

Teachers' Resource:
FASHIONED FROM NATURE

Supported by the European Confederation of Flax and Hemp – CELC

Additional support from G*Raw

Cape, Auguste Champot, Paris, about 1895.
Artificially curled rooster and pheasant feathers stitched to cotton fabric, lined with silk satin.

21 APRIL 2018 – 27 JANUARY 2019

Key Stages 3 – 5: Art & Design and Design & Technology

FASHIONED FROM NATURE

***Teachers' Resource:** Key Stages 3–5: Art & Design and Design & Technology*

Introduction

This resource explores some of the key objects and themes from the exhibition to support teaching and learning across KS 3–5: Art & Design and D&T. It aims to interrogate how clothing production has changed over time, and the challenges faced by us all today – to create and buy clothes that are beautiful as well as socially and environmentally responsible, and to value our clothes more.

Fashioned from Nature explores the relationship between fashion and nature from 1600 to the present day. The exhibition shows the inspiration fashion draws from nature, but also highlights the harmful effects of the increasing scale of the clothing industry on the natural environment. It asks two key questions:

– How can we design a more sustainable fashion industry?
– What can we learn from the past?

Choose carefully: look good. Wear wisely: feel good. Recycle: be generous.

Pre-visit activities

Before visiting, research some of the fibres and manufacturing techniques that are used to produce clothing. Ask students to examine their own clothes and identify where they are made and from which fabrics. Encourage them to collate a selection of care labels (displaying the % mix of materials) and magazine cut-outs of garments that use a range of fabrics for reference. Discuss which of these are synthetic or natural materials.

If you have access to a smart phone, download the virtual reality app 'Within', for free. Using VR goggles (available to buy online, but not essential), watch *Melting Ice*, a film which illuminates the effects of climate change on the glacial landscape of Greenland. Discuss brands and campaigns in the media that promote green fashion and thoughtful consumption.

The museum visit

Use this resource to introduce the key themes and ideas explored in the exhibition and get ideas for discussion points and activities which can be developed further into project work back at school.

Natural Inspiration

The beauty and diversity of the natural world has been a rich source of inspiration for textile design for centuries. The circulation of illustrated books in Renaissance Europe (about 1300–1600) provided a great variety of images of nature that could be copied. Most of the flora and fauna were real, though some existed only in myth.

Materialising Industry

In the 17th and 18th centuries, clothing was sewn by hand using fabrics created from natural materials. Derived from plants and animals, silk, wool, flax and cotton were the most important fibres. By 1800, rising incomes meant that more people than ever before could afford small fashionable luxuries. It was an age of great technical advancement and scientific discovery, and new inventions led to the mechanisation of the textile industry.

Poison and Pollution

During the 19th century, the British population tripled in size, rising to 37 million in 1901. The growing scale of the clothing industry and its increasing dependence on chemicals and coal for energy contributed to high levels of air, water and waste pollution. The environmental impact was enormous.

Conscious Catwalk; Stylish Protest

The environmental movement as we know it today took shape in the 1970s. Its concerns were not new, but they became part of the political agenda at a national and international level. Many environmentally-minded fashion designers use their clothes as a platform to make their concerns heard and bring about change through their designs.

Ready-to-Wear Recycling

Around 300,000 tonnes of clothing are discarded to landfill in the UK each year. The need to repair and recycle our clothes has become critical. A growing number of designers are championing ethical production and endeavouring to use materials otherwise destined for landfill to create garments.

Threading Innovation

The clothing industry is one of the top five polluters in the world. This has led many fashion companies to seek a more ethical stance on design, sourcing and production. Businesses and labs are now exploring materials and processes with designers to meet the current challenges and work together to reduce the industry's negative impact.

Find out more

Historical objects, like the cape shown on the front cover, often inspire contemporary design, despite growing campaigns against the use of natural materials like feathers. The innovative fashion designer, Alexander McQueen, was deeply influenced by nature, both thematically and in his use of traditional and high-tech materials. Visit the National Art Library to view the Alexander McQueen resource and explore a selection of the books he used as inspiration for his collections: vam.ac.uk/articles/mcqueens-research-library

FASHIONED FROM NATURE

Teachers' Resource:

Key Stages 3–5: Art & Design and Design & Technology



Waistcoat, 1780–89, France.
© Victoria and Albert Museum, London

Natural Inspiration

In the 17th century, a new wave of books offered a closer observation of the natural world. They were part of a more systematic attempt to classify and order nature. Study like this was encouraged by colonial expansion and travel, which introduced European explorers to species they were eager to record. In Britain, by about 1750, books on natural history were said to sell better than any others. Surviving garments and textile designs confirm this fascination with nature.

Many of the flowers, fruits and insects embroidered on early 17th-century garments and accessories are identifiable, although their colours are often fanciful. In the case of this waistcoat (pictured), the design includes carnations, pansies, strawberries and pea pods. Some motifs found in the garments are padded or worked in detached buttonhole stitch to create three-dimensional effects. The imagery probably derives from patterns designed for embroidery or books on natural history.

Find out more:

Discover another garment in the exhibition with a floral pattern, made from British cotton and lined in linen and baleen (whalebone). Located on the ground floor opposite the waistcoat, it is block-printed with trails of flowers. It can also be viewed in the V&A's 'search the collections' online: collections.vam.ac.uk/item/O359193/gown-unknown/

Given by the late Cecily FitzHerbert, through Dr Joan FitzHerbert, it was made in 1780–85 and altered in 1785–96 to give it a more fashionable appearance. Garments from this period often show signs of updating and repair, as clothing was valued and not disposed of as readily as today.

Activity:

Find inspiration in nature, whether through interesting books or by exploring your local environment. Make studies in your sketchbook of the images and objects that interest you. Play with scale and placement on the page, identifying recurring themes, colour or shapes.

Experiment with the natural forms to create more abstract imagery or repeat a shape multiple times to make patterns that could be used as a textile print.

Can you think of other designers that use nature in their collections? Explore Pinterest for examples, using tags like 'fashion and textiles', 'nature' and 'repeated print'. You may want to collect a selection of the images that inspire you on a new board for reference.

FASHIONED FROM NATURE

Teachers' Resource:
Key Stages 3–5: Art & Design and Design & Technology



Mantua, 1760s, France.
© Victoria and Albert Museum, London

Materialising Industry

Raw materials were sourced and processed in Europe, but as international trade spread throughout the 1800s and consumer demand grew, Britain imported increasing quantities of unprocessed and finished goods from Asia, Africa and the Americas.

The raw materials for this extravagant 'mantua' (pictured) came from around the globe. They include raw silk from Italy, Spain and the Middle East; flax grown in northern Europe; and precious metals, probably from the Potosí mines in present-day Bolivia, which were under Spanish control from the 1500s. The ermine fur was imported from North America or Russia. The silk was most likely woven in Lyon in the 1760s.

A London dressmaker used it to make this garment for a member of the British social or political elite to attend royal events at court. Silk is lustrous, strong, light, warm and gentle on the skin. It absorbs dye well and, depending on the quality of the thread and complexity of the weave, can create fabrics of extraordinarily varied textures and visual effects.

Find out more:

Look up the organisation Fashion Revolution. In their 'Fashion Transparency Index', they rank fashion retailers every year 'according to how much information they disclose about their suppliers, supply chain policies and practices, and social and environmental impact'. Find out more about this here: fashionrevolution.org/faqs-fashion-transparency-index-2017/

Activity:

Have you ever thought about the environmental impact of your clothes? Pick a garment in your own wardrobe and see if you can trace the manufacturing company, fabric production, processes and costs required to make that piece of clothing. Discuss with your classmates to hear what others think. You can put your opinions and thoughts into action via the Fashion Revolution website: fashionrevolution.org/about/get-involved/ From action kits to writing a postcard to policy makers, you can make your voice heard!

FASHIONED FROM NATURE

Teachers' Resource:

Key Stages 3–5: Art & Design and Design & Technology



Man's cotton shirt and cotton neckerchief (worn as a cravat), Britain, 1843
Given by Mr Alasdair Peebles and Miss B. Hinton respectively.

Poison and Pollution

In the 19th century, the textile industries in Britain became mechanised and steam power increased. These changes accelerated production and led to reduced prices. The country's self-sufficiency in coal, its dominance of global maritime trade and the abundance of natural materials drawn from across the British Empire all contributed to a boom in British textiles.

Ready-made clothes, particularly for men, began to be made in bulk. New technologies, such as synthetic dyes, also made fashionable clothes affordable to more people. The rise of department stores, sophisticated advertising and greater media coverage of fashion encouraged people to buy clothes.

However, this large-scale cotton manufacturing had a damaging impact on the environment. Around Manchester, where 90% of cotton manufacturing in Britain was based by 1835, air and water pollution created significant environmental and social problems. Similarly, at the St Rollox works near Glasgow, the production of powder for bleaching cotton released hydrogen chloride. The pungent fumes from this chemical rose up and combined with moisture to create acid rain.

Find out more:

Honest By is the first 100% transparent fashion brand, listing every process, cost and supplier they use in a bid to give the customer full disclosure of their manufacturing process. One of their outfits (by Bruno Pieters) is on display in the exhibition. You can find out more about them on their website: honestby.com

Activity:

Design a contemporary linen or cotton garment that could be worn under other pieces to reduce the need for washing other clothes so frequently. Do you think this would be a worthwhile campaign in today's culture? How might a message like that be communicated?

Watch this video about the clothing company Pulp It: youtube.com/watch?v=45966sBSMvo For a modern, cleaner approach to clothing manufacture, Pulp It are experimenting with a new type of recycled paper to make garments that can be worn four or five times and then recycled with newspapers or sent for commercial composting. Does this seem like a more attractive option? Or might it fuel fast-fashion mentalities in a society that already struggles with over-consumption?

FASHIONED FROM NATURE

Teachers' Resource:

Key Stages 3–5: Art & Design and Design & Technology



MEND MORE Jumper, Bridget Harvey, London, 2015. Found acrylic jumper, with appliquéd hand-dyed cotton and cotton thread. Lent by the designer.

Conscious Catwalk; Stylish Protest

As an industry, fashion is a major contributor to the destruction and damage of the natural world, from air pollution emitting from factories to surplus waste dumped in oceans and landfill. Environmentally sustainable fashion has become a hot topic of conversation and a motivation for more thoughtful design and consumption across society.

The 1970s saw a major awakening in environmental awareness around the world. The first government departments for the environment were established, the United Nations held the first major conference on international environmental issues, and the first Earth Day took place in the USA – an annual global event which is now celebrated in over 100 countries. Since the 1980s, designers such as Katharine Hamnett and Vivienne Westwood, and pressure groups like PETA, Greenpeace and Fashion Revolution, have targeted the damaging practices of the fashion industry. They have heightened awareness of the negative consequences of our consumer society.

'Jumpers provide me with a site for direct actions', says artist and maker Bridget Harvey. 'Their body-like forms [can be] recast as messengers to communicate discourses of repair, protest and activism. MEND MORE Jumper was initially made as a placard for the Climate March 2015 and has since been an aid for dialogue and social engagement.'

Find out more:

Vivienne Westwood's designs are a platform for her environmental activism. She recruits prominent figures to pose in her 'Save the Arctic' t-shirts and gives placards to the models in her catwalk shows. In the exhibition, watch the film of Westwood where she speaks about her passion for the environment. She urges consumers to 'buy less, choose well, make it last'.

Activity:

Campaign groups use slogan t-shirts to draw attention to their aims and to fundraise. For the wearer, they are an effective way of expressing their commitment to a cause.

Design a slogan to go on a t-shirt. You might want to use typography or imagery, or both. If you have an old t-shirt, you could transfer your design onto it using a fabric pen or cutting and sewing other bits of old fabric. Upload your designs to Instagram, using the hashtags: #fashionedfromnature #vandamuseum



FASHIONED FROM NATURE

Teachers' Resource:

Key Stages 3–5: Art & Design and Design & Technology

Dress, bag and hat,
Christopher Raeburn (born 1982),
Britain, 2017. Original 1950s silk escape maps.
'Parachute Anorak',
Christopher Raeburn (born 1982), Britain, 2017.
Parachute nylon.
'Zarya Solo' sandals,
Clarks x Christopher Raeburn,
Portugal, 2017. Leather,
ethylene-vinyl acetate and polyester.
Lent by the designer

Ready-to-Wear Recycling

By re-purposing materials in imaginative ways, fashion can be a powerful vehicle for reducing waste. For example, the Italian food industry produces around 700,000 tonnes of citrus fruit skins every year which go to agricultural waste. In 2017, Salvatore Ferragamo launched a collection of garments made of 'Orange Fiber', a sustainable and innovative fabric derived from citrus juice by-products to alleviate this waste.

Similarly, Christopher Raeburn, a pioneer of upcycling, is known for his forward-thinking approach. This dress, hat and bag (pictured) are reworked from 1950s escape maps, first manufactured during the Second World War for Royal Air Force pilots if they became stranded in enemy territory. Easy to hide, the silk maps were a more durable alternative to paper. The anorak is constructed from surplus military parachutes, and the sandals, produced in collaboration with Clarks, are made from vegetable-tanned leather.

Find out more:

Recently there's been a huge drive to reduce and re-use plastic waste, which has been polluting and severely damaging our oceans. For a week, collect packaging and paper that you would have ordinarily thrown away. Does the amount surprise you? What small changes could you make to reduce this?

Activity:

Use the plastic waste you've collected to create 3D sculptures. Play with large and small-scale models, photographing the process with your phone as you go. If you have a printer, print out the photographs and then cut them out and manipulate them into garments to stick on magazine cut-outs of people. Create a line-up of six figures using this fast-fashion technique.

FASHIONED FROM NATURE

Teachers' Resource:

Key Stages 3–5: Art & Design and Design & Technology



'Rootbound # 2' dress,
Diana Scherer, 2017, the Netherlands
© Diana Scherer. Lent by the artist

Threading Innovation

Today the fashion industry is dominated by the 'fast fashion' model. The quick turnaround of clothing trends responds to consumer demand with ever-more efficient production and supply chains. This business model has in turn ramped up the industry's environmental impact. Intensifying factors include free-trade agreements that enable companies to outsource manufacturing to low-wage economies, and the growth of large new consumer groups across the world. E-commerce companies and the spread of one-click internet shopping have also sped up the rate of commercial exchange.

Another consequence of fast fashion is the increased regularity of cleaning clothes. With each wash, synthetic clothing sheds tiny fibres that pollute rivers and oceans. These microfibres are ingested by fish and other organisms, causing gastrointestinal infections and reproductive problems. There is evidence of these fibres being present in the fish we eat.

In a bid for a different approach, visual artist Diana Scherer trains the roots of plants to grow in intricate structures, creating a 3D textile. When the roots are fully grown, she removes them from the soil and cuts off the plant stems. The pieces produced are not yet suitable to be worn, but hint at a potential, more sustainable future in which we grow our own fashion in the ground, reducing the volume of synthetic fibres that seep into the ocean.

Find out more:

Look up the textile designer and researcher Alice Potts: projects.alicepotts.com/ Potts is experimenting with waste products from human bodies and pushing the convergence of science, technology and design to new and exciting heights. Her practice explores the opportunities found in sweat, a natural waste product that, through lab experiments, has led to some extraordinary designs. Could this offer new solutions to sustainable ways of creating materials for clothing the human body in the future? Or is this a step too far? Do you think Alice's outcomes are disgusting or beautiful?

Activity:

With your classmates, think about some other ways scientists and designers could work together to create fashion design. What would you create using a combination of natural materials or waste products with technology if there were no limits? To see more short films about these 'Future Fabrics', visit: vam.ac.uk/FashionedfromNature