

SATURDAY 11 MAY 2019

SAT 19:00 Natural World (b063m3d7)
2015-2016

Ghost Bear Family

In the vast Canadian wilderness, there lives a very special bear family. Just out of hibernation, two black cubs have a pure white mother. She's not a polar bear or albino - locally she's known as a ghost bear. This far north, winter is never far away, and this unusual family must work hard to find enough food to see them through. They will also need to avoid other large predators, but being so different could bring them unwelcome attention.

SAT 20:00 Alaska: Earth's Frozen Kingdom (b0536hxc)
Winter

Alaska is one of the most iconic wildernesses on the planet - America's last frontier.

This three-part series follows a year in Alaska, revealing the stories of pioneering Alaskans, both animal and human, as they battle the elements and reap the benefits of nature's seasonal gold rush.

Alaska is huge - by far the biggest US state - and still one of the wildest places on earth. It has deep forests and vast mountain ranges, and a third of it sits above the Arctic Circle. The whole state goes through some of the most extreme seasonal changes: temperatures can reach into the 90s F (30s C) in the summer and can plummet to -80F (-60C) in the winter.

Yet plenty survives here - Alaska is home to some of the hardest animals on the planet. Each one has its own quirky way of getting through the challenges of the seasons. Above all, this is a land of great characters.

Black bear cubs are faced with a daunting climb down from their tree den and a mother sea otter nurses her baby through the chilly days of early spring. Stealthy 50-tonne sperm whales steal fish from the end of fishermen's lines in an extraordinary marine 'heist', grizzly bears grow big on a sudden wealth of salmon, and a huge male moose finds unlikely ways to impress a female. Thousands of bald eagles gather for a winter feast, and arctic foxes risk everything to find food in the alien world of an oil boomtown. People, too, must go with the flow of the extreme seasons, facing winter storms at sea to catch snow crabs, rushing across ice rivers with teams of huskies and taking advantage of Alaska's endless summer daylight to grow world-class giant vegetables.

Surviving the bone-chilling cold, deadly blizzards and darkness of an Alaskan winter takes courage, cunning and remarkable endurance. In the raw beauty of windswept mountain peaks, icy tundra and snowbound forests, this is the story of the tough and resourceful characters that face up to the ultimate challenges of this untameable land.

SAT 21:00 Cardinal (m00052b3)

Series 3

Sam

Detective John Cardinal struggles to truly accept that his wife Catherine took her own life. His doubts are only reinforced when he starts to receive a series of anonymous greeting cards blaming him for her death. Delorme steps in to take the lead at work, and the duo soon finds itself investigating a murder case in which the bodies are missing.

SAT 21:40 Cardinal (m00052bb)

Series 3

Roman and Irena

Cardinal and Delorme try to identify the double murder victims. But they are unaware that there is a witness to the crime who is being stalked by the murderer. Meanwhile, Cardinal starts a personal investigation into the anonymous notes he has been receiving.

SAT 22:25 Status Quo: Live and Acoustic (b052yq1f)

Throughout Status Quo's six decades of rockin' and double denim, they have notched up 65 hit singles, sold over 100m records worldwide and have spent 415 weeks in the British singles chart, so it's no wonder Francis Rossi and Rick Parfitt were awarded OBEs in 2010 for their services to music. And now, in a rare departure from their usual heads-down and boogie approach, they've gone acoustic!

Autumn 2014 saw the release of their 31st studio album and, in a complete departure from their usual rock sound, they transformed many of their legendary songs into acoustic,

stripped-down versions. To celebrate this unique enterprise, they then performed many of the songs live at north London's legendary Roundhouse. Sitting down!

This concert features many of their classic tracks including Pictures of Matchstick Men, Down Down, What You're Proposing, Whatever You Want, Marguerita Time, Rockin' All Over the World and many more, performed with a string section, percussion, accordion, backing vocals and a front line of five acoustic guitars. Throughout the show Francis and Rick reminisce about taking this bold step and remind us of some of the stories behind some of their classic songs.

SAT 23:25 Top of the Pops (m0004vz8)

Gary Davies and Steve Wright present the pop chart programme, first broadcast on 29 October 1987 and featuring The Style Council, George Michael, Rick Astley, Ray Parker Jr, Eurythmics, George Harrison, T'Pau, Scarlet Fantastic, the Bee Gees and Fleetwood Mac.

SAT 23:55 Top of the Pops (m0004vzl)

Peter Powell and Gary Davies present the pop chart programme, first broadcast on 12 November 1987 and featuring The Communards, Bill Medley and Jennifer Warnes, Mirage, Donna Summer, Marillion, Whitney Houston, Alexander O'Neal, T'Pau and Nina Simone.

SAT 00:25 Singer-Songwriters at the BBC (b015f5c8)

Series 2

Episode 1

The celebration of the singing songwriting troubadours of the 1960s and 70s continues with a further trawl through the BBC archives for timeless and classic performances.

Don McLean performs his huge hit American Pie from 1972 and Tim Buckley provides some sublime sounds with a rendition of his song Happy Time. Also making an appearance is the long-lamented John Martyn, folk queen Sandy Denny and, in a duet with Joe Egan as Stealers Wheel, the late Gerry Rafferty. Stealers Wheel chum and one-time collaborator Rab Noakes also makes a contribution to this compilation.

Leonard Cohen and Julie Felix present a unique collaboration and performance of Hey, That's No Way to Say Goodbye, and there's an unforgettable performance of Case of You by Joni Mitchell. No celebration of this genre would be complete without contributions from songwriting heavyweights such as Elton John, Paul Simon, Loudon Wainwright III and Yusuf Islam aka Cat Stevens.

SAT 01:25 Natural World (b063m3d7)

[Repeat of broadcast at 19:00 today]

SAT 02:25 Alaska: Earth's Frozen Kingdom (b0536hxc)

[Repeat of broadcast at 20:00 today]

SUNDAY 12 MAY 2019

SUN 19:00 Munro: Mountain Man (b00mwgqy)

Little more than 100 years ago, Scottish mountains standing at more than 3,000 feet were virtually unknown. Today they are familiar terrain to many thousands of climbers, thanks to Victorian adventurer Hugh Munro's determination to list the high peaks which now define the highlands and islands of Scotland.

This documentary tells the story of the magnificent peaks that bear his name and the people who have been possessed by them.

The birth of this obsession - now known as Munrobagging - is a twisting tale of intrigue, which presenter Nicholas Crane unravels high on the ridges and pinnacles of some of Scotland's most spectacular mountains.

SUN 20:00 Secret Agent Selection: WW2 (b0b110v4)

Series 1

Episode 3

The students are dropped in the middle of the remote Scottish Highlands, where they learn survival skills required for life in the field. Training in the same mountains as 1940s agents, they are schooled in the same techniques which prepared a group of agents tasked with putting a stop to Hitler's atomic ambitions in Norway. In a freezing Scottish lake and on a sheer rock face, some of the students are forced to find previously-untapped reserves of mental and physical strength, but not everyone makes it to the Special Operation Executive's famous 'finishing

school'.

SUN 21:00 Horizon (b09574pc)

2017

Mars - A Traveller's Guide

The dream of sending humans to Mars is closer than ever before. In fact, many scientists think that the first person to set foot on the Red Planet is alive today. But where should the first explorers visit when they get there? Horizon has gathered the world's leading experts on Mars and asked them where they would go if they got the chance - and what would they need to survive?

Using incredible real images and data, Horizon brings these Martian landmarks to life - from vast plains to towering volcanoes, from deep valleys to hidden underground caverns. This film also shows where to land, where to live and even where to hunt for traces of extraterrestrial life.

This is the ultimate traveller's guide to Mars.

SUN 22:00 The Sky at Night (m00052b7)

Supernovae Black Hole

This month, the Sky at Night team reveals how the first picture of a supermassive black hole was captured. When the photograph of the hole at the heart of the M87 galaxy was released in April, it captured the world's imagination and made headlines everywhere.

Chris Lintott reports from behind the scenes, meeting the scientists from the Event Horizon Telescope who worked for a decade to capture the image. And Maggie Aderin-Poock reveals the mysterious and terrifying power of this astonishing cosmic phenomenon.

SUN 22:30 imagine... (b00p36f8)

Winter 2009

Dame Shirley Bassey - The Girl from Tiger Bay

Alan Yentob gains an insight into the creative world of Dame Shirley Bassey in a programme first shown in 2009. After a triumphant Glastonbury appearance and a major illness at the age of 72, Dame Shirley tentatively re-enters the ring to confront her life in song.

Some of the best contemporary songwriters, including Gary Barlow, the Pet Shop Boys, Manic Street Preachers, Rufus Wainwright, Richard Hawley and KT Tunstall, along with James Bond composer John Barry and lyricist Don Black, have interpreted her life through song for an album produced by David Arnold.

The songs frame and explore the myth of Shirley Bassey, the girl from Tiger Bay, and the voice and the desire are not found wanting. A backstory profiling Shirley, complete with archive of her greatest performances, tells the story of what makes her the living legend that she is today.

SUN 23:30 Timewatch (b00jj5t3)

2008-2009

WWI Aces Falling

Edward Mannoock VC and James McCudden VC rose from modest backgrounds to become two of Britain's greatest fighter aces in World War One.

As the number of their victories grew, so did their chances of dying in flames. Timewatch tells the story of their battle to survive against the odds, and of the 90-year-old mystery surrounding the death of one of them.

SUN 00:30 Sappho: Love & Life on Lesbos with Margaret Mountford (b05tc6w7)

With a PhD in papyrology, Margaret Mountford goes in search of the truth behind the legend of Sappho, the most controversial writer of the ancient world and the first authentic woman's voice in western history.

The sensational discovery of a lost papyrus containing the words to songs unheard for 1,700 years sends Margaret on a journey of exploration.

From the fragmentary documents, ruined temple architecture and surviving oriental jewellery, the programme conjures the real world of the woman, whose erotic writings gave us the words 'sapphic' and 'lesbian', after the island of Lesbos the place of her birth.

Was she indeed the first lesbian, a priestess, prostitute, a stern

schoolmistress or an aristocratic lady of leisure as readers over the centuries have variously alleged. Plus how each generation's view of the archetypal liberated woman of letters tells us as much about us and our fears and concerns as it does about her.

SUN 01:30 Munro: Mountain Man (b00mwgyq)
[Repeat of broadcast at 19:00 today]

SUN 02:30 Horizon (b09574pc)
[Repeat of broadcast at 21:00 today]

MONDAY 13 MAY 2019

MON 19:00 Beyond 100 Days (m00052b9)
Series 1

13/05/2019

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

MON 19:30 Great British Railway Journeys (b04yzzz1)
Series 6

High Street Kensington to London Bridge

On the last of his journeys in the capital, Michael Portillo explores Albertopolis and reaches dizzying heights inside a Victorian landmark. He meets some of Battersea's most famous residents and gives one of them a bath! At Vauxhall, Michael learns about the darker side of London's flower market in Bradshaw's day. He ends this journey at London Bridge, where two stations are becoming one, and a new concourse is being built.

MON 20:00 Doris Day - Virgin Territory (b0074rwd)
Doris Day has often been dismissed as an actress and overlooked as a singer, despite career highs such as Calamity Jane and Pillow Talk. Covering her early years as a band singer, and her troubled private life, this documentary re-evaluates one of the screen's most enduring legends.

MON 21:00 Hitler's Children (b01j10j3)
Their family name alone evokes horror: Himmler, Frank, Goering, Hoess. This film looks at the descendants of the most powerful figures in the Nazi regime: men and women who were left a legacy that indelibly associates them with one of the greatest abominations in history. What is it like to have grown up with a name that immediately raises images of genocide? How do they live with the weight of their ancestors' crimes? Is it possible to move on from the crimes of their ancestors?

MON 22:00 Storyville (m00052bf)
A German Life: Goebbels's Secretary Remembers

Actress Maggie Smith made a triumphant return to the stage to perform the role of 103-year-old Brunhilde Pomsel, secretary and stenographer to the Nazi-propaganda minister, Joseph Goebbels - one of the worst war criminals of the 20th century. The playwright, Christopher Hampton, was inspired to write the play after seeing a powerful documentary about Brunhilde, made not long before she died.

In A German Life, the extraordinary story of an ordinary human being living through traumatic times raises profound questions about the moral choices and personal sacrifices that one is faced with when confronted by evil. Reflecting back on her life, Brunhilde Pomsel makes it clear that the dangers that led to the rise of fascism have not been overcome. 'So I joined the party,' she recalls. 'Why shouldn't I? Everyone was doing it.'

MON 23:25 Shipwrecks: Britain's Sunken History (b03lytp)
Civilising the Sea

Shipwrecks are the nightmare we have forgotten - the price Britain paid for ruling the waves from an island surrounded by treacherous rocks. The result is a coastline that is home to the world's highest concentration of sunken ships. But shipwrecks also changed the course of British history, helped shape our national character and drove innovations in seafaring technology, as well as gripping our imagination.

The terrible toll taken by shipwrecks was such that in the winter of 1820 some 20,000 seaman lost their lives in the North Sea alone. That's 20 jumbo jets. But in the final part of his series, maritime historian Sam Willis tells the stirring story of how the Victorians were finally driven into action, finding various ingenious solutions - from rockets that could fire rescue lines aboard stricken vessels to lifejackets, lifeboats and the Plimsoll

Line, which outlawed overloading.

In Africa, he traces the legend of the Birkenhead Drill - the origin of 'women and children first'. Decorum even in disaster was the new Victorian way and it was conspicuously on hand to turn history's most iconic shipwreck - Titanic - into a tragic monument to British restraint.

MON 00:25 The Search for Life: The Drake Equation (b00wtbtk)

For many years our place in the universe was the subject of theologians and philosophers, not scientists, but in 1960 one man changed all that.

Dr Frank Drake was one of the leading lights in the new science of radio astronomy when he did something that was not only revolutionary, but could have cost him his career. Working at the National Radio Astronomy Observatory in Greenback in Virginia, he pointed one of their new 25-metre radio telescopes at a star called Tau Ceti twelve light years from earth, hoping for signs of extraterrestrial intelligence.

Although project Ozma resulted in silence, it did result in one of the most seminal equations in the history of science - the Drake Equation - which examined seven key elements necessary for extraterrestrial intelligence to exist, from the formation of stars to the likely length a given intelligent civilisation may survive. When Frank and his colleagues entered the figures, the equation suggested there were a staggering 50,000 civilisations capable of communicating across the galaxy.

However, in the 50 years of listening that has followed, not one single bleep has been heard from extraterrestrials. So were Drake and his followers wrong and is there no life form out there capable of communicating? Drake's own calculations suggest that we would have to scan the entire radio spectrum of ten million stars to be sure of contact.

The answers to those questions suggest that, far from being a one-off, life may not only be common in the universe but once started will lead inevitably towards intelligent life.

To find out about the equation's influence, Dallas Campbell goes on a worldwide journey to meet the scientists who have dedicated their lives to focusing on its different aspects.

MON 01:25 Secret Knowledge (b0376h9w)
Stradivarius and Me

The name of 17th-century violin maker Antonio Stradivari - or Stradivarius as he is usually known - is one that sends shivers down the spine of music lovers the world over. During his lifetime Stradivari made over 1,000 instruments, about 650 of which still survive. Their sound is legendary and for any violinist the opportunity to play one is a great privilege.

Clemency Burton-Hill indulges in her lifelong passion for the instrument as she explores the mysterious life and lasting influence of Stradivari - through four special violins on display at this summer's Stradivarius exhibition at the Ashmolean Museum in Oxford. She is joined by 2002 Young Musician of the Year winner Jennifer Pike to put some of the violins in the exhibition through their paces.

MON 01:55 The Horizon Guide to AI (b0bhwhw3)
The BBC's Horizon programme began in 1964, and since then has produced films looking at computer technology and the emergence of 'artificial intelligence'.

Our dreams always begin with ideology and optimism, only for this optimism to be replaced with suspicion that AI machines will take over. However, as the Horizon archive shows, throughout each decade once we have learnt to live with the new emerging technology of the time, the pattern begins again. We become once more optimistic, before becoming fearful of it. The dream for decades had been for a computer with AI to be embedded within a humanoid robot, but just as scientists began to perfect machines with these qualities, something happened nobody expected.

Today, AI systems power our daily lives through smart technology. We are currently experiencing a level of fear about the power of AI, but will we enter the next decade optimistic about all that AI can deliver - or fearful of its ability to control vast areas of our lives?

MON 02:55 Shipwrecks: Britain's Sunken History (b03lytp)
[Repeat of broadcast at 23:25 today]

TUESDAY 14 MAY 2019

TUE 19:00 Beyond 100 Days (m00052bk)
Series 1

14/05/2019

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

TUE 19:30 Great British Railway Journeys (b050m9wg)
Series 6

Derby to Grantham

Michael Portillo embarks on a new journey following his Bradshaw's handbook from the heart of the industrial East Midlands to the north eastern island of Lindisfarne.

On this leg, he gives an old engine a fresh start in the railway hub of Derby.

In Nottingham, he discovers the Victorian origins of a well-known high street chemist. He then travels to Newstead Abbey, where he learns about its former owner, the young Lord Byron.

A baking lesson in Grantham yields a batch of the oldest commercially traded biscuits in the country, and no visit to the town would be complete for Michael without calling at a historic grocer's shop.

TUE 20:00 Eurovision Song Contest (m00052bn)
2019

Semi-Final 1

Scott Mills and Rylan Clark-Neal are live from Tel Aviv in Israel for the first semi-final of the Eurovision Song Contest. Seventeen acts battle it out for a place in Saturday's Grand Final. The UK's entry, Michael Rice, joins Scott and Rylan to discuss all things Eurovision.

TUE 22:10 Blue Planet II (b09jbn5f)
Series 1

Our Blue Planet

While making Blue Planet II, we have explored parts of the ocean that nobody has been to before, encountered extraordinary animals and discovered new insights into how life thrives beneath the waves. But we have also witnessed the profound effects of human activity. The oceans are changing faster and in more ways than at any point in human history and now, for the first time, we understand why.

In this final episode, we uncover the impact that our modern lives are having on our best-loved characters from across the series, including devoted albatross parents unwittingly feeding their chicks discarded plastic and mother dolphins potentially exposing their newborn calves to pollutants through their contaminated milk. Scientists have even discovered that increasing noise levels may stop baby clownfish finding their way home.

Many creatures are struggling to survive in today's oceans, and some changes in the ocean will require a global effort. While filming the stunning corals on the Great Barrier Reef's remote Lizard Island, the film crew witnessed a catastrophe. Warmer than normal seas caused the biggest coral bleaching event in human history, killing about 90 per cent of the branching corals at Lizard Island.

But the warming ocean could have an even more devastating effect. We travel to Antarctica on a unique expedition to discover how melting polar ice sheets could one day impact the lives of hundreds of millions of people around the world.

Yet, despite these devastating impacts, there is hope. Every year, billions of herring overwinter in the icy seas off Norway, but just 50 years ago they were almost wiped out by overfishing. Today, thanks to careful regulation, they have returned, creating one of the greatest spectacles in the ocean. Hundreds of giant humpback whales and one of the greatest gatherings of orcas on the planet feast on the herring - an extraordinary story of recovery.

Around the world, individuals are also making a huge difference to the future of the ocean. In the Galapagos, one scientist has devoted much of his life to saving the largest fish in the sea - the whale shark. He is using the latest technology to unlock one of the ocean's biggest mysteries - where these elusive giants may give birth.

In the Caribbean, a community is reversing the fortune of giant leatherback turtles. Their numbers have dropped dramatically, by up to 90 per cent in some parts of the world, but here, volunteers are risking their lives to get turtle poachers to put down their weapons and instead protect the beach where these

magnificent creatures nest. Through these valiant efforts, theirs is now one of the densest leatherback nesting beaches in the world.

TUE 23:10 Timewatch (b0078w1y)
2004-2005

The Killer Wave of 1607

At **9am** on 20 January 1607, a massive wave devastated the counties of the Bristol Channel. It came without warning, sweeping all before it. The flooding stretched inland as far as the Glastonbury Tor. Two hundred square miles of Somerset, Devon, Glamorganshire and Monmouthshire were inundated. Up to 2,000 people died. Yet for 400 years, the killer wave of 1607 has been forgotten. Timewatch relives the terror and the human tragedy of 1607 and follows the research of two scientists who are increasingly convinced that the wave was not simply a freak storm but a tsunami.

TUE 00:00 How It Works (b01fkc5n)
Metal

Professor Mark Miodownik travels to Israel to trace the history of our love affair with gleaming, lustrous metal. He learns how we first extracted glinting copper from dull rock and used it to shape our world and reveals how our eternal quest for lighter, stronger metals led us to forge hard, sharp steel from malleable iron and to create complex alloys in order to conquer the skies.

He investigates metals at the atomic level to reveal mysterious properties such as why they get stronger when they are hit, and he discovers how metal crystals can be grown to survive inside one of our most extreme environments - the jet engine.

TUE 01:00 Dan Cruickshank and the Family that Built Gothic Britain (b04m3jlr)

As good as any Dickens novel, this is the triumphant and tragic story of the greatest architectural dynasty of the 19th century. Dan Cruickshank charts the rise of Sir George Gilbert Scott to the very heights of success, the fall of his son George Junior and the rise again of his grandson Giles. It is a story of architects bent on a mission to rebuild Britain. From the Romantic heights of the Midland Hotel at St Pancras station to the modern image of Bainside power station (now Tate Modern), this is the story of a family that shaped the Victorian age and left a giant legacy.

TUE 02:00 The Joy of Rachmaninoff (p039q3qd)

Tom Service takes a cinematic journey through Russia on the trail of the wondrous yet melancholic melodies of Russian giant Sergei Rachmaninoff. A celebration of a composer's musical triumph over critical adversity and Soviet terror, with performances and contributions from Vladimir Ashkenazy, Denis Matsuev, Steven Isserlis, Stephen Hough, Vladimir Jurowski, Lucy Parham and James Rhodes.

TUE 03:00 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.

WEDNESDAY 15 MAY 2019

WED 19:00 Beyond 100 Days (m00052bg)

Series 1

15/05/2019

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

WED 19:30 Great British Railway Journeys (b050m8ht)

Series 6

Boston to Hensall

Armed with his Bradshaw's, Michael Portillo continues his journey from Derby to Lindisfarne. Beginning in Boston in the flatlands of Lincolnshire, Michael explores the connection between the town and its American namesake.

At Southwell, he discovers the origins of a favourite Victorian apple and learns how to make apple pie. In Menston, Michael visits an imposing institution built to provide asylum for those suffering from mental illness and learns how volunteers care for its once-derelict chapel and graveyard.

At Wakefield, Michael manages to board one of Britain's least frequent services and finds out what led to the birth of the parliamentary train. Along the way, he meets a former locomotive engineer who offers him the chance to drive a steam engine.

WED 20:00 Timeshift (b00nf0nl)

Series 9

The Golden Age of Liners

Paul Atterbury embarks on an alluring journey into the golden age of ocean liners, finding out how these great ships made such a mark on the popular imagination and why they continue to enchant to this day.

Paul's voyage takes him around Britain and reveals a story of

design, politics, propaganda, Hollywood glamour and tragedy. Along the way, he uncovers some amazing survivals from the liners of the past - a cinema in Scotland built from the interiors of the SS Homeric, a house in Poole in which cabins from the Mauretania are lovingly preserved - as well as the design inspiration behind the first great liners.

WED 21:00 Reporting History: Mandela and a New South Africa (m00052bh)

On the 25th anniversary of Mandela's election, BBC Correspondent Fergal Keane goes back to examine his reports, and considers why history did not turn out the way he expected.

At the heart of the film is an interview in which Fergal explores his decades of reporting in South Africa, from the fear being caught up in violent protests to the joy of reporting for BBC Newsbeat as Mandela was sworn in. He also meets historians and other experts as he considers how Mandela's legacy has played out.

WED 22:00 South Africa in Pictures (b00s6bdh)

British fashion photographer Rankin explores South Africa's rich photographic tradition, discovering how its leading photographers have captured this complex, often turbulent, nation through remarkable images and charting the unique role photography has played in documenting the story and people of this fascinating country.

Through encounters with legendary conflict photographers the Bang Bang Club, documentary photographer David Goldblatt and photojournalist Alf Kumalo amongst others, Rankin goes on a compelling and moving photographic journey to see the nation through their gaze.

WED 23:00 1066: A Year to Conquer England (b08h7zsb)

Series 1

Episode 1

In this three-part drama documentary series, Dan Snow explores the political intrigues and family betrayals between Vikings, Anglo-Saxons and Normans that led to war and the Battle of Hastings.

When King Edward the Confessor dies without an heir, it triggers a bitter race to succeed him as King of England. Earl Harold is on the spot and takes the crown. But in Normandy, Duke William believes the throne has been promised to him and decides to invade. Meanwhile, in Norway, the Viking king Harald Hardrada also fancies himself as King of England, and he too puts together an invasion force. Very soon, England will be under attack.

WED 00:00 Timeshift (b08lkx0y)

Series 17

Roof Racks and Hatchbacks: The Family Car

The family car. We grow up in the back seat - and before we know it, we find ourselves in the driving seat...

Timeshift explores the British experience of the family car, from the groundbreaking Morris Minor to the ubiquitous Ford Cortina, the Range Rover to the new Jaguar F-Pace - not to mention their imported rivals, such as the Volkswagen Golf and the Volvo estate.

Despite its reputation for being practical and sensible, designers have long endeavoured to make the family car attractive, even exciting, and to keep pace as the family and its requirements have evolved over the decades. Can a family vehicle be small - like the Mini? Or fast - like the Golf GTI? And what's the real reason why so many of today's family cars seem so enormous?

But the story of the family car isn't just about design. It's about the joy and frustration of parents and kids being cooped up on the road together. A saga of continental road trips and games of I-spy, backseat squabbles and impromptu toilet breaks. For better or worse, the car is one of the few remaining places where families still get to be a family.

Contributors include motoring journalists Richard Porter and Zog Ziegler, author Ben Hatch and leading car designer Ian Callum.

WED 01:00 Bute: The Scot Who Spent a Welsh Fortune (b08y60r0)

John Patrick Crichton Stuart, the 3rd Marquess of Bute, was one of the richest men in the British Empire in the late 19th century. With an annual income in excess of £150,000 - around £15 million in contemporary currency - he pursued his passion for architecture with a vengeance. Narrated by Suzanne Packer, The Scot Who Spent a Welsh Fortune delves into the extraordinary world of Lord Bute and reveals what connects the

small Scottish island of Bute to modern Cardiff.

Bute was one of the most unconventional mavericks of the Victorian age, passionate about the past but also far ahead of his time - a blue-blooded aristocrat, who supported women's rights and striking miners, a Welsh-speaking intellectual Catholic who was also a ghost hunter. Above all, Bute was a fabulously rich and visionary creator of great architecture including the Gothic fantasy of Cardiff Castle, and Castell Coch - the fairy-tale castle.

The 3rd Marquess got his hands on his fortune at the age of 21, but already when he was 18, he met the outrageous and eccentric Gothic designer William Burges. It was the start of a lifetime's collaboration with artists and architects which would pour Bute's original mind into fabulous buildings in an astonishing variety of styles.

William Burges transformed Bute's medieval Cardiff Castle into a Welsh Camelot. Within fantasy towers, he created lavish interiors, rich with murals, stained glass, marble, gilding and elaborate wood carvings. Then Bute gave Burges the dream commission - to restore the 14th-century Welsh ruins of Castell Coch near Cardiff as a summer party house for the family. He recreated, from a heap of rubble, a fairy-tale castle. The interiors were elaborately decorated, with specially designed furniture. It even had its own vineyard - the first in Britain.

Bute's next target was the family ancestral seat Mount Stuart on the Isle of Bute, where he was born. When it was destroyed in a fire, Bute embarked on a huge new Gothic palace, driven by his own taste and design skills.

The footprint of the Bute family still looms large in Cardiff. The Bute obsession with Gothic style entered the architectural DNA of Cardiff's domestic buildings. The green lung at the city's heart - Bute Park - was the family's back garden, and Cathays Park, one of the finest civic centres in Britain, was sold to the city by Lord Bute on condition it would be used for cultural, civic and educational purposes. The Bute family names are everywhere - Bute Street, Mount Stuart Square, after the family estate in Scotland, and the now demolished Ninian Park Football Ground, after the 3rd Marquess's second son, who became MP for Cardiff and died in the First World War.

Bute died in 1900 aged only 53 after a protracted illness and was buried in a small atmospheric mausoleum in the family graveyard on the shores of the Isle of Bute. His heart was buried on the Mount of Olives in Jerusalem. But his greatest memorials are his Welsh and Scottish grand designs.

WED 02:00 Timeshift (b00nf0nl)
[Repeat of broadcast at 20:00 today]

WED 03:00 Reporting History: Mandela and a New South Africa (m00052bl)
[Repeat of broadcast at 21:00 today]

THURSDAY 16 MAY 2019

THU 19:00 Beyond 100 Days (m00052br)
Series 1

16/05/2019

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 (m00052b7)
[Repeat of broadcast at 22:00 on Sunday]

THU 20:00 Eurovision Song Contest (m00052bt)
2019

Semi-Final 2

Scott Mills and Rylan Clark-Neal are live from Tel Aviv in Israel for the first semi-final of the Eurovision Song Contest. Eighteen acts battle it out for a place in Saturday's Grand Final. The UK's entry, Michael Rice, joins Scott and Rylan to discuss all things Eurovision.

THU 22:15 Supersized Earth (b01p9f4n)
Food, Fire and Water

In this final episode, Dallas examines what it takes to keep seven billion humans alive with food, energy and water.

40% of the Earth's surface is now devoted to growing food. To appreciate how we have transformed vast swathes of land to produce food, Dallas paraglides over the south coast of Spain, where what was once an arid landscape is now home to the

world's largest greenhouse array.

He also rides with cowboys on Brazil's largest cattle ranch, to help herd over 125,000 cattle. He visits Lake Mead, the biggest man-made lake in the USA, to see how it has helped us transform harsh desert into the bright lights of Las Vegas. He also joins the team building a 750 mile long artificial river to transport water from south to north China.

THU 23:15 Botany: A Blooming History (b011s3dg)
A Confusion of Names

What makes plants grow is a simple enough question. The answer turns out to be one of the most complicated and fascinating stories in science and took over 300 years to unravel.

Timothy Walker, director of Oxford University Botanic Garden, reveals how the breakthroughs of Swedish botanist Carl Linnaeus, Chelsea gardener Phillip Miller and English naturalist John Ray created the science of botany. Between them, these quirky, temperamental characters unlocked the mysteries of the plant kingdom, and they began to glimpse a world where bigger, better and stronger plants could be created. Nurseryman Thomas Fairchild created the world's first artificial hybrid flower - an entirely new plant that didn't exist in nature.

Today, botanists continue the search for new flowers, better crops and improved medicines to treat life-threatening diseases.

THU 00:15 Capability Brown's Unfinished Garden (b07xt6t9)

Capability Brown is known as the founder of landscape design. In the 1700s, he created some of the most magnificent landscapes in England. He travelled the length and breadth of the country, improving more than 200 of the greatest estates in the land for some of the most influential people of the 18th century.

But there is one plan that never got off the drawing board. The only land he ever owned was in Fenstanton, Cambridgeshire, but he died before he could carry out any plans for his own garden. Today it is a piece of flat land bisected by the A14 dual carriageway.

Landscape designer and Gardeners' Question Time regular Bunny Guinness travels across England to some of Capability's finest landscapes - Blenheim, Burghley, Milton Abbey and Castle Ashby - to understand what he might have created. Rediscovering plans and letters, and using the latest technology, Capability Brown's unfinished garden is brought to life.

THU 01:15 Metamorphosis: The Science of Change (p00zv0wk)

Metamorphosis seems like the ultimate evolutionary magic trick, the amazing transformation of one creature into a totally different being: one life, two bodies.

From Ovid and Kafka to X-Men, tales of metamorphosis richly permeate human culture. The myth of transformation is so common that it seems almost preprogrammed into our imagination. But is the scientific fact of metamorphosis just as strange as fiction or... even stranger?

Film-maker David Malone explores the science behind metamorphosis. How does it happen and why? And might it even, in some way, happen to us?

THU 02:15 Guts: The Strange and Wonderful World of the Human Stomach (p07801ts)

What's really going on inside your stomach? In this one-off special, Michael Mosley offers up his own guts to find out. Spending the day as an exhibit at the Science Museum in London, he swallows a tiny camera and uses the latest in imaging technology to get a unique view of his innards digesting his food. He discovers pools of concentrated acid and metres of writhing tubing which is home to its own ecosystem. Michael Mosley lays bare the mysteries of the digestive system and reveals a complexity and intelligence in the human gut that science is only just beginning to uncover.

FRIDAY 17 MAY 2019

FRI 19:00 World News Today (m00052cl)
The latest national and international news, exploring the day's events from a global perspective.

FRI 19:30 Top of the Pops (m00052cn)
Steve Wright and Simon Mayo present the pop chart programme, first broadcast on 19 November 1987 and featuring Maxi Priest, Whitney Houston, The Proclaimers, Barry White, Boy George, The Smiths, Donna Summer, T'Pau and

Whitesnake.

FRI 20:00 Bryan Ferry and Roxy Music: A Musical History (b0bt8x9w)

Documentary exploring the music of rock band Roxy Music, who have a good claim to be one of the UK's most influential bands. Led by charismatic front man Bryan Ferry, their striking style and great songs won them an army of fans who would go on to make their own mark in the world of music.

In this celebration of the music of both Bryan Ferry and Roxy Music, insights and anecdotes are provided by household names from Sadie Frost to Glenn Gregory & Martyn Ware, Gaz Coombes, New Order's Stephen Morris and Gillian Gilbert, Shaun Ryder and Alan McGee, Ana Matronic and more.

Formed in 1971, Roxy Music was the brain child of art student Bryan Ferry. His advert in Melody Maker gathered the initial line-up which included guitarist Phil Manzanera, saxophonist Andy Mackay, keyboard player Brian Eno and drummer Paul Thompson.

Pioneers of glam, their outlandish fashion sense, songwriting and pioneering use of electronics created a glorious package. Punk, New Wave and New Romantic music owe a huge debt to Bryan and Roxy Music.

Style is one thing, but the substance was reflected in a catalogue of classic songs - combined they create an enduring legacy which is celebrated in a golden hour of their greatest hits.

FRI 21:00 Top of the Pops (b09kt44m)
1985 - Big Hits

Celebrating the big hits of 1985 with a selection of iconic Top of the Pops performances spanning the genres, from pure pop to power ballads, from Hi-NRG to hip-hop, to R&B and indie classics. Featuring Wham!, The Smiths, Kate Bush, a-ha, Eurythmics, The Cure, Dead or Alive, Bonnie Tyler, Tears for Fears, Sister Sledge, Jennifer Rush, Doug E Fresh and many more.

FRI 22:00 Chuck Berry in Concert (b0074rbc)
Legendary rock 'n' roller Chuck Berry performs at the BBC Television Theatre in 1972. Johnny B Goode, Roll Over Beethoven and Nadine are just some of the highlights of this concert, shown in an extended cut. This version includes, for the first time, an epic rendition of My Ding-a-Ling that carries all before it and raises innuendo to an art form.

FRI 23:00 The People's History of Pop (b077rchk)
The Birth of the Fan

Twiggy celebrates the 60s, meeting skiffle musicians, fans of The Shadows, Liverpoolians who frequented the Cavern Club at the height of Merseybeat, Beatles devotees, Ready Steady Go! dancers, mods, lovers of ska, bluebeat and Millie Small, and fans of The Rolling Stones.

Unearthed pop treasures include a recording of John Lennon's first ever recorded performance with his band The Quarrymen.

FRI 00:00 TOTP2 (b05y09mh)
FA Cup

Mark Radcliffe rounds up the best and worst football records from the TOTP archives. Liverpool, Tottenham, Chelsea, Gazza and West Ham all feature alongside Arsenal.

FRI 00:25 Top of the Pops (m00052cn)
[Repeat of broadcast at 19:30 today]

FRI 00:55 Bryan Ferry and Roxy Music: A Musical History (b0bt8x9w)
[Repeat of broadcast at 20:00 today]

FRI 01:55 Top of the Pops (b09kt44m)
[Repeat of broadcast at 21:00 today]

FRI 02:55 Indie & Beyond with Shaun Ryder and Alan McGee (b0bn6sl4)
Happy Mondays frontman Shaun Ryder and Creation Records boss Alan McGee reveal a selection of their all-time favourite tracks.

From first jobs to private jets, longtime friends Ryder and McGee unpack the songs that formed the soundtrack to their lives.

In an hour of eclectic tunes, Shaun Ryder also discovers his lost

Top of the Pops appearance and Alan McGee declares an alternative Scottish national anthem.

Theirs is a blistering playlist of indie, punk and ska classics from Buzzcocks to The Specials, Junior Murvin to Marc Bolan, Orange Juice to Underworld and many more.