

**SATURDAY 17 NOVEMBER 2018**

**SAT 19:00 The Secret History of Our Streets (b04bx5r1)**  
Series 2

The Moray Estate, Edinburgh

BBC Two's multi-award-winning Secret History of Our Streets told the story of six London streets, from Victorian times to the present day.

Now, as its people stand at a crossroads in their history, the series travels to Scotland to tell the stories of three archetypal streets in Scotland's three great cities: Edinburgh, Glasgow and Aberdeen.

Endlessly surprising and not at all what you would expect, the stories of these streets are the story of a nation.

This is the story of Edinburgh's New Town and the Moray Estate - an area unlike anywhere else in Britain, with an architecture and a people seemingly unchanged over almost 200 years. The last bastion of the British Empire. A group of Scots, at a pivotal moment in time... the grandest street in Scotland.

**SAT 20:00 Operation Gold Rush with Dan Snow (b0824c97)**  
Series 1

Mountain Passes

In an epic adventure, historian Dan Snow follows in the footsteps of the 19th century's last great gold rush - a journey filled with genuine danger and thrilling beauty. Leading a one-month expedition, he is joined by polar explorer Felicity Aston and remote environment medic Dr Kevin Fong. Their goal - to strike gold in Canada's frozen wilderness.

They attempt to retrace a gruelling 600-mile journey through one of the world's last great wildernesses. It takes them from the coast of Alaska to the gold fields of the Klondike, a remote region on the edge of the Canadian arctic. It is a journey first undertaken by tens of thousands of gold seekers - men and women from around the globe who in the last years of the 19th century dropped everything and set off for the Klondike in the hope of striking it rich. So great were the hardships they encountered that only one in three of those who set off ever made it there. Now, Dan and his team are reliving those struggles and experiences in the hunt for their own gold.

In this first episode, Dan and his team take on the Alaskan Coastal Mountains, a wall of snow and rock blocking their way to the Klondike and its gold. Following the routes used by the Klondikers, they split up to experience two very different gold rush journeys. As they begin their journey to the gold fields, they have to cross icy rivers, avalanche prone slopes and climb a near vertical icy ascent.

**SAT 21:00 Beck (b0bsg6h6)**  
Without Intent

A girl finds her mother lying dead at the foot of the stairs. Is it an accident or murder?

In Swedish with English subtitles.

**SAT 22:30 Top of the Pops (b0bs47xf)**

Peter Powell and Stevie Wright present the pop chart programme, first broadcast on 18 September 1986. Featuring Eurythmics, Michael McDonald, Orchestral Manoeuvres in the Dark, Cameo, The Communards and Five Star.

**SAT 23:00 Top of the Pops (b0bs48gl)**

Janice Long presents the pop chart programme, first broadcast on 25 September 1986. Featuring Amazulu, Huey Lewis and the News, Farley 'Jackmaster' Funk, Genesis, Loose Ends, The Communards and Run DMC.

**SAT 23:30 Guitar Heroes at the BBC (b00pj73)**  
Part IV

Series featuring legendary guitarists treading the boards and trading licks at the BBC studios.

This edition kicks off with big hits from The Rolling Stones and David Bowie before taking things down a notch with the acoustic picking of Michael Chapman and the Irish mysticism of Horslips.

However, it's not long before the likes of Motorhead, Nazareth and straight-up blues rocker George Thorogood turn the volume right back up to 11. A spot of flamenco from Paco De Lucia and a classic track from Strat master Eric Clapton round off the show.

Filmed in the 1970s for shows including Top of the Pops, Parkinson, Rock Goes to College and the Old Grey Whistle Test, these rocking tracks leave viewers wondering why pianos were ever invented.

**SAT 00:35 Lionel Richie at the BBC (b017sw7c)**

A selection of Lionel Richie's greatest moments from the BBC archives, from his first Top of the Pops appearance with The Commodores in 1979 to highlights from his 2009 concert at the BBC's Maida Vale studios.

**SAT 01:35 The Secret History of Our Streets (b04bx5r1)**  
[Repeat of broadcast at 19:00 today]

**SAT 02:35 Operation Gold Rush with Dan Snow (b0824c97)**  
[Repeat of broadcast at 20:00 today]

**SUNDAY 18 NOVEMBER 2018**

**SUN 19:00 A History of Christianity (b00ntrs7)**  
Catholicism: The Unpredictable Rise of Rome

Professor Diarmaid MacCulloch's grandfather was a devout pillar of the local Anglican church and felt that any dabbling in Catholicism was liable to pollute the English way of life. But now his grandfather isn't around to stop him exploring the extraordinary and unpredictable rise of the Roman Catholic church.

Over one billion Christians look to Rome, more than half of all Christians on the planet. But how did a small Jewish sect from the backwoods of 1st-century Palestine, which preached humility and the virtue of poverty, become the established religion of western Europe - wealthy, powerful and expecting unflinching obedience from the faithful?

Amongst the surprising revelations, MacCulloch tells how confession was invented by monks on a remote island off the coast of Ireland, and how the Crusades gave Britain the university system.

Above all, it is a story of what can be achieved when you have friends in high places.

**SUN 20:00 Discovering... (b0bs67c1)**  
Series 1

Rhapsody in Blue - George Gershwin

George Gershwin's Rhapsody in Blue (1924) is a landmark in 20th-century music. Gershwin drew upon the jazz music enveloping New York City in the 1920s to create the 'American Sound', which would inspire generations of composers in years to come.

Josie D'Arby presents the BBC Scottish Symphony Orchestra with pianist Marc Andre Hamelin, conducted by Thomas Dausgaard, performing the piece in full from Glasgow's City Halls.

Through conversations with the Dausgaard, Hamelin and members of the orchestra, and interviews with jazz pianist and composer Julian Joseph and broadcaster, critic and biographer David Benedict, the programme delves deep into Gershwin's swinging salute to the city that never sleeps, exploring the composer's desire to be taken seriously beyond Broadway, and the improvisational approach which drew together so many different musical influences to create this iconic and much-loved piece of music.

**SUN 21:00 The Prince and the Composer: A Film about Hubert Parry by HRH The Prince of Wales (b011g941)**

Sir Hubert Parry is simultaneously one of Britain's best-known and least-known composers. Jerusalem is almost a national song, regularly performed at rugby grounds, schools, Women's Institute meetings and the Last Night of the Proms, while Dear Lord and Father of Mankind is one of Britain's best-loved hymns. Everyone knows the tunes, yet hardly anyone knows much about the man who wrote them.

In this film, HRH The Prince of Wales, a longstanding enthusiast of Parry's work, sets out to discover more about the complex character behind it, with the help of members of Parry's family, scholars and performers. This feature-length documentary by the award-winning director John Bridcut offers fresh insight into the life and work of Hubert Parry through the unique perspective of HRH The Prince of Wales.

**SUN 22:00 The Sky at Night (b0bsr2mg)**  
First Rock from the Sun

Documentary series. Mercury, unique amongst the planets, is shrinking. And that's only the beginning of how strange the solar system's smallest planet is. In October 2018 a new mission to Mercury was launched - BepiColombo. It's a spacecraft consisting of two separate orbiters. Together, these hope to achieve the most complete exploration of Mercury to date.

Since its launch, the spacecraft has been hurtling through space towards the inner solar system on an arduous seven-year journey that includes nine fly-bys of other planets. Its destination is dangerous: Mercury has some of the most extreme conditions in the Solar System.

The Sky at Night investigates how Bepi was built, how it will get to Mercury and what it hopes to discover. Three big questions are at stake. How did Mercury form? Why is it shrinking? And how has it survived the full blast of the sun?

**SUN 22:30 Golem (b0bs67q4)**

The danger lies not in machine becoming more like man but in man becoming more like machine.

Like a giant graphic novel burst into life, Golem is theatre company 1927's multi-award-winning dystopian fable about our over-reliance on machines. A dark and fantastical tale of an extraordinary ordinary man, it is a vivid mix of handmade animation, sly wit, live music, storytelling and performance.

Dissecting the present and looking to the future, Golem is a parable for our times that cleverly and satirically explores one of the great questions of the modern world - who or what is in control of our technologies?

Created by Margate- and London-based theatre company 1927, Golem had its world premiere at the Salzburg Festival, Austria, in August 2014. Written and directed by Suzanne Andrade, it is a synchronised fusion of handcrafted animation by Paul Barritt entwined with live performance from 1927's ensemble of performers, alongside a live and recorded score composed by Lillian Henley. Acclaimed by audiences and critics alike since its UK premiere at London's Young Vic Theatre in December 2014, Golem has, over three and half years, been performed over 315 times, touring across the UK and internationally to 16 countries across five continents, including seasons in Taiwan, France, Russia, China, Switzerland, Spain, Australia, Italy, USA, Denmark, Portugal, South Korea, Luxembourg, Columbia and Kazakhstan.

Golem was created as a 1927, Salzburg Festival, Theatre de la Ville Paris & Young Vic co-production with development support from Harrogate Theatre, Stratford Circus and The Old Market. 1927 was supported by The Space to film Golem in 2018 at artsdepot, London.

**SUN 00:00 There She Goes (b0bs475p)**  
Series 1

Ben

Rosie is incredibly excited - Gandalf is finally coming because there is going to be a birthday with lots of presents! It doesn't matter to Rosie that it's Ben's birthday. The extended family set off for a birthday meal.

**SUN 00:30 Tales from the Royal Wardrobe with Lucy Worsley (b048wss8)**

Today, few people's clothes attract as much attention as the royal family, but this is not a modern-day Hello magazine-inspired obsession. As Dr Lucy Worsley reveals, it has always been this way. Exploring the royal wardrobes of our kings and queens over the last 400 years, Lucy shows this isn't just a public preoccupation but our monarchs' as well.

From Elizabeth I to our present Queen, Lucy believes that the royal wardrobe's significance goes way beyond the cut and colour of the clothing and that royal fashion is, and has always been, regarded as their personal statement to their people. So most monarchs have carefully choreographed every aspect of their wardrobe and, for those who have not, there have sometimes been calamitous consequences.

**SUN 01:30 Handmade in Hull (b09g012v)**

A visually stunning tribute to Hull's craft traditions, produced in collaboration with artist Linda Brothwell as part of Hull City of Culture 2017. The film profiles the artisans whose skills put Hull on the map in Britain's industrial heyday, from the compass maker whose precision-crafted instruments helped steer Hull's fishing fleet to boat builders and woodcarvers, all reflecting on the joys of their craft and its role in the city's past. A heartfelt and evocative portrait of Hull's great industrial heritage and the people who helped create it.

**SUN 02:15 A History of Christianity (b00ntrs7)**  
[Repeat of broadcast at 19:00 today]

**MONDAY 19 NOVEMBER 2018**

**MON 19:00 Beyond 100 Days (b0bs7138)**

Series 1

19/11/2018

Katty Kay in Washington and Christian Fraser in London report on the events that are shaping the world.

**MON 19:30 University Challenge (b04wvzxc)**

Christmas 2014

Episode 1

The first match is between Lady Margaret Hall, Oxford, with news presenter Cathy Newman and actor Sam Westi and the University of Warwick, with novelist Jonathan Coe and travel writer Simon Calder. Jeremy Paxman asks the questions.

**MON 20:00 Ireland with Simon Reeve (b06rhqmg)**

Episode 2

Starting at the spectacular Giant's Causeway in Northern Ireland, Simon travels down the east coast to the great and rapidly changing cities of Belfast and Dublin. He ends his journey in the stunning Wicklow Mountains.

**MON 21:00 Storyville (b0bs68rr)**

Poisoning America: The Devil we Know

A Storyville documentary following a group of citizens in West Virginia who take on a corporation after they discover it has been dumping a toxic chemical into the water supply.

**MON 22:25 Long Shadow (b04jr0x4)**

Remembering and Understanding

David Reynolds shows how the common perception of the Great War as futile slaughter has been moulded over time. The image of mud and trenches, poets and poppies was not the general view in the 1920s and 1930s, but developed after the Second World War and most of all, through popular depictions of the war from the 1960s.

Reynolds gets to the roots of shifting public memory by comparing the British and German sense of what the Great War meant right back in its immediate aftermath. Britain invested in the diplomatic ideals of the League of Nations, and Reynolds charts the extraordinary popularity of disarmament movements. For many British people, the terrible sacrifice would not have been in vain if the Great War proved to be the war to end war. Reynolds tells the story of the Peace Ballot of 1935, which attracted an extraordinary 11.9 million signatories who hoped to stop the slide to war of 1914 ever happening again. In Weimar and Berlin, Reynolds shows that, by contrast, what mattered for Germany was not preventing another 1914 but another 1918 - the year of humiliating defeat. He also examines the myth of the stab in the back which fuelled the rise of Adolf Hitler and another, even more appalling conflict.

The Second World War changed the meaning of the Great War, creating the sense that 1914-18 had been an ineffectual sacrifice that required a second round. Reynolds examines how in the 1960s a new, less deferential generation looked back at the First World War during the 50th anniversaries. In plays like Oh! What a Lovely War and the rediscovery of war poets like Wilfred Owen, they helped set the public memory of a futile war waged by stupid generals.

**MON 23:25 The End of the World? A Horizon Guide to Armageddon (b00zj1c2)**

Our understanding of the world around us is better now than ever before. But are we any closer to knowing how it is all going to end?

Dallas Campbell delves into the Horizon archive to discover how scientists have tried to predict an impending apocalypse - from natural disaster to killer disease to asteroid impact - and to ask: when Armageddon arrives, will science be able to save us?

**MON 00:25 Timeshift (b03p7jh9)**

Series 13

Hurricanes and Heatwaves: The Highs and Lows of British Weather

A glorious national obsession is explored in this archive-rich look at the evolution of the weather forecast from print via radio to TV and beyond - and at the changing weather itself. It shows how the Met Office and the BBC have always used the latest technology to bring the holy grail of accurate forecasting that much closer - even if the odd messenger like TV

weatherman Michael Fish has been shot along the way.

Yet as hand-drawn maps have been replaced by weather apps, the bigger drama of global warming has been playing itself out as if to prove that we were right all along to obsess about the weather. Featuring a very special rendition of the shipping forecast by a Cornish fishermen's choir.

**MON 01:25 Utopia: In Search of the Dream (b092sb6f)**

Series 1

A Good Place Within

Art historian Richard Clay asks whether utopia is, ultimately, a state of mind. Can we find utopia within? He explores the many ways we have created to immerse ourselves in a perfect moment, of epiphany or transcendence, pushing the boundaries of artistic expression and pleasure.

Seeking answers in a broad range of arts, Richard meets digital games pioneer Sid Meier, Rada improvisation teacher Chris Heimann and opera impresario Martin Graham. He tries to compose a haiku and uncovers traces of the hedonistic medieval carnival tradition in the churches and pubs of his native Lancashire.

Richard also compares and contrasts different musical escapes, interviewing Acid House legend A Guy Called Gerald and the celebrated minimalist composer Steve Reich. This is not about the utopia of the future but about the utopia of the immediate world that we can experience now.

**MON 02:25 Ireland with Simon Reeve (b06rhqmg)**

[Repeat of broadcast at 20:00 today]

**TUESDAY 20 NOVEMBER 2018**

**TUE 19:00 Beyond 100 Days (b0bs71dz)**

Series 1

20/11/2018

Katty Kay in Washington and Christian Fraser in London report on the events that are shaping the world.

**TUE 19:30 University Challenge (b04ww01h)**

Christmas 2014

Episode 2

In the second of the first round matches, journalists and broadcasters Dame Jenni Murray and Rosie Millard from University of Hull fight it out against the University of Newcastle with broadcaster Kate Adie and columnist Giles Fraser. Jeremy Paxman asks the questions.

**TUE 20:00 The Story of Wales (b01d224j)**

England and Wales

Huw Edwards presents this major television history of Wales, showing the country in ways it has never been seen before. It is 1485: a young nobleman sails to the land of his fathers from exile in France. His mission - to capture the English crown. For the first time, a self-proclaimed Welshman will be king of England. Under the dynasty he founds, Wales becomes united with England. For every generation of Welsh people to come, the consequences are huge. But exactly what it means - for the next 250 years, at least - depends on whether you are a landowner or one of the ordinary people.

**TUE 21:00 The Quest For Bannockburn (p01ly75)**

Original Series

Day One

In the first of this two part special, Neil Oliver and Tony Pollard set out to solve one of the biggest puzzles in battlefield archaeology. 700 years ago, Robert the Bruce's overwhelming victory over the English at the Battle of Bannockburn helped seal Scotland's future as an independent kingdom. But the actual location remains a mystery. With the help of leading battlefield archaeologists, stuntmen, computer generated graphics and a good old fashioned spade - Neil and Tony go in search of both the real and imagined Battle of Bannockburn.

**TUE 22:00 Royal Cousins at War (p01pw7nx)**

A House Divided

At the outbreak of the First World War three cousins reigned over Europe's greatest powers - Tsar Nicholas II of Russia, Kaiser Wilhelm II of Germany and King George V of Britain.

This two-part series looks at the role played by the three monarchs, and their relationships with each other, in the outbreak of war, arguing that it is far greater than historians have traditionally believed.

The first episode tells the story of the emerging divisions and rivalries between the interrelated royal houses of Europe and features the little-known story of the two Danish sisters, Princess Alexandra and Princess Dagmar, who had pulled off the dynastic coup of the 19th century by marrying the heirs to both the British and Russian thrones. Following the invasion of their native Denmark by Prussia in 1864 during the Wars of German Unification, the sisters became the core of an anti-Prussian coalition that prefigured the great anti-German alliance of 1914. Their sons, King George V and Tsar Nicholas II were close friends.

It looks too at the tangled relationship between the German Kaiser and his English mother, Vicky - the oldest daughter of Queen Victoria. Disabled from birth, Kaiser Wilhelm had a complex love/hate attitude towards Vicky, which transferred itself to Britain as a whole, strongly influencing his foreign policy.

**TUE 23:00 Britain's Lost Masterpieces (b096tyw5)**

Series 2

Derby

Along with a hippo skeleton, a stuffed hedgehog and a log boat, Derby Museum has the best collection of Joseph Wright of Derby paintings in the world. Wright of Derby is one of the greatest English artists who ever lived. He painted the most astounding 'birth of science' scenes, his landscapes and portraits are exquisite and he was inspired by the Industrial Revolution.

But can our team peel back layers of modern restoration on a mysterious landscape painting stuck in the Derby vaults to reveal another hidden masterpiece by Wright of Derby? Dr Bendor Grosvenor and Emma Dabiri travel to Derby to investigate a painting which suffered industrial scale restoration in the 1970s. Can it be saved and carefully restored now? While Bendor travels to Italy to find where the landscape may have been painted, Emma investigates Derby as the cradle of the Industrial Revolution and the 'lunar-tics' of the Midlands who changed the world through science and philosophy.

**TUE 00:00 Lost Kingdoms of Central America (b04kzrg0)**

The Place Where Time Began

Dr Jago Cooper explores the rise and fall of the forgotten civilisations of central America.

His quest takes him from the crystal blue seas of the Caribbean to the new world's most impressive pyramids, flying over the smoking volcanoes of Costa Rica and travelling deep underground in the caves of central Mexico.

He travels in the footsteps of these peoples to reveal their secrets and unearth the astonishing cultures that flourished amongst some of the most dramatic landscapes in the world.

In the final episode, Jago explores the ancient civilisation of Teotihuacan that exploded into a position of dominance in the ancient Americas almost 2,000 years ago. For hundreds of years this great city state was the biggest in the New World. Its rulers built monumental pyramids and temples and then went on to build a vast empire that was maintained through force. Yet the identity of the people who led this civilisation remains a mystery.

**TUE 01:00 Horizon (b013pvn4)**

2011-2012

Seeing Stars

Around the world, a new generation of astronomers are hunting for the most mysterious objects in the universe. Young stars, black holes, even other forms of life.

They have created a dazzling new set of supertelescopes that promise to rewrite the story of the heavens.

This film follows the men and women who are pushing the limits of science and engineering in some of the most extreme environments on earth. But most strikingly of all, no-one really knows what they will find out there.

**TUE 02:00 Ryan Gander: The Idea of Japan (b08v8jd1)**

Ryan Gander OBE is a leading conceptual artist. He creates artworks full of symbolic meaning - images, sculpture, installations and films that may appear to be about one thing, but contain further messages for the thoughtful. And this, he believes, is why he is "big in Japan." Ryan believes he is appreciated there because the country has a highly sophisticated

visual culture, expressed through images and symbols that broadcast cultural messages to the world, as well as to the Japanese themselves. The Geisha and the Samurai are obvious examples; bullet train, tattoo art, and Tokyo street style are less so. The exploration of these signs and symbols takes him six thousand miles east of his Suffolk studio, to investigate how Japanese visual culture is closely linked to a special relationship with time, as the country's past and future inform its present tense.

The journey begins at Tokyo and the famous Scramble Crossing at Shibuya, where crowds race across a huge junction. It looks like chaos, but it's actually an affirmation of an unwritten Japanese code of civic conduct and an underlining of the power of Buddhism, and the state religion, Shinto. Visiting a series of temples Ryan investigates the teachings of Shinto, a word which means Way of the Gods and demands civic responsibility of citizens who have always lived cheek-by-jowl in Japanese cities.

Cleanliness is famously of special interest to the Japanese. In pursuit of the meaning behind everyday objects, Ryan visits a shop selling humble cleaning cloths that are nevertheless beautifully printed, raising chores to the level of art. At a primary school he observes students gleefully cleaning their classroom between lessons, aware of their shared obligations as citizens.

In a film that allows him to make unexpected connections between subjects, musing on a society that appears to march in step leads to those who don't – the Yakuza. These gangsters are despised for their lack of civic sense, yet are frequently on hand with earthquake relief and in plain sight at religious festivals. Ryan's interested in their tattoos, exquisite designs that in the West would be a source of pride, but which here exclude the wearer from beaches and bathhouses. He meets an art collector for whom he designed a simple tattoo that nevertheless suggests to other citizens that this law-abiding businessman is a friend to outlaws. Will perceptions ever shift? They might, as change is an important factor in Japanese culture. In Kyoto, Ryan discovers that the meaning of even the powerful Geisha has changed. He arrives expecting a therapist-entertainer-confidant, but learns that today these powerful businesswomen are now most frequently found in conference centres delivering PR messages. Their traditional role is now partly filled, he believes, by soft-spoken Host Boys in Tokyo night-clubs.

Dr Angus Lockyer, lecturer at the School of African and Oriental Studies, explains that the Japanese live in the present, savouring the moment, a mind-set reinforced by their home-grown religion, in a country that is in constant geological peril. This is the only nation to have experienced the horror of instant change by thermonuclear means, symbolised for Ryan by the small pocket watch stopped by the detonation, exhibited in a Hiroshima museum. Ryan makes another turn, noting the Japanese ability to move on, evidenced in their embrace of nuclear power within a decade of the bombings, and by the emergence, in 1954, of the mutant Godzilla. Spawned in nuclear disaster, the saurian was, to Japanese movie-goers, also an agent of change with messages about endings and new beginnings.

What Ryan labels a fixation on novelty is also explored through distinctive Tokyo street fashion, and with a deconstruction of the cherry blossom fever that breaks out every spring, impelling droves of city-dwellers to leap onto trains bound for the trees. Ryan links the interest in rejuvenation with an urgent issue facing the nation – they have the greatest population of aged citizens and a fast-falling birth-rate. Since the Japanese economic crisis of the nineties, the certainties of a corporate job for life are gone, and with it the hopes of up to a million would-be workers, the Hikokomori, who lock themselves in their bedrooms to avoid the new, uncertain world. Perhaps, says the artist, they should look to the past for inspiration, and the message of the Samurai. This A-list icon speaks of individualism, courage and iron will. But Ryan also finds him in toy stores in the form of robotic Gundam figures, and then, with the head of design at Nissan, injecting his aesthetic into auto bodies. The robots that we fear might be about to take over are welcomed in Japan, their futuristic qualities tempered by their ancient inheritance: here to protect and serve, nothing more.

**TUE 03:00 The Quest For Bannockburn (p011yy75)**  
[Repeat of broadcast at 21:00 today]

**WEDNESDAY 21 NOVEMBER 2018**

**WED 19:00 BBC News (m0001jx5)**  
BBC News

The latest national and international news from the BBC.

**WED 19:30 University Challenge (b04ww0y6)**  
Christmas 2014

**Episode 3**

Another first-round match sees distinguished graduates from two of the UK's top universities battle it out for a place in the semi-finals. King's College, Cambridge, with former BBC correspondent Martin Bell and Bishop David Walker, plays Royal Holloway, University of London, with journalist Francis Wheen and MP Valerie Vaz. Jeremy Paxman asks the questions.

**WED 20:00 Invasion! with Sam Willis (b09jj0md)**  
Series 1

**Episode 3**

In this final programme, Sam Willis continues to tell the story of the invasions that have shaped Britain. He finds evidence of the rich legacy of the Huguenots who came to Britain bringing fine silks and the latest technological developments. He also discovers the ingenious French plans to invade Britain by balloon and the subterranean fortress built for troops in the 19th century when invasion paranoia was at fever pitch.

**WED 21:00 The Quest For Bannockburn (b046rjhw)**  
Original Series

**Day Two**

Neil Oliver and Tony Pollard set out to solve one of the biggest puzzles in battlefield archaeology. 700 years ago, Robert the Bruce's overwhelming victory over the English at the Battle of Bannockburn helped seal Scotland's future as an independent kingdom.

However, the actual location remains a mystery. With the help of leading battlefield archaeologists, stuntmen, computer-generated graphics and a good old-fashioned spade - Neil and Tony go in search of both the real and imagined Battle of Bannockburn.

**WED 22:00 Britain's Nuclear Bomb: The Inside Story (b08nz0xh)**

In 1957, Britain exploded its first megaton hydrogen bomb - codenamed Operation Grapple X. It was the culmination of an extraordinary scientific project, which against almost insuperable odds turned Britain into a nuclear superpower. This is the inside story of how Britain got 'the bomb'.

The BBC has been granted unprecedented access to the top-secret nuclear research facility at Aldermaston. The programme features interviews with veterans and scientists who took part in the atomic bomb programme, some speaking for the first time, and newly released footage of the British atomic bomb tests.

**WED 23:00 Sleuths, Spies & Sorcerers: Andrew Marr's Paperback Heroes (p040pwl2)**  
Spies

What is the allure of the classic espionage story? As Andrew Marr argues in the conclusion to his series about the books we (really) read, the British spy novel is much more than a cloak-and-dagger affair. Rather, these books allow readers to engage with some pretty big questions about the human condition – principally, who are you? What or who would you be willing to betray? And for what cause would you lay your life on the line?

To help him decipher the rules of the classic espionage story, Andrew travels to Berlin in the footsteps of master spy novelist John le Carre, whose experience of witnessing the Berlin Wall being erected in 1961 inspired him to write the 20th century's greatest spy novel, *The Spy Who Came in from the Cold*.

Andrew uncovers the various conventions that have governed the genre since it began. He shows how early spy novelists created a climate of fear, how they introduced the debonair gentleman spy, and how through the works of former secret agents such as Somerset Maugham they translated the often mundane details of espionage into their stories. The tradecraft of spywriting is gleaned from writers Frederick Forsyth, William Boyd, Gerald Seymour, Charles Cumming as well as novelist (and former director general of MI5) Dame Stella Rimington. And Andrew considers the future of the fictional spy in an age when the agent on the ground is being superseded by electronic surveillance.

**WED 00:00 A Timewatch Guide (b08cwr72)**  
Series 3

British Empire: Heroes and Villains

Less than 100 years ago, the British ruled a quarter of the planet and one in five of the global population. Once, people were proud to call themselves imperialists, but now, to many, that seems like a badge of shame.

In this Timewatch guide, David Olusoga examines not whether the British Empire was a force for good or ill, but rather how it has been portrayed on British television over the last 70 years.

Drawing on decades of the documentary series Timewatch, plus many other gems from the BBC archive, David sees how Britain's Caribbean colonies grew rich on slave labour, how chaos gripped India post-independence, and how Africa was plundered for her mineral wealth.

David investigates how film-makers through the years have represented the actions and legacy of Britain's period as the world's ultimate superpower. It used to be said that the sun would never set on the British Empire - now, long after it's gone, the arguments surrounding it are very far from being settled.

**WED 01:00 Francis Bacon: A Brush with Violence (b08cwg3v)**

Francis Bacon was the loudest, rudest, drunkest, most sought-after British artist of the 20th century. Twenty-five years after his death, his canvases regularly exceed £40 million at auction. Bacon's appeal is rooted in his notoriety - a candid image he presented of himself as Roaring Boy, Lord of Misrule and Conveyor of Artistic Violence. This was true enough, but only part of the truth. He carefully cultivated the facade, protecting the complex and haunted man behind the myth. In this unique, compelling film, those who knew him speak freely, some for the first time, to reveal the many mysteries of Francis Bacon.

**WED 02:20 The Quest For Bannockburn (b046rjhw)**  
[Repeat of broadcast at 21:00 today]

**THURSDAY 22 NOVEMBER 2018**

**THU 19:00 Beyond 100 Days (b0bs72cp)**  
Series 1

22/11/2018

Katty Kay in Washington and Christian Fraser in London report on the events that are shaping the world.

**THU 19:30 The Sky at Night (b0bsr2mg)**  
[Repeat of broadcast at 22:00 on Sunday]

**THU 20:00 Timewatch (b016xjwh)**  
The Most Courageous Raid of World War II

Lord Ashdown, a former special forces commando, tells the story of the 'Cockleshell Heroes', who led one of the most daring and audacious commando raids of World War II.

In 1942, Britain was struggling to fight back against Nazi Germany. Lacking the resources for a second front, Churchill encouraged innovative and daring new methods of combat. Enter stage left, Blondie Hasler.

With a unit of 12 Royal Marine commandos, Major Blondie Hasler believed his 'cockleshell' canoe could be effectively used in clandestine attacks on the enemy. Their brief was to navigate the most heavily defended estuary in Europe, to dodge searchlights, machine-gun posts and armed river-patrol craft 70 miles downriver, and then to blow up enemy shipping in Bordeaux harbour.

Lord Ashdown recreates parts of the raid and explains how this experience was used in preparing for one of the greatest land invasions in history, D-day.

**THU 21:00 Tomorrow's World Live: For One Night Only (b0bs6c8f)**

Tomorrow's World is back for one night only in a special live 90-minute edition of the iconic science and technology programme.

Led by much-loved presenters Maggie Philbin and Howard Stableford, alongside Dr Hannah Fry, the programme takes a nostalgic look back at highlights from the archive, discovers the latest in British invention, tests cutting-edge technologies live in the studio, and looks forward to the science and technology that will shape our future.

**THU 22:30 The Wonderful World of Blood - with Michael Mosley (b05nyyhf)**

Of all the wonders of the human body, there's one more mysterious than any other. Blood: five precious litres that keep us alive. Yet how much do we really know about this sticky red substance and its mysterious, life-giving force?

Michael Mosley gives up a fifth of his own blood to perform six

bold experiments. From starving it of oxygen to injecting it with snake venom, Michael reveals the extraordinary abilities of blood to adapt and keep us alive. Using specialist photography, the programme reveals the beauty in a single drop. Michael even discovers how it tastes when, in a television first, he prepares a black pudding with his own blood.

Down the ages, our understanding of blood has been as much myth as science, but Michael reveals there might be truth in the old vampire legends, as he meets one of the scientists behind the latest research that shows young blood might be able to reverse the ageing process - the holy grail of modern medicine.

**THU 23:30 Andrew Marr: My Brain and Me (b08flqbv)**

After suffering a life-threatening stroke four years ago, the broadcaster and political journalist Andrew Marr quickly regained his ability to speak and was able to resume work. But he is still frustrated by lack of movement in his left arm, hand and leg. In this very intimate story, Andrew is on a mission to understand the mysteries of the human brain and to achieve further recovery. He meets some of Britain's million plus stroke survivors and travels the world in search of a miracle cure.

**THU 00:30 Tunes for Tyrants: Music and Power with Suzy Klein (b097ts08)**

Series 1

Dictatorship

Suzy Klein reaches the 1930s, when the totalitarian dictators sought to use and abuse music for ideological ends. She looks at the lives of Richard Strauss, Dmitri Shostakovich and Sergei Prokofiev, who produced some of the 20th-century's best-loved music whilst navigating the precarious tightrope of working for perhaps the most terrifying music lovers ever - Hitler and Stalin.

The political message of the classic musical fairytale Peter and the Wolf is revealed as well as the secret code hidden in Shostakovich's quartets and Strauss's deeply personal reasons for trying to please the Nazis.

Suzy also uncovers why Hitler adored Wagner but banned Mendelssohn's Wedding March, how Stalin used music to subtly infiltrate minds and why Carl Orff's Carmina Burana, a Nazi favourite, appeals to our most primitive senses.

Suzy also raises some intriguing questions: can we pin meaning onto music? What are the moral responsibilities of artists? And did the violence and tyranny of those regimes leave an indelible stain on the music they produced?

The stories are brought to life by performances from the BBC National Orchestra of Wales and its chorus - demonstrating Suzy's argument that music's incredible power to bypass our brains and reach for our hearts makes it a potent and dangerous force.

**THU 01:30 Invasion! with Sam Willis (b09jj0md)**

[Repeat of broadcast at 20:00 on Wednesday]

**THU 02:30 Timewatch (b016xjwh)**

[Repeat of broadcast at 20:00 today]

**THU 02:30 Timewatch (b016xjwh)**

[Repeat of broadcast at 20:00 today]

**FRIDAY 23 NOVEMBER 2018**

**FRI 19:00 World News Today (b0brkfj0)**

The latest national and international news, exploring the day's events from a global perspective.

**FRI 19:30 Top of the Pops (b0bsqck6)**

Gary Davies and Simon Mayo present the pop chart programme, first broadcast on 9 October 1986. Featuring The Bangles, Nick Berry, Julian Cope, Paul Young, Howard Jones, Madonna and Paul Simon.

**FRI 20:00 The Live Lounge Show (b0bsv1v7)**

Series 2

Jess Glynne, Hozier, Rita Ora and more

Clara Amfo takes us behind the scenes of the world-famous Radio 1 Live Lounge - showcasing the biggest names in music, including Jess Glynne, Hozier, Rita Ora, Bastille & Marshmello, Twenty One Pilots and Blossoms.

**FRI 21:00 David Cassidy: The Last Session (b0bshqks)**

This candid biography explores the life of David Cassidy, the 70s pop idol and TV star. The film includes never-before-heard audio interviews with David from 1976 and a raw and poignantly filmed final recording session shortly before his death.

Cassidy's role as singer Keith Partridge in the 1970s sitcom The Partridge Family brought fame and fortune and made him a global teen sensation. David Cassidy: The Last Session tells the inside story of his explosive rise to fame, his conflicted relationships with his father and his own celebrity, and the legacy he left behind.

**FRI 22:25 Country Music Awards (b0bs6f0c)**

2018

Bob Harris introduces the best bits from country music's biggest night of the year, the 52nd annual CMA Awards from the Bridgestone Arena in Nashville. Returning hosts Brad Paisley and Carrie Underwood announce the big winners with performers including Bebe Rexha, Keith Urban, Dierks Bentley with the Brothers Osborne, Kacey Musgraves, Pistol Annies, Thomas Rhett, Kelsea Ballerini, Kenny Chesney, Dan + Sha and Old Dominion with some surprise collaborations.

**FRI 23:25 Country & Beyond with The Shires (b0bs6f0f)**

British singer-songwriter duo Crissie Rhodes and Ben Earle form the award-winning country act The Shires. Their ultimate soundtrack ranges from Dolly Parton to Shania Twain.

Each song is handpicked and as they watch the performances they reveal the reasons behind their choices. They kick off with the Queen of Country, Dolly Parton, and her iconic track Jolene. Following that comes legendary singer Patsy Cline, and for Crissie it brings back memories of singing along to Crazy with her grandmother.

Ben then picks country pop crossover Shania Twain, whose That Don't Impress Me Much certainly made its mark on him. But Ben also likes his country classics and plumps for Glen Campbell's legendary Wichita Lineman. It's not only the stalwarts of the Great Country Songbook - they also make room for the edgy Americana roots music of critically acclaimed duo The Civil Wars and their spine-tingling live appearance on Later.

**FRI 00:25 Country at the BBC (b08gkzv)**

Grab your partner by the hand - the BBC have raided their archive and brought to light glittering performances by country artists over the last four decades.

Star appearances include Tammy Wynette, Kris Kristofferson, Johnny Cash and, of course, Dolly Parton. All the greats have performed for the BBC at some point - on entertainment shows, in concert and at the BBC studios. Some of the rhinestones revealed are Charley Pride's Crystal Chandeliers from The Lulu Show, Emmylou Harris singing Together Again on The Old Grey Whistle Test and Glen Campbell's Rhinestone Cowboy from The Val Doonican Music Show.

We're brought up to date with modern country hits from Top of the Pops and Later...with Jools Holland.

**FRI 01:25 Top of the Pops (b0bsqck6)**

[Repeat of broadcast at 19:30 today]

**FRI 02:00 Depeche Mode at the BBC (b08l6sm2)**

It's 2017 and synth giants Depeche Mode are back with their 14th studio album Spirit, the band's "timeliest work yet". As the rave reviews fly in, here is a look back at the journey of one of the UK's longest-lasting and most successful bands who emerged from the UK's post-punk scene over three decades ago by featuring clips from various BBC programmes, including Multi-Coloured Swap Shop, Synth Britannia, The OZone, Def II and The Whistle Test.

From their first appearance on Top of the Pops in 1981 and the tales of how they got there, to performing on Later...with Jools Holland in 2009, the programme shares archive testimony and recent interviews from core members Dave Gahan, Vince Clarke, Martin Gore and Andy Fletcher. New Life, Just Can't Get Enough, Blasphemous Rumours and Personal Jesus are among some of the classic tracks performed.

**FRI 03:00 The Live Lounge Show (b0bsv1v7)**

[Repeat of broadcast at 20:00 today]