

Institution: University of Bristol		
Unit of Assessment: 33) Music, Drama, Dance, Performing Arts, Film and Screen Studies		
Title of case study: Preserving and Presenting 20 th Century Colour Films for New Audiences		
Period when the underpinning research was undertaken: 2007-2019		
Details of staff conducting the underpinning research from the submitting unit:		
Name(s):	Role(s) (e.g. job title):	Period(s) employed by submitting HEI:
Prof. Sarah Street	Professor of Film and Foundation Chair of Drama	01/08/1993 – present
Dr. Liz Watkins	Research Associate	01/10/2007 – 31/12/2010
Dr. Vicky Jackson	Research Assistant	01/10/2012 – 30/09/2015
Dr. Carolyn Rickards	Research Associate	10/10/2016 – 09/10/2019
Period when the claimed impact occurred: 1 Aug 2013-31 July 2020		
Is this case study continued from a case study submitted in 2014? N		

1. Summary of the impact

Professor Sarah Street's AHRC- and Leverhulme-funded research has increased understanding of the preservation of colour films and expanded their presentation to today's audiences. Her research has led to the safeguarding of colour film as a crucially important aspect of moving image heritage. Her identification of historically significant colour films at risk of physical deterioration has led to them being preserved and disseminated. Practice has been changed through knowledge exchange and collaborations with film archivists, media organisations, filmmakers and artists concerned with preserving moving image heritage. Understanding and cultural enrichment has also been increased by engaging a wider public through talks, screenings, blog posts, videos and creating additional content for commercial DVD/Blu-ray releases of restored colour films.

2. Underpinning research

From 2007 to 2019, Professor Sarah Street, University of Bristol, led three major research projects on the history of colour films. They investigate how colour films were made, from the application of colour by hand, stencil or applied tinting and toning methods from the silent era, to photochemical processes such as Technicolor and film stocks that enabled colour to dominate sound cinema. In addition, they promote the understanding of colour as a profoundly cultural phenomenon influenced by prevailing aesthetic norms and national taste cultures. Although focused on different themes and periods, the projects share the conviction that colour films are best understood through knowledge exchange and collaboration with professionals and institutions actively involved in their preservation and restoration. Colour films have been particularly prone to physical deterioration, so the projects have engaged with practical and ethical issues surrounding their restoration and presentation to today's audiences. The research has re-evaluated the significance of colour films in cinema history, particularly those in danger of decay or which have been overlooked by academics, critics and audiences [3.1, 3.3, 3.6]. Alongside archival research and film analysis, audio and video interviews have been conducted with archivists/film industry professionals and other beneficiaries outside academia who have engaged with the research [3.4, 3.5].

The projects emphasise the aesthetic, cultural and technological significance of colour films in three periods and from interlinked perspectives:-

1. The Negotiation of Innovation: Colour Films in Britain, 1900-55 (2007-10), analysed the major colour film processes introduced in Britain. It constituted the first economic, cultural and aesthetic history of colour films based on archival research, film analysis, interviews with cinematographers and other professionals who worked with colour, archivists and film restorers. It identified a 'British School' of Technicolor and highlighted the contributions of cinematographers and other colour experts. Street demonstrated new modes of colour analysis in her award-winning monograph [3.1] and emphasised the role of women as colour consultants [3.2].

2. Colour in the 1920s: Cinema and its Intermedial Contexts (2012-15) focussed on a key decade for colour, extending the investigation beyond the UK to consider for the first time the close inter-relationships between European, American cinema and other arts, including commercial and print culture; fashion and industry; theatre and the performing arts. Working closely with archivists, many surviving film prints were examined to document contemporary colouring practices of tinting, toning and attempts to introduce 'natural' colour. The project's interdisciplinary, international focus produced new insights into colour's cultural and social significance in the 1920s, as documented in *Chromatic Modernity* [3.3].

3. The Eastmancolor Revolution and British Cinema, 1955-85 (2016-19) built on the two previous projects in evaluating a later, distinctive phase of film colour and arts. It revealed how Eastmancolor's cheaper stocks revolutionised filmmaking, identifying key genres, personnel and issues relating to the preservation of films particularly prone to fading and deterioration. These insights revised accepted, canonical understandings of British national cinema and encouraged academics, professionals and audiences to be more conscious about colour's role in film production, practices and restoration [3.6].

3. References to the research

- 3.1 **Street S** (2012), *Colour Films in Britain: The Negotiation of Innovation, 1900-55* (British Film Institute/Palgrave Macmillan), pp.316. Winner of the British Association of Film, Television and Screen Studies Prize for Best Monograph. Declared REF 2014. [Available on request]
- 3.2 **Street S** (2011). Negotiating the Archives: The Natalie Kalmus papers and the "branding" of Technicolor in Britain and the United States, *The Moving Image*, **11:1**, pp.1-24, <http://muse.jhu.edu/article/446994>
- 3.3 **Street S** and Yumibe J (2013). The Temporalities of Intermediality: Colour in cinema and the arts of the 1920s, *Early Popular Visual Culture*, **11:2**, pp.140-57, <https://doi.org/10.1080/17460654.2013.783149> and **Street S** and Yumibe J (2019), *Chromatic Modernity: Color, Cinema, and Media of the 1920s* (Columbia University Press), pp. 358. Winner of the Katherine Singer Kovács Book Award, Society for Cinema and Media Studies, 2020. Declared REF 2021. [Available on request]
- 3.4 **Street S** and Brown S (eds.) (2010). Colour in British Cinema and Television, *Special Issue of the Journal of British Cinema and Television*, **7:1**, pp.181, <https://www.euppublishing.com/toc/jbctv/7/1>
- 3.5 **Street S**, Brown S and Watkins L (eds.) (2013), *British Colour Cinema: Theories and Practices* (BFI/Palgrave Macmillan), pp.320 [Available on request]
- 3.6 **Street S** (2018). The Colour of Social Realism, *Journal of British Cinema and Television*, **15:4**, pp.469-90, <https://doi.org/10.3366/jbctv.2018.0438>, Declared REF 2021

Funding information

Street S (PI), *The Negotiation of Innovation: Colour Films in Britain, 1900-1955*, AHRC Research Grant, AH/E00623X/1, 2007-2010, GBP450,049 (fEC)

Street S (PI), *Colour in the 1920s: Cinema and its Intermedial Contexts*, Leverhulme Trust Project Grant, 2012-2015, GBP246,243

Street S (PI), *The Eastmancolor Revolution and British Cinema, 1955-85*, AHRC Research Grant, AH/N009444/1, 2016-2019, GBP958,649 (fEC)

4. Details of the impact

Professor Street's research has impacted key organisations, archivists, programmers, industry professionals, audiences and artists through safeguarding colour films, engaging new audiences, and changing the practices of preservation:

(i) Influencing the preservation of colour films

Street's monograph *Colour Films in Britain* [3.1] identified *This is Colour* (1942) as an 'at risk' Technicolor film and highlighted its importance in film history. This research influenced the British Film Institute's decision to restore and exhibit *This is Colour* at the 2016 London Film Festival and, as the BFI's Film Conservation Manager states, 'Your research, in particular through a public lecture you delivered at the BFI South Bank in 2012 [audience c.130], as well as your book *Colour Films in Britain*, was used by the BFI when restoring the film'. He continues 'your research on colour films has provided invaluable context for increasing knowledge and understanding of Britain's colour film heritage' [5.2]. The press release for the restoration of *This is Colour* described *Colour Films in Britain* as 'the definitive historical account of colour in British cinema' [5.1].

In 2015, Street's team co-organised a conference (140 delegates) with Amsterdam's EYE Filmmuseum. According to Eye's Head Curator, 'EYE's and my own interest to collaborate with Professor Street on this conference came from our desire to collaborate with her research ground-breaking project *Colour in the 1920s: Cinema and Its Intermedial Contexts*' [5.3]. The conference held public screenings (audiences c. 300) attended by researchers, archivists, curators and filmmakers, and showcased Street's award-winning research [3.3] highlighting the urgent conservation needs of colour films. EYE's Head Curator [5.3] notes the conference's 'remarkable impact' on the international film archival community through the creation of a platform for international debate, a new publication, *The Colour Fantastic* (Amsterdam, 2018), and a rise in colour film programming.

The East Anglian Film Archive benefited from *The Eastmancolor Revolution*'s digitisation of six films in their collection, preserving and making them more accessible with research-based commentaries [5.4]. Since 2017, the website has attracted 10,628 views from 3,857 unique visitors (70% from the UK, 12% USA and 18% from 64 other countries). Over four months in 2017 the amateur films generated 5,879 Twitter impressions and 72,400 impressions.

Eastmancolor Revolution also influenced distributor Studio Canal to prepare a new restoration and Blu-ray release (2019) of *Don't Look Now*, a prestigious film in their collection signalled by its specialised 4K Ultra-High-Definition restoration. In collaboration with Street's team, Studio Canal filmed a featurette about colour for the Blu-ray that was driven by the research. Studio Canal's Senior Catalogue Project Manager described this content as a new departure, 'undoubtedly increasing' the DVD's commercial viability by promoting a major title in their classic catalogue [5.6]. Project interviews also feature on Powerhouse Films' DVD releases of *Charlie Bubbles*, *The Old Dark House* and *The Odessa File*.

(ii) Safeguarding colour skills

As the photochemical era gives way to digital technologies, past colour skills are in danger of being forgotten even though many are transferable to current practices. Street and research teams for *The Negotiation of Innovation* and *Eastmancolor Revolution* projects conducted 32 unique interviews which safeguard for posterity knowledge and understanding of colour skills. These were published by the BFI [3.5] and online by the British Entertainment History Project (the largest collection of interviews with film/tv/radio professionals in the UK; Jan 2020 data snapshot shows 21,940 views since 2016). They are a primary source of reference for researchers, students, professionals, authors and the public. Permanently preserved by the BFI, they address concerns expressed by the Association of Cinematograph, Television and Allied Technicians that their colleagues' experience, memories and insight is in danger of disappearing as they retire. Testimony from former Vice-President of Deluxe Media describes the interviews as a 'valuable resource' offering 'considerable insight into the working conventions of professional colour film processing laboratories' as film continues for many filmmakers to be an origination medium of choice. [5.5] The interview conducted by Street and Rickards in Dec 2017 about the 'Bleach Bypass' process for colour desaturation of film prints used in well-known films directed by Mike Leigh, Terence Davies and Guy Ritchie, for example, ensures this special technique is available to future filmmakers.

(iii) Raising awareness of colour films amongst professional and lay audiences

In March 2018, the Eastmancolour team and the Watershed Media Centre held an event on *Some People*, a relatively unknown colour film shot in Bristol in 1962. Their research [3.6] informed a public introduction by Street (audience c. 200), followed by a panel discussion with those involved in making the film. The co-director of Talking Pictures TV (Britain's main broadcaster of classic films with 3.5 million viewers a week) attended the event and confirms that it caused them to broadcast *Some People*, record an interview with one of the film's stars, and air more British colour films on their channel [5.7]. In addition, post-event evaluations recorded 80% of respondents as interested in learning more about Eastmancolor [5.8]. Following the event, Bristol's M Shed featured a display on *Some People* in *Bristol Music* (exhibition, 34,000 visitors).

New audiences have also been engaged through curating international, public exhibitions of rarely seen colour films, such as at the *Le Giornate Del Cinema Muto*, Pordenone, Italy, 2014 (audience c. 940). The annual Pordenone Festival scheduling of *The Colour Fantastic* in 2018 and *Chromatic Modernity* in 2020 has led to sustained engagement with audiences. The Colour Group GB (a society of c. 5,000 scientists, professionals; 40% creative industries, 10% interested public) has increased its knowledge and understanding of colour films through an event co-organised at the BFI Southbank in 2017 presenting new research and rarely exhibited films (audience c. 300). The Group's Newsletter notes this marked 'a further, definitive step' towards establishing an annual film-based event in their calendar [5.9]. Post-event evaluations described it as 'inspiring' and 'enlightening': 90% of respondents' (including many practitioners), and 77% were interested in learning more about Eastmancolor [5.10]. In 2019 the Group awarded its Turner Medal, for the first time to a film expert, to Street 'in recognition of her outstanding contributions to colour in the arts'.

(iv) Inspired new artworks

Testimony from visual artist Aura Satz [5.11] demonstrates how discussing Street's research with a Library of Congress archivist led to *Eyelids Leaking Light* (2015), a new solo commission at the George Eastman Museum, New York for an installation featuring *Chromatic Aberration* (first exhibited in 2014 at the Tyneside Cinema, Newcastle, with Satz and Street 'in conversation'; audience c. 65) and *Doorway for Natalie Kalmus*. These works, inspired by Street's research on Technicolor [3.1, 3.2], were subsequently added to George Eastman House's collection for preservation. Satz explains the research had 'a crucial impact as there was a lack of publications on the history of women's involvement in early film technology' [5.11] during the research and development phases of her films/installations involving creative re-use

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of colour films including *Joan the Woman - With Voice* (exhibited from November 2013; Street is credited). 'As a result... I had numerous international solo exhibitions (London, Newcastle, Toronto, Rochester NY, Colgate NY) and screened the works at many international film festivals. I was approached by the George Eastman Museum to make a new commissioned film *Chromatic Aberration*, for a solo show.'

5. Sources to corroborate the impact

- 5.1 [BFI Press Release on Colour Programme for London Film Festival](#), October 2016, [Accessed 7 January 2021]
- 5.2 Testimonial, Film Conservation Manager, BFI National Archive, 9 September 2019
- 5.3 Testimonial, Head Curator, EYE Filmmuseum, Amsterdam, 10 October 2018
- 5.4 Eastmancolour blog posts about the digitisation of amateur colour films, April-September 2017 <https://eastmancolor.info/media/> [Accessed 28 March 2020]
- 5.5 Testimonial, former Vice-President of Film and Digital Services, Deluxe Media, 27 March 2020
- 5.6 Testimonial, Senior Project Manager, Studio Canal UK, 24 May 2019
- 5.7 Testimonial, co-director of TALKING PICTURES TV, 22 November 2018
- 5.8 Audience questionnaire evaluation for the *Some People* event, March 2018 (PDF); and report (PDF) on event/blog post by Street: <https://eastmancolor.info/2018/04/05/when-the-new-wave-came-to-bristol-some-people-1962/> [Accessed 28 March 2020]
- 5.9 Colour Group (Great Britain) PDF of Newsletter 2016/7, 04 April 2017
- 5.10 Colour Group (Great Britain) Workshop evaluation summary, March 2017 (PDF)
- 5.11 Email correspondence between visual artist and filmmaker Aura Satz and Sarah Street, 2013-2018; PDF of: https://www.iamanagram.com/doorway_natalie_kalmus.php [Accessed 7 January 2021]