







Introduction

Welcome to the Long Good Read. This is an experimental, almost entirely automated newspaper that uses an algorithm to pick the week's best longform journalism from the Guardian. The idea was started by developer Dan Catt, print-your own newspaper service Newspaper Club, the design team at Mohawk and the technology editorial team at the Guardian. We've put this together for you to read with your coffee. Enjoy! And please do tell us what you think - what else should we include in our experimental, automatic newspaper?

@thelonggoodread or

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Spend time listening to anyone in the media industry, you might think newspapers are dead. In fact it's just pulse of the big media businesses around the newspapers that is growing weaker, with readership and advertising revenues falling and increased competition from new technology just a part of that.

But newspapers themselves are a delightful, tactile, luxurious technology in their own right. The success of Newspaper Club, which lets anyone cheaply print their own newspaper, shows that newspapers have been reclaimed in a way.

Its success is partly down to our curiosity about being able to professionally print in a format that used to be hard for an individual to access, but it is also part of a wider craving for tangible, physical products to compensate for our digital dependency. Our screen lives make much of our life feel overwhelming, yet at the same time we have nothing physical to show for it. And there's a real human pleasure in being able to make and hold something in your hands.

Editorially, we get enormous satisfaction in exploring and playing with new projects. It's not about finding a future for paper, but a future for the stories that deserve telling. Where shall we go next?

Jemima Kiss Head of technology - editorial The Guardian theguardian.com/tech This newspaper is in beta. It's an experiment in combining the Guardian's readers, writers and robots with Newspaper Club's short-run printing tools, to produce a newspaper that's completely unlike the daily Guardian.

We're only printing 500 copies, and it's just for #guardiancoffee, so it needed to be quick and easy to produce. 'One person, one hour' was the goal, and achieving that required automating as much as possible, while still retaining an editorial eye.

First, the team at the Guardian wrote a small tool to sift through the most popular and interesting long form content, as driven by website analytics, comments and social media.

A selection of these are then imported into Newspaper Club's browser based tool, ARTHR, and they're quickly laid out into templates designed just for this project.

Then, it's onto one of Newspaper Club's printing presses, where it's printed, packed, and delivered straight to #guardiancoffee and into your hands.

Of course, this isn't designed to replace the daily Guardian paper. It's an experiment to see what's possible at the other end of the spectrum, using new technology and techniques to produce a newspaper as quickly as a webpage.

And if you like it, wait a little while and maybe we'll be able to generate one tailored just for you. **Tom Taylor**

Co-founder and head of engineering Newspaper Club newspaperclub.com/longgoodread And here we are, the last experimental newspaper in Series One.

Just like UK TV tends to have just 6 (or 3) episodes per series compared to the 24 or so they have in the US, this series of automated newspaper experimental things comes to the end in time for the holidays. We've had some great feedback from around the web, I've even reprinted one article all about us in the centre spread, in a sort of meta way. No doubt we'll typically get more now that the experiment is over.

If we were properly following TV tradition next week would be a Christmas Special containing all the best bits from the first 6 issues. But that rather seems to be extending the comparison too far.

Each week I talk about how all this happens with a press of a button or two, and then tag on a couple of lines about the cover. And each week I think to myself that I should explain a little more about what's going on with the covers. This week we're showing the number of articles in each of the paper's sections for the last 7 days.

The plan was always to have a cover that somehow represented that this was a data driven newspaper. That if this were a "real" thing (you never know, that may still happen) that the illustration on the cover would reflect the trends, tags and underlaying currents of the news. That after a while the reader would be able to scan the cover and understand how it changes from week to week, a glance would tell you if something had happened in sport, technology or some major breaking news.

We didn't have too much time to settle on a visualisation that we could carry over through the weeks, instead opting to play about with different formats. But in each case, the code was written so that just like the content and layout a button could be pressed, the system would suck up all the data we use and spit out the cover for the week.

Moving beyond that to a future where someone could customise their paper, telling the system the types of stories they wanted to see more of, logic dictates that each person would also get a slightly different cover. The mix going into their paper being different to someone else's.

Maybe for Season Two.

Dan Catt Developer revdancatt.com

Google's humanoid robots take on Amazon's courier drones

Android developer Andy Rubin leads new robotics division that aims to complete online shopping with home delivery by droids.
By Juliette Garside

Online shopping is not the most glamorous aspect of the digital revolution, but it has just become the latest Silicon Valley battleground, with droids racing drones to become the courier of the future.

First Amazon promised to eliminate the drudgery of the post office queue with parcels delivered by drone. Now Google has revealed that it is developing humanoid robots that could one day carry groceries to your door.

Andy Rubin, the Google executive who brought smartphones to the masses by developing Google's free Android software, has revealed he is working on a secret project for the search engine company to create a new generation of robots.

Rubin resigned unexpectedly from running Android in March, and over the past six months has quietly overseen Google's acquisition of seven small companies whose combined technology could be used to create a robot with animal characteristics such as a form of vision and moving limbs.

"With robotics it's a green field," Rubin told the New York Times. "We're building hardware, we're building software, We're building systems, so one team will be able to understand the whole stack."

Google robotics will be based in Palo Alto, California, and in Japan. The companies acquired include Industrial Perception, an American start-up that has developed digital eyes and robot arms for use in loading lorries, Holomni, which produces caster wheels that can rapidly swivel in any direction, and Japan's Schaft, whose robots generate as much power as a human and have mastered stable biped walking to cope with uneven ground (they can even retain their balance against the force of a human kick).

Sources say plans are to develop machines that can be used for a range of activities, from manufacturing small electronics like smartphones - still mostly assembled by hand - to packing goods in warehouses and ultimately making home deliveries.

If Amazon and Google's plans materialise, the unsuspecting online shopper could find a dazzling array of remote controlled technology arriving by air and road at their doorstep.

On Sunday, Amazon's founder, Jeff Bezos, kicked off his company's Christmas publicity push by revealing a project to use drones to deliver purchases

to the doorstep within half an hour of an order being placed.

Meanwhile, Google is approaching a breakthrough with self-driving cars that will use sensors and onboard computers to steer through traffic, raising the prospect that purchases could be delivered by robots in driverless vehicles.

The recently launched Google shopping service, a pilot project, is already delivering goods in San Francisco from Walgreens pharmacies, Target discount stores and American Eagle Outfitters.

Noel Sharkey, emeritus professor of artificial intelligence at the University of Sheffield, said: "This is a very exciting development at Google. The robotics community is waiting with bated breath to find out what is being planned. Clearly, given the companies that have been acquired this is going to be research on the development of humanoid robots.

"People should not be worried that [the robots] will be super intelligent. It is more likely they are going to develop these for domestic purposes such as assistance in elder care or perhaps for bar work or as receptionists. We can only speculate. But with the kind of money that Google can throw into a

project like this, it is likely to be astonishing."

Rubin worked for the German manufacturing firm Carl Zeiss, as a robotics engineer, before joining Apple and then Google.

He said that much of the technology needed for humanoid machines was already in place. There was room for improvement in areas including software and sensors, but mobility and moving hands were already well advanced.

He described the robotics project as a "moonshot", but unlike other Google research labs Rubin's division intends to produce machines that will eventually come to market.

"Like any moonshot, you have to think of time as a factor," Rubin said. "We need enough runway and a 10-year vision."

While Amazon's drones may prove little more than a publicity stunt, Rubin has a proven commercial track record. Android, launched not long after Apple's first iPhone, was slow to catch on, but its model of providing free software for use in any manufacturer's smartphone has helped Samsung surge ahead of Apple. Today, 80% of all smartphones sold run Android software.



The Dalles, Oregon, US, one of Google's data centres, which was opened in 2006. Photograph: AP

My week as an Amazon insider

It is the world's biggest online business. But with questions being asked about its treatment of employees, what is it like to work at Amazon? Carole Cadwalladr lands a job in one of its giant warehouses and discovers the human cost of our lust for consumer goods

By Carole Cadwalladr

The first item I see in Amazon's Swansea warehouse is a package of dog nappies. The second is a massive pink plastic dildo. The warehouse is 800,000 square feet, or, in what is Amazon's standard unit of measurement, the size of 11 football pitches (its Dunfermline warehouse, the UK's largest, is 14 football pitches). It is a quarter of a mile from end to end. There is space, it turns out, for an awful lot of crap.

But then there are more than 100m items on its UK website: if you can possibly imagine it, Amazon sells it. And if you can't possibly imagine it, well, Amazon sells it too. To spend 10½ hours a day picking items off the shelves is to contemplate the darkest recesses of our consumerist desires, the wilder reaches of stuff, the things that money can buy: a One Direction charm bracelet, a dog onesie, a cat scratching post designed to look like a DJ's record deck, a banana slicer, a fake twig. I work mostly in the outsize "non-conveyable" section, the home of diabetic dog food, and bio-organic vegetarian dog food, and obese dog food; of 52in TVs, and six-packs of water shipped in from Fiji, and oversized sex toys - the 18in double dong (regular-sized sex toys are shelved in the sortables section).

On my second day, the manager tells us that we alone have picked and packed 155,000 items in the past 24 hours. Tomorrow, 2 December - the busiest online shopping day of the year - that figure will be closer to 450,000. And this is just one of eight warehouses across the country. Amazon took 3.5m orders on a single day last year. Christmas is its Vietnam - a test of its corporate mettle and the kind of challenge that would make even the most experienced distribution supply manager break down and weep. In the past two weeks, it has taken on an extra 15,000 agency staff in Britain. And it expects to double the number of warehouses in Britain in the next three years. It expects to continue the growth that has made it one of the most powerful multinationals on the planet.

Right now, in Swansea, four shifts will be working at least a 50-hour week, hand-picking and packing

each item, or, as the *Daily Mail* put it in an article a few weeks ago, being "Amazon's elves" in the "21st-century Santa's grotto".

If Santa had a track record in paying his temporary elves the minimum wage while pushing them to the limits of the EU working time directive, and sacking them if they take three sick breaks in any threemonth period, this would be an apt comparison. It is probably reasonable to assume that tax avoidance is not "constitutionally" a part of the Santa business model as Brad Stone, the author of a new book on Amazon, The Everything Store: Jeff Bezos and the Age of Amazon, tells me it is in Amazon's case. Neither does Santa attempt to bully his competitors, as Mark Constantine, the founder of Lush cosmetics, who last week took Amazon to the high court, accuses it of doing. Santa was not called before the Commons public accounts committee and called "immoral" by MPs.

For a week, I was an Amazon elf: a temporary worker who got a job through a Swansea employment agency - though it turned out I wasn't the only journalist who happened upon this idea. Last Monday, BBC's Panorama aired a programme that featured secret filming from inside the same warehouse. I wonder for a moment if we have committed the ultimate media absurdity and the show's undercover reporter, Adam Littler, has secretly filmed me while I was secretly interviewing him. He didn't, but it's not a coincidence that the heat is on the world's most successful online business. Because Amazon is the future of shopping; being an Amazon "associate" in an Amazon "fulfilment centre" - take that for doublespeak, Mr Orwell - is the future of work; and Amazon's payment of minimal tax in any jurisdiction is the future of global business. A future in which multinational corporations wield more power than governments.

But then who hasn't absent-mindedly clicked at something in an idle moment at work, or while watching telly in your pyjamas, and, in what's a small miracle of modern life, received a familiar brown cardboard package dropping on to your doormat a day later. Amazon is successful for a reason. It is brilliant at what it does. "It solved these huge challenges," says Brad Stone. "It mastered the chaos of storing tens of millions of products and figuring out how to get them to people, on time, without fail, and no one else has come even close." We didn't just pick and pack more than 155,000 items

on my first day. We picked and packed the right items and sent them to the right customers. "We didn't miss a single order," our section manager tells us with proper pride.

At the end of my first day, I log into my Amazon account. I'd left my mum's house outside Cardiff at 6.45am and got in at 7.30pm and I want some Compeed blister plasters for my toes and I can't do it before work and I can't do it after work. My finger hovers over the "add to basket" option but, instead, I look at my Amazon history. I made my first purchase, TheRough Guide to Italy, in February 2000 and remember that I'd bought it for an article I wrote on booking a holiday on the internet. It's so quaint reading it now. It's from the age before broadband (I itemise my phone bill for the day and it cost me £25.10), when Google was in its infancy. It's littered with the names of defunct websites (remember Sir Bob Geldof's deckchair.com, anyone?). It was a frustrating task and of pretty much everything I ordered, only the book turned up on time, as requested.

But then it's a phenomenal operation. And to work in - and I find it hard to type these words without suffering irony seizure - a "fulfilment centre" is to be a tiny cog in a massive global distribution machine. It's an industrialised process, on a truly massive scale, made possible by new technology. The place might look like it's been stocked at 2am by a drunk shelf-filler: a typical shelf might have a set of razor blades, a packet of condoms and a *My Little Pony* DVD. And yet everything is systemised, because it has to be. It's what makes it all the more unlikely that at the heart of the operation, shuffling items from stowing to picking to packing to shipping, are those flesh-shaped, not-always-reliable, prone-to-malfunctioning things we know as people.

It's here, where actual people rub up against the business demands of one of the most sophisticated technology companies on the planet, that things get messy. It's a system that includes unsystemisable things like hopes and fears and plans for the future and children and lives. And in places of high unemployment and low economic opportunities, places where Amazon deliberately sites its distribution centres – it received £8.8m in grants from the Welsh government for bringing the warehouse here – despair leaks around the edges. At the interview – a form-filling, drug- and alcohol-testing, general-checking-you-can-read session at a local employ-

ment agency - we're shown a video. The process is explained and a selection of people are interviewed. "Like you, I started as an agency worker over Christmas," says one man in it. "But I quickly got a permanent job and then promoted and now, two years later, I'm an area manager."

Amazon will be taking people on permanently after Christmas, we're told, and if you work hard, you can be one of them. In the Swansea/Neath/Port Talbot area, an area still suffering the body blows of Britain's post-industrial decline, these are powerful words, though it all starts to unravel pretty quickly. There are four agencies who have supplied staff to the warehouse, and their reps work from desks on the warehouse floor. Walking from one training session to another, I ask one of them how many permanent employees work in the warehouse but he mishears me and answers another question entirely: "Well, obviously not everyone will be taken on. Just look at the numbers. To be honest, the agencies have to say that just to get people through the door."

It does that. It's what the majority of people in my induction group are after. I train with Pete - not his real name - who has been unemployed for the past three years. Before that, he was a care worker. He lives at the top of the Rhondda Valley, and his partner, Susan (not her real name either), an unemployed IT repair technician, has also just started. It took them more than an hour to get to work. "We had to get the kids up at five," he says. After a 10½-hour shift, and about another hour's drive back, before picking up the children from his parents, they got home at 9pm. The next day, they did the same, except Susan twisted her ankle on the first shift. She phones in but she will receive a "point". If she receives three points, she will be "released", which is how you get sacked in modern corporatese.

And then there's "Les", who is one of our trainers. He has a special, coloured lanyard that shows he's an Amazon "ambassador", and another that says he's a first aider. He's worked at the warehouse for more than a year and over the course of the week I see him, speeding across the floor, going at least twice the rate I'm managing. He's in his 60s and tells me how he lost two stone in the first two months he worked there from all the walking. We were told when we applied for the jobs that we may walk up to 15 miles a shift. He'd been a senior man-

ager in the same firm for 32 years before he was made redundant and landed up here. How long was it before you got a permanent job, I ask him. "I haven't," he says, and he holds up his green ID badge. Permanent employees have blue ones, a better hourly rate, and after two years share options, and there is a subtle apartheid at work.

"They dangle those blue badges in front of you," says Bill Woolcock, an ex-employee at Amazon's fulfilment centre in Rugeley, Staffordshire. "If you have a blue badge you have better wages, proper rights. You can be working alongside someone in the same job, but they're stable and you're just cannon fodder. I worked there from September 2011 to February 2012 and on Christmas Eve an agency rep with a clipboard stood by the exit and said: 'You're back after Christmas. And you're back. And you're not. You're not.' It was just brutal. It reminded me of stories about the great depression, where men would stand at the factory gate in the hope of being selected for a few days' labour. You just feel you have no personal value at all."

Why haven't they given you a proper job, I ask Les, and he shrugs his head but elsewhere people mutter: it's friends of the managers who get the jobs. It's HR picking names at random. It's some sort of black magic nobody understands. Walking off shift in a great wave of orange high-vis vests, I chat to another man in his 60s. He'd been working in the Unity mine, near Neath, he told me, until a month ago, the second time he'd been laid off in two years. He'd worked at Amazon last Christmas too. "And they just let me go straight after, no warning or anything. And I couldn't have worked any harder! I worked my socks off!"

When I put the question to Amazon, it responded: "A small number of seasonal associates have been with us for an extended period of time and we are keen to retain those individuals in order that we can provide them with a permanent role when one becomes available. We were able to create 2,300 full-time permanent positions for seasonal associates in 2013 by taking advantage of Christmas seasonality to find great permanent employees but, unfortunately, we simply cannot retain 15,000 seasonal employees."

And this is what Amazon says about its policy relating to sickness: "Amazon is a company in growth and we offer a high level of security for all our associates. Like many companies, we employ a system

to record employee attendance. We consider and review all personal circumstances in relation to any attendance issues and we would not dismiss anyone for being ill. The current systems used to record employee attendance is fair and predictable and has resulted in dismissals of 11 permanent employees out of a workforce of over 5,000 permanent employees in 2013."

It's worth noting that agency workers are not Amazon employees.

There's no doubt that it is hard, physical work. The Panorama documentary majored on the miles that Adam walked, the blisters he suffered, the ridiculous targets, and the fact that you're monitored by an Orwellian handset every second of every shift. As an agency worker, you're paid 19p an hour over the minimum wage - £6.50 - and the shifts are 10½ hours long. But lots of jobs involve hard, physical work. That's not the thing that bothers people. Almost everybody remains stoical in the face of physical discomfort and exhaustion. And they're Welsh: there's a warmth and friendliness from almost everyone who works there. My team leader is no corporate droid. He started on the shop floor, sounds like Richard Burton, and is gently encouraging. And yet.

"I've worked everywhere," a forklift truck driver tells me. "And this is the worst. They pay shit because they can. Because there's no other jobs out there. Trust me, I know, I tried. I was working for £12 an hour in my last job. I'm getting £8 an hour here. I worked for Sony before and they were strict but fair. It's the unfairness that gets you here."

An unfairness that has no outlet. In the wake of the BBC documentary, Hywel Francis, the MP for Aberavon, managed to get a meeting last week with Amazon's director of public policy, a meeting he's been trying to get for years. He's reluctant to speak about the complaints he's heard from his constituents but says that "the plant is exceptional in the local area in having no union representation. It's been a long haul to even get in there and find out what is going on." It's been a black hole where the lack of any checks upon its power has left a sense that everything is pared to the absolute bone - from the cheapest of the cheap plastic safety boots, which most long-term employees seem to spend their own money replacing with something they can walk in, to the sack-you-if-you're-sick policy, to the 15-minute break that starts wherever you happen to

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be in the warehouse. On my third morning, at my lowest point, when my energy has run out and my spirits are low, it takes me six minutes to walk to the airport-style scanners, where I spend a minute being frisked. I queue a minute for the loos, get a banana out of my locker, sit down for 30 seconds, and then I get up and walk the six minutes back to my station.

To work at Amazon is to spend your days at the coalface of consumerism. To witness our lust for stuff. This year's stuff includes great piles of Xboxes and Kindles and this season's Jamie Oliver cookbook, *Save With Jamie* (you want to save with Jamie? Don't buy his sodding book), and Paul Hollywood's *Pies & Puds*, and *Rick Stein's India*.

The celebrity chef cookbooks incense me. They don't even bother taking them out of the boxes. They lie in great EU butter mountain-sized piles at the ends of the aisle. Cook an egg on the telly and it's like being given a licence to print money for all eternity. The vast majority of people working in the warehouse are white, Welsh, working class, but I train with a man who's not called Sammy, and who isn't an asylum seeker from Sudan, but another country, and I spend an afternoon explaining to him what the scanner means when it tells him to look for a Good Boy Luxury Dog Stocking or a Gastric Mind Band hypnosis CD.

It's the Barbie Doll girl's Christmas advent calendar, however, that nearly breaks me. I traipse back and forth to section F, where I slice open a box, take another Barbie advent calendar, unpick the box and put it on the recycling pile, put the calendar, which has been shipped from China, passed from the container port to a third-party distributor and from there to the Amazon warehouse, on to my trolley and pass it to the packers, where it will be repackaged in a different box and finally reach its ultimate destination: the joy in a small child's heart. Because nothing captures the magic of Christmas more than a picture of a pneumatic blonde carrying multiple shopping bags. You can't put a price on that (£9.23 with free delivery).

We want cheap stuff. And we want to order it from our armchairs. And we want it to be delivered to our doors. And it's Amazon that has worked out how to do this. Over time, like a hardened drug user, my Amazon habit has increased. In 2002, I ordered my first non-book item, a *This Life* series 1 video; in 2005, my first non-Amazon product, a sec-

ondhand copy of a biography of Patricia Highsmith; and in 2008, I started doing the online equivalent of injecting intravenously, when I bought a TV on the site. "We are the most customer-centric company on earth," we're told in our induction briefing, shortly before it's explained that if we're late we'll get half a point, and after three of them we're out. What constitutes late, I ask. "A minute," I'm told.

I grew up in South Wales and saw first-hand how the 1980s recession slashed a brutal gash through everything, including my own extended family. I've always known that there's only a tissue-thin piece of luck between very different sorts of lives. But then my grandfather worked in a warehouse in Swansea. In my case, there really is only a tissue-thin piece of luck between me and an Amazon life. I have a lot of time to think about this during my 10½-hour day.

At the Neath working men's club down the road, one of the staff tells me that Amazon is "the employer of last resort". It's where you get a job if you can't get a job anywhere else. And it's this that's so heartbreaking. What did you do before, I ask people. And they say they're builders, hospitality managers, marketing graduates, IT technicians, carpenters, electricians. They owned their own businesses, and they were made redundant. Or the business went bust. Or they had a stroke. Or their contract ended. They are people who had skilled jobs, or professional jobs, or just better-paying jobs. And now they work for Amazon, earning the minimum wage, and most of them are grateful to have that.

Amazon isn't responsible for the wider economy, but it's the wider economy that makes the Amazon model so chilling. It's not just the nicey nice jobs that are becoming endangered, such as working in a bookshop, as Hugh Grant did in Notting Hill, or a record store, as the hero did in Nick Hornby's High Fidelity, or the jobs that have gone at Borders and Woolworths and Jessops and HMV, it's pretty m everything else too. Next in line is everything: working in the shoe department at John Lewis, or behind the tills at Tesco, or doing their HR, or auditing their accounts, or building their websites, or writing their corporate magazines. Swansea's shopping centre down the road is already a planning disaster; a wasteland of charity shops and what Sarah Rees of Cover to Cover bookshop calls "a secondrate Debenhams and a third-rate Marks and Spencer".

"People know about their employment practices, and all the delivery men hate them, but do people remember that when they click? Probably not. We try and kill them with kindness," she says. "You can't put the genie back in the bottle." But then there is nothing else to try and kill them with. It's cheaper, often for her, to order books on Amazon than through her distributor. "We're upfront about it and tell people, but there is just no way to compete with them on price."

There is no end to Amazon's appetite. "It's expanding in every conceivable direction," Brad Stone tells me. "It's why I called my book *The Everything Store*. Their ambition is to sell everything. They already have their digital services and their enterprise services. They've just started selling art. Apparel is still very immature and is set for expansion. Groceries are the next big thing. They're going very strongly after that because it will cut down costs elsewhere. If they can start running their own trucks in major metro areas, they can cut down the costs of third-party shippers."

In the UK, I point out, everyone already delivers groceries: Tesco, Asda, Waitrose, Sainsbury's. "I suspect they'll acquire," he says. And everywhere it kills jobs. Shops employ 47 people for every \$10m in sales, according to research done by a company called ILSR. Amazon employs only 14 people per \$10m of revenue. In Britain, it turned over £4.2bn last year, which is a net loss of 23,000 jobs. And even the remaining jobs, the hard, badly paid jobs in Amazon's warehouses, are hardly future-proof. Amazon has just bought an automated sorting system called Kiva for \$775m. How many retail jobs, of any description, will there be left in 10 years' time?

Our lust for cheap, discounted goods delivered to our doors promptly and efficiently has a price. We just haven't worked out what it is yet.

It's taxes, of course, that pay for the roads on which Amazon's delivery trucks drive, and the schools in which its employees are educated, and the hospitals in which their babies are born and their arteries are patched up, and in which, one day, they may be nursed in their dying days. Taxes that all its workers pay, and that, it emerged in 2012, it tends not to pay. On UK sales of £4.2bn in 2012, it paid £3.2m in corporation tax. In 2006, it transferred its UK business to Luxembourg and reclassified its UK operation as simply "order fulfilment" business. The Luxembourg office employs 380 peo-

ple. The UK operation employs 21,000. You do the

Brad Stone tells me that tax avoidance is built into the company's DNA. From the very beginning it has been "constitutionally oriented to securing every possible advantage for its customers, setting the lowest possible prices, taking advantage of every known tax loophole or creating new ones". It's something that Mark Constantine, the co-founder of Lush cosmetics, has spent time thinking about. He refuses to sell through Amazon, but it didn't stop Amazon using the Lush name to direct buyers to its site, where it suggested alternative products they might like.

"It's a way of bullying businesses to use their services. And we refused. We've been in the high court this week to sue them for breach of trademark. It's cost us half a million pounds so far to defend our business. Most companies just can't afford that. But we've done it because it's a matter of principle. They keep on forcing your hand and yet they don't have a viable business model. The only way they can afford to run it is by not paying tax. If they had to behave in a more conventional way, they would struggle.

"It's a form of piracy capitalism. They rush into people's countries, they take the money out, and they dump it in some port of convenience. That's not a business in any traditional sense. It's an ugly return to a form of exploitative capitalism that we had a century ago and we decided as a society to move on from."

In Swansea I chat to someone whose name is not Martin for a while. It's Saturday, the sun is shining and the warehouse has gone quiet. We've been told to stop picking. The orders have been turned off like a tap. "It's the weather," he says. "When it rains, it can suddenly go mental." We clear away boxes and the tax issue comes up. "There was a lot of anger here," he says. "People were very bitter about it. But I'd always say to them: 'If someone told you that you could pay less tax, do you honestly think you would volunteer to pay more?" He's right. And the people who were angry were also right. It's an unignorable fact of modern life that, as Stuart Roper of Manchester Business School tells me, "some of these big brands are more powerful than governments. They're wealthier. If they were countries, they would be pretty large economies. They're multinational and the global financial situation allows them to ship money all over the world. And the government is so desperate for jobs that it has given away large elements of control."

It's a mirror image of what is happening on the shop floor. Just as Amazon has eroded 200 years' worth of workers' rights through its use of agencies and rendered a large swath of its workers powerless, so it has pulled off the same trick with corporate responsibility. MPs like to slag off Amazon and Starbucks and Google for not paying their taxes but they've yet to actually create the legislation that would compel them to do so.

"They are taking these massive subsidies from the state and they are not paying back," says Martin Smith of the GMB union. "Their argument is that they are creating jobs but what they are doing is displacing and replacing other jobs. Better jobs. And high street shops tend to pay their taxes. There is a £120bn tax gap that is only possible because the government pay tax benefits to enable people to survive. When companies pay the minimum wage they are in effect being subsidised by the taxpayer."

Back in Swansea, on the last break of my last day, I sit and chat with Pete and Susan from the Rhondda

and Sammy, the asylum seeker from Sudan. Susan still wants a permanent job but is looking more doubtful about it happening. Her ankle is still swollen. Her pick rate has been low. We've been told that next week, the hours will increase by an hour a day and there will be an extra day of compulsory overtime. It will mean getting their children up by 4.30am and Pete is worried about finding a baby-sitter at three days' notice. When I ask Sammy how the job compares with the one he had in Sudan, where he was a foreman in a factory, he thinks for a minute then shrugs: "It's the same."

There have always been rubbish jobs. Ian Brinkley, the director of the Work Foundation, calls Amazon's employment practices "old wine in new bottles". Restaurants and kebab shops have done the same sort of thing for years. But Amazon is not a kebab shop. It's the future. Which may or may not be something to think about as you click "add to basket".



Boxing clever: staff at Amazon's Swansea warehouse prepare for one of its busiest days. Photograph: Rex Features

Top 20 things scientists need to know about policy-making

There are some common misunderstanding among scientists about how governments make their policy decisions.

By Chris Tyler

When scientists moan about how little politicians know about science, I usually get annoyed. Such grouching is almost always counterproductive and more often than not betrays how little scientists know about the UK's governance structures, processes, culture and history.

So when the Guardian reported on a Nature article that listed 20 things that politicians should know about science, I started reading it with apprehension, half expecting my head to explode within a few paragraphs.

I needn't have worried. The authors, Professors William Sutherland, David Spiegelhalter and Mark Burgman, have produced a list that picks up on many of the challenges that scientists report when engaging with policy makers, and it does so in a constructive way.

It has been printed out and stuck on my wall. It has been passed around the office. I am sure to reference it often.

But the fact remains that all too often, scientists blame politicians for failures when science meets policy-making, when in truth the science community needs to do much more to engage productively with the people who actually make policy.

There are similarities with long-standing and successful efforts to improve the relationship between science and the media. Fiona Fox, the director of the Science Media Centre, has repeatedly and correctly asserted that "the media will 'do' science better when scientists 'do' the media better". I believe that the same is true of science-policy connections.

So here is a list of 20 things that I and my fellow science advisers at the Parliamentary Office of Science and Technology think scientists should know about policy. We knocked up the list in just an afternoon last week but it should stimulate debate, and if anyone were to print it out and stick it on their wall or pass it round their labs, it probably wouldn't do any harm.

Here we go, in no particular order ...

1. Making policy is really difficult

The most common science rant about policy making includes a flippant comment about policy decisions being straightforward. I've heard people say that it is "obvious" that the UK should decriminalise drugs; stimulate the economy by doubling the science budget; reform our energy economy by investing extensively in nuclear. Such decisions are not straightforward at all. Public policy is always more complex than it seems, involving a wide range of inputs, complicated interactions with other policies, and varied and unpredictable outcomes. Simple solutions to complex problems are rarer than most people think.

2. No policy will ever be perfect

Whatever the decision, the effects of policy are almost always uneven. For example, any changes to taxes and benefits will leave some people better off and other worse off; and while the research impact agenda has been undoubtedly positive in some respects, it has caused problems in others.

3. Policy makers can be expert too

Scientists often consider themselves as the "experts" who engage with policy makers. In my experience, many policy makers are experts too. Some have excellent research credentials, and frequently they understand the research base well. When I worked at the University of Cambridge, one of my jobs was to connect researchers to policy makers; the researchers often told me how much they learned from speaking to policy makers. In other words, if you are a scientist talking to a policy maker, don't assume that you are the only expert in the room.

4. Policy makers are not a homogenous group

"Policy maker" is at least as broad a term as "researcher". It includes civil servants ranging from senior to junior, generalist to specialist, and to those in connected agencies and regional government; it includes politicians in government and opposition, in the Commons and the Lords; and then there are all the people who might not directly make the decisions, but as advisers can strongly influence them.

5. Policy makers are people too

See number 12 of the Sutherland, Spiegelhalter and Burgman list. Policy makers are people who, despite extensive training and the best of intentions, will sometimes make bad decisions and get things wrong. Also, they may – like scientists – choose to act in their own interest ...

6. Policy decisions are subject to extensive scrutiny

... which is why, like science - which mitigates human nature insofar as it is possible with the principles of academic rigour and peer review - policy is regulated by professional guidelines, a variety of checks and balances, and scrutiny that comes from a wide range of institutions and angles. For example, Parliament scrutinises government and the House of Lords scrutinises the House of Commons.

7. Starting policies from scratch is very rarely an option

A former government minister once told me that, on taking office, he decided to meet with a number of academics to seek advice on how to fix his particular policy domain - which was, and still is, largely broken. He found the experience to be deeply frustrating because everyone he met said: well, if you were designing the system from scratch, this is what it should look like. But he wasn't; he needed solutions that could evolve from within the existing ecosystem. This rule applies in a lot of policy areas, from infrastructure to education, from the NHS to pensions.

8. There is more to policy than scientific evidence

Policies are not made in isolation. First there is a starting point in current policy, and there are usually some complex interactions between policies at different regional scales: local, national and international. This is true of policy areas such as drugs, defence, immigration and banking regulations. Law, economics, politics and public opinion are all important factors; scientific evidence is only part of the picture that a policy maker has to consider. Most of the major policy areas that consistently draw opprobrium from scientists are far more complicated than just scientific evidence: energy, drugs and health, to name just three.

9. Economics and law are top dogs in policy advice

When it comes to advice sought by policy makers, economics and law are top dogs. Scientific evidence comes further down the pecking order. Whether or not this is the best way to make policy is not the point, it is just a statement of how things work in practice.

10. Public opinion matters

Many of the most important public policy decisions are made by people who were directly elected, and most of the rest are taken by people who work for them. We live in a democracy and public opinion is a critical component of the policy process. The public is directly involved in many planning decisions and public opinion is a consideration in the distribution of healthcare providers, schools and transport services. Complex policy areas such as drugs, alcohol, immigration and education, are all heavily influenced by public opinion.

11. Policy makers do understand uncertainty

It is commonly asserted by scientists that policy makers prefer to be given information that is certain, and I have even heard some say that policy makers don't understand uncertainty. On the contrary: politicians are surrounded by and constantly make formal and informal assessments of uncer-

tainty (for example, when considering polling information) and civil servants are expert at drawing up policy options with incomplete information (which is just as well because complete information is a fantasy). It is true to say that policy makers are not fond of information so laden with caveats that it is useless. Better than hazy comments about policy makers not understanding uncertainty, the Sutherland, Spiegelhalter and Burgman list is a productive explanation of what knowledge and skills would help policy makers.

12. Parliament and government are different

In the UK, the distinction between parliament and government is profound. Parliament - the legislature - debates public issues, makes laws and scrutinises government. Government - the executive - is led by select members of parliament and is responsible for designing and implementing policy. Parliament is made up of over a thousand MPs and peers, with a small staff of only a few thousand. Government is made up of only a hundred MPs and peers, with a staff of hundreds of thousands. For the record, I work in parliament.

13. Policy and politics are not the same thing

Policy is mostly about the design and implementation of a particular intervention. Politics is about how the decision was made. Policy is mostly determined in government, where the politics is focused by ministers, the cabinet, and the party leadership. In the House of Commons, there is less policy and more politics.

14. The UK has a brilliant science advisory system

The UK is leading the world with its science advisory system. Every government department has (in theory) a chief scientific adviser reporting to his or her own private secretary (the top departmental civil servant) and to the government chief scientific adviser, who reports directly to the prime minister. In parliament, we have the Parliamentary Office of Science and Technology, and in addition science advisers in the library research services and select committee offices.

15. Policy and science operate on different timescales

When policy makers say that they need information soon, they mean within days or weeks, not months. This is not a flaw of the system; it is the way it is. If scientists want to engage with policy they need to be able to work to policy makers' schedule. Asking policy makers to work to a slower timetable will result in them going elsewhere for advice. And make your advice concise.

16. There is no such thing as a policy cycle

I have seen many flow charts depicting "the policy cycle". They usually start with an idea, move through a sequence of research, design, implementation and evaluation, which then feeds back into the start of the cycle. Fine in theory, but in practice it is a lot more complicated. Policy making is iterative; the art of the possible.



A man smoking a cannabis cigarette. Photograph: David Bebber/Reuters

17. The art of making policy is a developing science

We live in exciting times for policy making. Various initiatives for better governance are under way, including ones for opening up the policy making process, and others for building evaluation into policy implementation. The new What Works Centres are roughly based on Nice (the National Institute for Health and Care Excellence, the healthcare body that recommends which treatments the NHS should use), but instead it will consider how to reduce crime, stimulate local economic growth, promote better ageing and use early intervention better. Research evidence, particularly from the social sciences, will play a key role. In another innovation, the Cabinet Office is set to establish a Policy Lab.

18. 'Science policy' isn't a thing

When policy makers talk about "science policy", they are usually talking about policies for things like research funding, universities and innovation policy. Researchers additionally use "science policy" to talk about the use of research evidence to help deliver better policies in a wide range of areas. I find it helps to distinguish between "policy for science" on the one hand, and "science for policy" on the other.

19. Policy makers aren't interested in science per se

Well some are, but on the whole, policy for science is pretty niche. Policy makers tend to be more interested in research evidence to inform policy making, but let's be clear: they are not interested in philosophical conversations such as "what constitutes evidence" or "the difference between science advice, social science advice and engineering advice". Policy makers care about research evidence insofar as it helps them to make better decisions.

20. 'We need more research' is the wrong answer

Policy decisions usually need to be made pretty quickly, and asking for more time and money to conduct research is unlikely to go down well. Policy makers have to make decisions with incomplete information (see #11) so they may exhibit frustration with researchers who are unable to offer an opinion without first obtaining funding for a multi-year research programme. I'm not saying that more research isn't often needed; it is. But it is not the answer I would ever choose to give to a policy maker seeking scientific advice.

Dr Chris Tyler is director of the Parliamentary Office of Science and Technology. He is on Twitter @cptyler and Google+

Lee Hazlewood: the wayward guru of cowboy psychedelia

Best known for reviving Nancy Sinatra's career with These Boots Are Made for Walkin', Lee Hazlewood was a highly unorthodox record producer. An epic box set collects his forgotten songs By Dorian Lynskey

When Lee Hazlewood died from renal cancer in 2007, his obituarists had a complicated story to tell: his enormous success as a hitmaker for Nancy Sinatra in the 1960s, his relocation to Sweden in the 70s, his neglected solo career, his long semi-retirement and his belated return to the music industry, feted by the likes of Nick Cave, Jarvis Cocker and Sonic Youth. The pieces didn't quite fit together. He was funny, charismatic and supportive but he could also be cold, vengeful and mean. Like Serge Gainsbourg, he made both exquisitely subversive pop music and cynical kitsch, and gave the impression that he regarded his career as a private joke with financial benefits. The only niche he inhabited was the one he carved for himself, and that could get lonely.

Barely acknowledged in the obituaries, however, was Lee Hazlewood Industries (LHI), the label he ran from 1966 to 1971. Neither commercially fruitful nor critically acclaimed, most of its 305-song output, which pinballed between country, soul, girl groups, psychedelia and novelty pop, fell through the cracks of history, almost as if it had never existed. Now reissue specialists Light in the Attic have salvaged it all in an epic box set, There's a Dream I've Been Saving, which tells the story of a label that could only have existed in a particular era of the Los Angeles music business, under the aegis of a very unusual man.

When I met him in 2002, the 72-year-old was a cranky raconteur with a taste for gruff one-liners. I asked him what inspired him to enter the music business. "Poverty," he growled, lighting a Marlboro. "I had a couple a dozen jobs in my life and I didn't like any of 'em."

Born in 1929, the son of an itinerant Oklahoma oilman, Hazlewood made a small fortune as a songwriter and producer for Duane Eddy before Frank Sinatra cajoled him into relaunching his daughter Nancy's flatlining career. Thanks in part to Hazlewood's unorthodox vocal coaching ("Sing like a 14-year-old girl who fucks truck-drivers"), 1966's These Boots Are Made for Walkin' was a colossal hit, earning Hazlewood the lasting gratitude of Frank and a generous offer from Decca: his own label, no strings attached. "Lee was great at taking advantage of situ-

ations, especially when they involved getting free money," says Suzi Jane Hokom, his colleague and lover throughout the label's lifetime.

It was an exhilarating time to be in LA. The city was full of money, music and the conviction that everyone was just one hit away from the big time. Hazlewood met the 20-year-old Hokom at the Hollywood restaurant Martoni's, a bustling music industry hangout. "He was funny and charming and he thought I was great because here was this girl singer who wanted to be a record producer," she says. "He thought that was unusual. It was a mutual admiration society."

She joined LHI as singer, producer and graphic designer; eventually they fell in love. "He used to call himself a grey-haired sonofabitch. It was a caricature he created. He liked to talk like a country guy who didn't have a dime, but then if he bought a car it had to be the biggest, longest car." It was a turbulent relationship. The label's logo, a classical Greek profile, was based on a necklace Hazlewood bought for Hokom while on holiday in Mexico. When she loaned it to Light in the Attic to photograph for the box set, she had to explain that it was chipped when she threw it at him during a heated spat.

Hazlewood had a nose for untested talent. He offered Texas-born radio DJ Tom Thacker the job of vice-president after a game of football at a friend's house. He was an unorthodox boss. His private office had blackout blinds and he liked to turn up for work around midday. One morning he came in early and found Thacker already at his desk. "Have you ever been late a day in your life?" he asked. No, said Thacker. "Well have you ever missed a day?" No. Horrified, Hazlewood ordered him to take the rest of the day off. "It was the best time in my life," says Thacker. "He was fun to work for. Real easy. It didn't seem to matter where Lee went, he could always find a parking place when no one else could."

Hazlewood liked to sign people he met around town or who turned up unannounced at 900 Sunset Boulevard, including Detroit girl group Mama Cats, whom he renamed Honey Ltd. "He had the deepest voice I'd ever heard in my life," says the band's Alex Sliwin. "I couldn't even understand him. And I'd never seen anyone with a moustache like that. He was very Texan. He was very sweet and embracing of us: his 'little darlin's'."

Even before becoming a fully independent label in

1968, LHI operated like one, prizing speed, spontaneity and instinct. LHI signed artists at such a rate that even the staff couldn't keep track. When I ask Thacker about Hamilton Streetcar, who recorded the loopy psych-pop single Invisible People ("They're gonna get you baby! They're gonna make you invisible too!"), he doesn't know who I'm talking about. Hazlewood's approach was to record singles as quickly and cheaply as possible and hope some of them took off. "It didn't matter about the style," says Thacker. "It was whatever sounded good and sounded like it could be a hit."

"It was like, OK, crank this out," says Hokom.
"For me it was terrifying because I'm a
perfectionist. It was challenging, especially when
you're the only girl who's doing that." Fortunately
LHI's studio talent pool included future TV themetune maestro Mike Post, Phil Spector protege Jack
Nitzsche and some of the ubiquitous LA session
musicians known as the Wrecking Crew.

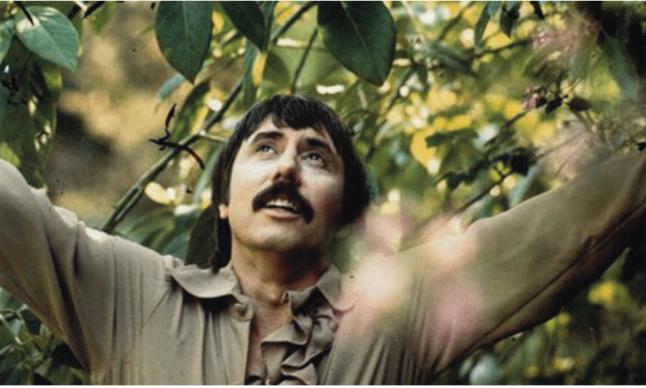
It was a well-oiled machine but it wasn't producing the goods. Even as Hazlewood continued to fare well outside the label with Nancy Sinatra - songs such as Some Velvet Morning and Sugar Town smuggled X-rated sentiments into the Top 40 - LHI artists came and went, and even his beloved Honey Ltd fizzled out. The only signing who went on to bigger things was country-rock pioneer Gram Parsons, who left the International Submarine Band after their Hokom-produced 1968 album to join the Byrds. Hazlewood, who never liked Parsons, was so enraged that he sued to have the singer's vocals removed from the Byrds' Sweetheart of the Rodeo.

He was just as controlling when Hokom received an offer to meet the Beatles (he hated them, too) in New York to discuss producing artists on their new Apple label. "That was an absolute no," says Hokom, who stormed out and went to New York anyway, just for the experience. "Lee was a very possessive man and the Beatles were kind of intimidating to someone who likes to say he's not intimidated by anyone."

To most of his colleagues, Hazlewood continued to appear wry and unflappable even as LHI's chronic hit-drought threatened its survival. "He must have had his moments but did I ever see one? No," says Honey Ltd's Joan Glasser. "I have no recollection of him showing any anger or remorse about anything. He was a survivor. He rolled with everything." Glasser's husband, who recorded and produced for

LHI as Michael Gram, says, "Tom and Lee were incredible. They made you feel like a human being." Hazlewood's inner circle, however, witnessed a more vulnerable side. "When the money started

had enough and walked. By that point Hazlewood had tax problems, his teenage son was almost old enough for the Vietnam draft, and LHI was dying anyway, so Sweden looked like the perfect escape



A nose for untested talent \dots Lee Hazlewood. Photograph: Mark Pickerel

running low we started figuring what are we gonna do?" says Thacker. "There were tears and all kinds of angst over the failure of the label because we were young, we were hopeful, we were invincible, and when we didn't get hits we were terribly disappointed."

By the end of the 60s, Hazlewood could no longer find a parking place in the LA music business but, to his surprise, he had become a celebrity overseas. En route to Russia in 1969 to accept a wood cabin in honour of These Boots Are Made for Walkin', he stopped off in Sweden and met director Torbjörn Axelman, another energetic, hard-living rogue. They became lifelong friends. "Lee was a cowboy all through," says Axelman via email. "He was a great entertainer and storyteller. I miss him a lot."

While working with Axelman on the peculiar 1970 TV special Cowboy in Sweden, Hazlewood began an affair with co-star Lena Edling. Hokom had finally

route. He spent the rest of the decade there, making increasingly strange records and films with Axelman.

Was Thacker surprised by the move? "Nothing about Lee really surprised me. He was a very spontaneous human being."

"I think he knew he'd burned his bridges in LA and here was a brand new world where he had a built-in fanclub," says Hokom. "You have to make friends with people in this town. Instead of maintaining his friendships he kind of abandoned them. He could detach himself from things that weren't going his way. I think he left a lot of these little broken bits around. He really needed a new start." ("He could be distant and he could be extremely sweet," Thacker responds. "I just thought of it as artistic moods.")

There was one last piece of unfinished business, emotional rather than financial. In 1971, Hazlewood

recorded his finest work, a mordant breakup album called Requiem for an Almost Lady. When I met him he laughed off the idea that it was all about Hokom: "I've had my pocketbook bent but I've never had my heart broken."

But if that's true, then why did he have a finished copy hand-delivered to Hokom's house? "That was the cherry on top," she says with a harsh laugh. "I was shocked. In a way it was hurtful and in a way it was poignant. I had moved on and he was still carrying a torch. Whenever he'd be in town I'd find little love notes slipped under my doormat. It was really sad. He'd be in touch from time to time and we'd go out for dinner. Every time I saw him he seemed a little more down. He drank nothing but Chivas Regal when I was with him and he told me much later that he was drinking a quart of vodka a day. And I said, wow, what happened to Chivas Regal? I think he resigned himself."

Hazlewood sank from view in the 80s and 90s, thwarting attempts by the Sub Pop label to reissue his work and release a heavyweight tribute album featuring fans such as Nirvana and Beck. Later, other labels approached him and he eventually relented, although he admitted that the endorsement of a Cocker or Cave meant less to him than the royalty cheques he got from Billy Ray Cyrus's cornball version of These Boots Are Made for Walkin'. In his final years he became a beloved cult hero - "an obscure old fuck," as he put it - but only now has the rest of the LHI roster been rescued from the shadows.

"These were my friends, people with great dreams," Hokom says wistfully. "This was their moment in the sun and it kind of fell apart. For Lee I think it was just another business venture. I'm not even sure how much his heart was in it after a while." She sighs. She doesn't want to badmouth him ("I stayed with him for six years. There must have been a connection, right?") but he still perplexes, frustrates and saddens her, six years after his death.

"Y'know, he was such an odd fellow and I look back and ask what exactly was it, Suzi Jane, that you saw in this guy? And I think it was his incredible writing. He enamoured me with his imagination. He just had great stories."

There's a Dream I've Been Saving: Lee Hazlewood Industries 1966-1971 is out on Monday on Light in the

Interwoven Globe: a show that reveals the fabric of power

An exhibition at New York's Metropolitan Museum of Art tells the story of empire and global trade through textile, providing a stunning corrective to Eurocentrism

By Amanda Vickery

Interwoven Globe: The Worldwide Textile Trade, 1500-1800 at the Metropolitan Museum of Art in New York claims to be the first major exhibition to explore the transmission of taste across the known world through the medium of fabric. There are 160 textiles and garments on display, from tapestries and bedcovers to vestments, shawls and chintz dresses - most rarely exhibited, many never seen before - occupying nine big galleries. It is a blockbuster of a show proclaiming the role and significance of cotton, silk, wool and linen, dyeing, printing, weaving and embroidering in the history of our world.

How we should tell that global history, however, is a matter of fraught debate. There is a grandiloquent suite of tapestries in the show, commissioned by Louis XVI, showing the four continents. An allegorical Africa offers its resources – ivory and ostrich feathers – in exchange for commodities. Silks, pearls, porcelains, and chests of spices and tea swamp Asia's throne. America is a demure young woman needing French guidance. But Europe presides over shipping barrels and a sail, commercially supreme. The tapestries are a monument to complacent colonialism and the European grasp on the world's resources. The west takes the rest.

And indeed this was how the story used to be told: a heroic tale of discovery and conquest. Or as Adam Smith put it in *The Wealth of Nations* (1776): "The discovery of America, and that of a passage to the East Indies by the Cape of Good Hope, are the two greatest and most important events in the history of mankind."

It is inarguable that the golden age of European maritime navigation was transformative for the economies, aesthetics and worldview of the west, with far-reaching, mixed and often devastating consequences for the communities the mariners reached. To maritime trading nations the seas were not a barrier but a highway. Where we see emptiness, the Venetians and Genoese, Portuguese, Spanish, and later the Dutch and English saw sea-lanes and the road to El Dorado.

As far as Europeans were concerned, the oldest global commodities were not textiles but spices:

pepper, ginger, cloves, nutmeg, cardamom, mace and cinnamon. Think Christmas cake. They were the mainstay of most world cuisines, but beyond flavouring, their uses were manifold. They were a vital preservative before canning or refrigeration, and key ingredients in perfumes, ritual preparations, love potions and painkillers. Spices were literally worth their weight in gold, but the most precious came predominantly from the socalled Spice Islands, now part of the Indonesian archipelago. Spices were transported by ship across the Indian Ocean, relying on the monsoon winds, by Turkish, Arab, Persian, Indian and Malay merchants, many Muslim. The spread of Islam across the Near East facilitated international trade for Muslim merchants as laws and commercial customs were shared. Arabic was the lingua franca of eastern trade for centuries.

The cargo tended to be handed on to Christian dealers in Cairo and Constantinople, and from thence to Venice and Genoa, and north. The Europeans had no choice but to pay a hefty mark-up price for Asian goods carried on Arab ships or by camel trade. It was direct access to spices that the first expeditions sought.

The dates of "discovery" are etched in the history of derring-do. As every schoolboy used to know, in 1492 the Genoese Christopher Columbus reached the West Indies in the pay of the Spanish. In 1498, Portuguese sea captain Vasco da Gama led a fleet of four ships around the treacherous Cape of Good Hope, and completed the journey to India. Three years later, Da Gama went with 20 warships to bombard and seize Calcutta. In 1500, the Portuguese claimed Brazil, and in 1521 Ferdinand Magellan reached the spiceries at last. In the same year, Hernán Cortés landed in Mexico, or "New Spain", laying waste to the Aztec with guns and germs within three years. The discovery of vast reserves of silver in northern Mexico in 1545 funded the Spanish crown for centuries, and led to a truly global exchange, because silver for coinage was one of the few things the Chinese desired from the west. From the 1560s, huge silver ships sailed every year from Acapulco in Mexico to Manila - the Spanish colony in the Philippines - returning laden with oriental delights. There was more Chinese porcelain in New Spain than in Spain itself.

Yet to see the Europeans girdling the world with trade as the defining moment in world history is to

reproduce the myopia of the conquistadors, denying the complexity of pre-existing medieval interactions and assuming the globe has one centre (northwest Europe) with all else periphery: as if India, China, Persia and the Ottomans had no civilisation, international trade or imperial reach of their own. By the 14th century, the Chinese diaspora had spread across the South China Sea as far as Singapore and Java, at least the distance between Seville and New Spain. Between 1403 and 1433, Admiral Zheng He led expeditions from southern China to India, the Horn of Africa and the Arabian Gulf. Whether the Chinese reached Australasia centuries before James Cook is still open to speculation. Arabic merchants were in south-eastern waters from the sixth century. The dhow and the junk dominated the Asian trade for centuries.

A luxuriant hybridity is built into the DNA of Interwoven Globe. Textiles were not the primary lure of maritime commerce, but they were valuable cargo to be traded for spices and silver; over time they grew in volume and significance, especially for the British merchant marine. Lustrous Chinese silks and brilliant Indian cottons were much in demand in Europe. Defoe likened the insidious spread of exotic textiles to a plague in 1708: "... it crept into our houses, closets and bed chambers; curtains, cushions and chairs, and at last beds themselves were nothing but Callicoes". Yet alongside a beautiful, but familiar riot of chintz, the exhibition spotlights altogether different conjunctions: Inca tapestries woven for the new colonial elite in Peru, Netherlandish wool transformed into Samurai battle jackets, printed cottons dyed in Gujarat for the Japanese and Indonesian market, and silk chasubles crafted in China to be worn by Roman Catholic priests, most of them Spanish.

This intermingling of cultures was not a cosy and cost-free bazaar. The Portuguese held their forts only by employing merciless force. When the Dutch ousted them in the 17th century they were just as ruthless. European wars fought on the colonial frontier escalated into a savagery unimaginable at home. An 18th-century Indian hanging represents a pitched battle fought between the English and the French East India Companies, abetted by their native allies - Hindu and Muslim - over the trading post of Pondicherry. A sample book from the London firm of Benjamin and John Bower advertises 500 basic cottons, targeted at the working poor and

slaves (or more accurately their owners). The traffic of slaves - European, Asian and African, east and west - was a normal feature of medieval trade, but the American plantation system, used for growing tobacco, cotton and sugar, ate up humans on an industrial scale.

Religion plays a significant role in this economic history of cloth. The popes ruled between the competing territorial claims of Portugal and Spain in 1494 - the globe was divided "like an orange", according to a letter written to Charles V. Fashionable Jesuits crop up on Mexican ladies' shawls and a room of glittering clerical vestments in Chinese silk speaks to the material pretensions of the Counter-Reformation and Inquisition.

The least familiar exhibits reveal the material world of the Iberian globe. The social mixing of races, ethnicities and cultures was very evident in Central and South America, producing dazzlingly hybrid traditions in textiles and dress. The extent of direct trade between China and South America is revelatory, with Chinese embroideries embellishing traditional Andean and Mexican garments.

Textiles are usually low on the pecking order of objects in museums and galleries. "As far as we know," says Amelia Peck, *Interwoven Globe*'s lead curator, "this is the first time that anyone has created an exhibition that uses textiles to tell the story of worldwide trade in the early modern period." When I asked her whether this is what the audience was expecting, she replied: "People seem to be surprised that what is essentially a historical and economic story can be told so compellingly through such beautiful objects."

The exhibition performs a delicate balancing act: on the one hand mapping European expansion in threads, and, on the other, evidencing a wealth of blended influences and interactions that bypass the west, provincialising Europe in the history of the world. Yet it is not just a material illustration of postcolonial history, it also makes an argument about the global visual impact of the textile trade - that, according to Peck, "more than any other type of object", commercial fabrics "influenced the visual culture of the locations in which they were marketed as well those in which they were produced.

By the 17th century, the constant interchange of exotic design motifs, fibres and dyes between these now interconnected markets brought into being, for the first time, a common visual language of design that was recognisable throughout the world".

Whether this was the defining global moment in aesthetics will remain open to debate. A global economy was not created by "the Promethean touch of merchants from Europe". As John Darwin insists in his history of empires, it already existed, flourishing in the maritime commerce pioneered by Asians that linked China, Japan, India, the Persian Gulf and east Africa. The powerful resurgence of Asia that is now under way only re-establishes these older patterns of trade and power. What we now call "globalisation" has never been only a European or western phenomenon.



Detail from a Hanging Depicting a European Conflict in South India (1740s-50s). Photograph: The Metropolitan Museum of Art, New York







The Guardian experiments with a robot-generated newspaper with The Long Good Read

The paper, printed by The Newspaper Club, is a collection of longform Guardian stories selected and laid out with the help of algorithm.

By Justin Ellis

The Guardian is experimenting in the craft newspaper business and getting some help from robots.

That may sound odd, given that the company prints a daily paper read throughout Britain. A paper staffed by humans. But the company is tinkering with something smaller and more algorithm-driven.

The Guardian has partnered with The Newspaper Club, a company that produces small-run DIY newspapers, to print The Long Good Read, a weekly print product that collects a handful of The Guardian's best longform stories from the previous seven days. The Newspaper Club runs off a limited number of copies, which are then distributed at another Guardian experiment: a coffee shop in East London. That's where, on Monday mornings, you'll find a 24-page tabloid with a simple layout available for free.

On the surface, The Long Good Read has the appeal of being a kind of analog Instapaper for all things Guardian. But the interesting thing is how paper is produced: robots. Okay, *algorithms* if you want to be technical — algorithms and programs that both select the paper's stories and lay them out on the page.

Jemima Kiss, head of technology for The Guardian, said The Long Good Read is another attempt at finding ways to give stories new life beyond the day they're published: "It's just a way of reusing that content in a more imaginative way and not getting too hung up on the fact it's a newspaper."

The Long Good Read began life several years ago

as a digital-only experiment from former Guardian developer Dan Catt. The idea was to harvest the paper's feature pieces and longer stories into a stream of articles best meant for RSS or a read-it-later queue. These were the stories that lent themselves to dedicated reading time, that quiet moment after work or a lazy Saturday morning. That, Kiss said, also fits the description of print: "It's part of a noble heritage: people wanting something to read when they're drinking their coffee or tea."

Catt built an algorithm that scans The Guardian's API, stripping away blog posts, multimedia, and other pieces in favor of articles over a certain length. Here's a good explanation:

"We plundered those tools for data and wrote our own little 'robot' (a bunch of algorithms) to surface what we hoped would be good, interesting, sometimes funny, sometimes long articles. Just before I throw together a new issue of this paper I can head off to our dashboard that presents me with about 30 'top' articles, about 1% of all articles originally published by the Guardian."

The robot does the legwork, leaving an editor to pick and choose what stories work for the edition before handing the process off to a different robot. In this case, it's The Newspaper Club's ARTHR tool, a layout program that lets people feed in content from different sources, either links or individual text and images. Tom Taylor, head of engineering for The Newspaper Club, said they use a semi-automated version of ARTHR for The Long Good Read, which allows an editor to enter story links and lets the program develop the layout on its own.

It's a human-robot workflow that makes putting together a customized newspaper a quick process.

The Long Good Read is sent to the printer on Friday and delivered fresh on Monday, Taylor said. "It becomes possible to make a paper in an hour that you can put in a coffee shop and have 500 copies," Taylor said.

The Newspaper Club started four years ago as a kind of bespoke printing business. It's a story about technology — the ARHTR tool, which simplifies the layout process for people who may not be familiar with Adobe InDesign — but also about the printing itself. The Newspaper Club specializes in smaller runs of newspapers (as few as one to five copies) using digital printing and traditional printing. The key, Taylor says, is bundling together groups of orders to help keep the costs low and allow people to print as few editions as they want. In the beginning, the minimum amount of newspapers they could run was 1,000 copies, but thanks to changes in printing tech and growth in business, that number has slowly slid to 300, to 50, and now as low as a single paper.

"It's like the miniaturization of the engine, taking it down from a factory-sized thing to inside a car, to a motorbike. It changes what's possible to do with an engine," Taylor told me.

The Newspaper Club is part boutique, part newspaper collaborative, doing work for individuals (newspaper-themed weddings, perhaps?), photographers, or the London Philharmonic Orchestra. Some U.S. newspaper owners have tried to increase their commercial printing business, increasingly by printing their competitor's papers. But Newspaper Club thinks smaller, and more personal, than the weekly coupon circular and hardware catalog.

"We're straddling two worlds: the nostalgia for



print and those beautiful machines, the rudiments of it all and the slightly more weird media future that is going on," Taylor said. "It's not as simple as 'The Internet will replace print.' The future is way more complicated than that."

While technology has upended the traditional newspaper model, Taylor said it's changed the economics in the favor of letting print lovers experiment with the medium. Things like The Newspaper Club aren't meant to replace the traditional daily, but instead to see how the form can be customized and personalized, Taylor said. The appetite for reading longer, more in-depth articles exists, as well as the desire to get away from the screens we surround ourselves with, Taylor said. "I have no particular nostalgia for print. But I see it being very useful for certain things," he said. "It does things you can't do with a tablet or a screen."

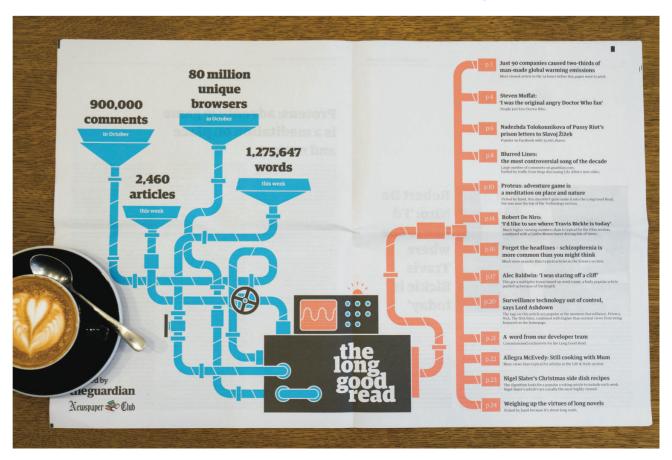
At the moment, The Guardian is planning a limited run of The Long Good Read before figuring out whether to continue the project; there's no contract term between the two companies. Kiss said the paper fit in well with The Guardian's other experiment, the coffee shop, which was also meant to be a different (real-life) venue for news and conversations. It all fits into The Guardian's larger mission of open journalism and engaging with the public. "It's not a new revenue stream — it's much more experimental than that," said Kiss. "It's to see what happens. I think media organizations need to be more lightfooted in what they experiment with."

For a company that has pushed itself to expand digitally around the globe, a move into print could seem like a backwards move. But print, like other technologies, has its own assortment of benefits

and drawbacks, Kiss said. What The Long Good Read does is take some of the features of customization and story curation — attributes we would think of as webby — and push them into print. What's important is giving people as many options for reading as possible, she said: "It's not the medium that's in trouble; it's the business model."

Photos from The Newspaper Club used under a Creative Commons license.

This article originally appeared on the Nieman Journalism Lab (http://nie.mn/1c97dAK) written by Justin Ellis and is licensed under a Creative Commons Attribution-Noncommercial-ShareAlike 3.0 United States License. Plus, they are awesome.



Cost cutting to blame for RBS's Cyber Monday card glitch, says union

Unite says job losses and offshoring led to customers being unable use debit cards or withdraw cash on Monday

By Angela Monaghan

The boss of RBS has admitted the bank would have to put right decades of underinvestment in its computer systems that have led to embarrassing IT failures barring customers from accessing their accounts.

As one City analyst suggested the problems would cost the state-owned bank as much as £1bn to put right, the chief executive, Ross McEwan, apologised for the "unacceptable" technical faults.

Despite assurances from the bank that the latest problems had been resolved, customers were still reporting problems on Tuesday following Monday's glitch, which saw millions unable to pay by card or withdraw cash on one of the busiest shopping days of the year. The bank said that more than 1,000 branches would open earlyWednesday morning to help customers affected by the faults.

McEwan said: "Monday night's systems failure was unacceptable. It was a busy shopping day and far too many of our customers were let down.

"For decades, RBS failed to invest properly in its systems. We need to put our customers' needs at the centre of all we do. It will take time, but we are investing heavily in building IT systems our customers can rely on. We know we have to do better."

McEwan said he would be announcing plans to improve RBS in the new year, including an outline of how the bank intends to invest in the future. After RBS bought NatWest in 2000 it was lauded for making huge cost savings from combining the two banks' IT systems, but lack of investment has come back to haunt it.

Ian Gordon, a banking analyst at Investec, said: "Ross McEwan isn't the first RBS leader to acknowledge there had been an extended period of underinvestment going all the way back to the NatWest deal. I don't think it's wildly inaccurate to imagine RBS spending £1bn over a period of time to put things right, but that isn't a number you will see in any given period."

Union leaders have claimed cost cutting was to blame for the faults on Monday evening and called on the bank to halt its redundancy programme.

Unite, Britain's biggest union, said the 30,000 job losses announced by the bailed-out bank since 2008 and the offshoring of IT functions had left it unable to provide a proper service to customers.

Dominic Hook, Unite national officer, said: "It is unacceptable that the bank's customers are once again facing inconvenience. Unite has grave concerns that staffing challenges are exacerbating the problems facing the bank, challenges that could be further amplified when the chief executive announces the outcomes of his strategic review in February.

"Serious questions must be asked as to why constant job cuts are being made when there are clearly

serious issues which need addressing by management."

Earlier on Tuesday RBS took to Twitter to apologise to furious customers, promising to compensate those left out of pocket as a result of the failure at RBS, NatWest and Ulster Bank, which mainly affected customers between 6.30pm and 9.30pm on Monday.

There were reports of trolleys full of shopping abandoned in supermarkets and people unable to pay for their petrol as the bank's customers were unable to withdraw cash and debit cards were declined. Others found that their accounts were overdrawn when there should have been funds available. Typically, about 250,000 RBS customers will use a cash machine every hour. RBS said it would not be compensating customers for inconvenience or time wasted, focusing instead on those who had incurred costs.

The bank insisted the issues affecting customers on Monday had been resolved, while conceding that some customers were still having difficulties.

A spokesman said: "The system issues that affected our customers last night have now been resolved and the vast majority of customers are experiencing a good service. We have heard from some customers who are still experiencing problems as our processes and systems get back to a fully normal service. If any customer is experiencing issues they should get in touch with our call centres or come into our branches, where our staff will be ready to help."

Susan Allen, director of customer solutions at RBS, said it was still unclear exactly what went wrong. "We put all our focus on getting it fixed and

we now start the detailed work on what went wrong. It is completely unacceptable that customers couldn't access their own money," she told BBC Radio 5 Live.

"The investigations would suggest it is completely unrelated to the volumes on Cyber Monday." Allen insisted the bank would "put this right for customers". Some customers were angry about the lack of communication. One Guardian reader, petey123, wrote: "So nothing on their website or by email about this, until I find out on the Guardian why my card wasn't working. Oh, but you put it on twitter. great."

The failure is a huge embarrassment for RBS, following similar glitches 18 months ago when IT problems locked many customers out of their accounts for several days. It cost the bank £175m to fix the problem and pay compensation to the customers affected. Stephen Hester, RBS chief executive at the time, waived a bonus potentially worth more than £2m as a result of the disruption in June last year.

It comes at a low point for RBS amid allegations that it is deliberately wrecking viable small businesses to boost profits. City regulators and the bank are investigating the allegations. Data security company Check Point warned RBS, NatWest and Ulster Bank customers to be wary of phishing emails sent to trick them into revealing their full bank details.

Check Point's UK managing director Keith Bird said: "Bank customers need to be very careful not to click on links in emails which appear to come from RBS, Nat West or Ulster Bank advising them about changes to account security, no matter how authentic the email seems to be."



Royal Bank of Scotland said sorry for its IT glitch on Cyber Monday. Photograph: Johnny Green/PA

Mark Carney warns house buyers: can you afford the mortgage?

Home-owners should not rely on being bailed out of any future difficulties by rising house prices, Bank of England governor warns By Larry Elliott and Jill Treanor

The governor of the Bank of England has issued a blunt warning to potential home-owners that they must be able to pay their mortgages when interest rates go up and not rely on being bailed out of any future difficulties by rising house prices.

In an interview with the Guardian, Mark Carney said on Friday that Threadneedle Street's decision to rein in mortgage lending was designed to head off a boom-bust in the property market at an early stage and avoid drastic policy action in the event of a bubble.

"Think about the mortgage you are taking on, the debts you are taking on," Carney said when asked what his message was to those aspiring to get on the housing ladder. "You are taking at least a 25-year mortgage, maybe a 30-year mortgage.

"Are you going to be able to service that mortgage five years from now, 10 years from now, if interest rates are higher? Or are you counting, even subconsciously, on the price of your house keeping going up and if something happens an ability to sell it quickly and not facing the consequences of not being able to pay?"

Carney was speaking as the latest data from Nationwide building society showed annual house price inflation at 6.5% - its highest since July 2010. The governor expressed concern about the lack of new homes being built as the Bank's own figures demonstrated that demand for property was strong. Mortgage approvals are running at levels not seen

since Northern Rock was nationalised in February 2008.

In a wide-ranging interview that included bankers' pay, City scandals, the Co-op bank rescue plan and his plans for the Bank of England, Carney said:

- Reform of the conduct of the financial sector is overdue.
- The Bank is increasing its scrutiny of bank executives following the scandal at the Co-op involving the Rev Paul Flowers.
- The Bank of England is anxious for the privatesector restructuring of the Co-op to go ahead but would step in with its own rescue if bondholders rejected the deal.
- He opposes the cap imposed by Brussels on bankers' bonuses, due to come into force next month.
- He wants more women in senior positions at the Bank of England to address the gender imbalance at the top.

The newly appointed Canadian governor of the Bank justified the decision by the Bank's Financial Policy Committee (FPC) to end Funding for Lending for home loans a year earlier than planned.

The scheme has been regarded as crucial in reviving the housing market since it was introduced in August 2012. It offers lenders cheap money in return for loans to customers, but from the new year it will be limited to business lending - still falling according to fresh figures from the Bank.

"The right way to do policy - to protect against the boom and bust cycles - is to act early in a graduated, proportionate way and that reduces the probability of having to act in a bigger way later."

He added: "I'm less concerned about the bousing the boust the bousing the bound of the

He added: "I'm less concerned about the housing market, given the steps the FPC has taken."

He said that Britain was building half as many homes a year as Canada despite having a population twice as large, and added: "It is widely acknowledged that there is a very large supply-side issue here.

"I fully recognise that Canada is the secondbiggest country in the world. It's easy to build housing as it's easy to find places [to build]. But it does give you a sense of the issues around the constraints on supply and the movements in prices you see as well. They all reinforce that sense that there is a supply issue. And there's nothing the Bank of England can do to change that."

The governor expressed a reluctance to use interest rates as a way of cooling down the housing market because it would affect all parts of an economy only just recovering from recession.

"You could use [interest rates] to address financial stability but it is a very blunt tool. It hits all aspects of the economy from the south to the north from across manufacturing. It affects exporters. It has a range of impacts - SMEs [small and medium-sized firms] as much as people borrowing for detached homes in Knightsbridge."

House prices are forecast to climb a further 10% next year and the Bank of England has embarked on a range of measures to try to temper the appetite for home loans. Affordability tests being introduced next year will require mortgage lenders to assess a borrowers' ability to repay a loan and lenders will be watched to ensure they do not relax lending criteria too much.

"What we don't want to see is a marked deterioration in underwriting standards that often happens, whether it's here or abroad, when a housing cycle really gathers momentum. It's one of the things that feeds momentum, so we want to see prudence from lenders," Carney said.

The governor said the Bank had enough powers to prevent a housing bubble as the FPC can recommend to the regulators that lenders take a tougher stance on the size of a mortgage compared to the value of the house - the so-called loan-to-value (LTV) ratio. He said that if the Bank did in the future recommend any caps on LTVs, he expected lenders to heed the warning.

"We have to make the case to act, convince people of the case, but it is not insubstantial if the FPC stands up and recommends that there should be a cap on loan to values just as a hypothetical example," Carney said.



 ${\bf Mark\ Carney,\ governor\ of\ the\ Bank\ of\ England.\ Photograph:\ Martin\ Godwin}$

Boris Johnson's IQ comments met with outrage

London mayor accused by Nick Clegg of talking about people as if they were dogs By Rowena Mason, political correspondent

Boris Johnson was on Thursday accused of revealing his "unpleasant elitism" and insulting the low-paid of London after he controversially suggested some people will struggle to get on in life because of their low IQs.

The London mayor was met with outrage from political rivals and silence from his own party after he gave a speech embracing the philosophies of Margaret Thatcher that appeared to mock the 16% "of our species" with an IQ below 85 and called for more to be done to help the 2% of the population who have an IQ above 130.

During the speech, Johnson declared that inequality was essential to foster the spirit of envy and hailed greed as a valuable spur to economic activity, as he claimed that shaking a cornflake packet hard was the best way of getting some to rise to the top.

The fiercest criticism came from Nick Clegg, the deputy prime minister, who attacked the senior Tory's "unpleasant, careless elitism" and accused him of talking about people as if they were dogs.

"I don't agree with Boris Johnson on this. Much as he is a funny and engaging guy, I have to say these comments reveal a fairly unpleasant, careless elitism that somehow suggests we should give up on a whole swath of fellow citizens," Clegg told LBC 97.3 radio.

"To talk about us as if we are a sort of breed of dogs, a species I think he calls it ... the danger is if you start taking such a deterministic view of people because they have got a number attached to them, in this case an IQ number, they are not going to rise to the top of the cornflake packet, that is complete anathema to everything I've always stood for in politics."

Clegg said he believed children developed at different paces and should have access to a culture of opportunity, aspiration and hard work.

His remarks were echoed by David Lammy, the Tottenham MP who is considering a bid to run as mayor of London for Labour in 2016, who said the remarks were worse than careless. "I don't think that's just careless. I think it's an insult," he told BBC Radio 4's World at One. "It's an insult to cleaners in London, to people who are home carers in London, people who are minimum wage, giving them the suggestion that they are sort of bottom of the cornflake packet. That's not the sort of society I thought we wanted to live in, particularly when the mayor has supported the London living wage, which is about saying we all ought to be in this together.

"It's extraordinary for a mayor, who should be for all of London, to think it's all right to glorify greed - a greed that has brought a banking collapse and caused misery and hardship to many Londoners, particularly to young people who can't get on the housing ladder."

Sadiq Khan, shadow justice secretary and another

potential mayoral contender, said Johnson's comments were "shameful" and suggested he was playing to the right in an effort to become leader of the Tory party. "He has never had to struggle or fight to survive in his life. How could someone so out of touch with most Londoners' lives possibly understand the reality of poverty in London?" he said.

greed is a force for social good."

Johnson's most provocative comments came when he talked about the relevance of IQ to equality. The mayor said: "Whatever you may think of the value of IQ tests it is surely relevant to a conversation about equality that as many as 16% of our species have an IQ below 85 while about 2% ..."



Boris Johnson Photograph: Dave Thompson/PA

"He is abandoning and exploiting poor Londoners to appeal to the far right of the Tory party and Ukip as he forgets London in his desperate scrabble to become leader of his party."

In contrast, there was near-silence from the Conservatives, with few voices rallying to Johnson's defence. Asked about the comments, Downing Street would say only that the prime minister believes in social mobility. A Conservative spokesman said the party had nothing to say on the subject.

Johnson's main defender was former Tory MP Ann Widdecombe, who told the BBC she could not see "what he said that the rest of us couldn't have worked out at the age of eight or nine". Later, Conor Burns, a Tory MP and friend of the late Thatcher, praised the speech for being "thoughtful and provocative".

"I think what Boris Johnson was powerfully and, as ever, controversially, setting out was that we are all born with different talents and abilities, and naturally people are different but it's up to each and every one of us to strive to maximise what we do with our God-given ability," he said.

Meanwhile, Labour took the opportunity to claim Johnson's remarks exposed his true nature. Jon Trickett, deputy chairman of the party, said: "Occasionally the veil slips to reveal the Tories' inner soul. Today is such a moment when Boris says that Johnson departed from the text of his speech to ask whether anyone in his City audience had a low IQ: "Over 16% anyone? Put up your hands."

He then resumed his speech to talk about the 2% who have an IQ above 130, telling the Centre for Policy Studies thinktank: "The harder you shake the pack the easier it will be for some cornflakes to get to the top."

Johnson also aligned himself with what were seen as the excesses of 1980s Thatcherism as he said: "I stress - I don't believe that economic equality is possible; indeed some measure of inequality is essential for the spirit of envy and keeping up with the Joneses that is, like greed, a valuable spur to economic activity."

He made clear, however, that Thatcherism needed to be updated for the 21st century.

"I hope there is no return to the spirit of loadsamoney heartlessness - figuratively riffling banknotes under the noses of the homeless - and I hope that this time the Gordon Gekkos of London are conspicuous not just for their greed - valid motivator though greed may be for economic progress - as for what they give and do for the rest of the population, many of whom have experienced real falls in their incomes over the last five years."

Top 10 film noir

Guns, dames and hats: you can't have a film noir without them, can you? Take a look at the Guardian and Observer critics list of the best 10 noirs and you'll realise things aren't that simple ...

They Live By Night

Nicholas Ray's astonishingly self-assured, lyrical directorial debut opens with title cards and lush orchestrations over shots of a boy and a girl in rapturous mutual absorption: "This boy ... and this gir ... were never properly introduced ... to the world we live in ..." A shriek of horns suddenly obliterates all other sound - their shocked faces both turn toward the camera, and the title appears: They Live by Night.

Meet 23-year-old escaped killer Bowie Bowers and his farm-girl sweetheart Keechie Mobley (Farley Granger and Cathy O'Donnell), in an imaginary idyll of peace and contentment that will never come true for them. Bowie, jailed at 16 for killing his father's murderer, has known nothing but jail, and is still a boy. Having escaped the prison farm with two older bank robbers - T-Dub and the psychotic Indian Chicamaw "One-Eye" Mobley (Jay C Flippen, Howard da Silva) - he feels loyalty-bound to tag along on their crime spree. Keechie is Chicamaw's niece, and soon circumstances force them to lam it cross-country at the same time as they tremblingly discover love for the first time.

Somehow all the planets aligned for Ray, a novice director with an achingly poetic-realist vision of Depression-era Texas and the determination to implement it wholesale: a perfect source novel, Edward Anderson's Thieves Like Us; and exactly the right combination of producer (John Houseman), studio (RKO) and sympathetic studio head (Dore Schary). The result is luminous in its imagery, highly sophisticated in its musical choices (the folk song I Know Where I'm Going succinctly and repeatedly stresses that they don't know anything at all) suffused with romantic fatalism - they'll die by night, too; you know it from the start - and enriched by Ray's total identification with his characters' doomed trajectory. Ray's first masterpiece, and a pinnacle of poetic noir. John Patterson

Kiss Me Deadly

Kiss Me Deadly is the black-hearted apotheosis of film noir, and a key film of the 50s, embodying the profoundest anxieties of Eisenhower's America: it ends with the detonation of a nuclear device on Malibu beach and, presumably thereafter, the end of the world itself. Robert Aldrich's moral universe is so violently out of kilter that even his opening credits run upside down. His hero, Mike Hammer, is an amoral, proto-fascist bedroom detective and 1,000% scumbag, but the villains he encounters are far, far worse.

Kiss Me Deadly opens with a woman, naked under a raincoat, fleeing headlong and barefoot down a highway at night. Rescued by Hammer, then un-rescued by her faceless original captors, she dies screaming under gruesome torture with pliers (Aldrich was always at the vanguard in his use of violence). Thereafter, Hammer finds himself on a terrifying hunt through the criminal underworld of Los Angeles, from his gleamingly modern office in posh Brentwood to the dilapidated flophouses of Bunker Hill, as he bludgeons, browbeats, blackmails and brutalises his way inch by inch towards a resolution that will destroy everyone and everything, all in search of the elusive "Great Whatsit" - a deadly, molten, much sought-after package that's grandfather to the suitcase in Pulp Fiction and the Chevy Nova in Repo Man.

Aldrich, a patrician aristocrat and a committed leftist, despised Mickey Spillane's nihilistic worldview and Mike Hammer's Cro-Magnon brutishness, and gave them the adaptation they deserved. Ralph Meeker, who usually played scumbag saddle-tramps and mobsters, bagged the sneering lead role and remains indelibly detestable even today: "Open a window," says one disgusted cop, as Hammer leaves the room. Surrounded by gargoyles and grotesques, even on his own team - he uses his secretary Velma as willing sexual bait - Hammer is a cynic who knows everything about human weakness but nothing about the frame he's in. And it all ends with a bang - the big bang. **JP**

Blood Simple

Taking its atmospheric title from a line in Dashiell Hammett's hard-boiled novel Red Harvest (an allusion never explained), Blood Simple is perhaps the Coen brothers' most straightforward movie, even though it is, ironically, not at all simple. In a manner that would come to be their stock-in-trade, the film is a cacophony of cross-purposes, in some ways a rehearsal for their breakout effort Fargo, which also depicts a nefarious plan gone wrong. It also marks the use of literary genre elements in the "real" world, a formula that would later be refined by Quentin Tarantino.

As in so much film noir, the crux of the story is a case of cherchez la femme. In this case la femme is Abby Marty (Frances McDormand), wife of Texas bar owner Julian (Dan Hedaya). Julian suspects Abby of having an affair with one of his staff, and when private eye Loren Visser (M Emmet Walsh) confirms this to be the case, Julian sets a murder plan in motion. For most directors this would be enough, but the Coens embrace the full-on complications of the genre to create a genuine sense of an "easy" crime spiralling out of control.

One of the first films to cement the nascent Sundance film festival's reputation, Blood Simple isn't so much neo-noir as neo-neo-noir, using postmodern flourishes that still seem bold today. The most

vivid is Walsh as Visser, presented more like a cold-blooded Universal Studios monster than a gumshoe, and the non-naturalistic lighting is often at odds with noir tradition, with the brothers allowing brilliant shafts of bright light to puncture the neon-lit dark. Best of all is the use of the Four Tops' It's the Same Old Song as a motif - a neat touch that expresses genre familiarity with affection rather than cynicism. **Damon Wise**

Lift to the Scaffold

Louis Malle's first fiction feature, based on Noel Calef's 1956 novel, occupies a very interesting space. It qualifies as film noir for its appropriation of US postwar cinema in its tale of lovers gone bad, but also heralds the imminent arrival of the French new wave. The director was in his mid-20s at the time and clearly using the crime-thriller genre (something he never returned to) as a testing ground and not a strict template. Perhaps that explains why his film is such a melting pot of influences, drawing not only on Hitchcock but also the Master of Suspense's overseas admirers, including Henri-Georges Clouzot and his Les Diaboliques.

As in that film, the story concerns a conspiracy to murder. Ex-Foreign Legion soldier Julien Tavernier (Maurice Ronet), a veteran of French military misadventures in Algeria and Indochina, is planning to kill his boss, who is also his lover's husband. On paper, the plan is seamless - Tavernier secures his alibis and enters his victim's office unseen, by means of a rope - but things soon get messy. On returning to the crime scene to retrieve a key piece of evidence, Tavernier finds himself trapped in the elevator, leaving his car parked outside with the keys in the ignition.

Although its elements point towards nailbiting tension, this isn't so much what Lift to the Scaffold is about; it draws more on the blanket fatalism of film noir rather than the savage irony so often associated with the genre. Key to this is Jeanne Moreau as Tavernier's lover, Florence; in the film's signature sequence her man fails to turn up, so she walks the streets trying vainly to find him. Filmed on the fly without professional lighting, accompanied only by Miles Davis's brilliant, melancholy score, these few minutes capture the bleak and beautiful essence of Malle's film. **DW**

The Third Man

"One of the amazing things about The Third Man," Steven Soderbergh once wrote, "is that it really is a great film, in spite of all the people who say it's a great film." He's right. It's one of the greatest, in fact: a witty, elegantly shot and steadfastly compassionate thriller suffused with the dreadful melancholia of the finest noir. It's set in Allied-occupied Vienna, where writer Holly Martins (Joseph Cotten)

pitches up at the invitation of his old chum Harry Lime. Except that when Martins arrives, Lime turns out to be dead. At least that's the prevailing wisdom at his funeral.

To say anything else about the mystery that Martins unravels would be to jeopardise some of the zesty surprises of this 64-year-old masterpiece. (Is there a statute of limitations on spoilers?) But then The Third Man is about more than plot. The morally fermented atmosphere of Vienna mapped out by Graham Greene's screenplay (based on his own story) is sustained beautifully by Robert Krasker's cinematography, with top notes of mischief introduced by Anton Karas's sprightly zither playing. An unassuming actor named Orson Welles also puts in an appearance, skulking in a doorway in one of the wittiest of all movie entrances, then delivering a speech full of humble horrors from the vantage point of a ferris wheel overlooking the city.

The key to the picture's genius is undoubtedly the mutually nourishing collaboration between Greene and the director Carol Reed. Seen in tandem with their other films together (The Fallen Idol, Our Man in Havana) there is a strong case to be made for them as one of the finest writer/director teams in cinema. Reed is not only alert to every nuance in Greene's writing but adept at finding pointed visual equivalents for his prose. Back to Soderbergh: "Disillusion, betrayal, misdirected sexual longing and the wilful inability of Americans to understand or appreciate other cultures – these are a few of my favourite things, and The Third Man blends them all seamlessly with an airtight plot and a location that blurs the line between beauty and decay." Ryan Gilbey

Out of the Past

No one ever smoked and brooded and loomed like Robert Mitchum. And he never did it as definitively as he does in Out of the Past, a stylish and devastating noir that was one of a hat-trick of perfect genre pieces directed by Jacques Tourneur in the 1940s (along with Cat People and I Walked with a Zombie). Viewers not enamoured of the actor's somnambulant manner might take the latter title for a description of what it must be like to act alongside Mitchum. But that would be to miss the bitter, internalised hurt and wounded hope he brings to his performance here; just because he's still, that doesn't mean he's not suffering.

Mitchum plays Jeff Bailey, a private eye hired by Whit Sterling (Kirk Douglas) to track down his errant lover, Kathie Moffat (Jane Greer), who skedaddled after swiping \$40,000 of his money. Oh, and shooting him. It may not be any surprise that when Jeff catches up with the fugitive femme fatale, there is a crackle of attraction between them. The seductive skill of the movie lies in its masterful evocation

of that sensual, fatalistic bleakness crucial to noir. From Nicholas Musuraca's chiaroscuro cinematography ("It was so dark on set, you didn't know who else was there half the time," said Greer) to Roy Webb's plangent score and the guarded, electrifying performances, it's nothing short of a noir masterclass.

The screenplay was adapted by Daniel Mainwaring from his own novel, Build My Gallows High (the film's UK title). But the sharpened splinters of dialogue also bear the mark of Cain – James M Cain, that is, the legendary author of noir landmarks The Postman Always Rings Twice and Double Indemnity, who performed vital but uncredited

Chandler, said Wilder, "was a mess, but he could write a beautiful sentence". Noir's visual style, which had its roots in German expressionism, was forged here, though Wilder insisted that he was going for a "newsreel" effect. "We had to be realistic," he said. "You had to believe the situation and the characters, or all was lost."

And we do. Fred MacMurray, who had specialised largely in comedy until that point, was an inspired choice to play the big dope Walter Neff, who narrates the sorry mess in flashback, and wonders: "How could I have known that murder can sometimes smell like honeysuckle?" Edward G Robinson is coiled and charismatic as Neff's colleague, a



 $All star\ Collection/Cinetext/WARN/Sportsphoto\ Ltd./All star$

rewrites. According to Mitchum's biographer, Lee Server, it was Cain who expunged Kathie of any traces of lovability. "She can't be all bad — no one is," one character remarks of her. To which Jeff shoots back: "She comes the closest." **RG**

Double Indemnity

Cameron Crowe called Double Indemnity "flawless film-making". Woody Allen declared it "the greatest movie ever made". Even if you can't go along with that, there can be no disputing that it is the finest film noir of all time, though it was made in 1944, before the term film noir was even coined. Adapting James M Cain's 1935 novella about a straight-arrow insurance salesman tempted into murder by a duplicitous housewife, genre-hopping director Billy Wilder recruited Raymond Chandler as co-writer.

claims adjuster who unpicks the couple's scheme. But the ace in the hole is Barbara Stanwyck as Phyllis Dietrichson, a vision of amorality in a "honey of an anklet" and a platinum wig. She can lower her sunglasses and make it look like the last word in predatory desire. And she's not just a vamp: she's a psychopath. There are few shots in cinema as bonechilling as the closeup on Stanwyck's face as Neff dispatches Phyllis's husband in the back seat of a car. Miklós Rózsa's fretful strings tell us throughout the picture: beware. Stanwyck had been reluctant to take the role, confessing: "I was a little frightened of it." Wilder asked whether she was an actress or a mouse. When she plumped for the former, he shot back: "Then take the part." **RG**

Touch of Evil

In the novel Badge of Evil by Whit Masterson - the source material for this movie - the hero is an American man who has been married to a Mexican woman for nine years. It was Orson Welles who flipped the racial mix, and made the marriage brand new. Welles intended a story of three frontiers: the rancid Mexican-American border; the way a good detective becomes a bad cop; and a provocation on interracial sexuality. To be sure, it's a recognisable Charlton Heston in makeup as Mike Vargas, with Janet Leigh as Susie - but in 1958, that bond disturbed a lot of viewers. Moreover, the overtone of honeymoon is a wicked setup for threats of rape. Will the horrendous border scum get to Susie before Mike? If you doubt that suggestiveness, just notice how the car bomb explodes as the honeymooners are ready to enjoy their first kiss on US soil. This is a crime picture in which coitus interruptus has to be listed with all the other charges.

Metaphorically and cinematically, it's a picture about crossing over - in one sumptuous camera setup we track the characters over the border. That shot is famous, but it's no richer than the single setup in a cramped motel suite that proves how Hank Quinlan (Welles himself) plants dynamite on the man he intends to frame. These scenes were a way for Welles to say, "I'm as good as ever", but they are also crucial to the uneasiness that runs through the picture and the gloating panorama of an unwholesome society. The aura of crime has seeped into every cell of ordinary behaviour: the city officials are corrupt, the night man (Dennis Weaver) needs a rest home, and the gang that come to the motel to get Susie are one of the first warnings of drugs in American movies. Not least, of course, Quinlan - a sheriff gone to hell on candy bars.

So evil is not just a "touch". It is criminality in the blood. Marlene Dietrich's Tanya watches over this doom like a witch or prophet, a bleak reminder that there is no hope. Fifty years later, that border is still an open wound. **David Thomson**

Chinatown

The near perfection of Roman Polanski's Chinatown starts with Diener/Hauser/Bates's haunting art nouveau poster for the film: an emblematic Hokusai wave breaks against Jack Nicholson's silhouette as the smoke from his cigarette floats up to merge with Faye Dunaway's medusa-like hair. The movie ends equally unforgettably with the line, "Forget it Jake, it's Chinatown!", as lapidary a pay-off as Scarlett O'Hara's, "After all, tomorrow is another day."

Behind the angst-ridden noirs of the 40s and 50s lie the social and political tensions of the second world war and the postwar decade. Similarly, Chinatown was conceived, written, produced and released in the troubled period that included the last years of the Vietnam war, Watergate, and Nixon's

fraught second term in the White House. But it retained its freshness, vitality and timelessness by being set so immaculately in an earlier period - Los Angeles in the long, hot summer of 1937 - and it deals with the scandals of that era, those touching on the complex politics of water in the arid west.

While gathering divorce evidence on behalf of a suspicious wife, Gittes (Nicholson) is sucked into a world beyond his comprehension involving municipal corruption, sexual transgression and the power of old money. He encounters the rich, ruthless capitalist Noah Cross (John Huston) and his estranged daughter, the beautiful Evelyn Mulwray (Faye Dunaway), whose husband, head of the Los Angeles Water and Power Board, dies under mysterious circumstances.

In his screenplay, Robert Towne develops two dominant metaphors; the first centres on water. During a period of drought someone is dumping water from local reservoirs, and it becomes clear that this most precious of human resources is being manipulated by land speculators in their own interests. The name of Evelyn's husband, Hollis Mulwray, evokes William Mullholland, the Los Angeles engineer responsible in the 20s for the deals that, in the old western phrase, "made water flow uphill in search of the money". The name Noah Cross suggests the protective Old Testament patriarch played in the 1966 blockbuster The Bible by John Huston, but here reprised in a less benevolent mode as a self-righteous plutocrat who has harnessed the flood in his own interests.

The other metaphor is that of Chinatown, an inscrutable place that outsiders either stand back from or misread in a way that demonstrates the futility of good intentions. Jake worked in Chinatown during his days in the LAPD and, at the end of the picture, returns there in a bid for redemption that turns out to be an act of tragic pointlessness. He's in every scene, frequently with the camera just behind him. We see and experience everything from his point of view, with Polanski composing every frame, dictating each camera movement.

The movie captures the city in a summer heat-wave: the blinding exteriors dazzle the eye and blur the judgment; shafts of light create a sinister atmosphere as they penetrate the dark interiors through venetian blinds. Jerry Goldsmith's superb score uses strings and percussion during moments of suspense and a distant, and bluesy trumpet for elegiac, contemplative scenes. Above all there is Nicholson's Gittes, a cocky, confident operator losing his social moorings and ending up as the proverbial drowning man reaching out for straws. **Philip French**

The Big Sleep

The "big sleep" of the title is of course death, but the action in Howard Hawks's classic hardboiled thriller from 1946, taken from the Raymond Chandler novel, often looks like the sleep of reason bringing forth monsters. Only the fiercest concentration will keep you on top of the head-spinning plot, and in fact the plot reportedly defeated its stars and director while they were actually shooting, cutting, reshooting and arguing about it. An explanatory scene was removed and replaced with one showing the leads flirting in a restaurant. Plot transparency was sacrificed in favour of the film's sexual mood music and making its female star, Lauren Bacall, every bit as compelling as she could be. The fact that Hawks moreover had to be relatively coy about the pornography and drugs makes the proceedings look even more occult and mysterious.

But the narrative's defiance of our comprehension is part of the film's sensational effect and its remarkable longevity: it means that scenes, characters, moments and quotable lines ("She tried to sit on my lap while I was standing up") float up out of the mesmerising stew and into your consciousness like fragments of a dream. The noir fused pulp detective fiction with the enigmatic form of German expressionism and The Big Sleep is an almost surrealist refinement of the noir genre.

Bogart is Philip Marlowe, a private detective called in by an ageing sensualist when his pretty, tearaway daughter is being blackmailed. Yet Marlowe is enamoured of her sister: a very cool customer played, of course, by Lauren Bacall. She was 20 years old and Bogart, her husband, was 44 but looking older – unwell, and battling with a drinking problem. Nowadays, discussing the presence or absence of "chemistry" between stars has become a critical commonplace. Bogart and Bacall virtually invented the subject with their droll, laconic dialogue. There is a palpable charge in the air. Bacall ventilates the male atmosphere of the film, which is otherwise heavy, gloomy and dark: Bogart himself appears in almost every scene of the film and the mystery is also when he has time to go back home and sleep.

The movie's disturbing and incomprehensibly labyrinthine story of murder and betrayal now looks like a fable by David Lynch, but Hawks his own storytelling force and potent and distinctive presence. Decades later, Polanski's gumshoe would retreat from the unknowable mess of Chinatown, but the disturbing and chaotic crime-swirl of greed, vanity, lust and murder — its vortex too low down to be clearly seen — was trademarked by Hawks, Bogart and Bacall in The Big Sleep. **Peter Bradshaw**

How to survive Christmas

Imagine if your jokes were funny, your presents perfectly wrapped and you beat your dad at the board games... Our experts offer tips to make sure you come out of the festive season a winner

you know who you are - and it ruins the joy for someone who may have found it funny. For example, my sister once got hysterical at this: "Who delivers presents to cats? Santa Paws." We can't ruin



Keeping a straight face: Miranda Hart. Photograph: Jay Brooks/Camera Press

How to tell a Christmas cracker joke by Miranda Hart

I am crackers about crackers. I don't really know why. The noise of them opening is never quite as satisfying as you'd hope, even though you always wince as if a firework is about to go off in your face. And you know that at best you'll end up with a pair of nail clippers that will break in 26 seconds.

Could it be the jokes? Ah yes. That tiny hopeful piece of paper that might lead to some round-thetable merriment. And they do. Well, sometimes. Well, OK, rarely. No, let's be fair, they can be satisfying. Examples: "Why does Santa have three gardens? So he can ho, ho, ho." "Why did the turkey join the band? Because it had the drumsticks."

OK, fine, they are predominantly rubbish (though I do find the first one quite funny). So a Christmas joke is all in the delivery. And here let me share two "don'ts" of the telling of a Christmas joke. Don't read it and go: "Oh dear, oh that's awful" before you've read it out. Someone will always do that -

what we think are rubbish jokes for those who find the simpler things amusing in life (a kind way to describe my sister!).

And don't do that thing of starting the joke:
"What does Santa suffer from if he gets stuck in a chimney?" Then go: "Come on, oh you can guess it, come on." The joke suddenly turns in to some terrifying quiz that you feel stupid for not getting.
"Claustrophobia." Oh yes, right, of course, should have got it. The only way to deliver a Christmas joke is with the joy and merriment of a six-year-old so everyone cheers on the delivery and the Christmas spirit is fully maintained. Or like my father - who gets hysterical as he reads it out, for no reason at all, and then we all get hysterical at him being hysterical. Either way, laughter ensues. And we all need laughter.

Miranda Hart is co-hosting a Christmas programme with Jon Holmes on Radio 2 on 23 December, from 2-5pm. Tickets for her My, What I Call Live, Tour are on sale now (mirandahart.com)

How to win at Trivial Pursuit by Richard Osman

There are two obvious tactics for winning at Trivial Pursuit. The first is to take a keen lifelong interest in Art, Literature, Sport, Leisure, Entertainment, History, Geography, Science and Nature. A shortcut would be to watch *Pointless* every day. That's what I do.

Secondly, cheat. This is easy in Triv, because you can just read all of the answers beforehand. It is made even simpler by the fact that everyone you're playing against is drunk. But let's assume you have left it too late to try option one, and you are too terrific a human being to countenance option two. Here are some tactics that might give you the edge.

Remember that there have been many versions of Triv. If you are over 50 make sure you are playing with the 1984 version, where the answers all tend to be Jack Nicholson, Michael Foot or Spandau Ballet. If you are under 25 go for the most recent version and rely on the fact that Uncle Keith won't have heard of twerking or Heston Blumenthal.

Also remember that you will not win Triv without answering a question on a category chosen by your opponents. Therefore at all times try to hide which subject is your weakest. Mine is Science and Nature. Or is it?

Thirdly, learn a few lists. My tips would be Oscar-winning films, kings and queens of England and capital cities of the world. If you know everything on these lists, people will think you are clever for the rest of your life.

And if all that fails, then the answer is probably Charlotte Brontë. Good luck! The 100 Most Pointless Arguments in the World by Alexander Armstrong and Richard Osman is out now (Coronet, £14.99, or £11.99 on guardianbookshop.co.uk)

How to get a table for New Year's Eve by Jay Rayner

Getting the most out of New Year's Eve in a restaurant is a tricky business. There are restaurants opening for the night across Britain, from the glorious fish brasserie Ondine in Edinburgh to Le Manoir in Berkshire to half of London's flashest eateries, but they'll make you pay for it. At Le Manoir it's £370 for dinner per person, or up to £4,380 for two people for two nights. Sushisamba, in the City of London, looks like a bargain by comparison: £275 for a nightlong party. And so it goes on: £115 for three courses

at Bar Boulud, £130 at Tom Aikens, £160 for a coveted place at the Kitchen Table at the back of Bubbledogs. The real issue is getting in, unless you're the sort of person who sorts New Year's Eve in June, and who wants to be them?

All hope is not lost. Christmas is such a tense and complicated time for families and lovers that some who were looking forward to spending New Year's together find by 29 December that they now detest each other. They are more likely to stuff their forks into each other's eyes than eat with them. So the best time to pick up a cancellation is probably 30 December. Got anything better to do with your time on that dreary day than sit on the phone? I doubt it.

A lot of places are doing two sittings, with the early one being at a knock-down price. The New Year's sitting at Tom Aikens from 6.30pm for two hours is a full £50 cheaper. At Bistrot Bruno Loubet the early menu is £50. Is any of it cheap? Of course not, and reasonably so. The biggest cost is all those people *not* celebrating New Year's Eve so they can serve you.

How to wrap presents with flair by Jane Means

In Tokyo I discovered a trick that makes even brown paper look instantly luxurious. Begin by creating pleats along your wrapping paper, pinching and folding it over in small amounts. When you've staggered pleats along the paper, stick some Sellotape across them, on the underside, to stop the paper from stretching. This works best for wrapping boxes and flat items. Wrap the box as normal, and add a simple ribbon.

Jane Means is a gift wrapping expert; get her DVD The Art of Gift Wrapping for a special price of £10 using the discount code 'OB13' (janemeans.com)

How to sing carols by Alfie Boe

Song choice is key. The fast patter songs - things like "Good King Wenceslas" - can be quite tricky when you've had a few sherries. "Ding Dong Merrily on High" can have you leaning to one side on the "Gloor-oria" chorus, so you want a nice big breath before that bit. And don't go for anything with too many verses - the professionals have autocue; you'll just forget.

Sing the words with meaning, and pronounce every syllable if you want to seem polished. But if

you're really struggling, the main thing is that your mouth is opening and closing and that you're making some noise. A carol is like singing "Happy Birthday": everybody's got to do it, so man up and do it properly. No ad libs. Stick to the classics. No Justin Bieber's "Mistletoe", however much the kids might want it.

If in doubt, substitute the words. Rude versions can work very well. Shepherds watching their flocks becomes shepherds washing their socks for kids. There's also another word that rhymes with flocks and socks which I won't mention here but you can Google it. Rewrite the whole song and you've started the party.

And if you're going up against competitive carollers, remember: it all comes down to your woollen scarf and bobble hat. Both are obligatory, of course. *Alfie Boe's album*, Trust, *is out on Decca Records. His* 2014 *UK Tour runs to* 13 *December (alfie-boe.com)*

How to get on with your family by Mariella Frostrup

For many, dread, not delight, is the primary emotion sparked by the festive season. "Tis the season to be jolly", allegedly, but it's the conscientious objectors of popular fiction who sum up the reality of this most commercialised of religious festivals. Scrooge feared profligate spending and the Grinch dreaded hammy happiness - both reach epidemic levels at this time. As desperate shops ratchet up the seasonal cheer, the most terrifying threat has to be the invasion of intolerable siblings, meddling mother-in-laws, hysterical children, grumpy parents, ghastly uncles and aunts, feral nieces and nephews.

For most of us it's a holiday experience to endure, not enjoy, but with a few behavioural tweaks you, too, can survive this annual emotional Armageddon. First, reduce exposure - halve the time you spend with family and you can halve the arguments. Even in the most acrimonious of environments it usually takes 12 hours to kick off. Also, spend less. Cut down on the amount you spend on gifts and you'll decrease your resentment levels. Finally, create a diversion - bring a box set in which you can all immerse yourselves when civil conversation becomes a challenge.

I'd also recommend that you stock up on Kalms, the herbal alternative to Class A drugs, and try to remember: these people are only human - even if particularly annoying examples of the species. If all else fails, you could turn to the Bible - in 1 Corinthians 10:12 you'll find good advice: "This, too, will pass."

How to put up Christmas decorations by Matthew Williamson

When it comes to decorating your house for Christmas, the best piece of advice is to relax. Don't overthink it. In fact, simpler is better - for instance, if you wrap all your presents in the same paper, the display under the tree is going to look great. The same for the tree itself. I use only white lights, because they look expensive. And use what's available. The year I just hacked down a load of fir tree branches from the trees in my garden and arranged them, it looked fabulous - I had so may compliments on my Christmas display. Cheap and cheerful can be made to look expensive. I have been curating a collection of celebrity-designed baubles for Kids Company this year, and Gwyneth Paltrow made hers out of papier-mâché. It was just wallpaper, evenly striped, but it was perfectly formed! Admittedly, I made mine of ostrich feathers and crystals. But then Christmas is all about surprises. To bid for a bauble, go to ebay.co.uk/usr/aquashard. Proceeds go to Kids Company (kidsco.org.uk)

How to pour champagne with style by Erik Lorincz

Everyone knows the most important rule for opening a bottle of champagne: twist the bottle, not the cork. (And if you didn't, you do now.) But here is a trick for pouring it like a pro - one I rarely see in the UK, so it is bound to impress.

Fold a napkin (or teatowel) in half and wrap it around the neck of the bottle. Twist the napkin as tight as you can to form a cloth handle. Holding the end of the twisted napkin, lift the bottle and balance it with your finger. And pour. Erik Lorincz is head bartender of the American Bar at the Savoy (fairmont.com)

All I want for Christmas? The reindeer-covered jumper of my dreams

Christmas jumpers may now be an ironic fashion statement, but I have always loved the real thing in all its 1980s-style glory, complete with giant Santa, Rudolph, snowmen and snowflakes By Hadley Freeman

Every Christmas, my kids beg me to take off my Christmas jumper (a giant Rudolph with a red pompom nose) for the photos, but I tell them Christmas jumpers are what Christmas is all about. Who's right? - Mike, by email

My God, Mike. Are your children satanists? Maybe even - clutched handkerchief - socialists? I do not wish to cast aspersions on your undoubtedly beloved offspring but, seriously, who are these young people, dissing Christmas knitwear? I may not be of the religious persuasion for which Christmas is intended, but I did RE in school and I know it is a gold-plated FACT that the story of Christmas goes as follows: it was a cold but clear night in the little town of Bethlehem. A humble shepherd (was Joseph a shepherd? Probably. I mean, he wasn't an IT engineer, was he? Let's stick with shepherd) and his young wife were travelling the hard and rocky mountain paths (are there mountains in Bethlehem? Whatever, style it out), looking for a place to rest their precious load. At last, they found a manger and there they placed their holy burden in a cow's feeding trough (is this right? Whatever, check Wikipedia later). Kings came from miles around to pay their respects to this newfound deity and as they knelt the shepherd's young wife pulled back the blanket to reveal what she had carried, and they saw what it was, and it was beautiful: a sloppily knitted Christmas jumper, with a giant Santa Claus in the centre and a pattern of alternating snowmen and reindeer round the neckline. Let the Christmas bells ring out!

I love Christmas: there's loads of food, there's loads of family and everyone wears really bad clothes, glittery makeup and sings cheesy songs. Seriously, there are few holidays more Jewish than Christmas. With all respect to the dozens of Hebrew schoolteachers who laboured to teach me the difference between the letters "vav" and "nun" in my youth, I'm struggling to think of a holiday more fun than one that lets you sit around all day in your bathrobe eating cinnamon pastries while watching a double bill of Trading Places and Scrooged. I honestly think I would have been a better Jew if Bill Murray and Dan Aykroyd had just made some decent films set during Rosh Hashanah.

Alongside Murray and Aykroyd, Christmas jumpers have always been a central part of my longing for Christmas, going right back to my school days, when girls with names such as Christina and Victoria would come to school wearing snowmen jumpers and I'd have to pretend to be excited over my bag of chocolate gold coins for Chanukah. I mean, chocolate's great and all, but these girls had Santa! Knitted Santas! On their tummies! On my deathbed, I fully expect my last croaked-out words to be "Christmas ... jumper", Citizen Kane-style. And then I will lie back, my last breath spent, and fade out of this world as I muse on a life spent chasing those enviable objects, and my many biogra-

phers will forever puzzle away at the meaning of my final words.

There is nothing ironic about my love of Christmas jumpers. Rather, it is a love borne purely out of respect for another's religion seeing as Christmas is, as we already established, a celebration of the first Christmas jumper. But also, Christmas jumpers are just delightful. I have recently been made aware of the fact that they are, hilariously, deemed rather "trendy" this year and various retailers are knocking them out for their irony-loving hipster clientele. As regular readers know, this column has little truck with the trendification of heretofore uncool fashion items because it generally means inflation of prices and a nauseating amount of irony. But in this case, I will benevolently allow this trend to happen. If people need a helping of irony to encourage them to experience the joy of a Christmas jumper, and if they want to pay extortionate prices to do so, so be it. Those of us more practised in the art of Christmas jumper-wearing know better.

Last week, I went to LA for work and, as I often do when I'm in California, I went to a secondhand clothing shop. (For reasons I have yet to fathom, California has the best secondhand clothing shops

in the world: cheap and colourful and just generally a delight.) I noticed that this particular one had a secret back room, so I asked to go in. Reader, I married it. Or I would have, if one could marry a room because this room was full of - can you guess? - old Christmas jumpers. Festive red jumpers from 1980s LL Bean catalogues, ridiculous ones that looked like advent calendars, beautiful Intarsia ones bedecked with snowflake patterns. I was Charlie Bucket, walking into Willy Wonka's chocolate factory. Amazingly, I managed to limit myself to just the one (an Intarsia one with reindeer, and a lick of silver thread around the cuffs), for a bargain \$10. I had found my Xanadu: my very own, perfect, 1980s Christmas jumper.

Personally, Mike, I prefer patterned versions to the ones like yours featuring a giant character for the vaguely defined reason that you can just about get away with wearing them on days other than 25 December. But, for heaven's sake, let's not quibble over the stylistic merits of Christmas jumpers. Life's too short. Just put on a Christmas jumper. Enjoy yourself.

Post your questions to Hadley Freeman, Ask Hadley, The Guardian, Kings Place, 90 York Way, London N1 9GU. Email ask.hadley@theguardian.com



Choice Christmas jumpers as modelled by This Morning presenters Phillip Schofield and Holly Willoughby. Photograph: Ken McKay/Rex Features

