

# Introduction

The Whitworth has been making art useful since 1889.

The gallery was originally founded with the wealth of Stockport-born engineer Sir Joseph Whitworth (1803-87). He transformed engineering through the introduction of a standardised system of measurement for machine parts. Whitworth left no formal instructions about how the bulk of his fortune (equivalent to more than £130 million today) should be used after his death. This decision was left to his widow Lady Mary Louisa and his good friends and fellow philanthropists Robert Darbishire and Richard Copley Christie.

For the very first time examples of Joseph Whitworth's world-changing mechanical innovations are on display amongst highlights from the gallery's diverse collections of textiles, fine art and wallpaper. Whitworth's commitment to **standardisation** is used throughout the exhibition as a counterpoint to significant moments of **deviation** within the gallery's collection and history.

This exhibition explores the establishment of the Whitworth. The founding intention to create a forward-thinking art and design collection is interrogated and its difficult histories exposed. Gender, labour, race and class inequalities are just some of the issues being confronted. This has informed our conversations about the history of the gallery and its collections and we continue to actively engage in this work.

Case 1

# ART AND INDUSTRY



THE  
25-  
CATHEDRAL  
OF  
BIRMINGHAM

THE  
25-  
CATHEDRAL  
OF  
BIRMINGHAM

THE  
25-  
CATHEDRAL  
OF  
BIRMINGHAM

THE  
25-  
CATHEDRAL  
OF  
BIRMINGHAM

THE  
25-  
CATHEDRAL  
OF  
BIRMINGHAM

# Art and Industry

William Morris described the exhibits inside the Great Exhibition of 1851 as 'wonderfully ugly'. For Morris and the art critic John Ruskin, this celebration of global arts highlighted how mass production had led to a separation between English workers and making. Both men were prominent in the Arts and Crafts movement, which aimed to promote hand-making over mass production and advocate the decorative arts.

William Morris described the exhibits inside the Great Exhibition of 1851 as 'wonderfully ugly'. For Morris and the art critic John Ruskin, this celebration of global arts highlighted how mass production had led to a separation between English workers and making. Both men were prominent in the Arts and Crafts movement, which aimed to promote hand-making over mass production and advocate the decorative arts.

Support for manufacturing objects by hand, rather than machine, continued throughout the 20th century with groups such as the North West's Red Rose Guild of Designer Craftsmen, who were based in the Whitworth from 1940. Today, the opposition between art as quality and industry as quantity continues. Our collection reflects many ways of making and in doing so offers opportunities to re-evaluate the capitalist system.

Case 2

# REPETITION



# Repetition

The Whitworth's design collections are full of repeating patterns. This enables cloth or wallpaper to be sewn or pasted together for different uses.

Copying is another repetitive technique within both art and industry. The Arundel Society (1848–97) commissioned copyists to reproduce works of art. Their intention was to extend knowledge and technical skill in order to popularise 'high art', yet this cemented dominant ideas about taste and value in art.

The repetition of particular motifs or themes is a powerful way to affirm stereotypes. However, when working with wallpaper and textiles, artists often use the subtlety a repeating pattern offers to subvert and unsettle.



Case 3

# PEACE



# Peace

A century of peace between the end of the Napoleonic War (1815) and the outbreak of World War I (1914) was termed 'Pax Britannica'. Yet, peace for Britain did not translate to the same experience for colonised people. To retain imperial prominence, Britain used military force throughout this period.

To mark this era, The Great Exhibition of 1851 was conceived by Queen Victoria's husband, Prince Albert, as a symbol of Britain's power and prosperity. It was intended to unite art and industry, while easing growing social unrest about the impact of mechanisation on workers.

For some, the development of new technologies combined with free trade and international competition held the promise of a peaceful future leading to the exhibition being called 'the world's great protest against war' and the inventor hailed the 'hero of peace'.

Yet, by the 1862 International Exhibition, an increasing number of inventors' designs were being exploited by the British government to support expansion and control of the Empire.

C Case 4

# WAR





# War

The Great Exhibition of 1851 celebrated the inventor as the 'alternative hero to the warrior'. Yet in the years that followed, their designs were often directed towards war efforts.

As we look back at our origins there is a need to acknowledge the complex and compromised history of the wealth that funded this institution. The Whitworth Rifle and Ordnance Company (part of Joseph Whitworth and Co.) was prominently displayed at the International Exhibition in 1862, which faced public criticism for its over-representation of armaments.

Funds generated from the Whitworth Rifle benefitted Joseph Whitworth and Co. and was subsequently transformed into cultural wealth for the gallery and Manchester.

Many works of art in the Whitworth's collection respond to war and conflict. They are a valuable tool for gaining perspective on historic and lived experiences.

Case 5

# HEXAGON



# Hexagon

The Whitworth rifle was one of the first long-range sniper rifles in military history. The deadly efficiency of Whitworth's design lay in the innovative shape of its hexagonal barrel and bullet.

Before Whitworth's invention, the rifle barrel had a grooved surface that would slightly cut into the bullet in order to grip and put spin on it. This friction would, however, slow the velocity of the shot down. Whitworth's modified design allowed the bullet to fit both snugly and smoothly into an un-grooved, twisted barrel that not only reduced friction but improved accuracy and range.

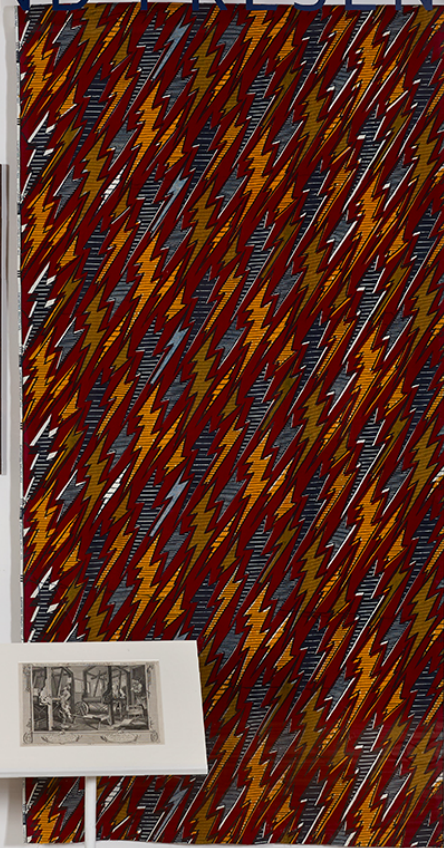
Whitworth's design may have stemmed from his knowledge that the hexagon is the strongest shape and is both a symbol of precision engineering and standardisation. The entomologist William Kirby (1759–1850) described the honeybee, whose honeycombs are made of interlocking hexagons, as 'heaven-instructed mathematicians'. The shape can also be found in the structure of human DNA, as well as graphene, the world's thinnest and strongest material.

Found in the centre of the 'Star of David' the hexagon is one of the most powerful symbols in sacred geometry. The shape has informed art and architecture for centuries. In Islamic art, for example, the hexagon reflects the six virtues of generosity, self-discipline, patience, determination, insight and compassion.



© Case 6

# PAST AND PRESENT



# Past and Present

Textiles have always been a significant part of the Whitworth's collection. Yet, as with fine art, early collecting was supported by Manchester's wealth, generated from exploitation at home and in the colonies.

A single object like *Lightening* (c.1989-91) tells a complex story of appropriation, technology and commerce over 150 years. The Dutch imitation of Indonesian batik found success in the West African market (becoming powerfully symbolic of identity) but was produced in Hyde, Greater Manchester.

In 1958 the Whitworth became part of the University of Manchester, continuing a pattern of art and innovation through collaboration. To mark the gallery's reopening in 2015, Nobel Prize winner Kostya Novoselov took microscopic samples of graphite from drawings in our collection to make graphene, with which the artist Cornelia Parker set off a meteor shower.

Recently the university launched a vision for placing Manchester at the centre of a fourth industrial revolution, driven by the advancement of digital technologies.



Case 7

# STANDARDISATION



# Standardisation

Joseph Whitworth is better known for perfecting existing designs than for his original inventions. Today, he is probably remembered most for his introduction of the universal system of screw threads.

Whitworth transformed machine production through his introduction of standard, fixed scale gauges. Before this system machine parts were not interchangeable, as there was no way of ensuring that they were exactly the same size. He pioneered the development of uniformity in industry - reducing costs and improving efficiency. This enhanced speed and mechanisation was one of the sources of Britain's wealth and power during industrialisation.

Using standardised measurement within design underpinned Whitworth's work. Throughout the collection designers, makers and artists have used standardisation both for aesthetic and for practical purposes. Within this building there are also standardised practices: from the light, temperature and humidity ranges which protect works of art, to the framing and mounting systems we use for display.

C&A

# DEVIATION



# Deviation

Deviation challenges conventional ideas, behaviours and standards.

The gallery's early collecting policy reacted against popular trends which favoured more fashionable oil painting over watercolours. This unconventional thinking continued with the addition of wallpaper to the collection in the 1960s and more recently with the acquisition of the Musgrave Kinley Outsider Art Collection and the Arte Útil Archive.

Museums and traditional art history inevitably standardise once new and challenging ideas, yet these ideas were often problematic in the first place. Picasso and Epstein, leading artists of the 20th century, cemented their position as avant-garde (new and experimental) by appropriating non-Western cultures and marginalised communities perceived as 'other'.

We recognise the role that museums play in reinforcing dominant histories. In recent years we have been working to disrupt historic imbalances in our collection and programme which has side-lined artists due to their gender, ethnicity, sexual preference, disability and access to formal education. We want the Whitworth to reflect our society as a whole, rather than a small fraction of it.



## C-Case 10





# Whitworth Park

In 1888, 18 acres of land were acquired to create a park alongside the planned Whitworth Institute. Whitworth Park originally included a bandstand, boating lake, observatory, and covered walkway.

The Victorians believed that public parks could alleviate the problems of industrialisation. It was hoped that exposure to clean air, nature and recreation would not only improve physical health, but reduce crime and social and political unrest. In later years the park has become a place for political debate, protest and prayer.

During periods of conflict it has been used for recovery and commemoration by soldiers and veterans and continues assist in the rehabilitation of patients from the neighbouring hospitals.

Whitworth Park has survived periods of decline and even the threat of closure. The re-development of the Whitworth in 2015 joined the gallery with the park. The Art Garden, new sculpture, community garden and wellbeing activity connect the gallery to local people. Global issues such as sustainability, diversity and public monuments are addressed inside and out at the Whitworth.

Case 11

# APPROPRIATION



# Appropriation

For centuries the Indian subcontinent was the largest producer and exporter of cotton cloth.

From the late 1400s, several European countries exploited this land and people for financial gain. During industrialisation manufacturers, such as those in Manchester, spun and wove imported cotton, producing cheaper copies of hand-made textiles originally produced by highly skilled artisans. The copies were sold in colonial markets for enormous profit.

British cotton wealth relied on the trade of people, brutally shipped across the Atlantic and Pacific Oceans to work as slaves on white-owned farms and plantations in the Americas. This had catastrophic effects on generations of people whose land and cultures were appropriated.

We recognise that the Whitworth's South Asian textile holdings grew from the roots of colonialism. We actively seek to challenge this by working with artists that confront these issues, such as Raisa Kabir, and this will continue with support for further acquisitions from the Art Fund New Collecting Award.

In 2019 Uthra Rajgopal (Assistant Curator of Textiles and Wallpaper) was awarded the prestigious Art Fund New Collecting Award to build a collection of contemporary South Asian textile artworks made by female artists from Pakistan, India and Bangladesh and their diasporas in the North West of England. As part of this award, Uthra has been working alongside an appointed mentor and has carried out research in South Asia and the North West of England.

The motivation behind this project is to bring a new direction to the Whitworth's collection of South Asian textiles. During the 19th century, the majority of our holdings were gifted or purchased to serve the productivity of the Manchester mills and undermine the local markets in the British colonies. Consequently, there are a large number of cut pieces of cloth, principally studied for their design and composition with little regard to the integrity or

spiritual quality of the whole length of cloth. We also know very little about their original makers.

This new collection, generously supported by the Art Fund, will be a step towards rebalancing the Whitworth's collection of South Asian textiles. In 2021, these textile artworks will form part of a larger display of new acquisitions, accompanied by further material on the project.