AURA SATZ

CHROMATIC ABERRATION

Free video installation in The Gallery
at Tyneside Cinema

OPEN DAILY 22 OCTOBER–23 NOVEMBER 2014

10–12 Pilgrim Street
Newcastle upon Tyne
NE1 6QG
www.tynesidecinema.co.uk/art

TYNESIDE
CINEMA

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INFORMATION

This resource contains factual information about the artist, artwork and their inspiration, along with suggested practical activities, questions and curriculum links. Each activity can be run as a one hour session or a combination of activities can be developed into a Scheme of Work (SOW) carried out over a school half term. Designed to support teaching and learning (in particular Key Stages 4 and 5), these aim to engage learners with the themes and ideas behind the work. This can be used flexibly and adapted to suit different needs or Key Stages.

Aims and objectives:
- To support cross curricular enquiry
- To develop further understanding about contemporary art practices
- To encourage activities inspired by the artist's work

ABOUT THE WORK

Chromatic Aberration is a new commission that continues Aura Satz' investigation into early film colour technologies, colour aberration, mis-alignment, eyes and visual perception. This new Tyneside Cinema commission, supported by George Eastman House, explores archival materials which illustrate the massive paradigmatic shift from black and white to colour, re-calibrating vision and how we understand perception.

The project draws inspiration from a brief scene in Powell and Pressburger's **A Matter of Life and Death** (1946), where the transition from the reality of colour to the black and white of the afterworld is conveyed from the viewpoint of David Niven's eyelid, from inside the body, behind the eyes. Aura's film reveals microscopic close-ups of eyes from early experiments in colour printing, which often reveal chromatic aberration and distortion so that the colours do not align. In some cases, such as Prizma colour printing technology, the aberration becomes apparent in movement, and so the effect will reveal itself only in the moment of blinking. When enlarged the extreme close-ups of eyes opening and closing will create an abstract patterning, highlighting the mobile instability of the film grain.

Collaboration is important to the process of Aura's work; previously she has worked with musicians, archivists, film historians, engineers and technicians. For **Chromatic Aberration** she collaborated with George Eastman House*, in Rochester, New York (one of the leading photo and film archives in the world) and the British Film Institute, London (holder of one of the world's largest film archives, as well as an important film restoration centre). Aura selected footage from the George Eastman House archive, in particular the Prizma and Kodachrome segments, and then filmed them in sequence through one of the microscopes used in the restoration department of the BFI. The result is a fascinating combination between reality and abstraction.

Within **Chromatic Aberration**, Aura recreates perception: the installation turns the cinematic lens in on itself, from prosthetic recording eye to the abstract inner screen of one's eyelids. Aura describes this process as 'getting inside the machine', creating a first-hand experience of seeing things from the 'other-side'.

*George Eastman was an American innovator and entrepreneur who founded the Eastman Kodak Company and popularised the use of roll film, helping to bring photography to the mainstream.

LOOK AT:

www.tynesidecinema.co.uk/satz

THEMES AND KEYWORDS

Aberration, Chromatic, Close-up, Colour, Composition, Convergence, Experiments, Eye, Installation, Light, Microscopic, Optical, Perception, Performance, Synchronisation, Transmission, Vision.

THINK ABOUT…

Visit the artwork and think about the following questions:

- Describe the work.
- What is the title of the work? Is this important? If so why?
- How does the work make you feel?
- How do you think the artist wants the audience to feel?
- How is the work presented? Is this important?
- How does the size of the artwork make an impact?
- Does the work change depending on where you stand?
- What happens if you walk around the work and view it from the other side?
- Choose ten words that capture the themes and ideas suggested in **Chromatic Aberration**.

Aura Satz, **Spiral Sound Coil** – in the studio, 2010. Photo by Paul Winch-Furness

ABOUT THE ARTIST

Aura Satz is an artist, lecturer and writer. Using film, sound, performance and sculpture within her art, amongst other works she has created a collection of films that investigate the visualisation of sound through various technologies and acoustic devices. These often include out of date, or obsolete, technologies, getting close up with equipment and systems that we are less familiar with today.

She has performed, exhibited and screened nationally and internationally, including Oberhausen Short Film Festival (Germany); Rotterdam Film Festival; New York Film Festival; FACT (Liverpool); Site Gallery (Sheffield); Arnolfini (Bristol); Ikon (Birmingham); BFI Southbank, Whitechapel Gallery, the Victoria & Albert Museum, Barbican Art Gallery, ICA, Tate Modern, Tate Britain; the Hayward Gallery and the Wellcome Collection (London). In 2012 she was shortlisted for the Jarman Award and the Samsung Art+ Award. She has also lectured widely including at the London Consortium, Slade, and the Royal College of Art, London.

LOOK AT:
www.iamanagram.com/vocal_flame.php

www.tate.org.uk/whats-on/tate-modern-tanks/film-music-and-live-performance/aura-satz-and-out-synch

www.southbankcentre.co.uk/whatson/aura-satz-1000379

http://www.avfestival.co.uk/programme/2010/events-exhibitions/aura-satz-sound-seam

INSPIRATION

Prior to colour printing, film footage was produced in black and white; hand-tinting and monochrome processes were eventually introduced. The results were very unrealistic compared to today's technologies. Early archival film footage shows many distortions where colours don't fit the image perfectly. These effects are of particular interest and inspiration for Aura and through **Chromatic Aberration** she explores early footage and its implications for perception, technology and moving image reproduction. Aura is interested in the idea of people seeing themselves in colour for the first time when these experimentations in colour imagery would have been projected back.

Aura is inspired by films from the late 1930s and early 1940s, especially those that use both black and white and colour for example **The Wizard of Oz** (1939) and **A Matter of Life and Death** (1947). The inclusion of both created a new language of what black and white and colour could mean. A scene taken from the middle of **A Matter of Life and Death** provides a particular starting point for **Chromatic Aberration**. This reveals the transition from colour back to black and white.

Aura is also interested in how early films progressed into technicolour. The technicolour generation would have experienced both colour and black and white. Early Walt Disney film's such as **Snow White and the Seven Dwarfs** (1937) attempted to show off what technicolour can do.

Alongside this, Aura is also inspired by radical colour experiments found in 1970s structuralist abstract films, such as those created by Paul Sharits and Tony Conrad. These often explore what happens on screen and on the eye, using colour to create after-images with opposite colours.

For **Chromatic Aberration**, Aura ran an archival film through a contact printer, which would have originally been used to make a copy of the film by reprinting each frame individually. This equipment allowed her to exploit different effects by focusing on the eye using extreme magnification, zooming in on the technical faults, such as 'fringing', where the colours don't line up and blur beyond the edges. The end result is a blinking eye, which is also echoed by the mechanical shutter of the contact printer. She created a film that brings to mind an abstract animation through the use of colour, but also by slowing down the movement of the eye, which looks like a fluttering insect, through a flickering, blinking quality which is also present in with mechanical sounds of the technology. There are moments in the film which evoke abstract colour and light as seen through the veins of your eyelids.

Aura is inspired by a range of artists and film makers including the following:

DARIO ARGENTO

Dario Argento was an Italian horror filmmaker whose work has included whole scenes which are entirely red or blue.

www.darioargento.it
http://sensesofcinema.com/2003/great-directors/argento/
www.allmovie.com/artist/dario-argento-p79899

STAN BRAKHAGE

The American Cinematographer and Director Stan Brakhage (1933-2003) created **Mothlight** (1963) that shows a fast succession of close up images of moth wings. To make the film he used a camera-less technique, pasting real moth wings onto the strips of film.

http://sensesofcinema.com/2002/great-directors/brakhage/
www.theyshootpictures.com/brakhagestan.htm
http://artforum.com/video/id=20463&mode=large&page_id=15

SUSAN HILLER

Susan Hiller studied film and photography in the early 1960s, followed by postgraduate research in anthropology. After travels in Central America she moved to London to work as an artist. In the 1980s she began making pioneering installation art using audio and visual technology. Her work is mixed media and she often uses a collaborative approach to represent cultural collective experiences.

www.susanhiller.org
www.tate.org.uk/whats-on/tate-britain/exhibition/susan-hiller
www.theguardian.com/culture/2004/may/04/1
http://susanhiller.org/installations/magic_lantern.html

ANISH KAPOOR

http://anishkapoor.com/
www.tate.org.uk/art/artists/anish-kapoor-1384
www.lissongallery.com/artists/anish-kapoor

YVES KLEIN

www.yveskleinarchives.org/
www.tate.org.uk/art/artworks/klein-ikb-79-t01513

LEN LYE

The experimental films made by New Zealand film-maker Len Lye (1901-1980) in the 1930s have had significant impact on Aura, in particular **Colour Box** (1935) and **Colour Flight** (1938). Inspired by movement, music and energy, Len Lye drew, scratched, stencilled and painted directly onto celluloid film to produce these creative works.

As well as being known as a creative film maker, Len Lye is also widely known as a kinetic sculptor and poet.

The Govett-Brewster Art Gallery is home to the archives and studio collection of the Len Lye Foundation. You can find out more about his **Colour Box** experiments (1935) on the Len Lye website: http://lenlye.com/

http://sensesofcinema.com/2007/great-directors/lye/
www.screenonline.org.uk/people/id/446754/

NORMAN MCLAREN

Scottish born, Canadian film maker Norman McLaren (1914-1987) also experimented with film and colour. His combinations of colour, music and movement created 'film ballet'. Like Len Lye, McLaren also drew directly onto film and his animations from the 1940s included hand tinting.

www.mclaren2014.com/

LIS RHODES

Lis Rhodes is a close collaborator of Aura and has a big influence on Aura's thinking. Lis Rhodes was a leading member of the London Filmmakers' Co-op and is an important figure in the history of artists' filmmaking in Britain. **Light Music** (1975) creates a synthesis of what is seen and what is heard and how the audience engages with the experience of the film.

www.youtube.com/watch?v=ts5uTOPdj4c
www.luxonline.org.uk/history/1960-1969/london_film-makers_co-op.html
www.luxonline.org.uk/artists/lis_rhodes/essay(1).html
www.tramway.org/events/Pages/Lis-Rhodes.aspx

USEFUL LINKS:

COLOUR

Paul Sharits:
www.nytimes.com/video/arts/design/100000001521648/paul-sharitss-dream-displacement.html

Ian Whittlesea's book **Becoming Invisible**:
www.anagrambooks.com/becoming-invisible

Colour screen:
http://color.hailpixel.com/

SOUND

Oskar Fischinger:
www.oskarfischinger.org/Sounding.htm

Norman Mclaren: **Synchromy**
www.nfb.ca/film/synchromy

Guy Sherwin:
www.luxonline.org.uk/artists/guy_sherwin/index.html
http://youtu.be/GLsUhFawsZ8

CLOSE-UP AND AMPLIFICATION

Charles and Ray Eames: Powers of 10
(a scientific film essay from 1968, reissued 1977)
http://youtu.be/0fKBhvDjuy0

Jennifer West: Jam Licking & Sledgehammered
Film (2008) http://youtu.be/2uKmT9qiDu4

RELEVANT FILMS

Aura is influenced by filmmakers whose work uses unrealistic and extreme use of colour for example:

A Matter of Life and Death U
Snow White and the Seven Dwarfs U
The Wizard of Oz U
The Act of Killing 15

◼ ACTIVITIES

EXPLORE

Play with light waves and colour transmission by devising a range of activities. Experiment with how light travels, for example set up structures where light is shone through smoke, plastic or glass. Create a mist of steam and consider how light travels in rays or straight lines. Use a mirror and reflect the light beams. What happens if colour is introduced through the use of filters? What happens if the light is shone through a series of holes or slits in a piece of card? If you have access to a prism, explore what happens as you shine light through a prism.

Film these processes using a smart phone, iPad or camera. Zoom in to the light and experiment with abstract images. Using video-editing software, edit the footage to create a short film. Think about different ways this can be projected.

The following free video-editing software is available online:

Windows MovieMaker (PC)
iMovie (Apple)

COLLABORATE

Working with others, make a short film that uses colour and abstraction to create a narrative; make this an emotional journey that works alongside a soundtrack to emphasise the intensity of colour being depicted. Explore how the speed and pace of the footage can tell a story. For example can you create intensity or make the film hypnotic by using a flickering motion or by introducing pulses within the film?

Experiment with the presentation of the work; you could project the film onto different materials, for example fabric, paper or a series of objects. Explore how the scale or angle of the projection can be used to give the film emphasis. Does this produce different hues, shadows or patterns?

Consider how you want the audience to experience the film. Do you want them to watch it whilst standing up, sitting on the floor, from in front of or behind the screen?

Does your film require a soundtrack? How does the introduction of sound alter the viewing experience?

COLLABORATE

Working with others, explore different ideas and relationships surrounding colour. Visit http://color.hailpixel.com/ Scroll over the screen, finding colours according to the spectrum, then create a lexicon where everyone tells their own story about different colours. Each story can only be told when the teller is washed with the colour they are describing.

PHOTOGRAPH

Sculptural qualities of objects are really important to Aura; using a magnifying glass, concave or convex lens explore the formal sculptural qualities of objects. This process can allow familiar objects to look abstract and like other things. Explore how the lens can enable the objects to tell their own stories, for example use a leaf to explore the shape and veins. Explore the focal length and the range of the lens. Introduce a mirror or mirrors and see what effects can be created. Photograph a series of close up images and if your camera allows play with the focus, deliberately take photographs that are not in focus. Create a series of abstract images that capture your visual experiments.

If possible use different types of cameras: digital, SLR, pinhole camera etc.

WRITE

Aura uses a brief scene from the film **A Matter of Life and Death** as a starting point: in this film a World War II pilot (David Niven) miraculously escapes death after baling out of a burning plane. A celestial court is set up to judge his case while Niven hangs in limbo between a Technicolor earth and a monochrome heaven.

Watch the scene in **A Matter of Life and Death**, where Peter is wheeled into hospital and taken into the operating theatre (approximately an hour into the film). Think about the moment when his eye closes and there is a transition from colour to black and white.

Find a black and white image on the internet that you think could represent heaven. Use this as a starting point for your own short story.

Or

Use a magnified image of an eye as a starting point. Create a poem inspired by the image.

CREATE

Mix different coloured inks or food colouring in water, and slowly mix the colours to create patterns and shapes. Do not try to control this process. Photograph or film the colours as they converge. Create a series of still images.

Using Photoshop, manipulate the images. Zoom in and identify areas that interest you and enhance these areas to create imaginary visions. Create a sequence that capture a particular mood or feeling.

◼ RELEVANT APPS

The McLaren's Workshop App
This allows you to create your own animations, the McLaren's Workshop iPad App was developed and created by the National Film Board of Canada.

Visual Poet App
Visual Poet is an application for creating visual poetry. With Visual Poet, the user can combine imagery and text to author compelling mixed media works of art and publish them to the internet.

BeFunky App
BeFunky Photo Editor lets you simply apply photo effects, edit photos and create photo collages with collage maker

BigMagnify
This App turns your phone or iPad into a magnifying glass.

Light Camera
Light Camera is a small camera app which allows you to capture light flow using different aperture setting and long exposure. You can capture beautiful night scene and paint with the light.

K-Sketch
K-Sketch is an easy-to-use drawing editor that enables you to create simple Flash animations, even if you have no idea about Flash design. All you need is basic drawing skills and, if possible, a graphic tablet – but it works with a standard mouse as well.

CURRICULUM LINKS

Art and design, English, Computing, Languages, Music, Science

AIMS

- Conceptual understanding: students should make connections between subject areas. The experimentation proposed in the suggested activities can assist with the understanding of bigger ideas, for example underpinning scientific knowledge, such as the links between colour and perception. Students should be encouraged to relate scientific explanations to phenomena in the world around them and undertake their research using creative exploration and expression.

ART AND DESIGN

- Students can engage in integrated critical, practical and theoretical study:

- Through the investigation and development of ideas by directly exploring materials, thoughtfully applying critical/cultural understanding.

- Through the selection of materials and refining of ideas through directly exploring and experimenting with diverse media and techniques.

- Students can capture and record ideas or observations relevant to intentions using drawing, marks, diverse materials and media; undertake research; and gather, select and organise visual and other appropriate information.

- Students can apply skills of reflection, analysis, reasoning and interpretation and develop skills of reflection and evaluation to inform the refining of ideas, processes and selection of resources.

- Students can review and evaluate recording approaches and outcomes in the context of intentions, and to inform further actions.

- Students can use personal research and critical understanding to evaluate and inform creative and written outcomes or actions, this should develop and extend thinking and inform own work.

COMPUTING

- Through the exploration of creative activities students can develop their capability, creativity and knowledge in computer science, digital media and information technology.

ENGLISH

- Exploring the artwork can help with the development of vocabulary.

- By responding to the artwork and the general themes in Chromatic Aberration pupils can be encouraged to apply their growing knowledge of vocabulary, grammar and text structure, and also to use literary and rhetorical devices which they have encountered.

LANGUAGES

- By responding directly to the artwork and describing the work, translation activities can help with vocabulary acquisition.

- Through discussing the work students can develop confidence with their sentence-building, alongside their knowledge of grammar to enable independent language use in speaking and writing.

- Answering questions about the artwork can enable students to engage in unscripted conversations, this can also help develop students' ability and willingness to use different languages to communicate in situations beyond the classroom.

MUSIC

- In response to the art work or creative activities inspired by the art work, students can improvise and compose; and extend and develop musical ideas by drawing on a range of musical structures, styles, genres and traditions.

- Students can be encouraged to identify and use the interrelated dimensions of music expressively and with increasing sophistication.

- Through their research students can develop a deepening understanding of the music that they perform and to which they listen, and its history.

SCIENCE

- Students can explore the transmission of light through different materials: absorption, diffuse scattering and specular reflection at a surface.

- Students experience the different frequencies of light, white light and prisms, differential colour effects in absorption and diffuse reflection.

- Students can describe colour as the reflection and absorption of different wavelengths of light.

- Students experience awe and wonder about the natural world through close access (magnification).

- Students develop communication skills for presenting and discussing scientific and creative ideas.

TYNESIDE CINEMA

Tyneside Cinema is one of the UK's leading independent specialised film and media venues, housed in its spectacular Grade II listed building in the centre of Newcastle-upon-Tyne. The Cinema first opened its doors in 1937, and today shows the best films from around the world, from award-winning world cinema to the latest Hollywood releases, as well as running a cutting-edge digital media arts programme.

THE GALLERY

The Gallery is Tyneside Cinema's state-of-the-art exhibition space and cinema screen. Located on the venue's third floor, this exciting new space was created to showcase and celebrate the creative crossover between artists and filmmakers working with digital moving image. During the daytime The Gallery shows a rich programme of moving image work by artists, and in the evenings it becomes a 33-seat cinema auditorium screening movies from around the world.

**Open daily 10:00–17:00 (Sundays 11:00-17:00)
FREE ENTRY**

You'll always be able to find something interesting and different in The Gallery, and the daytime art programme is completely free for you to enjoy. We hope you'll pop in and explore the new space on your next visit to the Tyneside!

CONTACT

Tyneside Cinema offers teachers and schools the opportunity to get involved through a range of opportunities, including gallery visits, seminars, workshops, twilight sessions and school visits.

CPD opportunities can be delivered as a whole school INSET or for a cluster of schools. Please email Anna Casey for more information.

anna.casey@tynesidecinema.co.uk

Your feedback about the artwork and this learning resource is welcome. Please send your comments to:

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CREDITS

Chromatic Aberration was commissioned by Tyneside Cinema with the participation of George Eastman House in Rochester, New York, and support in kind from BFI National Archive.

Filmed, directed and edited by Aura Satz
Soundtrack composed by Scanner
DoP: Tim Sidell
Sound Recordist: Gernot Fuhrmann

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