal objects you tried you did. Well the suffragettes they actually the suffragettes came out saying that we're going to put hammers in our muffs. Yeah. Like you'd be amazed what some women can do. Muff hammer is a good cool nickname for a suffragette isn't it. WWE Muff Hammer.

Making her way to the ring. She's got a note from her husband.

But he hasn't signed it. Sank. Oh also we should all be saying suffragettes. Oh really. Because they were very very initially with the world was coined by a newspaper writer and they were originally referred to as suffragettes because and they took it on because they said we're going to get to the vote. It was the Daily Mail. Yeah. The Daily Mail coined the word suffragette jet as a slam. It was because they were not the nice ones distinguished from the yet women's social and political union. The suffragists were the ones who were being peaceful campaigners. But then it became like yeah we are suffragettes. Fuck you. Yeah. Just on the museum it's just one last thing. The assistant keeper of the National Portrait Gallery who was called James Milner said that if women are to be admitted into public galleries there seems to be no alternative but to handcuff their hands behind their backs and to put up a grill in front of all the pictures to stop them headbutting them. Sensible policies for a safer Britain. Wow. Wow. Isn't that amazing. Very impressive. Yes they really really got up people's noses I think so to say. That's one word for it. Do you know about Emily Wilding Davidson. Yeah. Davidson the one who threw

herself under the King's horse famously she was the first human casualty. But I was reading about her and she was actually like super violent and had been for a very long time was like throwing rocks. She kept trying to throw rocks at Lloyd George but kept mistaking someone. And she was so violent that Pankhurst was like get her out. Like this is too much. Really. We think she's going to do something nuts. Yeah because she was just like attacking people throwing herself at people because they all did jujitsu didn't they. They were trained in jujitsu by one of the suffragettes Edith Garrard. Garrard led the teaching because she knew how to do jujitsu. And the idea behind the training was that appointed bodyguards would surround leaders like the Pankhurst basically so that they had people in front of them to do jujitsu. But they also had big wooden clubs concealed about their person. In their muff hammers. Well I don't know. Like no muff is big enough to hide these clubs. They have to hide them in their dressers. I don't know. I was reading about the slow pace of female emancipation. Just that Saudi Arabia gave women the right

to vote in 2015 leaving Vatican City as the only place where women's suffrage is still denied today. Right. Yeah well Switzerland only got it in 1991 as the whole country. So it was 1971 that the country had universal suffrage. But all the cantons were allowed to vote on it themselves. And they're like the sort of counties. They're like the counties yeah but they have a lot of things that they can kind of decide by themselves. And there was one canton the Appenzell inner Holden canton that voted against women's suffrage in 73, 82 and 1990. Fuck you now. Come on canton get with it. I know. And the thing is it's slightly weird because the way that they vote there they don't like go into a voting booth. They all go into the town hall square and kind of shout. Fuck women. I said it 15 years ago and I stand by it. Shut up Sandra. Yeah and then in 1991 the federal government had to step in and say look this is the rule guys. Guys you're embarrassing us. You're embarrassing uncle. He's getting really embarrassing. Have you heard of the board game suffragetto? No. Have you heard of the board game pankersquith?

Yeah they came out roughly at the same time. Really? Yeah yeah. What's yours? My one is a game whereby it kind of looks like a chess board and you have all these pieces and on one side your team suffragette and then the other side your team police and you need to get as many. I want this game. This sounds amazing. Yeah well there's only one remaining copy of it and it's in the Bodleian library. I'm gonna go with my Marfan Steele before I headbutt a painting. I think it used to be able to like download I was going to say PDFs but I think you could like download the board and stuff. Yeah right of course. Yeah but pankerswith because it was Asquith the Prime Minister. So Asquith was the Prime Minister at the time and this was 1909 and it was a board game. You had to you had to get across the board and avoid arrest. It was the same kind of premise. But the violence of the suffragette movement was part of this game of suffragetto because if you caught one of the suffragettes they went to prison and if you caught one of the policemen they went to hospital. Yes. Yeah and this was this was made by the suffragettes I think the board game. Yeah so it was their own issued game. They had a lot of merch. They had a load of merch. Women love

merch. We'll buy a tote bag. We don't care what's on it. We do not care. What other merch did they have?

Oh they had sort of scarves and they had badges and they had there were lots of postcards. Well the colours the big thing was the purple one and then they put that on jewellery as well and you'd have it on rings and it was like a secret you could wear the colours separately and everyone would be like oh I know what you vote for. That was one of the things of the at the 2012 Olympics they had a suffragette display as part of the opening ceremony and someone came out as Emily Davison wearing the purple sash that was Emily Davison's that's the genuine article yeah which is pretty cool. We should probably say there is a bit of a debate about whether suffragette tactics won the day in the end because they suspended all militant activities at the start of the First World War and then by the end of the war women were so integrated in industry factories all of that. Are you saying war's good? Is that where there's going? Or are you saying the suffragettes

are bad? Yeah which one Andy? Because the live audience and the people listening at home would like to know. Well actually I'm probably saying both. Welcome to Jim Beanie's. But no there is a debate isn't there about did actually actually did they achieve anything because they made themselves

very very hated at the time and then the impression was that by the end of the war that women had just were just so much more in society. And then would that have happened without them doing that movement in the first place? I don't know yeah it would be four long years yeah yeah but it's definitely like the tosses argue. Can I quickly just speaking of people hiding things in their muffs. It just like just reminded me of my favorite headline of all time. So the author Cormac McCarthy

died earlier this year and it was a headline that I saw years ago this is the headline so he only just makes a cameo and this is not really to do with him. Cormac McCarthy's ex-wife pulls gun from vagina during argument over aliens. Tell me you're clicking on that link immediately. The daily telegraph has changed hasn't it. What was that? Where was that? It was in a newspaper. Oh great yeah.

In Iraq. Yeah by Vince Mancini yeah. Flex out. Anyway yeah I've been wanting to say that for years on this podcast. Okay it is time for our final fact of the show and that is James. Okay my fact this week is that a designer from Indonesia who recycles cow dung has found a way to make stools

from stools. Very nice. Thank you. Yeah it's just a joke that stools and stools are the same thing but this is a thing that happened this was a display from the last Singapore design week which I read about. It's all about upcycling so they made lighting from old washing machine pipes. They made rugs from dog hair and this guy called Adhi Nugraha has his team basically at his university has taken this dung. They remove the water that gets rid of the smell. They add a load of wood glue and stuff like that and then they mold it into into anything you want. You can get speakers. You can get stools. You can get flower pots all sorts. That's very cool. That's interesting. It's a good way of recycling poo. A lot of it is burned isn't it? Cow dung in India which is really bad for the environment. I mean cows themselves are very bad for the environment and the dung like is full of methane and it just burning it just is a bad idea but it can be used to coat walls. Yeah that's another thing. Adobe for instance. Yeah adobe. Pooh and wool combined. Well so I was reading a thing about astronaut poo and what it might be used for for. Oh yeah and this is an exciting development so it might it might be in future that astronauts are able to power their own spaceship using polymers from their own poo. So that that's thrilling as in you can send astronauts to Mars and be like make your own way home when you hear some fruit and fiber.

Yeah exactly yeah six months and the other thing is they might be able to grow their own. This is a bit is a bit of a gross factor but trying to disregard it so they might be able to grow their own food from well I said control control the effect. No one's ready. There were scientists at Pennsylvania in 2017 they researched this thing a bioreactor right uh-huh so you effectively you you poo in the tube and then the puh tube puh tube that's a good name for it that's actually going to make it much more palatable to people I think and it produces gas it sort of gives off various biological gases and that fuels a microbial goo. Oh god that's the worst word you've used so far. We were all on board until microbial goo. Be squeamish. Microbial goo chief. They create a reactor and the good news good or bad news as I suppose it works and so that. So what is the reaction is it power or is it what are they getting out of it. This is to produce the Vegemite like microbial goo. Oh you're going to eat it. You're not and I should stress you're not eating anything that you have it's completely safe. You're filtering it. It's like it's all filtration. If I go to a restaurant I don't want to go it's just completely safe. Yes it was once

your shit but it's not anymore people change. I thought as well when you said about spearing stuff on walls I thought that was a thing that they were talking about deep space exploration because one of the problems that you have when you're flying further into space is that you go into these radiation bands where suddenly you're just getting smashed by it and if you put poo all over your walls. On the outside of the spaceship. Oh is it on the outside. I believe so. Who's doing that. I thought it was on the inside. Yeah who's who's. Who's going outside. You go on a spacewalk. You can go on a spacewalk. What does your son do at NASA again. Cleanest PDFs actually. Just tell them Arthur. You smear shit on the outside of a spaceship and we should be proud of him. Jesus Christ. You can imagine slowly you're sort of like 30 years into an intergalactic mission. You're outside your spaceship. You're smearing your later batch of shit on the outside guy. They're taking the fucking piss aren't they. I should have done that drama degree man. It's not worth it. Go to space they said. See the universe they said. I like the use of it was on the inside. That was normal. You were like yeah yeah living in like a shit hole. Well it makes more sense. Should we. They're going on a spacewalk. Dismiss shit all over your ship. Yeah I think it does. I could just imagine NASA checking in with you dad. A few months into the mission. Sorry sorry astronaut Shriver. We lost control and have you been. Okay send send him home. Send him home.

Astronaut Shriver you're going to need to turn your entire spaceship inside out. No Dan you need to poo into the tube. We're meant to filter it before eating. The video on poo tube isn't loading. I couldn't see it. Recycling. Recycling. Recycling. Recycling. Paper. Paper right. Paper. Well this is insane. Like okay you recycle paper. Sure. And then. If you don't shame on you. If you don't and then you have recycled paper. It's one of the easy ones. You recycle it again right. It's one of those things that you can just keep recycled. It turns out that you can only recycle paper seven times. The same number of times. You can fold it. Yes. Isn't that spooky. That is spooky. The tree knows. The tree is like no more.

Wrap me in wool and put me in the ground. It's kind of like the sort of Doctor Who regeneration limit isn't it. Can I ask you a question though. When you recycle. So I want to recycle this paper. Yeah. Put it in my recycling bin. How do I know if it's been recycled seven times and I'm wasting just wasting more recycling. This is nice paper as in the paper that you get. Thank you. Like it gets a bit rougher doesn't it. It does. Like the sort of rough low quality pulpy paper. Cheap notebooks will be made of that and then there are probably some industrial uses. Yeah but then if you've got a cheap notebook should you put. What should you put in there. I'm not the only one

who's stressed about this right. Absolutely. Because you put so much in there then you go to the big bin on the estate right and it's full of fucking plastic bags because no one reads the sign properly. And then is it worth me doing it. Yes. Someone contaminates the bin. I don't think we're saying don't recycle. I think I don't care. I'm going to really bite down on this. No you should do it. And I do it but it's frustrating. I know. I know. You have to be careful what you recycle. Wind turbine blades. They were out sometimes. Yeah. And they're really difficult to recycle. Okay. Because they're made of lots of different polymers and stuff. Yeah. They've got a new one. A new kind of material that they might use for turbine blades and you can recycle it by eating it. Oh wow. You just get some microbial goo and then you spread it on top. And so what's it made of. It's made of fibreglass. Yeah. But

as well as fibreglass it's got some plant derived polymers. It's got some synthetic polymers in and once it's been working for ages and you need to replace it you can kind of dissolve it and all the constituent parts separate and you can reuse all those different bits and the plant based ones you can turn into gummy bears. And the guy who invented it has made a wind turbine then dissolved it turn it into a gummy bear and eat those gummy bears. I mean I like gummy bears already. If I find out that I'm eating gummy bears which are made from renewable energy turbines I'm going to be over the f\*\*\*ing moon. That would be so good. One thing that can be recycled that has been a bit of a bane of the recycling industry for a while is nappies. Oh yeah. Because sometimes they contain lots of different components and it can be hard to separate them. This is a really good study from this year. It's researchers from Indonesia actually just whether your original fact is from James and it's researchers have found a way of taking nappies, used nappies, washing, drying, sterilizing, treading them right and then putting them into concrete and mortar. Wow. And they have successfully built a home that is 10% old nappies. Wow. And

it's completely sterile. It's completely like it's and it can use two cubic meters of used nappies, one single story home without any weakness of structure or integrity or anything like that. And it's completely safe. It uses up a load. I think that is about the amount a baby gets through in a year or two. Not my baby. We could build half of Milton Keyes at work this week. And so that's just a trial so far. But even in the UK, half of the Welsh A487 road is made of 100,000 nappies. Amazing. And they would just recycle it. I know plastic pellets that are then part of the road material and then he tarmac over the top. So when we were talking about the three little pigs earlier blowing down a shithouse, that actually could be a reality in the future. We're going to have to wrap up in a sec guys. We are at the end of the party. Oh. Yeah, so sorry. It's time. It's time. Yeah. Anything before we do? You can recycle rare earth metals using fish sperm. We're done. We're done. No one can tell me that's it. Is that the stuff you get those in your phone, don't you? The rare earth metals, yeah. This is a thing. It's, you know, Milton, Milton's the technical name for fish sperm, basically. So scientists use some, again, it's at the experimental stage. This is not widely used. But they made a powder out of some salmon milk because that is like largely composed of DNA, which largely is made up of phosphate, right? And that is, it's charged in a way that it attracts rare earth metals to it. Cool. So if you put it in a solution with some rare earth metals, because they obviously they're very important to recycle. And you want to recycle as much as you can keep it in the system going around. And if you put it in a solution with some salmon sperm, then it can be extracted. How much sperm do you need? Like, are we going to have to farm fish and make them ejaculate millions of times? I think that is the problem of scale in this. You're absolutely right, because it's like a salmon is quite small and it's, it is a waste product for the fish industry, but it's not. Not if you're a Mrs. Salmon. How are you getting the milk? Like, how do you collect milk? I'm just asking for a friend. I don't know. The milk man just comes round.

Okay, that's it. That is all of our facts. Thank you so much for listening. If you'd like to get in contact with any of us about the things we have said over the course of this podcast, we can be found on our Twitter accounts. I'm on at Shriverland, James. At James Harkin. Andy. At Andrew Hunter M. Cariad. At Cariad Lloyd on Instagram. And you can also get us on our group account on Twitter, which is at no such thing. Go to our website as well. No

such thing as a fish.com. All of our previous episodes are up there. And you can also join Clubfish. We've got any Clubfish members. And yeah, very nice. Very cool. It's a secret society for dorks. And it's, and it's awesome. So do join that. Otherwise, join us again next week for another episode. We'll see you then. Thank you so much. Soho Theatre. That was awesome. Goodbye.