

SATURDAY 16 NOVEMBER 2019**SAT 00:00 Midnight News (m000b823)**

National and international news from BBC Radio 4

SAT 00:30 The Anarchy (m000b825)

Episode 5

William Dalrymple's critically acclaimed new history of the East India Company examines how a small trading company was transformed into a colonial power over the course of almost 300 years. In today's concluding episode, he turns to its legacy as a prototype for modern day global corporations with some newly written cautionary reflections. The reader is Alistair McGowan.

Adapted by William Dalrymple
Produced by Elizabeth Allard

SAT 00:48 Shipping Forecast (m000b827)

The latest weather reports and forecasts for UK shipping.

SAT 01:00 Selection of BBC World Service Programmes (m000b829)

BBC Radio 4 joins the BBC World Service.

SAT 05:20 Shipping Forecast (m000b82c)

The latest weather reports and forecasts for UK shipping.

SAT 05:30 News Briefing (m000b82f)

National and international news from BBC Radio 4.

SAT 05:43 Prayer for the Day (m000b82h)

A spiritual comment and prayer to start the day with the Archdeacon of Bangor, Mary Stallard

SAT 05:45 The Curious Cases of Rutherford & Fry (m000b4wc)

Series 14

Stephen Fry's Identity Crisis

Stephen Fry (no relation) asks Adam and Hannah to investigate the following question:

"All my life I have been mildly plagued by the fact that I have a quite appalling ability to remember faces. I cut people I should know well dead in the street, or at least fail to recognise them in a way which must often be hurtful.

At a party I can talk to someone for ten minutes and then see them again twenty later and have no idea who they are unless I've made an effort to fix some accessory or item of their dress in my mind. If I see them the next day in another context I'll have no idea who they are. It's distressing for me inasmuch as I hate the idea that people might think I am blanking them, or think little of them, don't consider them significant and so forth.

I'd be very grateful if my sister-in-law and her eximious partner Adam could investigate prosopagnosia for me and offer any hint add to as to its cause or even possible – I won't say "cure" as I am sure it's chronic and untreatable – but at least any interesting ways of relieving it."

Hannah and Adam call in the experts, neuroscientists Sophie Scott and Brad Duchaine. Why is it that some people struggle with prosopagnosia, whilst others never forget a face?

You can find out more about Face Blindness, who it affects and how to cope with it by visiting www.faceblind.org.uk/

Presenters: Hannah Fry, Adam Rutherford
Producer: Michelle Martin

SAT 06:00 News and Papers (m000bcj5)

The latest news headlines. Including the weather and a look at the papers.

SAT 06:07 Open Country (m000b6t3)

Community Resilience in Toppesfield

Across the country, rural communities are finding their local services under threat, but in the north Essex village of Toppesfield, residents are finding creative ways to keep their local amenities open and village life thriving.

From the volunteer run village shop to the community funded pub and locally founded microbrewery, the villagers of Toppesfield are working hard to keep this rural community fired up with community spirit and much needed local

establishments. Helen Mark meets the locals who have generated and supported these projects and the organisations that are on hand to help, to find out what lessons could be shared with other rural villages.

Presented by Helen Mark
Produced by Anne-Marie Bullock

SAT 06:30 Farming Today (m000bcj7)

Farming Today This Week

The latest news about food, farming and the countryside

SAT 06:57 Weather (m000bcj9)

The latest weather forecast.

SAT 07:00 Today (m000bcje)

News and current affairs. Including Sports Desk, Weather and Thought for the Day.

SAT 09:00 Saturday Live (m000bcjf)

Lorraine Kelly

This year marks Lorraine Kelly's 35th year as a broadcaster and her 60th birthday. Born in the Gorbals to teenage parents, Lorraine took a job at her local newspaper instead of a place at university and, despite being sacked while on maternity leave, is now one of Britain's best known television presenters. Her new book *Shine* shares her secrets for success.

Amy Powney, creative director of sustainable fashion label Mother of Pearl, spent much of her childhood without mains electricity or running water when her parents sold their house to live off-grid in rural Lancashire. Despite being taken to school in a handmade trailer and having requests for tracksuits denied, Amy found that her parents approach to ethical living had influenced her when she began a career in fashion.

Professor Adam M Hill MB PhD is a dual-qualified Clinician and Mechanical Engineer with a military background and a career built at the interface of industry, academia and health systems. Adam is the Chief Executive Officer at immunodiagnosics company Oncimmune, a company who are trailing new ways to detect cancer, but he has previously worked for the McLaren F1 team and has served in the Household Cavalry.

Carol Bates' mum Vivien Grant contacted us after hearing our interview with former footballer Casey Stony, talking about her struggles to play the game she loved. Carol is from the generation of girls who weren't able to play football at school or elsewhere and it wasn't until she set up her own team at the age of 48, that she fulfilled her dream.

For Inheritance Tracks this week, actor Toby Stephens chooses *You Are In My Vision* by Gary Numan and Tubeway Army and *She Belongs To Me* by Bob Dylan.

Producer: Laura Northedge
Presenter: Eleanor Garland

SAT 10:30 Rewinder (m000bcjh)

Greg James, host of the Radio 1 Breakfast Show and self-confessed 'proud radio nerd', ruminates through the BBC's vast archives of audio, video, vinyl, photographs and documents, using current stories as a springboard into the past.

In the first series Greg unearthed the earliest appearances of Donald Trump on the BBC, including the time when the future President found himself perching on the chat-show sofa between Terry Wogan and Dame Edna Everage. Greg also found the BBC review show which thought that Elton John was 'past it' at the age of 26 - and uncovered reports of bad behaviour at a BBC pop show in the Royal Albert Hall in the early 1960s, culminating in the theft of Acker Bilk's bowler hat. It's still missing.

Greg now crosses the corridor from Radio 1 to Radio 4 for a second series of Rewinder, and says: "As someone who spends far too much time searching for oddities online, the opportunity to gain access to one of the greatest media resources on the planet is too good to miss."

Producer Paula McGinley

SAT 11:00 Electioncast (m000bnr0)

Adam Fleming and the BBC's politics team bring you the essential guide to the 2019 UK general election.

SAT 11:30 From Our Own Correspondent (m000bcjm)

"If we burn you burn with us"

They believe they are fighting for their way of life, for Hong

Kong's very existence, but the protestors know they can't really win says Paul Adams.

Kate Adie introduces this and other stories from around the world:

There is a saying in Russia "If he beats you - he loves you" hears Lucy Ash as she visits a refuge for the survivors of domestic violence in Moscow. "Twisted logic, yes, but it is still part of our mentality."

In Ethiopia, Justin Rowlett gets stung by killer bees as he examines successful attempts to re-green the region and restore long lost woodlands.

In Australia, bushfires burn. While scientists and firefighters agree that climate change is making things worse many leading politicians refuse to listen. Phil Mercer has seen the damage for himself.

And Joanne Robertson struggles to get a decent haircut in Paris and asks who is to blame?

Producers: Joe Kent and Lucy Ash

SAT 12:00 News Summary (m000bcjp)

The latest national and international news from BBC Radio 4.

SAT 12:04 Money Box (m000bcjr)

The latest news from the world of personal finance plus advice for those trying to make the most of their money.

SAT 12:30 The Now Show (m000b81j)

Series 55

Episode 4

Steve Punt and Hugh Dennis present the week via topical stand-up and sketches. They're joined by Andy Zaltzman, Olga Koch, Jess Robinson and Josh Berry, and Steve and Hugh interview journalist Iain Martin about what it's like to cover an election.

It was written by the cast with additional material by Liam Beirne, Katie Storey, Kat Sadler and Alison Spittle.

It was a BBC Studios production.

SAT 12:57 Weather (m000bcjt)

The latest weather forecast

SAT 13:00 News (m000bcjw)

The latest news from BBC Radio 4.

SAT 13:10 Any Questions? (m000b81q)

Diane Abbott, Claire Fox MEP, Robert Jenrick, Caroline Lucas

Chris Mason presents political debate from Worplesdon Memorial Hall in Surrey with the Shadow Home Secretary Diane Abbott, the Brexit Party MEP Claire Fox, the Secretary of State for Housing, Communities and Local Government Robert Jenrick and the prospective parliamentary candidate for the Green Party Caroline Lucas.
Producer: Lisa Jenkinson

SAT 14:00 Any Answers? (m000bcjy)

Have your say on the issues discussed on Any Questions?

SAT 14:45 Nora Webster (m000bck0)

Episode 2

BAFTA winning screenwriter Adrian Hodges' dramatisation of Colm Tóibín's powerful bestselling novel Nora Webster concludes.

As Nora rediscovers her love of music, and warmed by small acts of friendship, she gradually begins to find some hope and strength for the future...

Siobhan McSweeney (DERRY GIRLS) stars as Nora Webster.

The bestselling and critically acclaimed novelist Colm Tóibín is perhaps best known for Brooklyn (which became a film starring Saoirse Ronan) and The Master.

Award-winning winning writer for screen and television Adrian Hodges wrote the Oscar nominated film My Week with Marilyn. BAFTA winning TV series Amongst Women (adapted from the novel by John McGahern), the BBC adaptation of Philip Pullman's The Ruby in the Smoke starring Billie Piper, and was the writer and creator of The Musketeers and co-creator of Primeval.

Written by Colm Tóibín
Dramatised by Adrian Hodges
Directed by Allegra McLroy

Cast:
Nora Webster Siobhan McSweeney
Aunt Josie Brid Brennan
Phyllis Langdon Norma Sheahan
Catherine Ruth Bradley
Seamus Jonathan Forbes
Redmond Paul Reid
Dr. Cudigan Gary Lilburn
Maurice Edward MacLiam
Elizabeth Sophie Robinson
Aine Lauren Coe
Laurie Jessica Turner
Peggy Gibney Heather Craney
Donal Tommy Harris
Conor Sinead McGee
Other parts were played by the cast
Sound design David Chilton

Nora Webster is a BBC Northern Ireland Production

SAT 15:45 One to One (m000b5k6)

City or Country? Alys Fowler meets Gregory Leadbetter

Acclaimed gardening writer, Alys Fowler, tries to work out where she wants to live, in the city or the countryside, with the help of poet, Gregory Leadbetter.
Alys grew up in deepest rural England but for years has found happiness in the city of Birmingham, her small garden and local allotment. But she's starting to feel the pull of the countryside again, and the access to the natural world it offers. However, Gregory - through the lens of poetry - discusses how paying close attention to nature wherever you are can have a profound effect.

Producer: Karen Gregor

SAT 16:00 Woman's Hour (m000bck2)

Highlights from the Woman's Hour week.

SAT 17:00 PM (m000bck4)

Full coverage and analysis of the day's news, plus the sports headlines.

SAT 17:30 The Bottom Line (m000b6tr)

Dismissing staff

What are the rules when people have to lose their jobs? It's always a difficult situation - which is why it's often handled badly. Evan Davis and guests ask if there is a better way of doing it.

GUESTS

Angela O'Connor, Founder and CEO, The HR Lounge Consultancy

Sian Keall, Partner, Employment Law, Travers Smith LLP

Kate Griffiths-Lambeth, Group HR Director, Charles Stanley, Wealth Managers

Producer: Julie Ball
Editor: Hugh Levinson

SAT 17:54 Shipping Forecast (m000bck7)

The latest shipping forecast.

SAT 17:57 Weather (m000bck9)

The latest weather forecast.

SAT 18:00 Six O'Clock News (m000bckc)

The latest national and international news from BBC Radio 4.

SAT 18:15 Loose Ends (m000bckf)

Paul Merton, Lucian Msmati, Cathie Pilkington, Samantha Baines, Sharky, Odette Peters, Scottee, Clive Anderson

Clive Anderson and Scottee are joined by Paul Merton, Lucian Msmati, Cathie Pilkington and Samantha Baines for an eclectic mix of conversation, music and comedy. With music from Sharky and Odette Peters.

SAT 19:00 Profile (m000bckh)

An insight into the character of an influential person making the news headlines

SAT 19:15 Saturday Review (m000bckk)

The Gangster The Cop The Devil, Touching the Void, Romesh Gunsekera, Gold Digger, George IV : Art and Spectacle

The Gangster The Cop The Devil is an award-winning Korean action thriller about an unlikely alliance between a police detective and a mobster who have to work together to catch a serial killer

Touching the Void began life as a book by Joe Simpson, about a climbing accident which nearly killed him. It has since been turned into a film and now a stage play. How can you show vertiginous dangers and a lot of internal thought processes in the theatre?

Sri Lankan writer Romesh Gunsekera (well it was actually called Ceylon when he was born) has written a coming of age novel set in his native country in 1964, as the struggle for independence began.

Gold Digger is a Sunday night series just started on BBC1. When their 60 year old mum meets and moves in with a much younger man, Julia's children decide they don't like it and start to try and drive them apart
George IV : Art and Spectacle has just opened at The Queen's Gallery at Buckingham Palace. He was arguably the most magnificent of British monarchs and formed an unrivalled collection of art, much of which remains in the Royal Collection

Tom Sutcliffe's guests are Charlotte Mullins, Lynn Shepherd and Jim White. The producer is Oliver Jones

Rembrandt van Rijn, The Shipbuilder and his Wife: Jan Rijcksen and his Wife, Griet Jans, 1633
Image credit: Royal Collection Trust / (c) Her Majesty Queen Elizabeth II 2019

SAT 20:00 Archive on 4 (m000bckm)

Pandora's Ballot Box

Since the Cambridge Analytica scandal broke in the pages of The Observer, there has been an unprecedented level of attention paid to the possible influence of digital technology upon elections. The heads of social media platforms have been questioned repeatedly by Select Committees in the UK and Senate Committees in America, quizzed about funding, fake accounts and interference in politics by the Russian authorities, leading some to talk of the potential demise of functioning democracy. In 'Pandora's Ballot Box', Professor Philip Cowley of Queen Mary College, University of London, will argue that while there are good reasons for us to be worried, in fact many of these same anxieties can be witnessed being provoked by the introduction of much earlier, non-digital technologies, such as radio, TV, polling and even political posters. All of these, as Philip will show, have been both exploited by tech-savvy party operatives and simultaneously accused of simplifying and coarsening political discourse. Archive includes phonograph recordings of Teddy Roosevelt and a secret TV screen test of Winston Churchill, and Philip talks with Martin Moore, Laura Beers, Stephanie Hare and Chris Burgess, to find out whether the issues we face in the digital age mark a significant and qualitative increase in the threat technology poses to the integrity of our elections.

Produced by Geoff Bird

SAT 21:00 Dickens Confidential (m000bckp)

Series 1

Darker Than You Think

Episode Two - Darker Than You Think
Written by Mike Walker

Drama series imagining Charles Dickens as a campaigning newspaper editor.

Bodies are being discovered in the River Thames with dreadful injuries. The rumours abound that it's Spring Heeled Peter, but the inspector in charge of the case just wants the culprit found before anyone else is killed. Chief correspondent Jack is sent to investigate but Agnes seems rather more interested in her new beau, a pioneering and seemingly philanthropic doctor, than following the progress of his leads.

Dickens Jamie Glover
Agnes Jasmine Hyde
Jack Freddy White
Henry Jenks Nicholas Boulton
Inspector Leavett Harry Myers
Scottish Convict John Dougall
London Convict Sam Dale
Warder Anthony Glennon

Produced & Directed by Tracey Neale
Executive Producer - Alison Hindell

SAT 21:45 Book at Bedtime (b08mb39f)

Rabbit, Run

Episode 1

The post-war novel that summed up middle-class white America and established John Updike as the major American author of his generation. Rabbit, Run is the first in a virtuoso Pulitzer Prize-winning quintet featuring hapless Harry Angstrom, whom we meet as a 26-year-old former high school basketball star and suburban paragon in the midst of a personal crisis.

Episode 1 (of 10):

When Harry "Rabbit" Angstrom joins an impromptu basketball game, he sets in motion a chain of decisions that will free him from the responsibilities of adult life - or so he hopes.

Rabbit, Run established Updike as one of the major American novelists of his generation. In the New York Times he was praised for his "artful and supple" style in his "tender and discerning study of the desperate and the hungering in our midst's".

Radio 4 plans to broadcast all five novels in the series over the next few years.

Read by Toby Jones

Abridged by Eileen Home

Produced by Clive Brill

A Brill production for BBC Radio 4.

SAT 22:00 News and Weather (m000bckr)

National and international news from BBC Radio 4.

SAT 22:15 Moral Maze (m000b4xl)

The Morality of Voting

"You're joking – not another one!" That was Brenda from Bristol, back in 2017 when Theresa May surprised the country with a snap poll. A penny for Brenda's thoughts as we climb aboard the roller-coaster for our third general election in four years. The pundits are predicting only its unpredictability. The parties are fractured and fraught, the voters are frustrated and fatigued, and Brexit prances through the pantomime. The old safe-seat certainties are crumbling. Campaigners on all sides have been encouraging tactical voting to stop the opposition at all costs. Is that morally acceptable, or should we vote for the candidate we most closely support, even if they have no chance of winning? If our long-held tribal loyalties seem less certain, is that good or bad? Does it shake up candidate complacency or threaten community interests? Is it OK to stand in the voting booth and ask 'What's in it for me?' or are we there on behalf of all humanity? Perhaps the question is not 'How should I vote?', but 'Why should I bother?' People fought and died for our right to vote, so is it a moral duty to go to the polling station, even if we spoil our ballot? Or is it wrong to criticise those who stay at home on election day, nursing their anger or their apathy? Featuring Dr Lisa McKenzie, Alan Hamlin, Richard Harries and Professor Lea Yp.

Producer: Dan Tierney.

SAT 23:00 Counterpoint (m000b4qx)

Series 33

Semi-Final 2, 2019

(11/13)

Another trio of heat winners joins Paul Gambaccini to decide which of them will go forward to the 2019 Final. Which musical ensemble was founded by William Christie in 1979? And which contemporary composer has released a sequence of seven classical recordings this year inspired by a walking tour in the Alps? The competition is fierce at this stage and the semi-finalists will need to trawl their knowledge of every genre of music in order to stay afloat.

Taking part today are:

Mark Sautter, an accountant from West London
Harry Shaw, a student from Cheltenham
Brian Thompson, a retired schoolteacher from Liverpool.

Producer: Paul Bajoria

SAT 23:30 Poetry Please (m000b70l)

40th anniversary special with Cerys Matthews

To celebrate the programme's 40th birthday, Cerys Matthews interviews Roger McGough about his favourite poetry.
Producer Sally Heaven.

SUNDAY 17 NOVEMBER 2019

SUN 00:00 Midnight News (m000bckt)

National and international news from BBC Radio 4

SUN 00:30 Short Works (m000b812)

In the Forest Park

Acclaimed Irish writer, Kevin Barry, reads a new story, specially commissioned for Radio 4.

In a bittersweet tale, two lovers meet again by an Irish lake - the place they broke up, decades before....

Reader and writer: Kevin Barry is an acclaimed Irish writer, whose debut novel, *City of Bohane*, won the 2013 Impac Dublin literary award; his next novel, *Beatlebone*, was the winner of the Goldsmiths prize, and his most recent novel, *Night Boat to Tangier*, was longlisted for the Booker Prize.
Producer: Justine Willett

SUN 00:48 Shipping Forecast (m000bckw)

The latest weather reports and forecasts for UK shipping.

SUN 01:00 Selection of BBC World Service Programmes (m000bcky)

BBC Radio 4 joins the BBC World Service.

SUN 05:20 Shipping Forecast (m000bcl0)

The latest weather reports and forecasts for UK shipping.

SUN 05:30 News Briefing (m000bcl2)

National and international news from BBC Radio 4.

SUN 05:43 Bells on Sunday (m000bcl4)

Tewkesbury Abbey in Gloucestershire

Bells on Sunday comes from Tewkesbury Abbey in Gloucestershire. The central tower is one hundred and forty eight feet high and is the largest surviving Norman tower in existence. Up until the early nineteen hundreds there was a ring of eight, but in 1962 a new ring of twelve bells was cast and hung by John Taylor of Loughborough. The tenor weighs just over twenty seven hundred weight and is tuned to D. We hear the ten largest bells ringing Stedman Caters.

SUN 05:45 Profile (m000bckh)

[Repeat of broadcast at 19:00 on Saturday]

SUN 06:00 News Headlines (m000bdkt)

The latest national and international news headlines.

SUN 06:05 Something Understood (b08318lx)

The Unfamiliar

The attractions of unfamiliarity are many - a cure for ennui, antidote to monotony, stimulation for jaded appetites. What is it about the strange, the new or the exotic that exerts such an appeal?

Mark Tully explores the attraction of the unfamiliar and the important role our hunger for new places, new people, new fashions and new experiences plays in understanding the world.

There is music from Gavin Bryars, Claude Debussy and Johnny Cash and readings from John Masefield, Rita Dove and philosopher Dale Andrews.

The readers are Paapa Essiedu and Emma Pallant.

Producer: Frank Stirling

A Unique production for BBC Radio 4

SUN 06:35 On Your Farm (m000bdkw)

Mushroom Soup for the Soul

Verity Sharp goes mushroom collecting with Long Litt Woon. Malaysian anthropologist Woon found solace in fungi foraging after the sudden death of her husband. Now she's become a certified mushroom expert in Norway.

Producer: Beatrice Fenton

SUN 06:57 Weather (m000bdky)

The latest weather forecast.

SUN 07:00 News and Papers (m000bdl0)

The latest news headlines. Including a look at the papers.

SUN 07:10 Sunday (m000bd12)

Sunday morning religious news and current affairs programme.

SUN 07:54 Radio 4 Appeal (m000bd14)

Children in Need

Donations: BBC Children in Need Appeal, PO Box 648, Salford, M5 0LB

You can give now by calling 03457 33 22 33. Standard geographic charges from landlines and mobiles will apply. You can also donate online at bbc.co.uk/Pudsey

And you can also donate using - Freepost BBC Radio 4 Appeal. (That's the whole address. Please do not write anything else on the front of the envelope).
- Mark the back of the envelope 'BBC Children in Need'.
- Cheques should be made payable to 'BBC Children in Need'.

SUN 07:57 Weather (m000bd16)

The latest weather forecast.

SUN 08:00 News and Papers (m000bd18)

The latest news headlines. Including a look at the papers.

SUN 08:10 Sunday Worship (m000bd1b)

Breaking Down Barriers

In a complex world, we've long wrestled with the notion of a wall of hostility which divides humanity, and the imperative to demolish it: St Paul tackled this very issue in his letter to the Ephesians two thousand years ago.

Revd Jonathan Reeves leads a live service from Highfields church, Cardiff, in which Revd David Gobbett considers what we might do to address the barriers that divide us today, and how unity can be found in the love of God. The Director of music is Jeffrey Howard, and music includes: All Creatures of our God and King; My hope is built on nothing less (Cornerstone); Beneath the cross of Jesus; Here is love vast as the ocean; The church's one foundation. Producer: Dominic Jewel.

SUN 08:48 A Point of View (m000b81s)

On Spam

"Only when I wander, usually by accident, into my spam box", writes Adam Gopnik, "do I find anything resembling actual affection - prose that captures the spark of human sympathy, the language of exquisite deference, that the Enlightenment philosophers insisted was the necessary mucilage of human societies".

The excessive courtesy of spam letters is, of course, designed to entrap the reader but why, Adam wonders, have the decencies of human correspondence disappeared from virtually all other forms of communication these days.

Producer: Adele Armstrong

SUN 08:58 Tweet of the Day (b04hkwnn)

Andean Cock-of-the-Rock

Tweet of the Day is the voice of birds and our relationship with them, from around the world.

Miranda Krestovnikoff presents the Andean Cock-of-the-rock from Peru. Deep in a cloud forest a female awaits the display of her displaying males. Gathered in front of her several head-bobbing wing-waving males, these males are spectacularly dazzling: a vibrant orange head and body, with black wings and tails, yellow staring eyes, and ostentatious fan-shaped crests which can almost obscure their beaks. Male cock-of-the rocks gather at communal leks, and their performances include jumping between branches and bowing at each other whilst all the time calling loudly. Yet, for all the males' prancing and posturing, it is the female who's in control. Aware that the most dominant and fittest males will be nearest the centre of the lekking arena, it's here that she focuses her attention.

SUN 09:00 Broadcasting House (m000bdld)

The Sunday morning news magazine programme. Presented by Paddy O'Connell

SUN 10:00 The Archers Omnibus (m000bdlg)

Tony finds himself attracting attention and there's a near miss for Peggy.

Writer, Tim Stimpson

Director, Gwenda Hughes

Editor, Jeremy Howe

Jill Archer Patricia Greene
David Archer Timothy Bentinck
Tony Archer David Troughton
Lilian Bellamy Sunny Ormonde
Chris Carter Wilf Scolding
Alice Carter Hollie Chapman
Justin Elliot Simon Williams
Eddie Grundy Trevor Harrison
Clarrie Grundy Heather Bell
Will Grundy Philip Molloy
Emma Grundy Emerald O'Hanrahan
Mia Grundy Molly Pipe
Alf Grundy David Hargreaves
Jim Lloyd John Rowe
Kate Madikane Perdita Avery
Kirsty Miller Annabelle Dowler
Elizabeth Pargetter Alison Dowling
Freddie Pargetter Toby Laurence
Lily Pargetter Katie Redford
Robert Snell Graham Blockey
Peggy Woolley June Spencer
Leonard Berry Paul Copley
Joy Horville Jackie Lye
Russ Jones Andonis James Anthony

SUN 11:15 Desert Island Discs (m000bd1j)

Stephen Graham

Stephen Graham is an actor, whose credits include key roles in films including *This is England* and *The Irishman*, and in TV dramas such as *Boardwalk Empire* and *Line of Duty*.

Stephen was born in Kirkby just outside Liverpool in 1973. He discovered acting at school, where a starring role in a production of *Treasure Island* at the age of 10 was a turning point: local actor Andrew Schofield was in the audience and suggested that Stephen should join the Everyman Youth Theatre in Liverpool.

After leaving school, Stephen won a place to study drama in London, but left after a year. His first roles as a professional actor, when he once pretended to be his own agent to talk his way into an audition, gave little indication of the success to come. In 2006, his performance as Combo the skinhead in *This is England*, directed by Shane Meadows, won widespread critical acclaim. More recently, he has played Al Capone in *Boardwalk Empire*, and the undercover policeman Corbett in the most recent series of *Line of Duty*.

Stephen, who lives in Leicestershire, is married to fellow actor Hannah Walters, who he met at drama school.

Presenter: Lauren Laverne

Producer: Sarah Taylor

SUN 12:00 News Summary (m000bdn2)

The latest national and international news from BBC Radio 4.

SUN 12:04 I'm Sorry I Haven't A Clue (m000b4r9)

Series 72

Theatre Severn, Shrewsbury

The 72nd Series of Radio 4's multi award-winning 'antidote to panel games' promises yet more quality, desk-based entertainment for all the family. The series starts its run at Theatre Severn in Shrewsbury where Tim Brooke-Taylor and Stephen Fry are pitched against Pippa Evans and Miles Jupp, with Jack Dee as the expert inspired reluctant chairman. Regular listeners will know to expect inspired nonsense, pointless revelry and Colin Sell at the piano. Producer - Jon Naismith. It is a BBC Studios production.

SUN 12:32 The Food Programme (m000bcmv)

The Food Programme at 40: Looking Forward (Part II)

Andi Oliver, Rick Stein and Yotam Ottolenghi join Sheila Dillon at the BBC Radio Theatre to celebrate 40 years of The Food Programme and ask what changes the next four decades might bring to the way we eat and drink.

Together with restaurant critic for The Guardian and MasterChef regular, Grace Dent and food blogger and presenter Leyla Kazim, they'll traverse the food trends which have shaped our eating in and eating out, and face questions from listeners from all over the country. From fad diets to food fraud, from the scandals which have shocked us to the cook books we reach for in our flour-coated, milk-spattered kitchen time of need; the highs and lows of 40 years in food and drink.

The Food Programme was commissioned in 1979 as a six-part radio series fronted by Derek Cooper. Join in as we share the food stories which have helped make the series the place on BBC Radio 4, for hungry minds across four decades.

Produced in Bristol by Clare Salisbury.

(Part II of II)

SUN 12:57 Weather (m000bdlp)
The latest weather forecast

SUN 13:00 The World This Weekend (m000bdlr)
Global news and analysis, presented by Mark Maddell.

SUN 13:30 From Our Home Correspondent (m000bdlt)
In the latest programme of the monthly series, Mishal Husain introduces dispatches from journalists and writers around the United Kingdom that reflect the range of contemporary life in the country. From politics to pastimes, from hallowed traditions to emerging trends, from the curious to the ridiculous, the programme presents a tableau of Britain today.

Producer Simon Coates

SUN 14:00 Gardeners' Question Time (m000b810)
North Wessex Downs

Peter Gibbs and the panel are in the North Wessex Downs. Chris Beardshaw, Matthew Wilson and Anne Swithinbank answer the horticultural queries.

This week, the panellists give tips on turning a front lawn into a vegetable patch, making the most of an unheated greenhouse during the winter, and the best indoor blooming plants for winter.

Peter Gibbs visits the Design Museum to see the new Moving to Mars exhibition, where he meets curator Eleanor Watson and discusses what could be grown on the Red Planet.

Producer: Dan Cocker
Assistant Producer: Jemima Rathbone

A Somethin' Else production for BBC Radio 4

SUN 14:45 The Listening Project (m000bdlw)
Sunday Omnibus - Children in Need

highlighting the work of Children in Need

Fi Glover presents the omnibus edition of the series that proves it's surprising what you hear when you listen with three conversations celebrating the work of charities benefitting from Children in Need. They include Read for Good which provides books for children in hospital; CHIVA which works with young people who have been perinatally infected with HIV; and the counselling service for bereaved children, STARS.

The Listening Project is a Radio 4 initiative that offers a snapshot of contemporary Britain in which people across the UK volunteer to have a conversation with someone close to them about a subject they've never discussed intimately before. The conversations are being gathered across the UK by teams of producers from local and national radio stations who facilitate each encounter. Every conversation - they're not BBC interviews, and that's an important difference - lasts up to an hour, and is then edited to extract the key moment of connection between the participants. Most of the unedited conversations are being archived by the British Library and used to build up a collection of voices capturing a unique portrait of the UK in the second decade of the millennium. You can learn more about The Listening Project by visiting bbc.co.uk/listeningproject

Producer: Mohini Patel

SUN 15:00 The Pallisers (m000bdly)
Episode 2

The Pallisers, based on the novels by Anthony Trollope. Dramatised by Mike Harris. Episode 2.

Bold and pacy adaptation of the famous novels about high life and low politics in Victorian England. Starring Jessica Raine and Tim McMullan. Plantagenet and Cora Palliser have gone abroad in an effort to repair their marriage. Lady Violet has gone with them, leaving behind a very angry husband.

Cora Jessica Raine
Plantagenet Tim McMullan
Mary Flood Sinead MacInnes
Phineas Edward MacLiam
Violet Scarlett Courtney
Marie Goesler Melody Grove
Burgo Blake Ritson
Kennedy/Duke Neil McCaul
Finn's mother Heather Craney

Servant Ikky Elyas
Producer/Director Gary Brown

SUN 16:00 Open Book (m000bdm0)
Ben Lerner, Ian Rankin, Auto Fiction

Elizabeth Day talks to the novelist Ben Lerner about his latest novel *The Topeka School*, a companion piece to his previous novels *Leaving the Atocha Station* and *10:04*. The novel explores a period between the 1990s and present day America and shines a light on toxic masculinity, the corruption of political discourse and a high school debating style called "The Spread".

Works of autofiction are often held up as great literary experiments when written by male authors like Ben Lerner but are women writers allowed the same accolades? Olivia Sudjic and Meena Kandasamy explore what it means to be a woman writing highly autobiographical fiction. In her latest novel *Exquisite Cadavers*, Meena Kandasamy exposes the workings of her inspiration to the reader, she tells us why.

And king of crime writing Ian Rankin discusses his forgotten novel *Westwind*. First published to only 1,000 copies, it's been out of print and out of mind for thirty years. Rankin tells us why he returned to republish the tech thriller about satellites, spies, surveillance and why it's surprisingly timely for readers today.

SUN 16:30 Charlotte Mew: The Heart of Hidden Things (m000bdm2)
Julia Copus explores the poetry and life of the only born and bred Bloomsbury poet.

Thomas Hardy wrote that Charlotte Mew was "Far and away the best living woman poet - who will be remembered when others are forgotten." Siegfried Sassoon said that she was "the only poet who can give me a lump in my throat," while Virginia Woolf called her "the greatest living poetess".

Although she lived in Bloomsbury all her life, she was never part of the Bloomsbury set and, when Charlotte Mew died in 1928 aged 59, a small notice in a London paper described her simply as "Charlotte Mary New, 53" - the name and the age both wrong.

But to those who knew her, Charlotte Mew was a compelling, at times mischievous and groundbreaking poet, whose writing was full of sea-breezes, lamp-lit streets, human voices, and the sudden stark contrasts between sound and silence, between life and death.

Her dramatic monologue *The Farmer's Bride* caused a sensation in literary circles when it was published in 1912, dramatising the terrifying story of a young woman trapped in a powerless arranged marriage, who is literally locked away.

Julia explores how Charlotte Mew broke the mould of contemporary styles in the early 20th century and created a unique poetic voice.

Producer: Jo Wheeler
Reader: Raquel Cassidy

A Freewheel production for BBC Radio 4

SUN 17:00 File on 4 (m000b5lb)
Anatomy of a fraud

Dodgy diamonds, missing millions - and the victims failed by justice.

It starts with a phone call. Cynthia Tuck, a retired nurse and widow in her 80's, is charmed by a man offering her the chance to help put her grandchildren through university. All it would take is a small initial investment. Fast forward three years and Mrs Tuck has lost her entire life savings - hundreds of thousands of pounds.

Three years on, in 2019, her fight for justice has hit a dead end. No charges. No trial. Everyone involved still at large. What went wrong? And why is the system failing millions of fraud victims like Cynthia Tuck?

Reporter: Dan Whitworth
Producer: Simon Maybin
Editor: Hugh Levinson

SUN 17:40 Profile (m000bckh)
[Repeat of broadcast at 19:00 on Saturday]

SUN 17:54 Shipping Forecast (m000bdm4)
The latest shipping forecast.

SUN 17:57 Weather (m000bdm6)

The latest weather forecast.

SUN 18:00 Six O'Clock News (m000bdm8)
The latest national and international news from BBC Radio 4.

SUN 18:15 Pick of the Week (m000bdmb)
Catherine Bott

This week we explore life and death and art through the emotionally healing properties of mushroom foraging, and wandering and wondering in a graveyard. There are surprising revelations about George Eliot and Julie Andrews; plenty of song, but not quite as we know it, and remembering Weimar and the First World War through poetry and art. We also discover a magical mermaid, and find out the rhino's horn is little more than hair and snot.

SUN 19:00 The Archers (m000bcmq)

Phoebe hatches a plan and Lily's attempt to do the right thing backfires.

SUN 19:15 Fred at The Stand (b099yjmp)
Series 1

MacDonald, Omotayo, Caulfield and Foot

Fred MacAulay introduces some of the funniest comedians in the UK doing what they do best - pure stand up comedy. Recorded at The Stand Comedy Club in Edinburgh.

Jamie MacDonald jokes about his life as a blind comedian, Jo Caulfield bemoans relationships, Fummi Omotayo tells us about his experiences with the police and Paul Foot... well, Paul Foot needs to be heard to be believed.

Producer: Richard Melvin

A Dabster production for BBC Radio 4

SUN 19:45 A Run in the Park (m000bdmd)
Episode 3

A group of strangers in Belfast have formed a running group, determined to go from absolute beginners to completing a 5K Parkrun in just nine weeks. As their shared runs get longer and tougher, friendships are forged and relationships challenged. But will any of them actually make it over the finish line?

Young couple Brendan and Angela are running from their doubts about their rapidly approaching wedding; librarian Cathy is in pursuit of a new life following a health scare; Syrian refugee Yana races from the trauma of her past; and recent retiree Maurice is determined to get fit for his family, step by painful step, even if he's not actually part of their lives right now...

Author

David Park is one of Northern Ireland's most acclaimed writers. He is the author of nine novels and two collections of short stories. He has been awarded the Authors' Club First Novel Award, the Bass Ireland Arts Award for Literature, the Ewart-Biggs Memorial Prize, the American Ireland Fund Literary Award and the University of Ulster's McCrea Literary Award, three times. He has also received a Major Individual Artist Award from the Arts Council of Northern Ireland. His most recent novel *Travelling in A Strange Land* won the Kerry Group Irish Fiction Award and was a Radio 4 'Book at Bedtime'.

Writer David Park

Reader Seamus O'Hara

Reader Louise Parker

Producer Michael Shannon

SUN 20:00 Feedback (m000b816)

Why will there only be two party leaders in the big election debate - not three or more? That's one of the questions a BBC Executive responsible for the election coverage addresses on this week's Feedback.

The producer of the latest bumper BBC podcast, Tunnel 29, explains why she turned to the TV serial *Eastenders* for inspiration.

And two young people try listening to Radio 4 for the first time and give their reaction.

Presenter: Roger Bolton

Producer: Kate Dixon

Executive Producer: Samir Shah

A Juniper Connect production for BBC Radio 4

SUN 20:30 Last Word (m000b814)

Nik Powell OBE, James Le Mesurier OBE, Frank Dobson, Hazel Vincent Wallace OBE

Pictured: Nik Powell

Matthew Bannister on

James Le Mesurier, the former British Army Officer who set up the organisation that trained the White Helmet volunteers who rescue people from bomb sites in Syria.

Nik Powell, the businessman who helped Richard Branson to start Virgin Records and went on to produce a string of acclaimed British films.

Frank Dobson, the Labour M.P. who became Health Secretary under Tony Blair and embarked on an ambitious hospital building programme.

Hazel Vincent Wallace, who founded the Thorndike Theatre at Leatherhead in Surrey, which became known as one of the finest venues outside London.

Interviewed guest: Stephen Woolley

Interviewed guest: Jon Wardle

Interviewed guest: Julia Langdon

Interviewed guest: Michael Gaunt

Producer: Neil George

Archive clips from: PM, Radio 4 13/11/2014; Today, Radio 4 12/11/2019; The White Helmets, directed by Orlando von Einsiedel, Grain Media / Violet Films 2016; PM, Radio 4 11/11/2019; Masterclass with Nik Powell, Australian Film Television and Radio School 22/03/2017; The Evil Dead, directed by Sam Raimi, Renaissance Pictures 1981; The Company of Wolves, directed by Neil Jordan, Incorporated Television Company / Palace Pictures 1984; The Film Programme, Radio 4 01/09/2013; Who Wants to be a London Mayor? Carlton/ITV 25/04/2000; The World Tonight, Radio 4 02/06/1995; Labour Party Conference, BBC Sound Archives, 30/09/1997; Theatre and Stage Stars, Huntley Film Archives 26/01/2015; Sybil Thorndike Theatre, British Pathé 1969; Thorndike Theatre, British Movietone / AP 09/22/1969; Theatrical Balance Of Payments, Radio 3 01/12/1968.

SUN 21:00 Money Box (m000bcjr)

[Repeat of broadcast at 12:04 on Saturday]

SUN 21:25 Radio 4 Appeal (m000bd14)

[Repeat of broadcast at 07:54 today]

SUN 21:30 Analysis (m000b4rj)

The uses and misuses of history in politics

Barely a day passes when an MP doesn't reach for an historical analogy to help explain contemporary events. But to what extent do the Battle of Agincourt and World War II really help us better understand what's happening now? Edward Stourton asks if there is a danger that some politicians might have misunderstood some of the best known moments in Britain's history?

Guests:

Professor David Abulafia (Emeritus, University of Cambridge)

Professor Anne Curry (Emeritus, University of Southampton)

Professor Neil Gregor (University of Southampton)

Professor Ruth Harris (University of Oxford)

Professor Andrew Knapp (Emeritus, University of Reading)

Professor Andrew Roberts (Visiting, King's College London)

Professor Robert Tombs (University of Cambridge)

Producer: Ben Cooper

Editor: Jasper Corbett

SUN 22:00 Westminster Hour (m000bdmh)

Radio 4's Sunday night political discussion programme.

SUN 23:00 The Film Programme (m000b6t9)

Emma Thompson

With Antonia Quirke

Emma Thompson has written 6 films in which she also stars. Last Christmas is the latest. She explains why she sometimes has to bite her tongue when actors deliver her lines in ways that she hadn't quite imagined.

Neil Brand reveals how the ground-breaking score to cult classic Forbidden Planet was a last minute replacement and why the original composer decided to destroy his rejected score.

"Apocalypse Now meets Pygmalion". Matthew Sweet pitches a

long forgotten science fiction novel to film industry experts Lizzie Francke, Rowan Woods and Clare Binns.

SUN 23:30 Art of Now (m0007x4z)

The World in Their Hands

We hear from one of the world's last remaining globemakers and reflect on the globe's cultural and symbolic currency.

While Google Earth may give us intricate detail of every inch of land, there's nothing like clutching a globe to properly comprehend our place in the world. We've been fascinated by replicating our planet since ancient times; an art and science that's developed as our understanding has evolved.

In this programme, we step into the studio of Bellerby & Co Globemakers, one of the few companies remaining that are making globes by hand today. From their Stoke Newington warehouse, we follow the journey of a globe from design to dispatch. We hear about the challenges they face daily, from retraining their hands to querying geopolitical protocol, and the customers who've commissioned their unique bespoke worlds.

Alongside this creative process, we visit installation artist Luke Jerram, who is touring his replica earth artwork, Gaia. We also hear from writer and cartography enthusiast Simon Garfield and globe conservator Sylvia Sumira to explore the rich history of globemaking as well as some bigger ideas around the influence of those who represent our planet to us. The globe is crucially illustrative of our shared experience. Do we need its symbol today more than ever?

Produced in Cardiff by Amelia Parker

Photo by kind permission of Bellerby & Co Globemakers

(credit: Sebastian Boettcher)

Gaia soundtrack courtesy of Luke Jerram and Dan Jones

MONDAY 18 NOVEMBER 2019**MON 00:00 Midnight News (m000bdmk)**

National and international news from BBC Radio 4.

MON 00:15 Thinking Allowed (m000b4x6)

Time

Time: Laurie Taylor considers the extent to which the way we spend our time has changed over the last fifty years. Is it true that we are working more, sleeping less and addicted to our phones? What does this mean for our health, wealth and happiness? Oriol Sullivan, Professor of Sociology of Gender at the UCL, has taken a detailed look at our daily activities and found some surprising truths about the social and economic structure of the world we live in. Also, Daniel S. Hamermesh, Distinguished Scholar at Barnard College, examines the pressure to do more in less time. Which people are the most rushed & why - from France and Germany to the UK and Japan.

Producer: Jayne Egerton

MON 00:45 Bells on Sunday (m000bcl4)

[Repeat of broadcast at 05:43 on Sunday]

MON 00:48 Shipping Forecast (m000bdmm)

The latest weather reports and forecasts for UK shipping.

MON 01:00 Selection of BBC World Service Programmes (m000bdmp)

BBC Radio 4 joins the BBC World Service.

MON 05:20 Shipping Forecast (m000bdmr)

The latest weather reports and forecasts for UK shipping.

MON 05:30 News Briefing (m000bdmt)

National and international news from BBC Radio 4.

MON 05:43 Prayer for the Day (m000bdmw)

A spiritual comment and prayer to start the day with the Archdeacon of Bangor, Mary Stallard

MON 05:45 Farming Today (m000bdmy)

The latest news about food, farming and the countryside.

MON 05:56 Weather (m000bdn0)

The latest weather forecast for farmers.

MON 05:58 Tweet of the Day (h04hkwt)

African Southern Ground Hornbill

Tweet of the Day is the voice of birds and our relationship with them, from around the world.

Miranda Krestovnikoff presents the African Southern Ground hornbill. Ground hornbills live in south and south-east Africa. They're glossy black birds, as big as turkeys with huge downward-curving bills. The bird produces a deep booming sound that reverberates over long distances, sometimes as much as 5 kilometres, across its grassy habitat. Preferring to walk rather than fly, they strut about in the long grass, searching for prey. Snakes are a favourite: even deadly puff adders are no match for the birds' bludgeoning beaks.

MON 06:00 Today (m000bcly)

News and current affairs, including Sports Desk, Weather and Thought for the Day.

MON 09:00 Start the Week (m000bcly)

Life, death and taxes

Nothing is certain in this world except death and taxes. If this is true, then the comedian-cum-finance writer Dominic Frisby says it's time we better understand the latter! He tells Tom Sutcliffe how taxes have shaped our past, are upsetting our present and could be the answer to changing our future.

The economist Vicky Pryce also wants to change the future, by reforming capitalism so that it stops failing women. She interrogates the pay gap and glass ceiling. But she also argues that the free market is predicated on perpetuating inequality - and that it is women who bear the brunt.

The free market economy was advanced during the Enlightenment. The academic Alexander Zevin explores how a century later economic liberalism became fused with political liberalism in Britain. And how the liberal message evolved through the pages of the Economist Magazine, founded in 1843.

As BBC Radio 4's Book at Bedtime prepares to read Voltaire's satire Candide, Professor Judith Hawley looks back to the ideas that were fermenting at the time of the Enlightenment, and how optimism can quickly lead to disillusionment.

Producer: Katy Hickman

MON 09:45 George Eliot: A Life in Five Characters (m000bcv)

Episode 1

George Eliot - notable among Victorian novelists not only for her books but also for her personal life-story - explored through five of her fictional characters
1. Maggie Tulliver

It's sometimes said that George Eliot never wrote an autobiography because she had written her own life into her key characters.

Presenter Kathryn Hughes hears from contemporary writer Tessa Hadley and recent Eliot biographer Philip Davis about Maggie Tulliver from Mill on the Floss: how much of the story of Maggie, a clever, tempestuous girl with a rigid and less-gifted brother, growing up in the West Midlands with an adoring father, was inspired by Eliot's own upbringing?

With readings from the novel by Juliet Stevenson

Producer: Beaty Rubens

MON 10:00 Woman's Hour (m000bcm1)

PHONE IN - Jane Garvey takes your calls about relationships at work

Earlier this month, McDonald's Chief Executive Officer Steve Easterbrook was fired for having a consensual relationship with a subordinate. But what are the rules where you work? And how easy are they to navigate?

Do you know where the line is between flirting and harassment in the post #MeToo era? Or has it all gone too far?

Whether you've had a relationship at work, been affected by the fallout surrounding one, or are an employer who wants to tell us about policies you've put in place to protect your workforce, we want to hear from you.

Call 03700 100 444 - lines open at 0800 - or email via the website: womanshour@bbc.co.uk.

Presenter: Jane Garvey

Producer: Anna Lacey

MON 10:45 Life Lines (m000bcm3)

Series 3

Episode 1

Al Smith's award-winning drama series set in an ambulance control room where Carrie the call handler must deal with heart-stopping situations.

Today a man is intent on taking his own life. Can the emergency services get to him in time?

Carrie Sarah Ridgeway
Peter Jonjo O'Neill
Will Rick Warden
Ian Mike Jibson

Produced by Sally Avens

MON 11:00 The Untold (m000bcm6)

The Campaigning Medic

Nian is a fourth-year medical student in London committed to doing what she can to draw attention to climate change and the need for action: even if that means risking arrest.

Over two weeks of action she balances sleeping out with fellow campaigners in a London park, alongside her placement on the wards of a busy hospital. It's an exhausting fortnight and she feels torn about leaving the protests and worried about what will happen if the police do arrest her.

The Extinction Rebellion action starts with blockades across London bridges and roads are closed through Parliament and Trafalgar Square. Nian is one of the rebellion's spotters and starts the day cycling from location to location as they earmarked sites for action. In hushed whispers the group co-ordinate by phone using code names: they want to try and stay one step ahead of the police.

As the action gathers pace the police move quickly to stop structures being erected on Westminster Bridge. They were being transported in a hire van, which is now surrounded by police and Nian's friend jumps onto the vehicle's roof. It's a tense moment and Nian quickly raises spirits by leading the crowds in chants. But the arrests are beginning and the question is crystallised: how far will she and others be prepared to go in their environmental protests?

Producer: Sue Mitchell

MON 11:30 Loose Ends (m000bckf)

[Repeat of broadcast at 18:15 on Saturday]

MON 12:00 News Summary (m000bcqw)

The latest national and international news from BBC Radio 4.

MON 12:04 Candide (m000bcmc)

Episode 1

1/5. Voltaire's witty 18th century novel of ideas about good and evil takes its eponymous hero and the long-suffering Dr Pangloss on an epic, picaresque journey through Europe and South America. Along the way they endure terrible misfortune but somehow manage to retain an optimism about what life has in store. In this episode, Candide falls in love and is expelled from paradise. Abridged by Robin Brooks and read by Adrian Scarborough.

Producer: Bruce Young. Repeated at 1045pm.

MON 12:18 You and Yours (m000bcmg)

News and discussion of consumer affairs.

MON 12:57 Weather (m000bcmj)

The latest weather forecast

MON 13:00 World at One (m000bcm)

Mon-Thurs: Analysis of news and current affairs, presented by Sarah Montague. Fri: Analysis of news and current affairs, presented by Mark Mardell.

MON 13:45 50 Things That Made the Modern Economy (m000bld7)

Series 2: 50 More Things...

Canned Food

What does canned food have in common with Silicon Valley? More than you might think. Its story reveals how little some dilemmas around innovation have changed in two hundred years. Initially developed for military purposes, then commercialized in a place with plenty of venture capital and no

stifling bureaucracy, the path of canned food is shared by many recent technological innovations. But, as Tim Harford explains, canned food may also hold lessons about the dangers of under-regulation.

Producer: Ben Crighton
Editor: Richard Vadon

MON 14:00 The Archers (m000bcmq)

[Repeat of broadcast at 19:00 on Sunday]

MON 14:15 Drama (b09hw8jr)

Billie Homeless Dies at the End

A tough and resourceful teenage girl is driven from her home and onto the freezing city streets on the last night of her life. As the streets fill up with drunken Christmas revellers, Billie is blown around the city like a leaf on the wind, from one encounter to another, clinging onto the hope that she can find Cal, the one man she knows who would take her in.

The unforgiving city is evoked in an original musical score by Coldcut, electronic music pioneers known for their continually innovative and ground breaking work and now celebrating 30 years at the vanguard of modern music.

Featuring a remarkable debut performance as Billie by Georgie Scholes, who was 15 years old at the time of recording, and with support including Don Warrington as Blessed.

Written by Tom Kelly, this is an epic and breathtaking drama played out on the small scale of one young girl's search for warmth on the city streets. Even if her fate is sealed, she might somehow help the rest of us, including Arham the taxi driver (played by Zaydun Khalaf), find the strength to carry on.

Other parts played by members of the company

Music composed and performed by Coldcut
Sound design by Alisdair McGregor
Written by Tom Kelly

Produced and directed by Boz Temple-Morris

A Holy Mountain production for BBC Radio 4.

MON 15:00 Counterpoint (m000bcm)

Series 33

Semi-Final 3, 2019

(12/13)

The last of this year's heat winners join Paul Gambaccini for the contest to decide who takes the third of the places in the 2019 Final. Questions await them on all aspects of musical knowledge, from 18th century oratorio to 1980s dance music. And which performer has achieved the bestselling British album of the 21st century so far?

Appearing in today's semi-final are
Alexandra Denman, a copywriter from Bristol
Brian Easty, an actor and teacher from Westcliff-on-Sea in Essex
Alan Franklin, a retired librarian from Fulham in London.

Producer: Paul Bajoria

MON 15:30 The Food Programme (m000bcmv)

[Repeat of broadcast at 12:32 on Sunday]

MON 16:00 Out Loud (m000bcmx)

Exploring Bradford's emerging spoken-word counter culture, journalist, writer and artist Kirran Shah enters the intimate spaces where local people share their life stories.

She's on a journey back to her home town, seeking to discover if there's a way she can belong in Bradford. Her first few visits to some of these pop-up club nights are terrifying. Can she dare to take her turn at the open mic?

Smartphones are switched off, the lights are dimmed and the performances begin. Poetry, rap, song and stories - all are welcome, truthfulness is appreciated. People are applauded for courage, self-expression and for making real-life connections. It's the antithesis to online messaging.

Slowly and gradually, Kirran discovers a thriving, inclusive community that is a celebration of human connection. It's very different from the Bradford she remembers.

A Sparklab production for BBC Radio 4

MON 16:30 The Digital Human (m000bcmz)

Series 18

Messiah

Aleks Krotoski explores how the culture in Silicon Valley led to a growth in the cult of personality and asks if it's gone too far.

This kind of worship has been hot housed in Silicon Valley ever since Steve Jobs burst out of his garage and onto the scene.

Here, we take a look at how Mark Zuckerberg, Elon Musk and others are now regarded as charismatic high priests in a new dark age.

And when our need for meaning collides with our reverence for progress and technology, we end up putting these tech leaders on a pedestal. Have we finally found the messiahs we've been looking for?

Producer: Caitlin Smith

MON 17:00 PM (m000bcn1)

Afternoon news and current affairs programme, reporting on breaking stories and summing up the day's headlines.

MON 18:00 Six O'Clock News (m000bcn5)

The latest national and international news from BBC Radio 4.

MON 18:30 I'm Sorry I Haven't A Clue (m000bcn7)

Series 72

Theatre Severn, Shrewsbury

The 72nd series of Radio 4's multi award-winning 'antidote to panel games' promises more homespun wireless entertainment for the young at heart. This week the programme pays a return visit to Theatre Severn in Shrewsbury where Tim Brooke-Taylor and Stephen Fry are pitched against Pippa Evans and Miles Jupp, with Jack Dee in the chair. At the piano - Colin Sell. Producer - Jon Naismith. It is a BBC Studios production.

MON 19:00 The Archers (m000bcn9)

It's an emotional day for Eddie and Joy makes a friend.

MON 19:15 Front Row (m000bcnc)

Live magazine programme on the worlds of arts, literature, film, media and music

MON 19:45 Life Lines (m000bcm3)

[Repeat of broadcast at 10:45 today]

MON 20:00 Designing a World for Everyone (m000bcnf)

In 1979, Pattie Moore, a 26-year-old designer in New York was so so incensed by the way her colleagues ignored the needs of the elderly that she embarked on a daring piece of social research. Disguised as an 85-year-old woman, she took to the streets of America, travelling to over 100 cities, to discover the realities of being old. Her disguise not only looked the part but also simulated the infirmities of old age - prosthetics reduced her hearing, vision and the ability to move with ease. She bound her fingers and wore gloves to simulate arthritis.

In this programme, Jeremy Myerson, the Helen Hamlyn Professor of Design at the Royal College of Art, follows Pattie's story as she relives memories in New York where her radical experiment began. Pattie retraces her steps to significant places such as Harlem, where she was brutally attacked, and the bench in Central Park where she was romanced by an elderly widower. She talks to senior New Yorkers today about their lives in the city.

Pattie's experiment was a milestone in development of universal design - the idea that products and environments should be designed so they can be used by as many people as possible regardless of age or disability. Her mission since has been to champion the needs of those less able and to design with empathy. We hear from a veteran who has benefitted from one of her rehabilitation simulation environments and look to the future of design for conditions such as autism.

Today, Pattie is an internationally renowned gerontologist and designer. In October Pattie received the prestigious Design Mind Award at the 2019 National Design Awards in New York.

Producer: Sara Parker
Executive Producer: Emma Walker
A Rosa Production for BBC Radio 4

MON 20:30 Analysis (m000bcnh)

NATO at 70

NATO's military strength and unswerving trans-Atlantic solidarity enabled it to contain and ultimately defeat the Soviet

Union. But with Vladimir Putin's Russia resurgent, and eager to restore some of its past glory, people speak of a new "Cold War". But this one is very different from the first. It is being fought out on the internet; through propaganda; and by shadowy, deniable operations. It is not the kind of struggle that plays to the Alliance's traditional strengths. Worse still, NATO – currently marking its seventieth anniversary – is more divided than ever; its member states having very different priorities. President Trump has added additional strains, raising a question-mark over Washington's fundamental commitment to its European partners. So can NATO hold together and adapt to the new challenges it faces or will it sink into a less relevant old age?

Producer: Stuart Hughes
Editor: Jasper Corbett

MON 21:00 What's Eating Rotherham (m0007rt6)

Why do you keep going back to the fridge after dinner? Fruit and vegetables, a balanced diet, low salt, low sugar and moderate exercise seem to be the silver bullets loaded into a revolver that has only ever fired blanks at the problem of Britain's obesity crisis. More than ten years ago, the celebrity chef Jamie Oliver came to Rotherham in an effort to help combat obesity, by providing information on how to cook healthy foods. A decade on Rotherham still has a high proportion of people that are overweight or obese.

In What's Eating Rotherham, local resident Joanne Keeling, who is 28 stone and trying to lose weight, looks at the emotional side of overeating and examines the effect Jamie Oliver – and the spotlight he brought to Rotherham – can have on a town at the centre of media attention. With the help of Producer Jay Unger, Joanne soon discovers an uncomfortable truth about why some people emotionally eat. As well as questioning whether or not traditional methods of treating obesity, like prescribed exercise and diet regimes, actually work she wants to learn about the psychology of why people overeat in the first place.

MON 21:30 Start the Week (m000bclx)

[Repeat of broadcast at 09:00 today]

MON 22:00 The World Tonight (m000bcnl)

In depth reporting, intelligent analysis and breaking news from a global perspective

MON 22:45 Candide (m000bcme)

[Repeat of broadcast at 12:04 today]

MON 23:00 Have You Heard George's Podcast? (m000bcnn)

Chapter 2

11. Writer's Block

Having lost his way, George encounters a mysterious figure who offers to help him, but on one condition. Chaos ensues as the poet ends up travelling 10 years into the future.

Written by George The Poet
Produced by Benbrick & George The Poet
Original music by Benbrick

Featured songs: High For This by The Weeknd, Both by Headie One, Gigantalous by SL

Featured guests: Jamala as Samira the Oracle, Julie Adenuga as Dija, Sir Martyn Lewis as the Newsreader, J Man as Genna, GK as Spinner, George's Mum, Diggy, Natalie, Zizi, Vidhu, Cristale, Young Talented Individuals, Lola, Damini

Thank you to Matthew Walker and Penguin for allowing us to use elements from the book Why We Sleep

Have You Heard George's Podcast? is a George the Poet production for BBC Sounds
Commissioning Executive for BBC: Dylan Haskins
Commissioning Editor for BBC: Jason Phipps

MON 23:30 Stranger Than Sci-Fi (m0006tm3)

Babies In Bags

Astro-physicist Dr Jen Gupta and comedian Alice Fraser travel the parallel worlds of science and sci-fi.

Starting with the latest books and films, they discover real life science that sounds too strange to be true – from babies grown in bags, via black hole Jacuzzis, to flowers that behave like our ears.

Each programme starts with imagined futures and ends with today's latest scientific research, exploring along the way how each impacts the other. This episode dives into the science

behind Anne Charnock's book, *Dreams Before The Start Of Time*, which imagines a future where babies can be grown in artificial wombs. How close is modern technology to making this a reality?

Jen and Alice talk to Anne Charnock, Science Fiction historian Lisa Yaszek, research scientist Matt Kemp and investigative journalist Jenny Kleeman.

Produced by Joe Sykes and Rich Ward
Executive Producer: Peggy Sutton
A Somethin' Else production for BBC Radio 4

TUESDAY 19 NOVEMBER 2019

TUE 00:00 Midnight News (m000bcns)

National and international news from BBC Radio 4

TUE 00:30 George Eliot: A Life in Five Characters (m000bcnv)

[Repeat of broadcast at 09:45 on Monday]

TUE 00:48 Shipping Forecast (m000bcny)

The latest weather reports and forecasts for UK shipping.

TUE 01:00 Selection of BBC World Service Programmes (m000bcp0)

BBC Radio 4 joins the BBC World Service.

TUE 05:20 Shipping Forecast (m000bcp2)

The latest weather reports and forecasts for UK shipping.

TUE 05:30 News Briefing (m000bcp4)

National and international news from BBC Radio 4.

TUE 05:43 Prayer for the Day (m000bcp6)

A spiritual comment and prayer to start the day with the Archdeacon of Bangor, Mary Stallard

TUE 05:45 Farming Today (m000bcp8)

The latest news about food, farming and the countryside.

TUE 05:58 Tweet of the Day (b04hky3h)

Satin Bowerbird

Tweet of the Day is the voice of birds and our relationship with them, from around the world.

Miranda Krestovnikoff presents Australia's satin bowerbird. Then male is a blackish looking bird with bright purple eyes, whose plumage diffracts the light to produce an indigo sheen with a metallic lustre. He builds a U-shaped bower of sticks on the forest floor into which he hopes to lure a female. But brown twigs on a brown woodland floor aren't very eye-catching, so he jazzes up the scene with an array of objects from berries and bottle-tops to clothes-pegs and even ballpoint pens. All have one thing in common: they are blue. The male dances around his bower to attract the greenish females: often holding something blue to impress her. As he poses, he calls enticingly to advertise his prowess. Once she's made her choice, she will leave to build her nest and rear her young alone.

TUE 06:00 Today (m000bf8)

News and current affairs, including Sports Desk, Weather and Thought for the Day.

TUE 09:00 The Long View (m000bf9d)

Extinction Rebellion and the Bonfire of the Vanities

Jonathan Freedland and his guests compare the Bonfire of the Vanities in fifteenth century Florence with Extinction Rebellion's Autumn Uprising.

Girolamo Savonarola was a Dominican Friar whose apocalyptic sermons inspired his followers, the Piagnoni or 'wallers' to take over Florence's streets and squares, challenging the authorities and condemning the consumption of sinful luxuries, such as mirrors, cosmetics and musical instruments.

Today's Extinction Rebellion activists have also staged city-centre protests, demanding radical action to reduce carbon emissions and the consumption of modern luxuries such as fast fashion and air travel.

Joining Jonathan to discuss past and present are Evelyn Welch, Professor of Renaissance Studies at King's College London, Tim Stanley of The Telegraph and William Skeaping of

Extinction Rebellion.

Producer: Julia Johnson

TUE 09:30 Naturebang (m000612w)

Starlings and Social Networks

Starling murmurations, those swirling, shifting sky-patterns made by hundreds of birds moving in synchrony, are one of nature's greatest spectacles. How do they avoid crashing into each other? Becky Ripley and Emily Knight delve into the maths behind the movement with some computer modelling to help them chart the flight patterns, and discover the secret.

As for us humans, sadly we don't fly together through the sky in swirling clouds. But there are patterns to how we interact with one another. Like a ripple of movement, travelling through a cloud of starlings, ideas can spread through social media with blistering speed. Here too, computer modelling can help us chart how opinions morph as we react to those around us. Do we have more in common with the birds than we think?

Featuring Jamie Wood from the University of York, and Dr Jennifer Golbeck from the University of Maryland.

TUE 09:45 George Eliot: A Life in Five Characters (m000bfj9)

Episode 2

George Eliot – notable among Victorian novelists not only for her books but also for her personal life-story – explored through five of her fictional characters
2. Dorothea Brooke

It's sometimes said that George Eliot never wrote an autobiography because she had written her own life into her key characters.

Presenter Kathryn Hughes hears from contemporary writer Tessa Hadley and recent Eliot biographer Philip Davis about Dorothea Brooke from Middlemarch. Does the morally serious young woman, desperate to make a serious contribution in small-town life and beyond, represent the feelings of the young Eliot herself?

With readings from the novel by Juliet Stevenson

Producer: Beaty Rubens

TUE 10:00 Woman's Hour (m000bfj)

The programme that offers a female perspective on the world

TUE 10:45 Life Lines (m000bfgl)

Series 3

Episode 2

Al Smith's award-winning drama series set in an ambulance control room. Carrie must deal with heart-stopping emergencies every day, even when her own life is in crisis. Today a young boy has been stabbed.

Carrie Sarah Ridgeway
Ian Michael Jibson
Will Rick Warden
Martin Shaun Mason
Darren Michael Ajao
Monica Amelia Lowdell
Gracie Laura Christy
Luke Will Kirk
Ailsa Lucy Reynolds
Police Officer Clive Hayward
Man Illy Elyas

Directed by Sally Avens

TUE 11:00 Hurting (m000bf9n)

Sally Marlow talks to some of the men and women who have self-harmed, and the experts who treat them, to find out what is driving so many people to self-harm.

Clinical guidelines define self-harm as any act of self-poisoning or self-injury carried out by a person irrespective of their motivation. However, research reveals a worrying association between self-harm and the risk of suicide.

While rates of self-harm are particularly high among teenage girls, the true picture is far more nuanced. Rates have gone up in all age groups and both genders and, more recently, in groups such as middle-aged men.

So what is driving so many people to hurt themselves, and what can be done to help them? The media is quick to point the finger at social media, but Sally discovers that the reasons

behind this question are as varied and complex as the people who do it.

Producer: Beth Eastwood

TUE 11:30 Art of Now (m000bfqg)
Playing Well: VERY LOUD SCIENCE

Concluding his three-part investigation into music and mental health, Chris Hawkins meets the scientists measuring exactly what a performer goes through when they step on to the stage in front of a crowd.

Professor Catherine Loveday of the University of Westminster is a specialist in music and the brain, and has used clinical measures to survey people working in the music industry - and it seems that from DJs to solo artists there is something uniquely stressful about performance.

But when do healthy fight or flight responses become a problem?

Professor Mark Wetherell of the University of Northumbria University has measured stress in people from all walks of life, and Marcus Lesycysznski-hall, lead singer of Pagans SOH offers to take part in an experiment designed by the professor. Tracking his stress hormone cortisol at the moment of performance - the results prompt Marcus to say "Wow." Bill Ryder-Jones remembers his time in The Coral - and memories which have a little do to with a hormone called oxytocin - and John Grant assures performers that the crutches associated with the music industry, drugs and alcohol, are not the reasons for your creativity.

Professor Loveday also offers a crucial five-point plan for anyone wanting to pursue a career in music and look after their mental health.

Details of organisations offering information and support with mental health are available at bbc.co.uk/actionline, or you can call for free, at any time to hear recorded information on 08000 155 998.

Presented by Chris Hawkins
Produced by Kevin Core

TUE 12:00 News Summary (m000bfqg)
The latest national and international news from BBC Radio 4.

TUE 12:04 Candide (m000bfqv)
Episode 2

2/5. Voltaire's witty 18th century novel of ideas about good and evil takes its eponymous hero on an epic, picaresque journey through Europe and South America. In this episode, Candide's great love, Cunégonde, describes her terrible fate after Candide had to leave her behind. Abridged by Robin Brooks and read by Adrian Scarborough.

Producer: Bruce Young. Repeated at 1045pm.

TUE 12:18 You and Yours (m000bfqx)
News and discussion of consumer affairs.

TUE 12:57 Weather (m000bfgz)
The latest weather forecast

TUE 13:00 World at One (m000bfh1)
Mon-Thurs: Analysis of news and current affairs, presented by Sarah Montague. Fri: Analysis of news and current affairs, presented by Mark Mardell.

TUE 13:45 50 Things That Made the Modern Economy (m000bksw)
Series 2: 50 More Things...

Interface Message Processor

In 1958, ARPA, the Advanced Research Projects Agency, was dubbed "a dead cat hanging in the fruit closet". All the interesting projects had been transferred to its newer, more fashionable rival, NASA. And yet the dead cat turned out to have an extra life: ARPA commissioned and created a way for any computer in the world to contact any other computer in the world. As Tim Harford explains, the ARPAnet was the forerunner of today's Internet - and the heart of the ARPAnet was a massive, heavily armoured piece of kit that set the stage for how the internet works: The Interface Message Processor, the most important hunk of silicon you've never heard of.

Producer: Ben Crighton
Editor: Richard Vaden

TUE 14:00 The Archers (m000ben9)
[Repeat of broadcast at 19:00 on Monday]

TUE 14:15 The National (m000bfh5)
Episode 1

by Sarah Wooley

1963. Sir Laurence Olivier becomes the first Artistic Director of the National Theatre. But there are many political battles ahead, not least with his lieutenant, the critic Kenneth Tynan

Sir Laurence Olivier . . . Robert Glenister
Kenneth Tynan . . . John Heffernan
Lord Chandos . . . Michael Pennington
Cecil Tennant . . . Neil McCaul
Diana Boddington . . . Scarlett Courtney
Stephen Arlen . . . Will Kirk
Harry . . . Rick Warden
Neville . . . Greg Jones
Peter O'Toole . . . Jonny Holden
Reporter . . . Clive Hayward

Directed by Marc Beeby

The first of three dramas about the birth of the National Theatre. Funded at huge cost to the taxpayer, the "theatre to end all theatres" was front page news in its early years. Running it was a high stakes political business as much as it was an artistic one. Never before had one theatre been the focus for such relentless national debate about the relationship between the arts, government, press and the public.

From its inception at the Old Vic to the opening of the Olivier Theatre in the National's eventual home at the South Bank, from the fall of Macmillan to the rise of Thatcher, the series follows the legendary players in a fast-moving, entertaining saga. Big personalities clash and ambition, greed and power fight with artistic integrity and wider cultural responsibilities.

Writer Sarah Wooley has an impressive record of dynamic, character-driven factual drama including 'A Nice Little Holiday' about John Osborne, 'Victim', about Dirk Bogarde and the making of the film of the same name, and 'Fifteen' about Andy Warhol.

TUE 15:00 Short Cuts (m000bfh7)
Series 21

From the Heart

From a broken-hearted granddaughter's search for understanding to a collective conversation around desire - Josie Long presents short documentaries and adventures in sound about desire, love and heartbreak.

Series Producer: Eleanor McDowall
A Falling Tree production for BBC Radio 4

TUE 15:30 Costing the Earth (m000bfhb)
Green Places in Urban Spaces

David Lindo AKA The Urban Birder takes a look at why city planners and policy makers are beginning to understand the importance of nature in our cities and towns. Not only can these built up areas attract diverse wildlife they also allow more people from diverse backgrounds to access the mental and physical health benefits of nature. With more of us engaged the fight to conserve species and fight climate change could be much more likely to be won..

Producer Helen Lennard

TUE 16:00 Law in Action (m000bfhd)
What's it really like to be in prison?

The secrets of life behind bars, revealed in a new podcast series The Secret Life of Prisons. Joshua Rozenberg meets the ex-prisoners and others behind the project from the Prison Radio Association and The Prison Reform Trust.

Producer: Neil Koenig
Researcher: Diane Richardson

TUE 16:30 A Good Read (m000bfhg)
Nemone Metaxas & Raymond Antrobus

Nemone Metaxas, DJ and former athlete, joins deaf poet and educator Raymond Antrobus to talk about the books they love with presenter Harriett Gilbert. Nemone loves Everything I Know About Love by Dolly Alderton, Raymond loves Surge, a powerful poetry collection by Jay Bernard, and Harriett's choice this week is Patrick Modiano's Honeymoon. Follow us on instagram at @agoodreadbbc

Produced by Becky Ripley

TUE 17:00 PM (m000bfhj)
Afternoon news and current affairs programme, reporting on

breaking stories and summing up the day's headlines.

TUE 18:00 Six O'Clock News (m000bfhn)
The latest national and international news from BBC Radio 4.

TUE 18:30 Tom Wrigglesworth's Hang-Ups (m000bfhq)
Series 5

The Bubbles Get Up Your Nose

This week Tom tries to talk his Dad down from some amateur brewing while the local bin collection system comes under attack.

Starring Tom Wrigglesworth, Paul Copley, Kate Anthony and Elizabeth Bennett.

Written by Tom Wrigglesworth and James Kettle with additional material by Miles Jupp.

Produced by Richard Morris

A BBC Studios Production

TUE 19:00 The Archers (m000bfhs)
There's a bump in the road for Elizabeth and David has concerns.

TUE 19:15 Front Row (m000bfhv)
Live magazine programme on the worlds of arts, literature, film, media and music

TUE 19:45 Life Lines (m000bfgl)
[Repeat of broadcast at 10:45 today]

TUE 20:00 File on 4 (m000bfhx)
Drug Shortages

Medical professionals say shortages of commonly prescribed drugs are currently worse than ever before - impacting on patient care and potentially costing lives.

The government has banned the export of some medications from the UK in an attempt to protect dwindling supplies but desperate patients are still travelling abroad to get the medication they need or, rationing their supply or going without treatments entirely.

File on 4 examines the complex supply network behind the medication we're prescribed and finds out how a single broken link in the fragile chain can impact patients, doctors and pharmacists alike. Speaking to worried insiders, exasperated clinicians and patients left too frightened to leave the house, the programme uncovers a long-running crisis at the very centre of our health care system.

Reporter: Adrian Goldberg
Producer: Steven Hobson
Editor: Carl Johnston

Image credit: Hiranman/Getty

TUE 20:40 In Touch (m000bfhz)
News, views and information for people who are blind or partially sighted

TUE 21:00 All in the Mind (m000bfj1)
Programme exploring the limits and potential of the human mind.

TUE 21:30 The Long View (m000bfgd)
[Repeat of broadcast at 09:00 today]

TUE 22:00 The World Tonight (m000bfj3)
In depth reporting, intelligent analysis and breaking news from a global perspective

TUE 22:45 Candide (m000bfqv)
[Repeat of broadcast at 12:04 today]

TUE 23:00 Alexei Sayle's Imaginary Sandwich Bar (b09gkct)
Series 2

La Vie Moral

Episode 4 - La Vie Moral

Alexei considers how one might live an ethical life, recounts the difficulties he faced when tracking down his lost cat and pays penance for a feud with another performer.

Written by Alexei Sayle
Performed by Alexei Sayle
Original music and lyrics by Tim Sutton
Produced by Joe Nunnery
A BBC Studios Production.

TUE 23:30 Stranger Than Sci-Fi (m00070bq)
Black Hole Jacuzzis

Astro-physicist Jen Gupta and comedian Alice Fraser travel the parallel worlds of science and sci-fi.

Starting with the latest books and films, they discover real life science that sounds too strange to be true - from babies grown in bags, via black hole Jacuzzis, to flowers that behave like our ears.

In this episode they dive into the science behind Claire Denis's film *High Life*, which is about a group of criminals travelling towards a black hole. They explore the mysteries of the void, a strange scientific theory called The Penrose Process and try to find out if one day black holes might provide us with limitless resources of energy.

Produced by Joe Sykes
Executive Producer: Peggy Sutton
A Somethin' Else production for BBC Radio 4

WEDNESDAY 20 NOVEMBER 2019

WED 00:00 Midnight News (m000bfj7)
National and international news from BBC Radio 4

WED 00:30 George Eliot: A Life in Five Characters (m000bfj9)
[Repeat of broadcast at 09:45 on Tuesday]

WED 00:48 Shipping Forecast (m000bfjc)
The latest weather reports and forecasts for UK shipping.

WED 01:00 Selection of BBC World Service Programmes (m000bfjf)
BBC Radio 4 joins the BBC World Service.

WED 05:20 Shipping Forecast (m000bfjh)
The latest weather reports and forecasts for UK shipping.

WED 05:30 News Briefing (m000bfjk)
National and international news from BBC Radio 4.

WED 05:43 Prayer for the Day (m000bfjm)
A spiritual comment and prayer to start the day with the Archdeacon of Bangor, Mary Stallard

WED 05:45 Farming Today (m000bfjp)
The latest news about food, farming and the countryside.

WED 05:58 Tweet of the Day (b04hkygm)
Red-billed Quelea

Tweet of the Day is the voice of birds and our relationship with them, from around the world.

Miranda Krestovnikoff presents the World's most numerous bird; red billed quelea. Red-billed queleas are the most numerous birds in the world and as part of the weaverbird family sound and look like small neat sparrows. Their ability to adapt to local conditions and travel for food allows large populations of fast-breeding queleas to build up. The statistics are mind-boggling. Some flocks of red-billed quelea can comprise millions of birds which may take hours to fly past. There are probably between one and a half and ten billion birds in Africa. They breed in vast colonies; one colony in Nigeria covered one hundred and ten hectares and contained thirty one million nests.

WED 06:00 Today (m000bfrr)
News and current affairs, including Sports Desk, Weather and Thought for the Day.

WED 09:00 Only Artists (m000bfrrw)
Helen Cammock meets Suhayla El Bushra

The Turner Prize nominated artist Helen Cammock meets the playwright Suhayla El-Bushra.

WED 09:30 The Curious Cases of Rutherford & Fry (m000bfry)
Series 14

The Heart of the Antimatter

"How do you make antimatter?" asks Scott Matheson, aged 21 from Utah.

The team take charge of this question with a spin through the history of antimatter. Adam talks to physicist Frank Close, author of *'Antimatter'*, about its origins in the equations of Dirac to its manufacture in the first particle accelerator, the Bevatron.

Cosmologist Andrew Pontzen tells Hannah why physicists today are busy pondering the mystery of the missing antimatter. Anyone who discovers why the Universe is made of matter, rather than antimatter, is in line for the Nobel Prize.

Plus, neuroscientist Sophie Scott describes how antimatter has been put to good use down here on Earth to peer into people's brains.

Presenters: Hannah Fry, Adam Rutherford
Producer: Michelle Martin

WED 09:45 George Eliot: A Life in Five Characters (m000bfvr)
Episode 3

George Eliot - notable among Victorian novelists not only for her books but also for her personal life-story - explored through five of her fictional characters

3.Janet Dempster

It's sometimes said that George Eliot never wrote an autobiography because she had written her own life into her key characters.

Presenter Kathryn Hughes hears from contemporary writer Sathnam Sanghera and recent biographer Philip Davis about Janet Dempster from the early novella, *Janet's Repentance*. A shocking and very contemporary story about domestic violence in a small West Midlands town, how much does the redemptive journey of the abused Janet reflect Eliot's own growth in sympathy as a novelist?

With readings from the novel by Juliet Stevenson

Producer: Beaty Rubens

WED 10:00 Woman's Hour (m000bfs2)
The programme that offers a female perspective on the world

WED 10:41 Life Lines (m000bfs4)
Series 3

Episode 3

Al Smith's award-winning drama series set in an ambulance control room. Carrie must deal with heart-stopping emergencies every day as quickly as possible but when 74-year-old Arthur calls, Carrie knows she must keep him talking or risk him dying.

Carrie Sarah Ridgeway
Will Rick Warden
Chris Jonny Holden
Mike Greg Jones
Arthur Neil McCaul

Directed by Sally Avens

WED 10:55 The Listening Project (m000bfs6)
Anabel and Edwina - A Great Gift

Mother and adopted daughter on constantly being asked specific questions about adoption. Fi Glover presents another conversation in a series that proves it's surprising what you hear when you listen.

WED 11:00 Designing a World for Everyone (m000bcnf)
[Repeat of broadcast at 20:00 on Monday]

WED 11:30 Woof (m000bfs8)
True Tales of Romance and Failure

It's All In A Name & Much Loved Son and Fantasia

Bittersweet comic real life stories written and performed by Chris Neill with Martin Hyder and Isy Suttie.

This week - none of us are getting any younger and is kitchen matchmaking on the cards? Also - myopia and its advantages and ... is that an architect I see before me?

Written by Chris Neill
Starring: Chris Neill, Isy Suttie and Martin Hyder
Producer: Steve Doherty
A Giddy Goat production for BBC Radio 4

Music:

Title: Dance Away
Perf: The Bryan Ferry Orchestra

Title: The Way You Look Tonight
Perf: The Jaguars

Title: Can't Give You Anything (But My Love)
Perf: The Stylistics

Title: Matchmaker, Matchmaker
Perf: Marlena Shaw

Title: Twilight Time
Perf: The Platters

Title: It's Raining Again
Perf: Supertramp

Track: Those Lazy, Hazy, Crazy Days of Summer
Perf: Johnny Maddox

Track: September Song
Perf: Dion and The Belmonts

Track: Ladyfingers
Perf: Herb Alpert and the Tijuana Brass

Track: Lo Sceicco Bianco
Perf: Katyna Ranieri & orchestra

Track: I Don't Feel Like Dancin'
Perf: Scissor Sisters

WED 12:00 News Summary (m000bfvt)
The latest national and international news from BBC Radio 4.

WED 12:04 Candide (m000bfsd)
Episode 3

3/5. Voltaire's witty 18th century novel of ideas about good and evil takes its eponymous hero on an epic, picaresque journey through Europe and South America. In this episode, Candide reaches the fabled city of Eldorado where the streets are littered with gold and jewels. Abridged by Robin Brooks and read by Adrian Scarborough.
Producer: Bruce Young. Repeated at 1045pm.

WED 12:18 You and Yours (m000bfsq)
News and discussion of consumer affairs.

WED 12:57 Weather (m000bfsj)
The latest weather forecast

WED 13:00 World at One (m000bfsl)
Mon-Thurs: Analysis of news and current affairs, presented by Sarah Montague. Fri: Analysis of news and current affairs, presented by Mark Mardell.

WED 13:45 50 Things That Made the Modern Economy (m000blz0)
Series 2: 50 More Things...

Prohibition

Economists in the 1920s argued in favour of Prohibition, the short-lived attempt to ban sales of alcohol in the United States. They were worried about drunkenness affecting productivity. But economics didn't yet have the idea of the "rational criminal", which helps to explain why Prohibition was so widely flouted. Now debates are raging about whether cannabis should continue to be prohibited. Tim Harford reveals how a branch of economics called public choice theory has a surprising explanation for why alliances in favour of banning things can command such wide support.

Producer: Ben Crighton
Editor: Richard Vadon

WED 14:00 The Archers (m000bfhs)
[Repeat of broadcast at 19:00 on Tuesday]

WED 14:15 The National (m000bfsg)
Episode 2

by Sarah Wooley

1971. With Sir Laurence Olivier due to end his tenure as Artistic Director, the Board attempts to find a successor - with potentially disastrous consequences.

Sir Laurence Olivier . . . Robert Glenister
Kenneth Tynan . . . John Heffernan
Sir Max Rayne . . . Clive Hayward
Peter Hall . . . Sam Troughton
Lord Goodman . . . Jon Glover
Lord Chandos . . . Michael Pennington
Kathleen Tynan . . . Sinead MacInnes
Constance Cummings . . . Jessica Turner
Doctor . . . Neil McCaul
Gerald . . . Will Kirk
Jane . . . Laura Christy
Diana Boddington . . . Scarlett Courtney
Jason . . . Greg Jones

Directed by Marc Beeby

WED 15:00 Money Box (m000bfss)

The latest news from the world of personal finance plus advice for those trying to make the most of their money.

WED 15:30 All in the Mind (m000bfj1)
[Repeat of broadcast at 21:00 on Tuesday]

WED 16:00 Thinking Allowed (m000bfsv)
New research on how society works.

WED 16:30 The Media Show (m000bfsv)

The programme about a revolution in media with Amol Rajan, the BBC's Media Editor

WED 17:00 PM (m000bfsv)

Afternoon news and current affairs programme, reporting on breaking stories and summing up the day's headlines.

WED 18:00 Six O'Clock News (m000bf13)

The latest national and international news from BBC Radio 4.

WED 18:30 Susan Calman Makes Me Happy (m000bkt7)
Episode 1

Taking part in Strictly Come Dancing made Susan Calman happy. Completely, totally happy. And having lived with anxiety for so long, it was something of a surprise to discover something new that gave her feelings of joy. So, in Susan Calman Makes Me Happy, she explores and explains the other things in life that bring her happiness.

This week, aided and abetted by her studio audience and wife Lee, Susan presents a love letter to the gogglebox. From the enormous rented behemoth of her childhood through to the modern day box-set you can watch on your phone anywhere you like, television has been an ever-present comfort and teacher for her.

Produced by Lyndsay Fenner.

Written by Susan Calman and Jon Hunter

Production Co-ordinator: Tamara Shilham

A Somethin' Else production for BBC Radio 4

WED 19:00 The Archers (m000bft5)

Lily is left feeling guilty and Justin attempts to widen his net

WED 19:15 Front Row (m000bft7)

Live magazine programme on the worlds of arts, literature, film, media and music

WED 19:45 Life Lines (m000bfs4)

[Repeat of broadcast at 10:41 today]

WED 20:00 Moral Maze (m000bft9)

Combative, provocative and engaging debate chaired by Michael Buerk. With Anne McElvoy, Ella Whelan, Giles Fraser and Matthew Taylor. #moralmaze

WED 20:45 The Curious Cases of Rutherford & Fry (m000bfry)

[Repeat of broadcast at 09:30 today]

WED 21:00 Costing the Earth (m000bfhb)

[Repeat of broadcast at 15:30 on Tuesday]

WED 21:30 Only Artists (m000bfwr)

[Repeat of broadcast at 09:00 today]

WED 22:00 The World Tonight (m000bfwb)

In depth reporting, intelligent analysis and breaking news from a global perspective

WED 22:45 Candide (m000bfds)

[Repeat of broadcast at 12:04 today]

WED 23:00 Twayna Mayne: Black Woman (p07r9s0y)
3. Gender and Sexuality

Comedian Twayna Mayne was trans-racially adopted and in this episode she explores gender and sexuality in her quest to understand her Black British identity. Along with stand-up in front of a live audience she chats to other women about their shared experiences, with this episode featuring a contribution from lead singer of the two tone band The Selecter, Pauline Black, singer and actress Mzz Kimberley and writer Danielle Dash.

Producer: Julia McKenzie
A BBC Studios Production

WED 23:15 Bunk Bed (b0608nxv)

Series 2

Episode 3

Two men in darkness, sharing a bunk bed and a stream of semi-consciousness about family, relationships, work and imagined life.

We all crave a place where our mind and body are not applied to a particular task. The nearest faraway place from daily life. Somewhere for drifting and lighting upon strange thoughts which don't have to be shoed into context, but which can be followed like balloons escaping onto the air. Late at night, in the dark and in a bunk bed, the restless mind can wander.

After an acclaimed reception by The Independent, The Sunday Telegraph, The Observer and Radio 4 listeners, Bunk Bed returns with its late night stream of semi-consciousness.

In this episode, under cover of darkness, the bedfellows touch on Tolkien, Tom and Jerry, Jewish v Irish names, guilty siblings, and whether the band Napalm Death are as good as Shakespeare.

Elsewhere in the series, Patrick and Peter deal with therapy, Chas and Dave, children's happiness, Babycham, Aldous Huxley, and correction fluid - among a ragbag of subjects.

Written and performed by Patrick Marber and Peter Curran
Producer: Peter Curran
A Foghorn production for BBC Radio 4

WED 23:30 Stranger Than Sci-Fi (m0007623)

Talking Plants

Astro-physicist Jen Gupta and comedian Alice Fraser travel the parallel worlds of science and sci-fi.

Starting with the latest books and films, they discover real life science that sounds too strange to be true - from babies grown in bags, via black hole Jacuzzi, to flowers that behave like our ears.

In this episode, Jen and Alice investigate the science behind Sue Burke's book, Semiosis, about a mysterious breed of intelligent plants. They talk to Sue about how watching her houseplants formed the inspiration for the book. Then they ask the linguist Dr Hannah Little if we could ever learn the language of something that has a completely different understanding of what communication means. Finally, Professor Lilach Hadany explains how a radical new study might show plants are listening to each other - and maybe even to us.

Produced by Joe Sykes and Rich Ward
Executive Producer: Peggy Sutton
A Somethin' Else production for BBC Radio 4

THURSDAY 21 NOVEMBER 2019

THU 00:00 Midnight News (m000bfw1)

National and international news from BBC Radio 4

THU 00:30 George Eliot: A Life in Five Characters (m000bfvr)

[Repeat of broadcast at 09:45 on Wednesday]

THU 00:48 Shipping Forecast (m000bfw3)

The latest weather reports and forecasts for UK shipping.

THU 01:00 Selection of BBC World Service Programmes (m000bfw5)

BBC Radio 4 joins the BBC World Service.

THU 05:20 Shipping Forecast (m000bfw7)

The latest weather reports and forecasts for UK shipping.

THU 05:30 News Briefing (m000bfw9)

National and international news from BBC Radio 4.

THU 05:43 Prayer for the Day (m000bfwc)

A spiritual comment and prayer to start the day with the Archdeacon of Bangor, Mary Stallard

THU 05:45 Farming Today (m000bfwf)

The latest news about food, farming and the countryside.

THU 05:58 Tweet of the Day (b04hkwgt)

Black Drongo

Tweet of the Day is the voice of birds and our relationship with them, from around the world.

Miranda Krestovnikoff presents the black drongo of Southern Asia. What looks like a small crow crossed with a flycatcher is riding a cow's back in an Indian village. Black drongos are slightly smaller than European starlings, but with a much longer tail. They feed mainly on large insects: dragonflies, bees, moths and grasshoppers which they will pluck from the ground as well pursuing them in aerial sallies. Although small, these birds are famous for being fearless and will attack and dive-bomb almost any other bird, even birds of prey, which enter their territories. This aggressive behaviour has earned them the name "King Crow" and in Hindi their name is Kotwal - the policeman.

THU 06:00 Today (m000bg2w)

News and current affairs, including Sports Desk, Weather and Thought for the Day.

THU 09:00 In Our Time (m000bg2y)

Melisende, Queen of Jerusalem

Melvyn Bragg and guests discuss the most powerful woman in the Crusader states in the century after the First Crusade. Melisende (1105-61) was born and raised after the mainly Frankish crusaders had taken Jerusalem from the Fatimids, and her father was King of Jerusalem. She was married to Fulk from Anjou, on the understanding they would rule together, and for 30 years she vied with him and then their son as they struggled to consolidate their Frankish state in the Holy Land.

The image above is of the coronation of Fulk with Melisende, from Livre d'Eracles, Guillaume de Tyr (1130?-1186)
Source: Bibliothèque nationale de France

With

Natasha Hodgson

Katherine Lewis

and

Danielle Park

Producer: Simon Tillotson

THU 09:45 George Eliot: A Life in Five Characters (m000bg30)

Episode 4

George Eliot - notable among Victorian novelists not only for her books but also for her personal life-story - explored through five of her fictional characters
4.Silas Marner

It's sometimes said that George Eliot never wrote an autobiography because she had written her own life into her key characters.

Presenter Kathryn Hughes hears from contemporary writer David Constantine and recent Eliot biographer Philip Davis about Silas Marner, the embittered small-town line-weaver whose life is transformed when he fosters a small founding, Eppie.

Eliot never had children herself, but she took very seriously her responsibilities towards the sons of her partner, George Henry Lewes. Did she pour her understanding of children and the redemptive power of parenthood into the character of Silas?

With readings from the novel by Juliet Stevenson

Producer: Beaty Rubens

THU 10:00 Woman's Hour (m000bg32)

The programme that offers a female perspective on the world

THU 10:45 Life Lines (m000bg34)

Series 3

Episode 4

Al Smith's award-winning drama set in an ambulance control room. Carrie must deal with heart stopping and starting emergencies every day. When a young woman is the victim of an acid attack Carrie finds herself talking to both the victim and the perpetrator.

Carrie Sarah Ridgeway
Will Rick Warden
Ian Michael Jibson
Jenny Sinead MacInnes
Flo Laura Christy
Man/Paramedic Ikky Elyas
Paramedic Scarlett Courtney
Bill Clive Hayward
Craig Will Kirk
Policeman Shaun Mason

Directed by Sally Avens

THU 11:00 Crossing Continents (m000bg37)

Russian Women Fight Back

Domestic abuse in Russia is endemic with thousands of women dying at the hands of their partners every year. Despite this a controversial law passed in 2017, which scrapped prison sentences for first-time abusers. Beatings that do not cause broken bones or concussion are now treated as administrative offences rather than crimes. As one activist puts it: "the punishment for beating your wife now feels like paying a parking ticket".

But Russian society is waking up to the crisis. The case of three girls- the Khachatryan sisters - who face long prison sentences for murdering their tyrannical father, has sparked mass protests. More than 300,000 people have signed an online petition urging prosecutors to drop the murder charges. The girls' mother tells reporter Lucy Ash that her daughters were acting in self-defence against a man who had abused them physically, emotionally and sexually for years.

Lucy also meets the mother of a woman stabbed to death by her husband who was discovered in her blood soaked bed by her seven year old son. In all three cases, the frightened women had appealed to the police but to no avail. These tragedies might have been averted if only the authorities had taken earlier warnings seriously.

In Moscow, Lucy talks to activists who are fighting back by supporting victims, pushing for legal reforms and drawing attention to the cause through art, video games and social media. And she meets a lone feminist MP in the Russian Duma who is trying to bring in restraining orders for violent husbands, boyfriends and family members. Today Russia has no such laws and domestic violence is not a standalone offence in either the criminal or the civil code.

THU 11:30 Write Brummie (m000bg39)

A portrait of 24 hours of writing in Birmingham

Writing begins in Birmingham in the suburb of Oldbury at 5am every day when writer William Gallagher makes a dawn beginning on his latest screenplay or podcast script. By 8am Mike Gayle is at his desk in Harborne ready for a morning of editing his latest novel. And at 09:30, poet Liz Berry joins Birmingham's writing day over in the leafy suburb of Moseley to work on her latest collection of poems about motherhood.

A mile away, in Kings Heath, novelist Catherine O'Flynn starts

work on her children's novel at 10:30. At the other end of Kings Heath High Street, novelist Helen Cross takes up the writing baton at lunchtime and works steadily through the afternoon until the kids get home from school.

Birmingham pauses to eat in the early evening before writing begins again, this time over in the far suburb of Dorridge where Professor Chris McCabe has finished his day job in his laboratory and, by 8 in the evening, is busy at work on his latest crime thriller. Chris finishes around 10pm but playwrights Tom Davis and Deirdre Burton don't start writing until midnight. They sit by the fire writing plays together until 2:30am in Moseley.

In the wee hours in Harborne, insomniac poet Vidyan Ravinthiran is disturbed by his new-born baby and gets up to revise his latest verse - and so he completes Birmingham's writing day.

Specially composed verse by Gregory Leadbetter

Reader: Adrian Earle
Presenter: Sue Brown
Producer: Rosie Boulton

A Must Try Softer production for BBC Radio 4

THU 12:00 News Summary (m000bg3c)

The latest national and international news from BBC Radio 4.

THU 12:04 Candide (m000bg3f)

Episode 4

4/5. Voltaire's witty 18th century novel of ideas about good and evil takes its eponymous hero on an epic, picaresque journey through Europe and South America. In this episode, Candide arrives in Venice to rendezvous with Cunégonde but things don't go according to plan. Abridged by Robin Brooks and read by Adrian Scarborough.

Producer: Bruce Young. Repeated at 1045pm.

THU 12:18 You and Yours (m000bg3h)

News and discussion of consumer affairs.

THU 12:57 Weather (m000bg3k)

The latest weather forecast

THU 13:00 World at One (m000bg3m)

Mon-Thurs: Analysis of news and current affairs, presented by Sarah Montague. Fri: Analysis of news and current affairs, presented by Mark Gardell.

THU 13:45 50 Things That Made the Modern Economy (m000bktf)

Series 2: 50 More Things...

Bonsack Machine

One historian of the cigarette industry reckons it invented much of modern marketing. Why did such huge sums go into advertising early brands such as Camels and Lucky Strikes? Before an inventor called James Bonsack came along, cigarettes were far less popular than cigars, pipes or chewing tobacco. Bonsack's machine made it possible to make huge amounts of cigarettes more cheaply - creating the need to persuade people to buy them. But, as Tim Harford explains, many modern regulators think we should be worried about the power of cigarette branding.

Producer: Ben Crighton

Editor: Richard Vadon

THU 14:00 The Archers (m000bft5)

[Repeat of broadcast at 19:00 on Wednesday]

THU 14:15 The National (m000bg3r)

Episode 3

by Sarah Wooley

Plans for the opening of the new National Theatre building are threatened by construction delays and industrial action. Meanwhile, new Artistic Director, Peter Hall, faces some serious criticism from inside the organisation itself.

Peter Hall . . . Sam Troughton
Sir Max Rayne . . . Clive Hayward
Harold Pinter . . . Paul Ritter
John Goodwin . . . Neil McCaul
Sir Laurence Olivier . . . Robert Glenister
Lord Goodman . . . Jon Glover
Diana Boddington . . . Scarlett Courtney

Simon Replh . . . Will Kirk
Strike Leader . . . Rick Warden
Contractor . . . Greg Jones
Taxi Driver . . . Adam Courting

Directed by Marc Beeby

THU 15:00 Open Country (m000bg3t)

Arnos Vale Cemetery

For the first time, Open Country is entirely based at a cemetery. Helen Mark explores Arnos Vale in Bristol - forty-five acres of green space and woodland which provide a vital wildlife corridor in the city. First established 180 years ago as a 'garden cemetery' with architecture in the style of classical Greece, Arnos Vale quickly became the fashionable place for Victorian Bristolians to be buried. It was one of the first places in England to install a crematorium, a state-of-the-art development in its day. But during the latter part of the 20th century it fell into disrepair. Neglected and overgrown, it almost closed for good. A campaign to save it has resulted in a cemetery which today is much more than just a place to bury the dead. As Helen finds out, it has a whole life of its own. Wildlife thrives in the trees and undergrowth which almost swallowed the gravestones during the years of neglect. Now restored as a working cemetery, it also has a cafe and a shop, and is a venue for everything from yoga classes and craft fairs to film screenings and even weddings.

Producer: Emma Campbell

THU 15:27 Radio 4 Appeal (m000bd14)

[Repeat of broadcast at 07:54 on Sunday]

THU 15:30 Open Book (m000bdm0)

[Repeat of broadcast at 16:00 on Sunday]

THU 16:00 The Film Programme (m000bg3w)

The latest releases, the hottest stars and the leading directors, plus news and insights from the film world.

THU 16:30 BBC Inside Science (m000bg3y)

Dr Adam Rutherford and guests illuminate the mysteries and challenge the controversies behind the science that's changing our world.

THU 17:00 PM (m000bg40)

Afternoon news and current affairs programme, reporting on breaking stories and summing up the day's headlines.

THU 18:00 Six O'Clock News (m000bg42)

The latest national and international news from BBC Radio 4.

THU 18:30 Alone (m000bg44)

Series 2

Friday Nights, Saturday Mornings

A sitcom, written by Moray Hunter and starring Angus Deayton, about five single, middle aged neighbours living in flats in a converted house in North London. With Abigail Cruttenden, Pearce Quigley, Kate Isitt and Bennett Arron.

Mitch (Angus Deayton) is a widower and part-time therapist who is looking to put his life back together now that he is single and living with Will (Pearce Quigley), his younger, more volatile and unhappily divorced half-brother. Elsewhere in the building are schoolteacher Ellie (Abigail Cruttenden) who is shy, nervous and holds a secret candle for Mitch. Overly honest, frustrated actress Louisa (Kate Isitt), and socially inept IT nerd Morris (Bennett Arron) complete the line-up of mismatched neighbours.

In the sixth and final episode, Friday Nights, Saturday Mornings, Will's new girlfriend Hannah (Carrie Quinlan), seems to have a problem with Mitch being around all the time and, to Ellie's dismay, Will finds himself having to make a difficult decision where Mitch is concerned. Louisa meantime is convinced her acting career is in dire straits and is determined to get her retaliation in first.

Cast
Mitch- Angus Deayton
Will- Pearce Quigley
Ellie- Abigail Cruttenden
Louisa- Kate Isitt
Morris- Bennett Arron
Hannah and Rebecca - Carrie Quinlan

Written and created By Moray Hunter
Directed by Moray Hunter and Gordon Kennedy

Sound Engineer and Editor Jerry Peal
Production Manager Sarah Tombling
Based on an original idea developed in association with Dandy Productions
Recorded live at RADA Studios London
Produced by Gordon Kennedy

An Absolutely production for BBC Radio 4

THU 19:00 The Archers (m000bg46)

Things are looking up for Tracy and Eddie has a change of heart.

THU 19:15 Front Row (m000bg48)

Live magazine programme on the worlds of arts, literature, film, media and music

THU 19:45 Life Lines (m000bg34)

[Repeat of broadcast at 10:45 today]

THU 20:00 Law in Action (m000bfhd)

[Repeat of broadcast at 16:00 on Tuesday]

THU 20:30 The Bottom Line (m000bg4b)

Evan Davis hosts the business conversation show with people at the top giving insight into what matters

THU 21:00 BBC Inside Science (m000bg3y)

[Repeat of broadcast at 16:30 today]

THU 21:30 In Our Time (m000bg2y)

[Repeat of broadcast at 09:00 today]

THU 22:00 The World Tonight (m000bg4f)

In depth reporting, intelligent analysis and breaking news from a global perspective

THU 22:45 Candido (m000bg3f)

[Repeat of broadcast at 12:04 today]

THU 23:00 Where's the F in News (m000bg4h)

Series 3

Episode 3

An energetic, intelligent female-anchored show with an all-female panel - using the events, trends and talking points they think should really be top of the news agenda in a series of fresh and funny challenges.

Host Jo Bunting is joined by guests including Sara Barron, Elizabeth Day and Tessa Coates.

Jo Bunting is a producer and writer of topical comedy and satire, with credits including Have I Got News For You, the Great British Bake Off spin off show An Extra Slice with Jo Brand, and the successful topical chat show That Sunday Night Show presented by Adrian Chiles on ITV. Jo was a guest interviewer on Loose Ends for several years and a panellist on Loose Women.

An Avalon production for BBC Radio 4

THU 23:30 Stranger Than Sci-Fi (m0007bx3)

Space Colonies

Astro-physicist Dr. Jen Gupta and comedian Alice Fraser travel the parallel worlds of science and sci-fi.

Starting with the latest books and films, they discover real life science that sounds too strange to be true - from babies grown in bags, via black hole Jacuzzis, to flowers that behave like our ears.

In this episode, Jen and Alice explore one of the oldest questions in science and science fiction - why should we travel into space? At a time when Elon Musk and Jeff Bezos are promising space colonies in the next fifty years, is it time to rethink our relationship with space? They talk to the astrobiologist Dr. Louisa Preston about whether there is life out there on other planets.

Then they find out how we might already be endangering that potential life. The space archaeologist Dr Alice Gorman explains how we are polluting our solar system, why we should worry about space junk and what a manifesto for sustainable space travel might look like.

Produced by Joe Sykes
Executive Producer: Peggy Sutton
A Somethin' Else production for BBC Radio 4

FRIDAY 22 NOVEMBER 2019

FRI 00:00 Midnight News (m000bg4m)

National and international news from BBC Radio 4

FRI 00:30 George Eliot: A Life in Five Characters (m000bg30)

[Repeat of broadcast at 09:45 on Thursday]

FRI 00:48 Shipping Forecast (m000bg4p)

The latest weather reports and forecasts for UK shipping.

FRI 01:00 Selection of BBC World Service Programmes (m000bg4r)

BBC Radio 4 joins the BBC World Service.

FRI 05:20 Shipping Forecast (m000bg4t)

The latest weather reports and forecasts for UK shipping.

FRI 05:30 News Briefing (m000bg4w)

National and international news from BBC Radio 4.

FRI 05:43 Prayer for the Day (m000bg4y)

A spiritual comment and prayer to start the day with the Archdeacon of Bangor, Mary Stallard

FRI 05:45 Farming Today (m000bg50)

The latest news about food, farming and the countryside.

FRI 05:58 Tweet of the Day (b04hkytk)

King Eider

Tweet of the Day is the voice of birds and our relationship with them, from around the world.

Miranda Krestovnikoff presents the Arctic specialist the king eider duck. Relatives of the larger common eider found around the British coast, king eiders breed around the Arctic and sub-Arctic coasts of the northern hemisphere. As true marine ducks they can dive to depths of 25 metres on occasion, to feed on molluscs and marine crustaceans. The drake King Eider has colourful markings; having a black and white body with a reddish bill, surmounted by an orange-yellow shield. His cheeks are pale mint-green and his crown and nape are lavender-grey. He uses his bill pattern and head colours in a highly ritualised display to woo his mate, fluffing up his chest and issuing an amorous coo-ing call.

FRI 06:00 Today (m000bgnm)

News and current affairs, including Sports Desk, Weather and Thought for the Day.

FRI 09:00 Desert Island Discs (m000bdlj)

[Repeat of broadcast at 11:15 on Sunday]

FRI 09:45 George Eliot: A Life in Five Characters (m000bgnp)

Episode 5

George Eliot - notable among Victorian novelists not only for her books but also for her personal life-story - explored through five of her fictional characters
5. Gwendolen Harleth

It's sometimes said that George Eliot never wrote an autobiography because she had already poured so much of her own experiences into her key characters.

Presenter Kathryn Hughes hears from debut novelist Kathy O'Shaughnessy and recent biographer Philip Davis about Gwendolen Harleth, the charismatic, flawed heroine of Eliot's final novel, Daniel Deronda.

Does Gwendolen's fated search for some agency in her life reflect Eliot's opinion about the growing fight for women's equality?

With readings from the novel by Juliet Stevenson

Producer: Beaty Rubens

FRI 10:00 Woman's Hour (m000bgnr)

The programme that offers a female perspective on the world

FRI 10:45 Life Lines (m000bgnt)

Series 3

Episode 5

Al Smith's award-winning drama series set in an ambulance control room. When Carrie takes a call from Frances she realises that she's in as much need of emotional as physical support.

Carrie Sarah Ridgeway
Ian Michael Jibson
Frances Rebecca Root
Will Rick Warden

Directed by Sally Avens

FRI 11:00 Natural Histories (m000bgnw)

Pigeon

The relationship between humans and pigeons is one of the oldest on the planet. They have been our co-workers; delivering messages, assisting during the war, providing a source of food, a sport and obsession for many, and a suitable religious sacrifice. They helped Darwin with his theory of Natural Selection, have become a powerful symbol of peace and helped us unravel some of the mysteries of navigation. Yet many of us still regard them as vermin, as "rats with wings". Brett Westwood and Verity Sharp probe into this paradox, and explore how pigeons have helped us and what they can reveal about the homing instinct and what it means for us to feel at home. Producer Sarah Blunt

Contributors

Dr Jon Day - ILecturer in English, Kings College, London and Author of 'Homing - on pigeons, dwellings and why we return'.
Ian Evans - Executive Director of the Royal Pigeon Racing Association
Barbara Allen - Author of 'Pigeon'
Gordon Corera - BBC Security Correspondent and author of 'The Secret Pigeon Service'.
Amy Dickin - Awards and Heritage Manager for The People's Dispensary for Sick Animals (PDSA)
Tim Guilford - Professor of Animal Behaviour, Oxford University & member of the Oxford Navigation Group

FRI 11:30 In and Out of the Kitchen (b065vsdx)

Series 4

The Birthday

Damien rents a narrowboat for a weekend cruising around the heart of England with his partner Anthony, his producer friend Marion Duffett, his parents Janet and Dennis, his agent Ian, and his builder Mr Mullaney, during which he hopes to relax but also ease tensions between Mr Mullaney and Anthony who aren't getting on well following an Anthony-induced hiccup in their newly formed property business. But canalling isn't always as easy as it looks...

Starring:

Miles Jupp as Damien Trench
Justin Edwards as Anthony
Philip Fox as Ian Frobisher/Dennis Trench
Brendan Dempsey as Mr Mullaney
Lesley Vickereage as Marion Duffett
Selina Cadell as Janet Trench
David Acton as Mr Touchstone
and
Alex Tregear as The Waitress

It was written by Nick Revell

The producer was Sam Michell

FRI 12:00 News Summary (m000bgny)

The latest national and international news from BBC Radio 4.

FRI 12:04 Candido (m000bgp0)

Episode 5

5/5. Voltaire's witty 18th century novel of ideas about good and evil takes its eponymous hero on an epic, picaresque journey through Europe and South America. In this final episode, Candide hatches a plan to rescue Cunégonde and is reunited with an old friend. Abridged by Robin Brooks and read by Adrian Scarborough.
Producer: Bruce Young. Repeated at 1045pm.

FRI 12:18 You and Yours (m000bgp2)

News and discussion of consumer affairs.

FRI 12:57 Weather (m000bgp4)

The latest weather forecast

FRI 13:00 World at One (m000bgp6)

Mon-Thurs: Analysis of news and current affairs, presented by Sarah Montague. Fri: Analysis of news and current affairs, presented by Mark Maddell.

FRI 13:45 50 Things That Made the Modern Economy (m000bmtc)

Series 2: 50 More Things...

GPS

What would happen if GPS (the Global Positioning System) stopped working? From emergency services to ride-sharing apps to just-in-time supermarket logistics networks, the ability to navigate using GPS is baked into the economy. And that's just the start. GPS is not so much a location service as a time service. Power grids, stock markets and cloud computing all depend on the ability to agree on the exact time. No wonder GPS is sometimes called the "invisible utility". But Tim Harford thinks that perhaps what we should really fear is not so much GPS signals going down, as being spoofed in ways we fail to notice.

Producer: Ben Crighton
Editor: Richard Vadon

FRI 14:00 The Archers (m000bg46)

[Repeat of broadcast at 19:00 on Thursday]

FRI 14:15 Drama (b09hr3bq)

Do Not Go Gentle

Josey may be approaching the end of her life. But she's determined to fight it with her characteristic wit and perspicacity. No one - including death - will tell her what to do.

Written by Mike Harris, who has been writing radio drama for over thirty years. This play displays his customary mix of mirth and mayhem in equal measure.

Written by Mike Harris

Produced and Directed by Clive Brill
A Brill production for BBC Radio 4.

FRI 15:00 Gardeners' Question Time (m000bgpb)

Sheffield Botanical Gardens: Correspondence Edition

Kathy Clugston is at the Sheffield Botanical Gardens for a correspondence edition of the show. Bob Flowerdew, Anne Swithinbank and Matt Biggs are on hand to answer questions sent in from our listeners via post, email and social media.

Producer: Dan Cocker
Assistant Producer: Rosie Merotra

A Somethin' Else production for BBC Radio 4

FRI 15:45 Short Works (m000bgpd)

Cuckoo

An original short work for BBC Radio 4 by the Northern Irish writer Paul McVeigh. As read by Tony Flynn.

Born in Belfast, Paul McVeigh has written comedy, essays, flash fiction, a novel, plays and short stories. His work has been performed on radio, stage and television, and published in seven languages. Paul co-founded the London Short Story Festival and is an associate director at Word Factory. His debut novel 'The Good Son' won The Polari First Novel Prize and The McCreath Literary Award.

Writer Paul McVeigh
Reader Tony Flynn
Producer Michael Shannon

FRI 16:00 Last Word (m000bgpg)

Radio 4's weekly obituary programme, telling the life stories of those who have died recently.

FRI 16:30 Feedback (m000bgpj)

The programme that holds the BBC to account on behalf of the radio audience.

FRI 16:55 The Listening Project (m000bgpl)

Helena and Abdul - Becoming British

Friends who met at a language class talk about their unlikely and enduring friendship. Fi Glover presents another conversation in a series that proves it's surprising what you hear when you listen.

FRI 17:00 PM (m000bgpn)

Afternoon news and current affairs programme, reporting on breaking stories and summing up the day's headlines.

FRI 18:00 Six O'Clock News (m000bgpq)

The latest national and international news from BBC Radio 4.

FRI 18:30 The Now Show (m000bgps)

Series 55

Episode 5

Steve Punt and Hugh Dennis present the week via topical stand-up and sketches. They're joined by Fern Brady, Pierre Novellie, Johnny & the Baptists and Gemma Arrowsmith.

It was written by the cast with additional material by Robin Morgan, Laura Major, Kat Sadler and Alex Kealy.

It was a BBC Studios production.

FRI 19:00 The Archers (m000bgpv)

Writer, Tim Stimpson
Director, Rosemary Watts
Editor, Jeremy Howe

Jill Archer Patricia Greene
David Archer Timothy Bentinck
Pip Archer Daisy Badger
Pat Archer Patricia Gallimore
Brian Aldridge Charles Collingwood
Phoebe Aldridge Lucy Morris
Lilian Bellamy Sunny Ormonde
Harrison Burns James Cartwright
Neil Carter Brian Hewlett
Justin Elliott Simon Williams
Rex Fairbrother Nick Barber
Eddie Grundy Trevor Harrison
Clarrie Grundy Heather Bell
Will Grundy Philip Molloy
Emma Grundy Emerald O'Hanrahan
Ed Grundy Barry Farrimond
Tracy Horrobin Susie Riddell
Elizabeth Pargetter Alison Dowling
Lily Pargetter Katie Redford
Johnny Phillips Tom Gibbons
Leonard Berry Paul Copley
Russ Jones Andonis James Anthony
Joy Horville Jackie Lye
Alf Grundy David Hargreaves
Roman Trench Ewan Bailey

FRI 19:15 Front Row (m000bgpx)

Live magazine programme on the worlds of arts, literature, film, media and music

FRI 19:45 Life Lines (m000bgnt)

[Repeat of broadcast at 10:45 today]

FRI 20:00 Any Questions? (m000bgpz)

Sarah Wollaston

Chris Mason presents political debate from Callington Community College in East Cornwall with a panel including the Liberal Democrat Prospective Parliamentary Candidate Sarah Wollaston.

Producer: Lisa Jenkins

FRI 20:50 A Point of View (m000bgq1)

A weekly reflection on a topical issue.

FRI 21:00 Archive on 4 (b099tppv)

Driven

Peter Curran looks back at the culture of cars - as the driverless era approaches.

It's lasted barely 11 decades, yet the era of the driver and the car is slowly coasting to a close. Fewer young people are learning to drive while the technology behind autonomous vehicles is set to come of age.

Peter traces his enthusiasm for driving back to his disreputable teenage years in Belfast. He starts this Archive on 4 with Mr Toad of the Wind in the Willows who, in 1908 (the year of the model T Ford), promised his friends he'd never drive again - only to break his promise almost instantly. The Toad story is prophetic. For many, cars are compulsive.

Using choice archive, Peter looks at the diverse role of driver - from Barbara Cartland's posh Chauffeur to the hapless guests featured on Road Rage School. And he tracks the car as style icon, with special reference to the lovable Morris Minor, the stylish Mini and the all-things-to-all-drivers Ford Cortina, whose pre-launch codename was the Archbishop.

Peter Curran identifies one car as prophetic. The VW Beetle - part of a plan by Adolf Hitler to allow all workers the freedom associated with motoring - starred in its own 1968 movie, the Love Bug. Herbie was the first-ever driverless car, though he was propelled by magic and belief, not artificial intelligence.

Meanwhile Alexei Sayle thinks future generations will marvel at the idea that their ancestors were allowed to drive cars "in the same way chemists were allowed to put opium in cough syrup."

A Testbed production for BBC Radio 4.

FRI 22:00 The World Tonight (m000bgq3)

In depth reporting, intelligent analysis and breaking news from a global perspective

FRI 22:45 Candide (m000bgp0)

[Repeat of broadcast at 12:04 today]

FRI 23:00 A Good Read (m000bfhg)

[Repeat of broadcast at 16:30 on Tuesday]

FRI 23:25 Stranger Than Sci-Fi (m0007kxs)

Jurassic Park

Astro-physicist Jen Gupta and comedian Alice Fraser travel the parallel worlds of science and sci-fi.

Starting with the latest books and films, they discover real life science that sounds too strange to be true - from babies grown in bags, via black hole Jacuzzis, to flowers that behave like our ears.

In this episode, they tackle the question everyone wants to know the answer to - can we bring the dinosaurs back to life? They talk to the journalist Britt Wray about the surprising origin story for the book Jurassic Park. Then they dive into the world of de-extinction research and find out why there is a group of scientists who focus all their time on reviving extinct species.

They ask if we might soon see woolly mammoths roaming the Siberian steppe once again. What are the potential pitfalls of resurrecting the dead?

Produced by Joe Sykes
Executive Producer: Peggy Sutton
A Somethin' Else production for BBC Radio 4

FRI 23:55 The Listening Project (m000bgq8)

Mark and Glyn - For Better or Worse

Husband and husband talk frankly about what it's like living with Multiple Sclerosis. Fi Glover presents another conversation in a series that proves it's surprising what you hear when you listen.