"... Insofar as photography does peel away the dry wrappers of habitual seeing, it creates another habit of seeing: both intense and cool, solicitous and detached; charmed by the insignificant detail, addicted to incongruity."

SUSAN SONTAG: ON PHOTOGRAPHY (1977)

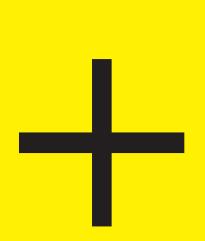
RESPONSES TO THE ACT OF LOOKING

Historic Environment Scotland (HES) uses photography when recording sites, places and objects to capture information in order to build our knowledge about Scotland's Historic Environment. The medium of photography helps celebrate and make sense of the extraordinary as well as our everyday experience.

When these images enter the public domain, they also take on another life as markers for experiences consumers of HES information may or may not have had. They can provoke an aesthetic response to our industrial heritage that goes beyond their original intended use as documentary information.

The appearance of almost universal photograph-making by anyone with a mobile phone means that we live in an increasingly image-saturated world. Curated collections of photographic material, such as that of HES, not only ensure the preservation of the images, but also helps keep us mindful of the necessity to capture what we can of our continually changing world.









- " (the images) I felt were beautiful drew me into the image and made me think about patterns or social history..."
- and ugly simultaneously.
 Industrial photography
 stimulates both reactions."

"Some views can be beautiful





15 ROPERY

Bruntons Wire Works, Musselburgh, East Lothian 1997

Bruntons produced wire rope from 1890. This is a view of the 500 ton test range used to test aircraft-braking system cable for aircraft carriers. This works also made the wire cabling for the Forth Road Bridge in the mid-1960s. Bruntons closed in 1997. SC557175

16A BLACKSMITH AT HIS HEARTH Stornoway, Isle of Lewis, Outer Hebrides

2018

Stornoway once had several blacksmiths which would have concentrated on general blacksmithing, agricultural implement making and vehicle repair. The current blacksmith's grandfather set up the business after the First World War. The blacksmith is making a peat-cutter head (locally referred to as a 'tairsgeir') in white metal. DP272025

16B FABRICATION BAY

Boiler Works, Newbie, Annan, Dumfries and Galloway

1994

Newbie boiler works was built from 1898 by Cochran & Co. By the late 1990s and it was thought to be the largest boiler works in Europe. Cochran's Newbie Works is still in existence. SC371625

17A DRYING SHED

Blackpots Tile Works, Aberdeenshire 1971

This louvered, wooden building was used to dry the 'green' or unfired clay bricks and tiles prior to firing in a kiln. The tile works was in operation from 1786 until 1971 and has since been demolished. SC358475

17B ROPEWALK Gourock Rope Work,

Port Glasgow, Inverclyde 1976

in which ropes were made from strands of plant-based material such as hemp or manila. Here we see a 'traveller' and 'top cart' which laid and hauled out the strands of rope to the required length. With the development of more compact manufacturing methods ropewalks became obsolete. SC344774

Ropewalks are long, narrow buildings containing 'walks'

Fairfield Ship Yard and Engine Works,

18 CRANES

Govan Road, Glasgow 2014

Launch berth with nos. 1, 2, 3 and 4, 80 ton mono-tower cranes visible. Crane No. 5 is just out of shot. Installed in 1975, such cranes used to fit out ships in the shipyard. This was the last group of cranes on the Clyde. They were demolished in 2015.

DP168354

19 COAL HANDLING AREA

Cockenzie Electricity Generating Station, Midlothian 2013

This is the area of the power station where coal

was dropped into bunkers which fed the boilers. The boilers would then generate steam to run the turbines to produce electricity for the National Grid. Opened in 1968, the complex was dominated by a large rectangular steel-framed building containing the boilers, with an adjoining Turbine Hall which housed the steam pressure turbines. Cockenzie closed in 2013 and the buildings were demolished two years later. DP154846

20A LIME PIT Ornamental Plasterer's Workshop,

Peebles, The Scottish Borders 2017

This is mixed with water to produce slaked lime, the basis for the lime plaster used in ornamental plasterwork. Lime plaster can now be bought ready-made and is no longer slaked or stored in dry form on this site. This lime pit is a rare survival.

Limestone is quarried, heated and ground to make lime.

DP257612

20B DIESEL ENGINE FACTORY ROOFLINE Cummins Engine Factory,

Shotts, South Lanarkshire 1998

The American-owned Cummins Diesel Engine Factory

was opened in 1956 and modified in 1961. Further modifications in 1980 resulted in this striking glazing and crimped metal sheeting treatment in one area of the site. Cummins ceased production in 1998 but the buildings are still in use as warehousing. SC1305277



response to the beauty: the patterns, structures, light and colour... to the very real chaotic, busy everyday workshops. They haven't been sanitised and like that..." "...man has found himself taken

"I had a strong emotional

and is...disconnected from a certain mode of existence."

outside of his natural position





21A WATER TOWER Cranhill, Glasgow

2006

This reinforced-concrete water tower not only provides

high pressure water from Loch Katrine reservoir in the Stirling area to the 1950s Cranhill Housing Estate in Glasgow, but is also an example of striking design. In addition, it serves as a local landmark with sculptures and lighting installations commissioned in the late 1990s/early 2000s to enhance its amenity value. DP017446

21B STEEL REMAINS Ravenscraig, Motherwell, North Lanarkshire

1991

Ravenscraig Steel Works was built by Colvilles Ltd in 1957 to meet post-war demand for strip steel. The steel ingots produced on site were rolled into strips for a variety of uses. Ravenscraig steelworks eventually covered 1,000 acres and closed in 1992. The iconic cooling towers and gasholder were demolished in 1996.

SC1081531

22 WAREHOUSE

Cardy Fishing Net Works, Lower Largo, Fife 1978

Cardy Works was built in 1867 to weave fishing nets on power looms. The finished nets would be stored in the warehouse before dispatch. The main Net Works building is now in use as holiday accommodation. SC343035

23 HOT SAW

Rotary Forge Mill, Clydesdale tube works, Bellshill, North Lanarkshire 1991

Clydesdale Works was established in the late 19th-century and specialised in the manufacture of steel used in steel plate production. By the mid-1980s, the plant was the only producer of seamless tubes in the United Kingdom. Most of the output was destined for use in the oil industry. This works closed in 1991.

SC357726

24A BOBBINS

Screen Loom Shed, Lace Factory, Brown Street, Newmilns, East Ayrshire

2009

These bobbins supplied man-made yarn to one of the second-hand 1920s looms in Haddow, Aird and Crerar's screen loom shed. These looms, installed in 1993, were wide enough to weave mesh screens for theatrical use. Latterly, this was one of the main products of the factory due to the decline in demand for machine-lace curtains. DP070220

24B BREWHOUSE

Brewdog Brewery, Ellon, Aberdeenshire 2012

A brewery making craft beers, Brewdog was set up in Fraserburgh 2007. In 2012 it moved to its new brewery in Ellon. It is one of the most successful businesses in the UK food and drink industry.

DP153861

24C TELEPHONE SYSTEM Local Government Office, Pitt Terrace, Stirling

2013

Built between 1968 and 1971, this is a detail of the original telephone system in one of the basement rooms of this local government building. This building has been demolished.

DP155196

Laphroaig Distillery,

24D WASH STILLS

Islay, Argyll and Bute 1999

The copper vessels known as pot stills distil the 'wash' which is 'wort' (malted barley flour and hot water) that has been fermented (using yeast) to increase its alcohol content. Pot stills are made of copper which is resistant to corrosion and does not taint the taste of the whisky. SC922935

24E WIRE WEAVING LOOM

Woollard and Henry engineering works, Dyce, Aberdeenshire 2014

covers dandy rolls (see image 10) and which together produce the 'watermark' on paper. The watermark patterns can then be hand-applied either by pressing into the wire mesh or cast and hand sewn onto it using fine copper wire. DP186758

This loom weaves the top cover or copper wire mesh that

24F CRUCIBLES

Vesuvius, Brown Street, Newmilns, Ayrshire 2009

The Vesuvius Crucible Company was opened in 1963. It specialised in refractory ceramics (for lining furnaces) and in material for the steel industry including crucibles in which metal would be melted. Vesuvius closed in 2009.

DP062099

25A SPILLWAY

Alginate Works, Barcaldine, Argyll and Bute 1996

This alginate works was set up in the 1940s to process seaweed into alginate. Alginates can be used as food thickeners, stabilizers and in edible films and gels. The spillway (beyond the gate) allowed water to escape from the reservoir which supplied the works for the production process.

SC1305284

25B JACQUARD LOOM

Lace Shed, Brown Street, Newmilns, East Ayrshire 2009

Crerar Ltd. which have now closed. The punched pattern cards laced together and sitting above the loom controlled the patterns it produced. Lace making was once a staple industry in this part of Ayrshire. DP070266

This is a loom in the lace works of Haddow, Aird and

26 PACKAGING STORE 'Tam O' Shanter' Hone Works,

Stair, East Ayrshire 2013

This works processed a particular type of stone found

in Ayrshire which was used in the making of hones or whetstones for the sharpening of metal blades such as mens' 'cut-throat' razors. Such hones became outmoded as electric razors and modern abrasives for grinding, polishing and smoothing became more commonly used. The site closed in the early 2000s. DP161952



industrial type architecture creeping into our living spaces." "The 'ugly' becomes beautiful

"Disgust with modern art/

and poetical..."



27 STILL HOUSE

Springbank Distillery, Campbeltown, Argyll and Bute 1996

The still house is where the copper vessels known as pot stills distil the 'wash' to make whisky. Established in 1828 and continuing to produce malt whisky, Springbank is one of over forty malt distilling enterprises that are known to have existed in Campbeltown since the 18th century. SC742481

28A BARLEY PLOUGH Ardbeg Distillery, Islay, Argyll and Bute

1980

Barley ploughs were traditionally dragged by the 'maltster' through the germinating (sprouting) barley as it lay on the malting floor. The barley would then be heated in a kiln to stop germination. This germinated and dried barley is referred to as malt - the defining ingredient in malt whisky. Since the 1950s, the increase in centralised mechanical malting premises has seen a reduction in malting and kiln drying at individual distilleries. SC416711

Wateridgemuir, Ellon, Aberdeenshire 2007

28B WATERWHEEL

This abandoned, underground, metal-framed waterwheel

shows the remains of its wooden 'buckets' which collected water falling from the lade. The waterwheel turned as the buckets filled and emptied. Using metal gears, the turning waterwheel would operate machinery in the adjacent agricultural building. Waterwheels and lades are more commonly found at ground level. DP035626



of lost ways of being, living in the world and the accidents that could happen (there)..." (of industrial production)...

"...the images make me think

anti-nature mindset which it instils in man..."







- "I had a strong emotional response to the beauty in the patterns/structures/light and colour... to the very real chaotic, busy everyday workshops.

 They haven't been sanitised and I like that..."
- for others, a questioning of what it shows, pangs of recognition or perhaps some disquiet..."

Familiarity for some...





29 STRUCTURAL DETAIL

'Clock' Warehouse, Victoria Dock, Dundee **2006**

This former grain store became a whisky bond before being converted into flats. The brick and iron construction is evocative of its industrial origin. The reuse of industrial buildings is becoming more common as it is eco-friendly and the industrial look or aesthetic is regarded as a unique selling point.

DP018428

30 OIL-TANK INTERIOR

Interior, Inchindown Naval Establishment, Ross and Cromarty, Highland
2009

Interior of one of six underground World War II oil storage tanks built by the Royal Navy to store fuel oil for their ships. Inchindown supplied Invergordon Naval base by pipeline. This facility is no longer in use.

DP065162

31 KIPPERING KILN

Albert Street, Wick, Caithness, Highland
1983

This kippering kiln smoked herring. Along with herring fishing, kippering of herring has all but ceased in Caithness. This kiln void would once have hung with fish suspended from sticks known as 'tenters' under which wood chippings were lit. Smoking could take between 6 and 12 hours. This example dating from the early 20th century has been demolished.

SC342094

32 LINOLEUM STOVE

Nairn's Linoleum South Works, Kirkcaldy, Fife 1986

Linoleum is a floor covering which was widely used before carpeting became affordable. It is traditionally made of processed linseed oil (from the seeds of the hemp plant) mixed with wood flour, cork, filler and colour pigments. It is then pressed by rollers into sheets and onto textile backing and heated in stoves like this one to toughen the linoleum.

SC1659254

33 MALTING FLOOR

East Barn, Ardbeg Distillery, Islay, Argyll and Bute

1980

The traditional method of germinating barley was to spread it out on a stone floor, turn it manually to encourage even germination and then to dry it in a kiln. The floor malting method was still in use at Ardbeg when this photograph was taken. The distillery was founded in 1815 and is still in production.

SC342231

34 FINES FOR SHIPPING Silica Mine, Lochaline, Argyll and Bute

2007

Crushed and cleaned silica sand (used in glassmaking and as an abrasive) ready for shipping out. The site was only really accessible by boat as silica sand is a bulky commodity and the site did not have good road connections. The only sand mine in Scotland, it closed in 2009.

DP029411

35 GIANT CANTILEVER CRANE
John Brown's Shipyard, West Dunbartonshire
2003

Designed by Sir William Arrol and Co., this overhead rotating cantilever crane was erected in 1907. It was

rotating cantilever crane was erected in 1907. It was designed to lift heavy items such as boilers into ships. It is one of four surviving cranes of this type on the River Clyde and is now a visitor attraction.

SC793567

36 LINKSNess Bank Footbridge, Inverness, Highland

1974

This iron suspension bridge was designed by James Dredge. It was built 1853-4 and has a span of 23.5m. It is held together by chain links like this one and allows foot passage to the River Ness Islands.

SC361232



- "I got the strongest responses for the images of places that I am familiar with through working or living nearby especially when the places have now gone."
- of monumental activity and others the pathos of decay what had been glorious once..."

"...some industrial images





37 GASWORKS ROOF

Stone gasholder, Musselburgh, East Lothian 1969

At one time most towns had a gasworks. The coal gas produced from burning coal in ovens, known as retorts, was used for lighting, cooking and heating. This is an early type of gasholder house dating from 1831 and would have stored the gas until it was piped to consumers. It was demolished in 1970. SC358505

38 OIL PLATFORM AT DUSK Cromarty Firth at Invergordon, Highland

2016

Cromarty Firth served as one of three major anchorages for Britain's naval fleet during the First World War due to its depth of water. As a result of this, oil platforms can be towed in and out of the Cromarty Firth. DP229455

39 OIL TANK

Former Royal Navy Fuel Depot, Invergordon, Highland 2016

during the First World War, the fuel depot at Invergordon was extended in 1934 and continued in use until the 1990s. This tank dates from the inter-war period and DP229355

Built by the Royal Navy to store fuel oil for their ships

40 ROOF STRUCTURE

Engineering Shop, Carron Iron Works, Larbert, Stirling 1960

founded in 1759. Here we see the extensive use of timber in the roof. The use of timber on such a scale for industrial buildings was supplanted by the use of metal. This building was demolished in about 1970. SC355152

This was part of the world famous Carron Iron Works



harsh and striking but still light and beautiful, challenging my perception of an 'industrial aesthetic'..."

Many of the images were







ACKNOWLEDGEMENTS

This exhibition would not have been possible without the skilled survey photographers of HES and its predecessor the Royal Commission on the Ancient and Historical Monuments of Scotland: Angus Lamb, Geoff Quick, Jim Mackie, Steve Wallace, Robert Adam, Derek Smart and John Keggie. The current team (Zoe Ballantine and Lewis Matheson) continue to work with industrial and architectural survey colleagues to create a record of Scotland's industrial heritage as part of the wider ongoing mission to document and celebrate Scotland's historic

Curation and Words: Miriam McDonald Exhibition Design: Submarine Design

HES staff: Zoe Ballantine, Anne Martin, Jane Thomas, lain

Anderson, Steve Wallace and Neil Gregory

(HES), the lead public body established to investigate, care for and promote Scotland's historic environment. As well as being responsible for over 300 properties of national importance, HES has a large and ever-growing archive of drawings, photographs and information on the nation's archaeology, architecture and industry. The online catalogue for exploring this material can be found at:

This exhibition was created by Historic Environment Scotland

canmore.org.uk

environment.

Environment Scotland.

All of the photographs in this exhibition are © Historic

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Scottish Charity No. SC045925





... photographs alter and enlarge our notions of what is worth looking at... "
SUSAN SONTAG: ON PHOTOGRAPHY (1977)

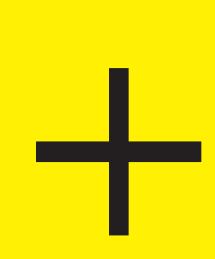
SURVEY PHOTOGRAPHY BY HISTORIC ENVIRONMENT SCOTLAND

The photographs in this exhibition form part of the National Record of the Historic Environment (NRHE) which is maintained by Historic Environment Scotland (HES). The images aim to capture the everyday, the exceptional, the marginalised, the ignored and the undervalued within our industrial heritage.

The photographs were chosen for the exhibition as a result of a 'crowd sourcing' exercise. Participants were invited to choose which words, feelings and emotions each of the images conjured up for them. Their reactions ranged from beauty to fear.

What will your response be?









"In many cases they show a lost/ disappearing world..."

Scotland was one of the world's first industrialised nations but this extraordinary achievement was not widely studied or appreciated until relatively recently. In the post-industrial age, our legacy of industrial sites and places can appear a negative one, synonymous with decline, pollution and blight. With the passing of time, the way in which Scottish industry has shaped our communities and landscapes has even, in some places, been forgotten entirely.

PHOTOGRAPHING INDUSTRY

The following images were taken by Historic Environment Scotland (HES) through its ongoing mission to document Scotland's historic environment. Multiple images are taken as part of creating a record in order to help us remember and better understand our industrial heritage.

HES aims to take a factual approach to photographing industrial spaces, structures and processes. Over the years, our photographers have sought to avoid an artistic response or to convey a subjective reaction to the places and situations that are being recorded.

A few of the industrial

sites included here are protected because they have already been recognised as significant or historic, others have been recorded for their interest or rarity or because they were destined to disappear through demolition or decay. Some are still in operation and some long abandoned. The common theme which unites these industrial places is threat – they are all going to be changed, or lost.

to Ballachullish slate quarries (make me think of) stories of danger, hard work, exploitation, riches... hardship... but also great skill and skills lost..."

My family connection







"there is no innocent eye..."

ERNST GOMBRICH, ART AND ILLUSION (1960)

WHAT DOES AESTHETICS MEAN?

'Aesthetic' was a term originally used by philosophers in Ancient Greece to mean 'relating to the perception of the senses'. How we explain the way in which we react to art and whether a universal definition of beauty is possible are questions that have challenged philosophers ever since. Our individual response to what we see is subjective, potentially emotional and often influenced by contemporary taste.

Today we use aesthetic in the world of art and design to connect an object to a specific artistic movement such as Impressionism. In a general sense however, we tend to use it when describing the quality of an object that has caused a reaction within us when we look at it.

THE EMOTION OF LOOKING

The photographs in this exhibition serve to memorialise an industrial history that is rich, complex and emotive. As well as documenting the physical reality of their subjects, they preserve the potential for a human reaction to places which may no longer exist; nostalgia, sense of belonging, negativity, discomfort or loss. By extracting individual images from their archival context, we invite you to consider these photographs not simply in terms of the information they contain but also for their aesthetic value. Do you find them beautiful or ugly? Do they provoke a personal, emotional response?

industrial architecture is an eyesore."

ugly – most



