



Can I Hear That In Colour?

An investigation with
visually and hearing impaired people
into options for achieving accessibility to
archive film of the North West of England

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Meeting real needs is an important principle in any service offered to the public. In striving to achieve this, it is vital to understand the needs and preferences of potential users.

PILOT GROUP

We thank the following panel members who gave their time freely to the project, commented honestly and made the suggestions which led to the development of options for accessibility. Thanks to their support and effort the project gathered real evidence. We have pleasure therefore in acknowledging the work of:

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FOREWORD

Moving images represent a powerful historical and cultural record of the twentieth century. Public film archives have a special responsibility to ensure that the collections within their care reflect, as widely as possible, the way our society has developed and to recognise the contributions of many communities. While acquisition and preservation efforts are imperative to secure the future survival of fragile footage, responding to the needs of today's audiences presents both opportunities and challenges.

The North West Film Archive has established a significant collection of moving images which capture the experiences and interests of people from the North West of England. As part of a long term commitment, the archive has sought to include representation of cultural diversity within its holdings, complemented by audience development activities. In order to improve accessibility for disabled people the archive worked with specialists to devise and implement a research project, focusing on the needs and preferences of people with hearing and visual impairments. Gathering first-hand experience from disabled people, the project has identified positive steps that can be taken to widen both individual and communal participation.

This report makes a real contribution to our understanding of disability access issues. The possibilities presented by technological advances can be harnessed to benefit members of our society who have traditionally been disadvantaged. I particularly hope that its findings will encourage more archives to adopt inclusive access approaches. Beyond its direct relevance to peer groups, the report contains practical guidance for a broad range of arts and media practitioners - all of whom share a responsibility towards wider public access.

As patron of the archive, I would like to add my personal thanks to everyone who has contributed towards the successful outcome of this project.

Lord Puttnam of Queensgate CBE

REPORT AUDIENCES & AVAILABILITY

In publishing and promoting this project report, the North West Film Archive and Full Circle Arts wish to share the outcomes of this user-led research across the public film archive sector world-wide. It is hoped that colleagues will be encouraged to consider the needs of disabled people within their own access programmes.

The understanding gained from the project is also of direct relevance to disability arts organisations, performance/exhibition venues, arts funders and government policy-makers, and the film and television industries.

For manufacturers of audio-visual and computer equipment the findings represent valuable and informed feedback from customers and their audiences.

Copies of this report are available free of charge and can be obtained:

By post:

- standard print version
- large print version
- audio cassette in English language

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CONTENTS

page number

Acknowledgments	i
Foreword	ii
Report audiences & availability	iii
Contents	iv
Glossary of terms & definitions	vi
Report Summary	

SECTION 1	Sharing a regional collection of moving images:	
	The North West Film Archive	1

SECTION 2	Methodology	2
2.1	The need for a specialist consultant	
2.2	Defining and constructing the project	
2.3	Assembling the pilot group	
2.4	Securing project funding	
2.5	Pilot group sessions	
2.6	Options for accessibility	
2.7	Feedback to the pilot group	
2.8	Sharing the project's findings	
	Overview & schedule	3

SECTION 3	Pilot Group Trial & Evaluation Sessions	4
3.1	Session 1 Objectives	
3.1.1	Trial:	
	Exploring the accessibility of different film types	
3.1.2	Summary of key points	
3.1.3	Observations	
3.2	Session 2 Objectives	5
3.2.1	Trials:	
	Audio-description of a silent film	
	Lengthening screen time for captions and titles	
	Contrast levels of black & white film	
3.2.2	Summary of key points	
3.2.3	Observations	
3.3	Session 3 Objectives	7
3.3.1	Trial:	
	Accessibility of colour/sound films	
3.3.2	Summary of key points	

	3.3.3	Impairment-specific sub-groups: vision-mixer & optical aids induction loop systems deaf community requirements atmospheric music & sound effects	
	3.3.4	Observations	
	3.4	Session 4 Objectives	9
	3.4.1	Trial: original commentary together with abridged audio-description full audio-description replacing original commentary abridged captions added in-vision to original signer added in-vision to original signer & abridged captions added in-vision to original	
	3.4.2	Summary of key points	
	3.4.3	Preparing to test with new audiences	
	3.4.4	Options for testing	
SECTION 4		Testing with new audiences	13
	4.1	Objectives	
	4.2	Assembling new audience groups	
	4.3	The <i>ice-breaker</i>	
	4.4	Testing options with visually-impaired audience	
	4.4.1	audio-description of silent film	
	4.4.2	audio-description of sound film	
	4.5	Summary of key points from testing with visually impaired audience	
	4.6	Observations	
	4.7	Testing options with hearing-impaired audience	
	4.7.1	silent film	
	4.7.2	sound film with literal captions in-vision	
	4.7.3	sound film with literal captions and signer in-vision	
	4.7.4	sound film with signer in-vision	
	4.7.4	sound film with literal captions and signer in-vision	
	4.8	Summary of key points from testing with hearing impaired audience	
	4.9	Observations	
	4.10	Refined list of options for accessibility	
	4.11	Feedback to pilot group	
SECTION 5		Next steps	22
APPENDICES			
Appendix I		Equipment Used	
Appendix II		Film information	

GLOSSARY OF TERMS & DEFINITIONS

Social model of disability

People with impairments are disabled by society when they are prevented from taking part. The responsibility for change is on *society*. This model was developed by disabled people to challenge the medical model of disability.

Medical model of disability

The way society defines and categorises disability. Disability is their [disabled people's] problem because 'they have something medically wrong with them'. Puts responsibility for change on the *individual*.

Visually impaired people

Many visually impaired people have a certain amount of vision. The reduction in their vision affects the amount of detail they are able to see. Some common causes are:

- Simple Chronic Glaucoma
- Retinitis Pigmentosa
- Macular Degeneration and Macular Dystrophy
- Mild Diabetic Retinopathy
- Cataracts

Other visually impaired people are blind. Within blindness there are issues to consider including:

- the term 'blind' is applied to a large number of people
- only approximately 3% of visually impaired people have no sight at all
- there are differences to consider between individuals who have been blind since birth and those who have become blind following a number of years of being sighted

Hearing impaired people

Many people suffer a hearing loss without being regarded as hearing impaired. More acute hearing loss may require the individual to be supported through:

- wearing a hearing aid (or two hearing aids)
- using amplified telephones or a Minicom
- switching the hearing aid to the 'T' position in rooms equipped with an induction loop

Deaf people

Hearing impairment should not be confused with the term 'deaf'. Deaf people are those who have no hearing and cannot benefit from the forms of support identified above. Deaf people communicate in different ways:

- by using a sign language (e.g. BSL - British Sign Language)
- by lip reading

Sign language

Sign language is a complete form of communication. There are a number of different sign languages around the world and all have some common characteristics:

- its own individual structure (not a simple translation of spoken language)
- its own lexicon and syntax
- regional dialects
- emphasis and intonation

Audio description

A technique used for about 10 years in the UK. It is a method of describing action and visual detail which can help visually impaired people gain more access to a specific event such as:

- live theatre performances
- film screenings
- visual art (used in art galleries)

In-vision signing

Recording a signer on videotape and superimposing this image upon or next to the moving image. The frame should be:

- on the right of the screen
- positioned approximately halfway down the screen
- oval - but allowing sufficient space for all arm and body movement

Captions

Sometimes referred to as 'sub-titles'. This denotes the use of a block of text superimposed on the moving image. Captions can vary in their content and appearance.

Types of caption:

- sub-titles which are a literal translation of any spoken words in the film commentary
- sound-scape captions (e.g. telephone rings / dramatic music)
- captions in different colours to show dialogue between speakers
- modified captions - written in a form of shorthand to support deaf people

Appearance:

- mainly white text (using a sans serif type face) on a darkened background matt at the bottom of the screen
- when people are speaking on camera the text changes from white to a different colour
- research being conducted to examine the effectiveness of placing captions in different screen positions

REPORT SUMMARY

Background to the Research Project

The collection of the North West Film Archive (NWFA) is a public resource representing - and supported by - the people of the North West of England. The NWFA regards accessibility to this region's filmed heritage as a fundamental guiding principle alongside its commitment to custodial responsibilities.

Having been closely involved in the planning of its new purpose-designed accommodation in 1996, the NWFA had ensured that disability issues were incorporated into the building. The NWFA consulted with a range of organisations to compile a list of specialist audio-visual and computer equipment which would further improve the experience of disabled visitors, particularly those with visual and/or hearing impairments. These requirements were included within the Archive's successful bid to the Heritage Lottery Fund (£260,821 awarded).

The NWFA recognised that in order to carry out the next step - user-led research - it did not possess the relevant in-house expertise and a practitioner partner would need to be brought on board. With a grant from North West Arts Board, the NWFA engaged Full Circle Arts, a disabled people's regional resource which provides consultancy services to organisations working on disability arts projects, to work on a unique joint research project to identify the criteria which people with sensory requirements regard as important when accessing moving images. This research project was devised by the NWFA to develop inclusive in-house and outreach access opportunities and to provide service choice for the region's people - a real world-first.

Methodology

A pilot group of twelve people from around the North West of England was assembled so that the project would be user-led and would gain first hand knowledge about their actual requirements. The pilot group met monthly over six months to participate in trial and refinement sessions where their responses to technical experimentation and specialist intervention would be measured and evaluated, both qualitatively and quantitatively. As a truly user-led project, real evidence was gathered from the outset about audience needs and preferences. A range of options for accessibility was established which was then refined, modified and augmented through secondary testing with new audiences with similar needs. Issues resulting from this fresh perspective were fed back to the pilot group so that they could see where their original views were shared, where there were differences in opinion and where new ideas had been added.

Findings

The findings range from attitudinal considerations and simple, practical steps which improve accessibility to moving images, working up to the introduction of specialist professionals and technical interventions which require more planning and resources. The following options for accessibility are based on disabled people's own views and should hold true for many screening scenarios.

Custodians of moving image collections may give attention to :

Attitudinal considerations

- avoid making assumptions relating to an individual's impairments and the extent to which s/he may derive benefits from moving images - for example, our research shows that visually impaired people gain pleasure from moving images both as an individual and as part of a shared audience experience and their enthusiasm for the material can be as strong as a sighted person's.
- be responsive to user needs so that opportunities for access and user choice can be fully exploited. This includes investigating audience communication needs in advance.
- recognise that, in common with all our audiences, usage will range from individual research and group (social) viewings
- bear in mind that visually impaired and blind people's capacity to *visualise* will depend on whether their vision became impaired after a period in their life when they were able to see fairly well

Practical steps

- provide the individual or group with advance information about the venue, its facilities and the screening prior to the event
- in preparing group viewings, select material carefully on the basis of user needs and preferences (see *Audience recommendations* below)
- provide full contextual introductions to each film - spoken, captioned/signed as necessary
- allow for the same film to be shown more than once, so that appreciation can be built up. This will be achieved through different interpretative and technical interventions
- describe specialist interventions (e.g. audio description) to the audience as these may not be familiar techniques

Audience recommendations

User preferences from visually impaired audience members:

- black and white film is easier to access than colour film
- silent films benefit from audio description
- where a film contains spoken commentary, this should be shown in its original (un-modified) format before a version with interventions e.g. audio described
- audio description can facilitate access in place of the original soundtrack

For hearing impaired audiences a range of approaches can be adopted to meet particular communication needs.

User preferences from hearing-aid users:

- induction loop systems should be checked by hearing-aid users for proper calibration and to detect any interference
- *in-vision* captions should be a literal transcript of any spoken commentary and appear in a sans serif type, white on a dark background with spoken dialogue in a different colour or italicised

User preferences from sign language users:

- a signer may be video-recorded in advance and this image added *in-vision*, preferably in an oval or circular frame positioned about halfway up the side of the screen
- if a signer is not available, *in-vision* captions should be abridged rather than literal if the audience is primarily made up of sign language users

In all cases:

- signing and captioning should tell 'the same story'. These should be introduced in layered stages through multiple screenings - if used all at once this can cause information overload

Next steps

While some questions were answered by this research, many more were raised, and the NWFA has a responsibility and commitment to building on the success of this ground-breaking project. Future priorities will focus on resourcing and initiating action research to find and work with new audiences, and widen out applications for enjoying the collection. Disabled people will continue to be actively involved as part of the NWFA's public access development.

Can I Hear That In Colour? is just *one* example of a public film archive's experience working with disabled people to achieve greater accessibility to moving images. The NWFA looks forward to hearing about other projects which can broaden our understanding of disabled people's needs and influence the development of public access programmes.

Section 1 SHARING A REGIONAL COLLECTION OF MOVING IMAGES The North West Film Archive

The North West Film Archive (NWFA) is a public regional collection which holds over 25,000 reels of film and videotape from early 'animated pictures' to contemporary productions. The experiences and interests of North West people are vividly captured in both professional and amateur footage - a powerful record of modern times in moving pictures.

The NWFA collection includes cinema newsreels, documentaries, educational and training films, travelogues, advertising and promotional material, corporate videos and regional television programmes - alongside hundreds of films shot by local families and enthusiasts. Thanks to the support of over 1,000 depositors, the NWFA has established a collection which is both regionally specific and internationally significant.

The collection of the North West Film Archive (NWFA) is a public resource representing - and supported by - the people of the North West of England. Whilst the NWFA's core purpose is the care and development of its collection, a strong commitment to public access drives the organisation not only to respond to demand but also to actively explore new opportunities.

As a public regional resource, the NWFA recognises the need to consider and address the requirements of everybody it serves - from the design of its new purpose-built accommodation to keeping abreast of technological advances which help more people to enjoy the collection. In 1996, informed by research into the requirements of people with sensory impairments, the Archive made a successful bid to the Heritage Lottery Fund which included audio-visual and computer equipment which would enable it to:

- provide dedicated services to individual visitors with hearing/visual impairments
- include users with these impairments within its mainstream public access services

Purchasing and installing the technology was only the beginning. Genuine consultative research was needed to release the potential of the new facilities in order to address accessibility criteria identified by disabled people. As the NWFA did not have the expertise to carry out this work alone, a practitioner in the field of disability arts was needed to act as consultant. There were no known precedents for this work, therefore the NWFA started from scratch to initiate a unique project - '*Can I Hear That In Colour?*' In October 1998, with a grant from North West Arts Board, the NWFA engaged disability arts consultancy Full Circle Arts to work with them and a pilot group of visually and hearing impaired people.

It was agreed that this pilot group of twelve would be the driving force for the research. An equally important strand was the acceptance by everybody involved that the project would rely on an understanding of the social model of disability (*see Glossary of terms and definitions*). However, because there was a fundamental need to focus on impairment-specific issues, the social model would actively be broken, especially by the pilot group members themselves.

The North West Film Archive and Full Circle Arts are pleased to publish this project report to offer its findings to a wider audience. We hope it inspires others who work with moving images to explore ways in which they can widen and develop public access to their collections.

Section 2 METHODOLOGY

2.1 The need for a specialist consultant

In embarking on research in this field, the NWFA recognises that it does not have the necessary experience in-house, and that a professional disability arts practitioner trusted amongst disabled communities is required as a project partner. Enquiries to public funding bodies and local disability/arts organisations would help in identifying the appropriate agency.

Full Circle Arts (FCA), a disabled people's regional resource based in Manchester, providing consultancy services to organisations working on disability arts projects, was identified.

2.2 Defining and constructing the project

The aim of the project - to identify criteria by which people with visual and/or hearing impairments can gain improved access to regional archive film - would be agreed with FCA. As a user-led project, its scope would be determined both by the group's suggestions and by the capacity of the NWFA's technical facilities. The research itself would involve five, monthly trial and evaluation sessions at the end of which the pilot group would agree a list of options for accessibility. A secondary testing phase would entail two screenings with new audiences of people with similar impairments whose fresh perspective would provide additional evidence.

2.3 Assembling the pilot group

FCA's primary task would be to use its database to identify North West residents active in disability arts as artists or as representatives of disability forums. For the group's views to be sufficiently representative, a maximum of twelve (minimum of nine) individuals would be sought. Alongside their vocational experience, panellists would need to be prepared to commit their time for the duration of the project (an estimated seven months), and would need to be accustomed to commenting freely as part of a group. A balance would be sought between those with visual and hearing impairments - a couple of members had neither but represented disability forums. Other selection criteria would incorporate the need for cultural diversity, as well as gender and age differences.

2.4 Securing project funding

With the project proposal agreed, the NWFA would approach its regional public arts funder, the North West Arts Board (NWAB), to support the above the line costs of the project. Disabled people's involvement in the arts is a specific priority identified by NWAB, and an award of £3,800 was made. The NWFA recognises that in order for the project to realise its potential it would be a high priority within the Archive's activities, requiring a considerable investment in staff time and resources.

2.5 Pilot group sessions

Pilot group members would comment on how accessible extracts of films are when screened. Their responses would be recorded (in note form and on digital mini-disc) and then evaluated quantitatively afterwards. Resultant suggestions for technical and/or specialist interventions to aid accessibility would give the Archive a range of issues to tackle in preparation for further sessions. (Section 3 gives details of session content).

2.6 Options for accessibility

Technology permitting and with the help of specialist personnel (signer and audio describer), the NWFA would prepare versions of film extracts incorporating the pilot group's suggestions. The resulting criteria, or list of options for accessibility, would then be tested with new audiences in order to verify, modify and supplement the options already identified.

2.7 Feedback to the pilot group

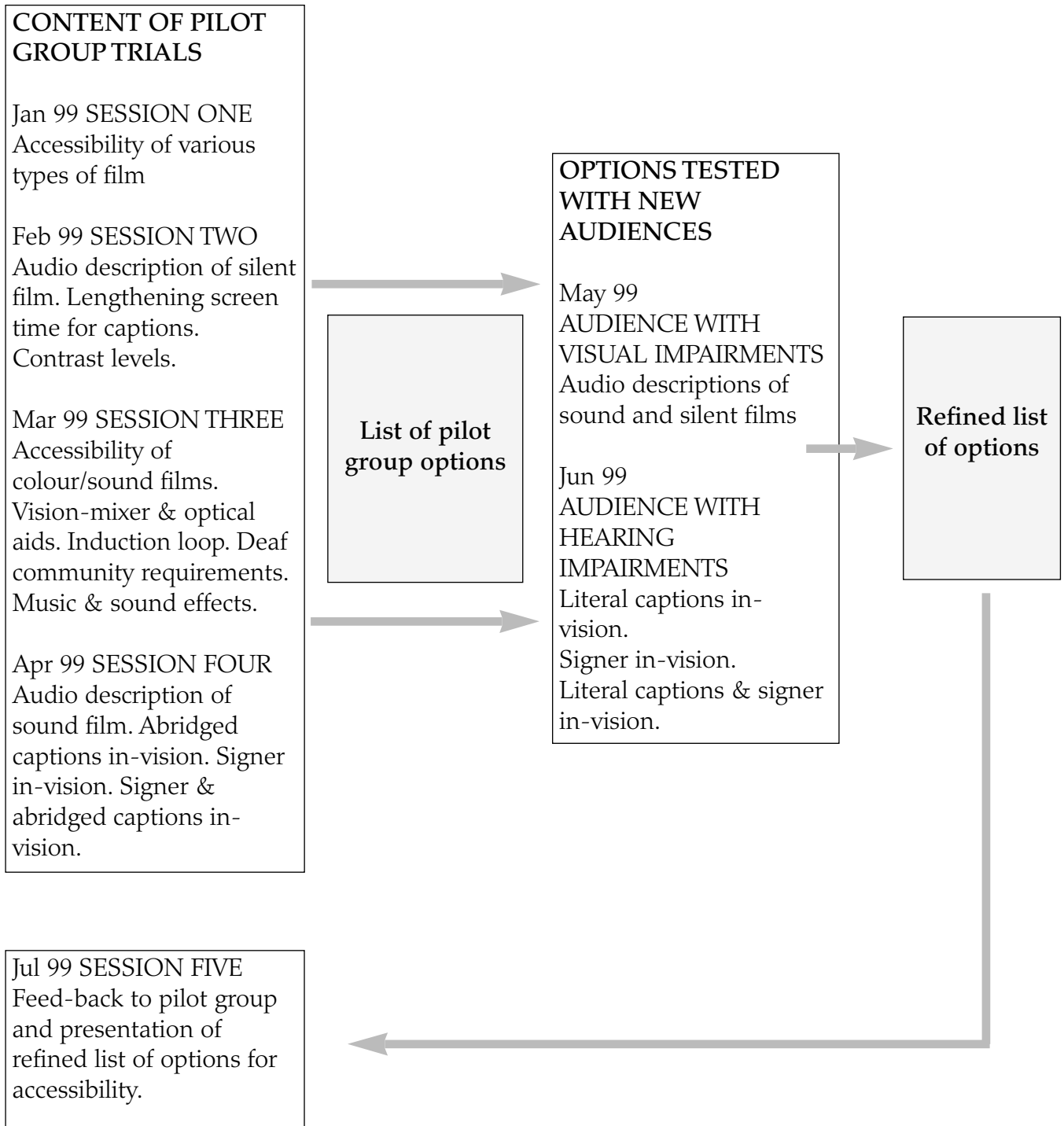
A final session would feed the new audiences' responses back to the pilot group. This would enable panellists to appreciate where their views were shared, and take on board comments which added new evidence to the project.

2.8 Sharing the project's findings

The North West Film Archive and Full Circle Arts would produce a joint research report targeted at custodians of public film collections, performance/exhibition venues, disability organisations, arts funders and policy-makers, and the film and television industries. The report would seek to share the new understanding gained, and encourage public film archive colleagues to explore making their collections more accessible to disabled audiences. The NWFA is keen to hear about similar research/projects which have investigated opportunities to make moving images more accessible to disabled people.

OVERVIEW & SCHEDULE

Trialling and refining options for accessibility



Section 3 PILOT GROUP TRIAL & EVALUATION SESSIONS

This section provides summarised details of each of the trial and evaluation sessions held at NWFA involving project personnel and the pilot user group. (Full session notes are available on request from the North West Film Archive).

SESSION ONE 26 January 1999

3.1 Objectives

- to familiarise the pilot group with the collection
- to screen film extracts in un-modified form to begin the discussion around accessibility issues
- to establish a *baseline* position against which the panel could reflect and make responses
- to gather suggestions from the pilot group for accessibility options to explore in further sessions

3.1.1 Trial: Exploring the accessibility of different film types

Four film extracts were screened in turn to familiarise pilot group members with basic film types and the nature of the collection. Discussion about how accessible each film type was followed each screening.

<i>film type</i>	<i>extract from film (F)* film details listed at Appendix II</i>
black/white - silent	F Stockport Market c1910
black/white - sound	F Anytown 1936
colour - silent	F School Life In Wartime 1942
colour - sound	F The Voice of a Region 1970-72

3.1.2 Summary of key points:

- the ability to pick out detail and degrees of definition are key to gaining accessibility to film
- added commentaries maintaining the character of a film might enhance the experience, therefore audio description is seen as an option to pursue
- the creation of an alternative descriptive commentary, and the capacity to switch between it and the original, should be investigated
- the character and integrity of a film should be maintained in its audio description, and not be consumed by the background, contextual information which should form a spoken/signed introduction
- the length of time which captions and opening titles of the film appear on screen should be increased
- where a film is highly stylised (e.g. using a pacy and punchy editing style common in promotional films of the 1970's) methods should be investigated to try and increase accessibility to this

3.1.3 Observations

- the pilot group grasped the aims of the project very quickly and contributed comments and ideas freely
- the session was successful in gathering evidence from visually impaired and hearing impaired people about their initial needs and preferences, providing an excellent platform from which the project would develop
- the pilot group's suggestions gave the NWFA a considerable range of issues to tackle

SESSION TWO 23 February 1999

3.2 Objectives

- to implement priority recommendations from the first session and evaluate the outcomes, specifically:
 - the audio description of a silent film, ensuring the character/integrity of the film is maintained
 - the lengthening of the screen time for captions and titles in the same film
- to begin trialling other technical options

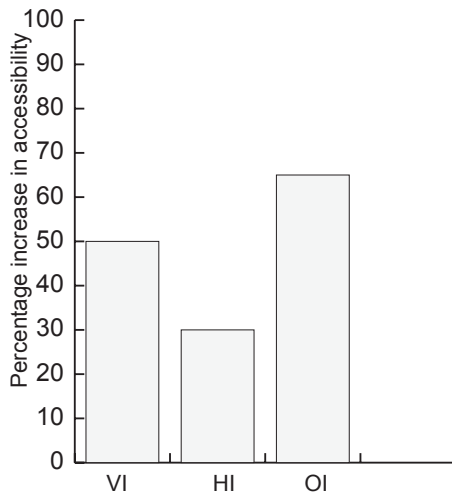
3.2.1 Trials

F School Life In Wartime 1942

- the original silent film extract was screened without modification serving as the *baseline* position
- the same extract was screened again with an audio description track added and the pilot group made their evaluation of whether this intervention improved accessibility

Graph G-1

Key:
 VI=visually impaired people
 HI=hearing impaired people
 OI=people with other impairments



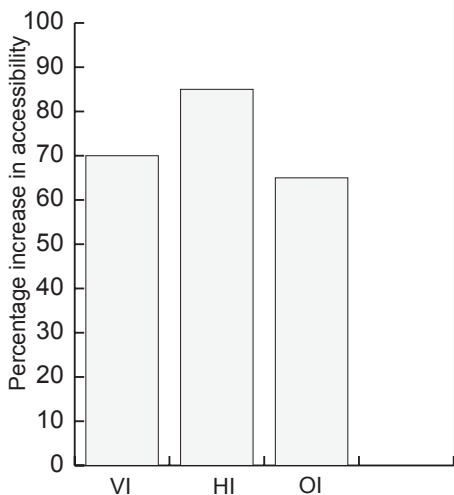
- a marked increase in accessibility for all group members
- for hearing impaired people only those using the induction loop were able to record positive results as the screening was not signed
- it was noted that those with neither a visual nor hearing impairment found the audio description significantly increased their access to the film

F School Life In Wartime 1942

- the same film extract was shown with audio description, this time with the caption frames lengthened for their screen time. This version was signed by a BSL signer in attendance.

Graph G-2

Key:
 VI=visually impaired people
 HI=hearing impaired people
 OI=people with other impairments



- by lengthening the screen time for caption frames the whole pace of the film was easier and more accessible
- the longer screen time improved access for people with some residual vision
- the more comfortable pace increased accessibility for visually impaired people by a further 20%
- the introduction of the signer accounted for the 55% rise in accessibility by hearing impaired members

F The Launching of the Formby Lifeboat 1916

- a black and white silent film extract was screened to experiment with contrast levels using a *Magic Dave* vision mixer

F Appeal by the Mayor of Bolton 1942

- a second black and white sound film extract was screened to experiment with contrast levels. This film also generated comments regarding its sound track, which comprised mainly of direct speech to camera whereas some images showed action not referred to by the speech.

3.2.2 Summary of key points

- improvements in accessibility were made by adding an audio description
- people who rely on sign language can access a film more effectively when the sound track is signed
- caption frames which need reading or signing require sufficient screen time for this to be done - an important element in accessibility
- a verbal contextual introduction to the film is necessary - signed for those who require it
- blind pilot group members could not get full access to a film through audio description alone and suggested music or other sound effects might improve the experience
- the provision of *in-vision* captions (sub-titles) for sound films was identified for future investigation
- adding audio description to a film which already had a tightly scripted sound track was identified as particularly difficult

3.2.3 Observations

- the session had proved very positive as pilot group members had been able to gain varying degrees of access to films which were previously inaccessible
- a number of key issues had been identified during the session in respect of audio description, and the addition of on-screen captions and signing

SESSION THREE 30 March 1999

3.3 Objectives

- to investigate the accessibility of colour/sound films with high optical and sound standards - the first of this film type to be explored in terms of accessibility
- to focus through four sub-groups on some impairment-specific issues

3.3.1 Trials

- F The Changing Face of Salford Part 1 Life in the Slums 1968/9
- F Lancashire Coast 1955

- each film extract was screened in its original (un-modified) format to give a *baseline* position
- the pilot group discussed how accessible these films were and their comments were gathered

3.3.2 Summary of key points

- there was a need to address the anomaly between what was seen on-screen and the voiced commentary in one of the films - this commentary comprised of a carefully scripted narrative with a strong social/political message, at odds with the images accompanying it
- the addition of *in-vision* captions (sub-titles representing a spoken commentary) may help hearing impaired viewers to concentrate less on the original soundtrack and more on the visual content

3.3.3 Impairment-specific sub-groups

- the pilot group split into four sub-groups to identify issues relating to:

experiments using the *Magic Dave* vision-mixer and optical aids

The vision mixer altered contrast and brightness to try to help viewers pick out detail from the image. The optical aids consisted of adjustable monocular and binocular lenses either worn on their own or fitted to the user's own spectacles. There was mixed benefit in using the vision-mixer and optical aids with visually impaired people as no technical experimentation or optical device measurably increased accessibility (although individuals encountered improvements which were significant for them)

the use of an induction loop system to access sound material

This trial revealed that the NWFA's radio frequency loop systems (one in each of the two public viewing areas) could not be used simultaneously as this caused interference.

the needs of the deaf community

This discussion group comprised of members whose first language is BSL and revealed particular preferences with regard to signing and captions:

signing

- films should have a signed introduction
- if possible the signer should be recorded on video in advance. This image can then be incorporated *in-vision* as the film is screened. The signer should not be constantly visible, but faded in and out as required
- if in-vision signing is not possible the *live* signer should be positioned close to the screen and properly illuminated

captions

- captions should convey meaning as it will be understood by the deaf community i.e. not a literal transcription of what is being said in the commentary, but an abridged version which can be quickly *scanned*
- captions should focus on adding necessary information which the deaf person is not able to gain from other aspects of the film

- captions should be white lettering on a black (or dark) background

the use of atmospheric music and/or sound effects to enhance accessibility

This trial revealed that, in terms of the margin for suggestion which sounds can evoke, there is a difference between:

- those blind people who have been blind from birth or from an early age
- those blind people who have lost their sight following a period of their life when they were able to see

3.3.4 Observations

- access to a film for visually impaired and hearing impaired people is not a single issue and therefore no single intervention will provide simultaneous, fully satisfactory access to mixed audiences
- the consensus emerged that accessibility is built up *layer by layer*. This can be achieved if extracts are shown more than once with different interventions provided on an impairment-specific basis

SESSION FOUR 27 April 1999

3.4 Objectives

- to evaluate five different versions of the same film extract incorporating interventions suggested by the pilot group in previous sessions, specifically:
 - audio description
 - signing in-vision
 - captions in-vision
 these interventions would be trialled separately and in different combinations
- to prepare for the next phase of the project (testing options with new audiences of visually impaired and hearing impaired people) by identifying those interventions which appeared to be most effective in increasing accessibility

3.4.1 Trials

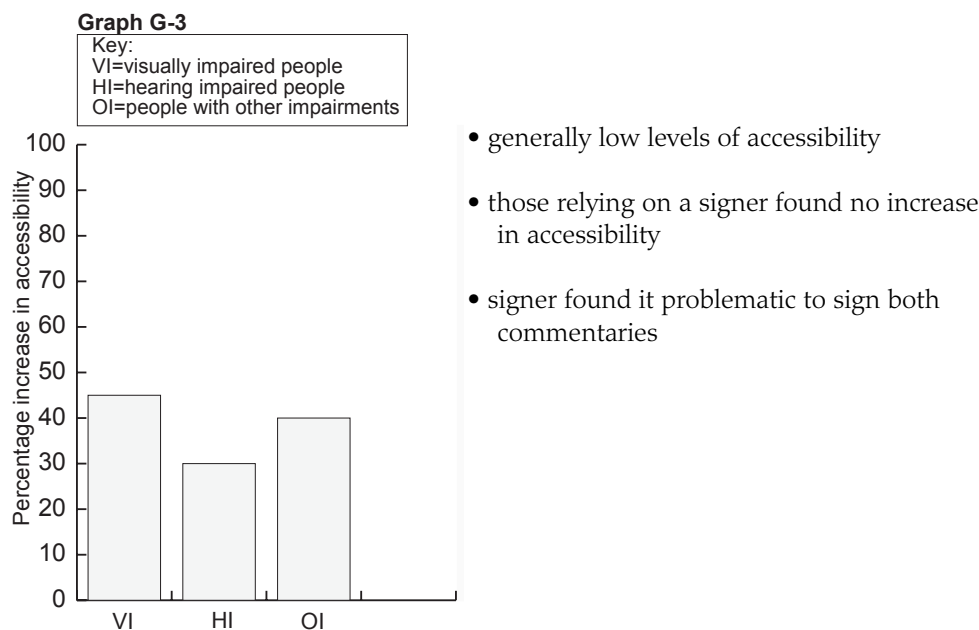
F The Changing Face of Salford Part 1 Life in the Slums 1968/9

When used in the previous session, this film had raised issues of accessibility which the project personnel had not previously considered, but which the pilot group felt needed to be tackled. A highly stylised film with a *political* message, the moving image and commentary are often at odds. This anomaly creates the film's *tension* in making a social/political statement. It was this tension which raised accessibility issues.

- The original (un-modified) version was screened first to establish a baseline for evaluation

Version 1 - original sound track with an abridged audio description being 'squeezed' into the gaps of the original voiced commentary. Both commentaries were signed with the signer standing to one side of the screen.

This particular option was prepared in order to meet the pilot group's desire not to lose the *authenticity* of the original sound track as they believed this to be a powerful component of the film

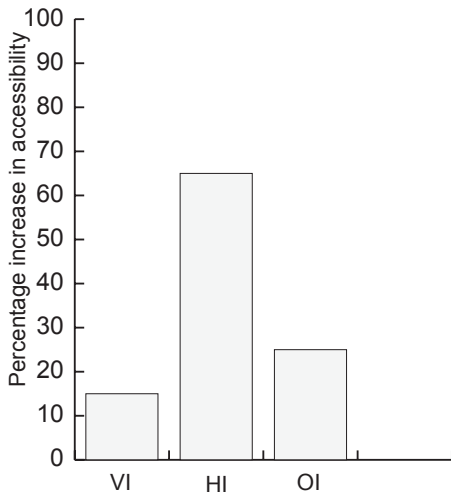


Version 2 - removal of the original sound track and a full audio description sound track added. This was signed with the signer standing to one side to the screen.

This version was trialled to see how full audio description and the absence of the original sound track (which had been identified as a strong element of the film) would affect the evaluation of accessibility.

Graph G-4

Key:
 VI=visually impaired people
 HI=hearing impaired people
 OI=people with other impairments



- losing the original 'atmosphere' of the film's sound track was regarded as a loss of a strong element of the film - this accounted for the drop in score by visually impaired people
- hearing impaired people scored this version nearly 40% higher because in signing only one commentary the result was much more coherent

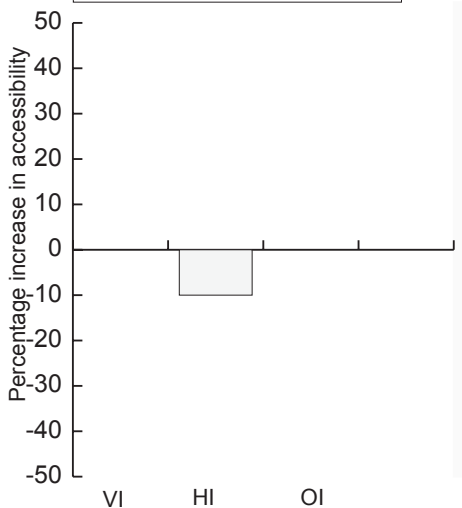
Version 3 - retention of the original sound track and addition of in-vision captions. Text for the captions had been written by pilot group members with the deaf community in mind (i.e. not a literal transcription of the original commentary). They also made reference to the social/political tension in the film. The screening was not signed.

For hearing impaired members of the group this version could be accessed through:

- original sound with captions (via the induction loop)
- captions only (by deaf people who were a small percentage of the pilot group)

Graph G-5

Key:
 VI=visually impaired people
 HI=hearing impaired people
 OI=people with other impairments

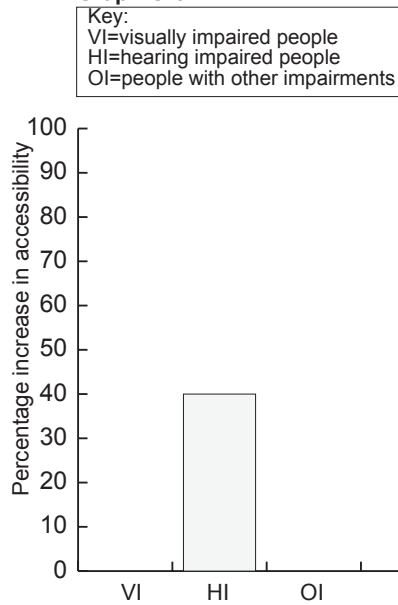


- those using the induction loop disliked the captions as they were too selective
- because the number of deaf people was small compared to the total number of hearing impaired people in the group this showed a negative score

Version 4 - original sound track with addition of in-vision signing. The signer had been pre-recorded on videotape and this image was superimposed in a rectangular frame at the bottom right of the screen, with the image of the signer faded in/out as required by the commentary. The signer made reference to the social/political tension within the film during a signed introduction, then interpreted the actual commentary of the film.

This was the first attempt to provide in-vision signing in the ways suggested by the deaf members of the pilot group.

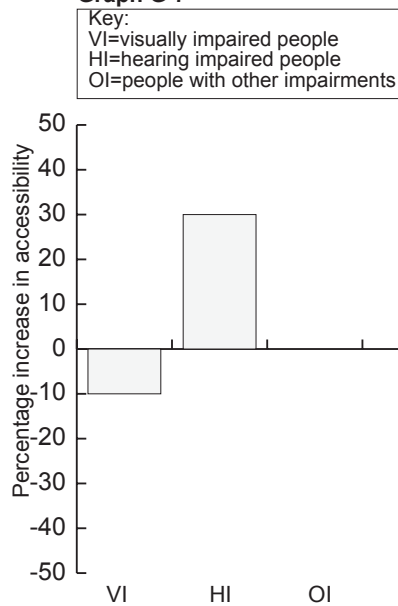
Graph G-6



- the introduction to the film was a crucial element requiring signing
- the provision of the in-vision signer increased accessibility for hearing impaired people significantly
- the appearance of the signer in-vision did not lessen the experience for others

Version 5 - original sound track with addition of both in-vision signing and captions
 Based on the comments from previous sessions, that accessibility could possibly be built in layers of information, this version of the film extract contained multiple interventions.

Graph G-7



- for some hearing impaired people, captions and signing in-vision together allows them time to rest from the induction loop
- those with residual vision found there was too much happening on the screen leading to information overload, hence the low score

3.4.2 Summary of key points

- the co-existence of dual spoken commentaries on a film was counter-productive to accessibility
- signing dual spoken commentaries was both problematic for the signer and confusing for hearing impaired users
- although audio description improves accessibility, the loss of the original sound track was felt to be a *high price* to pay for it
- important differences of opinion were raised by hearing-aid users about interventions made at the suggestion of deaf pilot group members; the captions were too selective and they would have preferred a literal representation of the spoken word, with the signer appearing in-vision throughout
- highly stylised films which contain promotional or propaganda messages can be made more accessible to visually impaired and hearing impaired people
- accessibility was built in layers of information which require the film to be shown more than once with suitable interventions made on an impairment specific basis
- interventions should be added based on the communication needs of the audience

3.4.3 Preparing to test with new audiences

The pilot group's own needs and preferences had been used to arrive at a list of options for accessibility. New audiences had no knowledge of the project and therefore would be able to judge the accessibility of the films from a fresh perspective. The evaluation by new audience members would be used to refine the existing list of options by confirming, opposing, modifying or adding to the pilot group's suggestions.

3.4.4 Options for testing

SILENT FILMS

visually impaired pilot group members recommended that

- the addition of an audio description sound track greatly enhances the accessibility of silent films
- silent films should not be shown to visually impaired audiences without this intervention
- silent films should be presented with a verbal contextual introduction which could be given by the audio describer or the person presenting the film

SOUND FILMS

hearing impaired pilot group members recommended that*

- if captions are added to the screened image *in-vision* these should be literal transcriptions of the words spoken in the film's commentary
- *in-vision* signing (the addition on screen of a pre-recorded video image of a BSL signer) is the best option for making sound films accessible to those who use sign language as their first language
- the image of the signer should remain on screen for the whole film
- if *in-vision* signing and captions are used together, they need to communicate the same story

* because significant differences in opinion existed regarding captions and signing it was decided to experiment with literal captions and constant *in-vision* signing with the new audiences

visually impaired pilot group members recommended that

- the way to improve accessibility to sound films is to replace the original commentary with an audio description
- in order to do this without losing any of the film's authenticity (which can happen when removing a film's original sound), the film should be repeated; first with the original sound track, and again with the audio description replacing the original track
- attempts to create a single, combined soundtrack which squeezes audio description into the gaps in the original sound track was counter-productive to accessibility

GENERAL POINTS

all pilot group members agreed that

- films, whether silent or sound, benefit from a full spoken and/or signed contextual introduction - this prior information enables the audience to concentrate on accessing the film's content as soon as the film starts, without having to contextualise it as well
- if a film has a particularly strong promotional message or standpoint, this should be made explicit in the film's introduction - this is because often the image on screen will not match, or will be at odds with, any spoken commentary
- accessibility is built up in layers - trying to incorporate several measures into the same version causes *information overload*
- where several versions of a film have been prepared to meet audience needs (i.e. containing different *interventions*) these should be shown in sequence

Section 4 TESTING WITH NEW AUDIENCES

4.1 Objectives

- to evaluate new audiences' responses to the pilot group's list of accessibility options
- to gather background information about the audiences's experiences of watching television and going to the cinema
- to refine the pilot group's list of accessibility options

4.2 Assembling new audience groups

Working with pilot group members and local disability organisations (Henshaw's Society for the Blind and the Manchester Deaf Centre), two separate new audiences were assembled - the first consisting of visually impaired and blind people, the second of hearing impaired and deaf people. Although the new audiences were playing an active part in the project, it was important to set the screening in the context of a social occasion for the group, representative of *real* public access. Participants' partners/companions also attended.

4.3 The *ice-breaker*

First the aims of the project were outlined, as well as the role the new audiences were to play. Using a prompt sheet the *ice-breaker* allowed the project personnel to collect details about:

- audience member's individual impairments so that comparisons could be made with the pilot group
- the audiences' cinema-going and television-viewing habits so that their experience at NWFA could be related to their experience of watching other moving images

4.4 Testing with visually impaired audience

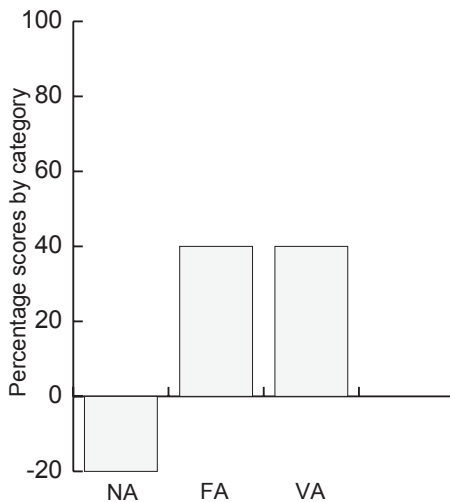
4.4.1 Audio description of silent film

F Stockport Market 1910

This extract from a black and white, silent film had been prepared with an audio description sound track added. It had been clear from the *ice-breaker* exercise that this technique was not one which the audience had come across previously. Therefore the film, and its *intervention*, needed careful introduction.

Graph G-8

Key:
 NA = not accessible
 FA = fairly accessible
 VA = very accessible



- nobody in the new audience had previous experience of audio description or knew what it was
- blind people found the audio description contained too much information
- the majority found the audio description gave them an insight into the film which they would not otherwise have had

4.4.2 Audio description of sound film

F Heart of Britain 1940

An extract from this black and white, sound film was shown in two versions:

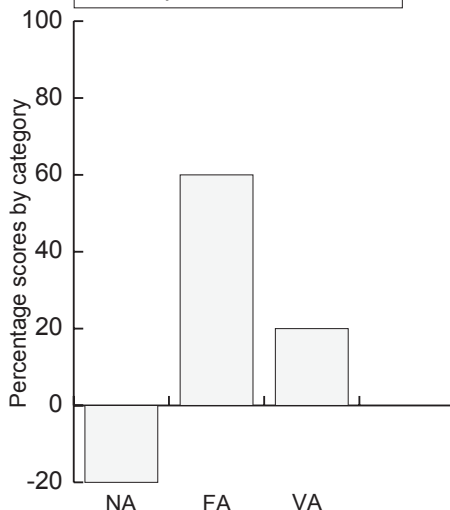
- original version with no modifications
- original sound track removed and audio description track added in its place

This tested whether the new audience would find that accessibility could be increased by showing more than one version of a film.

Version 1

Graph G-9

Key:
 NA = not accessible
 FA = fairly accessible
 VA = very accessible

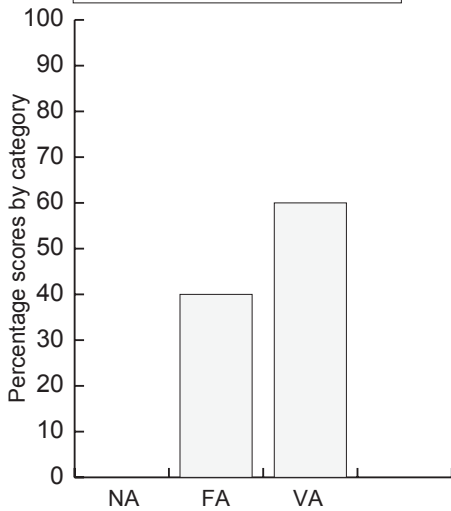


- the positive response to this film was largely due to the fact that it provoked many memories for the audience (the film's spoken script is particularly 'poetic' and propagandist and could be likened to a radio broadcaster)

Version 2

Graph G-10

Key:
 NA = not accessible
 FA = fairly accessible
 VA = very accessible



- the audio description increased access to this film significantly
- the audience had quickly adapted to the technique and commented how much more detail it provided
- the audience appreciated being able to experience the film more than once

F The Changing Face of Salford Part 1 Life in the Slums 1968/69

An extract from this colour, sound film was shown in two versions - this time reversing the previous sequence

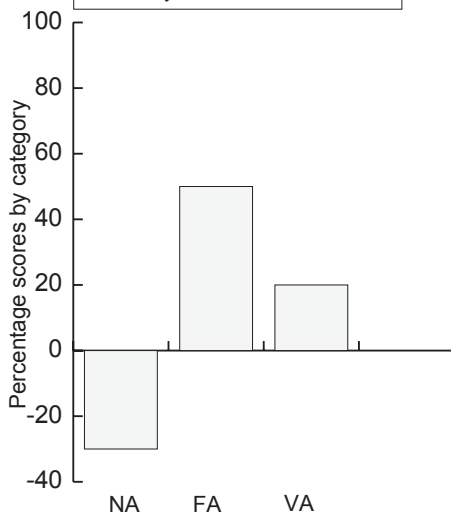
- original sound track removed and audio description track added in its place
- original version

This was designed to test how the new audience would respond to having the modified version shown *before* the original (with its *authenticity* intact). This was important in the light of the views of the pilot group that the original sound track was a key element in accessing and enjoying this film.

Version 1

Graph G-11

Key:
 NA = not accessible
 FA = fairly accessible
 VA = very accessible

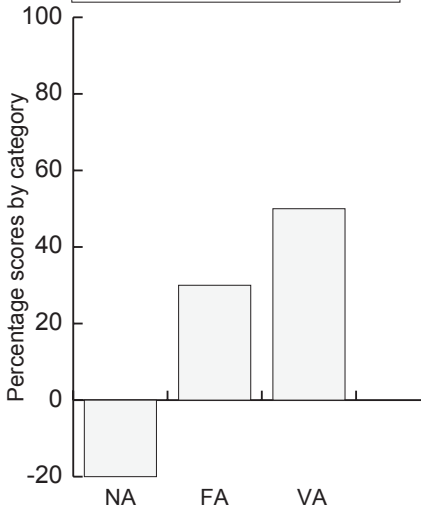


- a number felt the colour images were less accessible than black and white ones
- whilst the quality of the audio description was appreciated, it did not appear to have added to the film's accessibility

Version 2

Graph G-12

Key:
 NA = not accessible
 FA = fairly accessible
 VA = very accessible



- people agreed with the pilot group that the original sound track made the film more interesting
- from the comments it appeared to make sense to screen the un-modified version of the film first as this offered the best platform for the addition of more 'layers'

4.5 Summary of key points from testing with visually impaired new audience

- audio description as a technique is not widely familiar to visually impaired people and therefore requires explanation
- overall the group agreed that black and white moving images are more accessible than colour
- when a film is screened more than once access to the film increases as layers of information are built up and held in the memory
- there was evidence that when a sound film is shown in two versions - one original and one with audio description - the order of screening (original first) is important in order to maximise the effectiveness of the layering of information

4.6 Observations

- as well as demonstrating accord with the preferred options of the pilot group, a degree of new understanding had been gained by testing with the new audience, particularly with regard to their preference for black and white film, and their lack of awareness of audio description
- the group adapted extremely readily to the technique of audio description as it helped them to gain access to the moving images in a new way
- members of the group remarked that their visit to the Archive, and the test screenings, had been equally enjoyable as a social occasion as it had been to gain access to the films

4.7 Testing with hearing impaired new audience

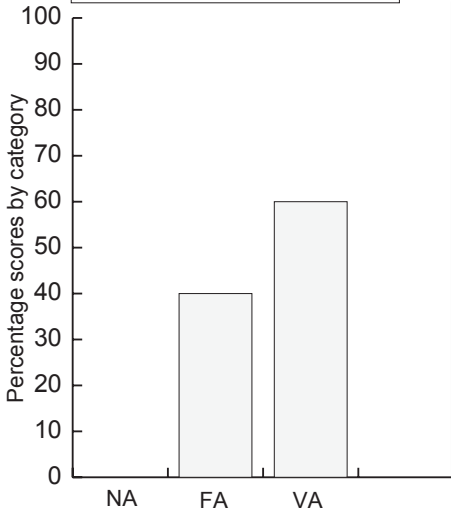
4.7.1 Silent film

F Stockport Market 1910

An extract from this black & white film was shown to measure the group’s responses to a silent film.

Graph G-13

Key:
 NA = not accessible
 FA = fairly accessible
 VA = very accessible



- no accessibility problems were encountered

4.7.2 Sound film with literal captions in-vision

4.7.3 Sound film with literal captions and signer in-vision

F Heart of Britain 1940

An extract from this black and white, sound film was shown in two versions:

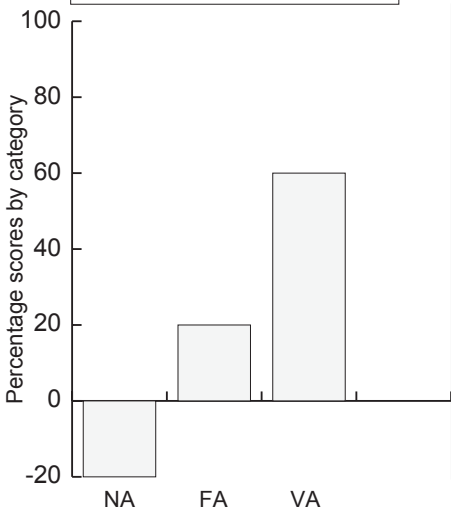
- original sound track with a literal transcription of the commentary provided as captions on the screen
- as version (i) with an *in-vision* signer added

This exercise provided an opportunity for several of the pilot group’s suggestions to be tested. It would not only test the audience’s re-action to captions, but also the fact that the caption text represented word-for-word what the commentary said. In the second version, the addition of a signer on the screen together with captions would explore whether all the interventions at once would affect accessibility.

Version 1

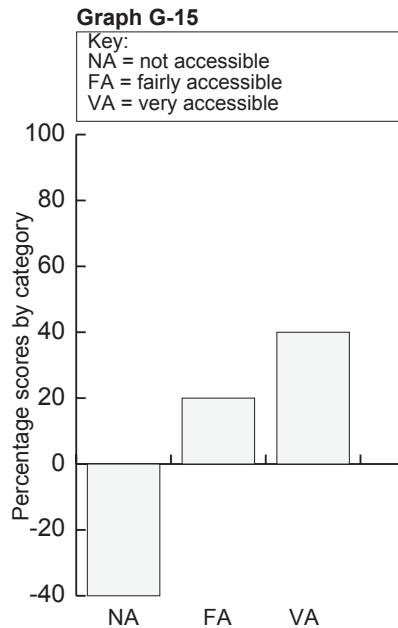
Graph G-14

Key:
 NA = not accessible
 FA = fairly accessible
 VA = very accessible



- differences in response related to how members prefer to communicate
- captions provided the only access for deaf people and were felt to be inadequate as this is not their primary form of communication (NA and FA scorers)
- induction loop users found the sound track clear and used captions to check certain words (VA scorers)

Version 2



- having both captions and a signer in-vision provided too much information
- the signer was a minor distraction for induction loop users
- sign language users appreciated the in-vision signer but felt that the use of captions at the same time decreased accessibility
- coloured text captions were suggested as beneficial in denoting spoken dialogue

4.7.4 Sound film with signer in-vision

4.7.5 Sound film with literal captions and signer in-vision

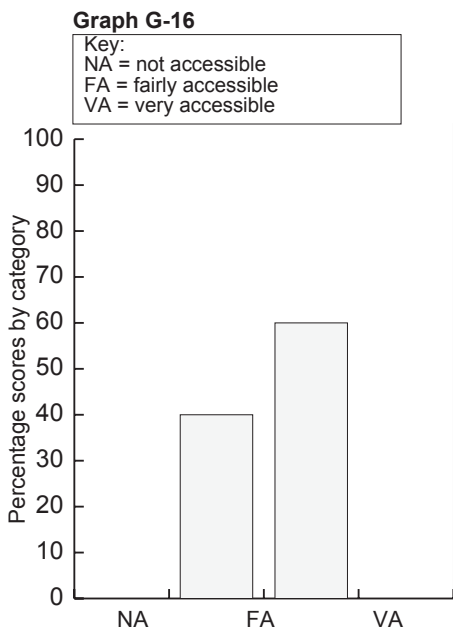
F The Changing Face of Salford Part 1 Life in the Slums 1968/69

Again, an extract was shown in two versions:

- original film with *in-vision* signer added
- as version (i) with literal transcription captions added on screen

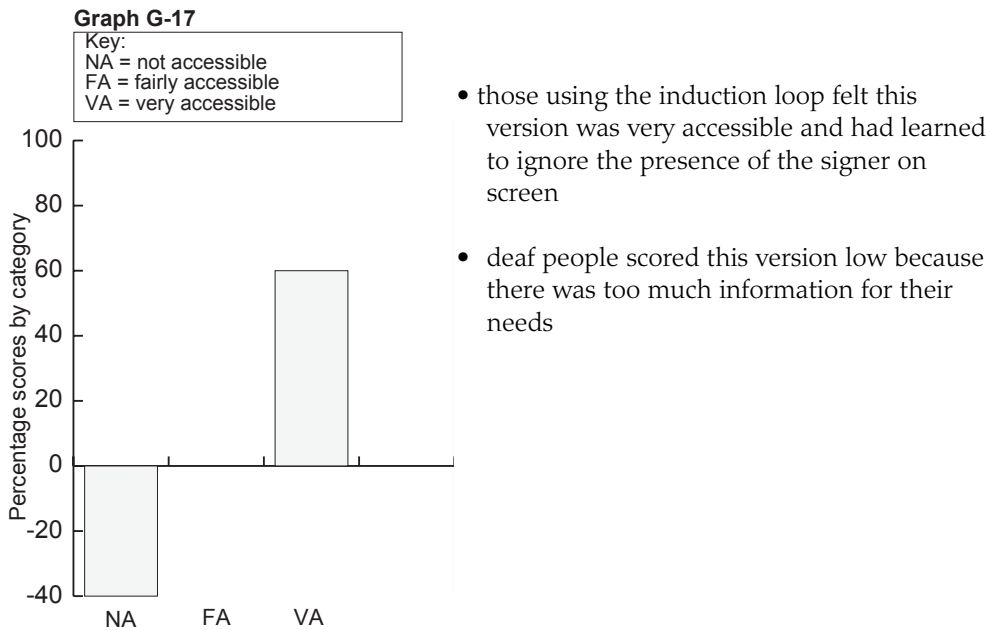
This would test whether the audience felt that the signer alone improved accessibility, and whether this intervention was preferable to captioning on screen. Again, the combination of the two interventions was also assessed.

Version 1



- the original sound track met the needs of induction loop users
- in-vision signing met the needs of deaf people
- deaf people commented that the position of the in-vision signer could be improved

Version 2



4.8 Summary of key points from testing with hearing impaired audience

- the inclusion of an *in-vision* signer increases accessibility for sign language users
- a preference was expressed for the signer to be framed in an oval approximately half-way up the screen as deaf people tend to use their peripheral vision to gain access to the signed interpretation
- it was felt that the signer should fade in/out of the picture as required rather than be constantly in vision. The fact that there is no signing should indicate to hearing impaired people that there is nothing audible which requires signing.
- a preference was expressed for the signer to match the gender of the person speaking the commentary
- the appearance of captions and signer on screen at the same time slightly diminishes the accessibility of the film for some hearing impaired people
- captions should incorporate colours to denote when direct speech is taking place
- *soundscape* captions (e.g. 'dramatic music is playing') should be used where appropriate in parts of a film where there is no spoken commentary

4.9 Observations

- the new audience had a larger number of deaf people than did the pilot group. The first language of these individuals was British Sign Language (BSL).
- the make-up of the new audience allowed a fresh perspective which added valuable evidence to the project. This resulted in new suggestions which were made to modify and enhance the pilot group's original list of options for deaf people, particularly in terms of *in-vision* signing and the use of captions
- during the pilot group sessions a version of *The Changing Face of Salford* had been prepared using abridged captions written with the deaf community in mind. This version had been rejected in favour of using literal transcriptions. Following comments made by the sign language users in the new audience, they were invited to view this abridged version after which they commented that they preferred it to the one with the literal translations.
- when making moving images available to individuals and groups it is essential to research the communication needs and preferences of the audience

4.10 Refined list of options for accessibility

Driven by the pilot group and with the fresh perspective of new audiences, the project had arrived at a pivotal point where a much clearer picture was beginning to emerge of people's priorities, needs and preferences when accessing moving images.

Initial suggestions had been validated and improved upon, new viewpoints had illuminated aspects not previously covered and a new, refined list of options for accessibility had been revealed.

Initial considerations for custodians of moving image collections include the following:

Attitudinal considerations

- avoid making assumptions relating to an individual's impairments and the extent to which s/he may derive benefits from moving images - for example, our research shows that visually impaired people gain pleasure from moving images both as an individual and as part of a shared audience experience and their enthusiasm for the material can be as strong as a sighted person's.
- be responsive to user needs so that opportunities for access and user choice can be fully exploited. This includes investigating audience communication needs in advance.
- recognise that, in common with all our audiences, usage will range from individual research and group (social) viewings
- bear in mind that visually impaired and blind people's capacity to *visualise* will depend on whether their vision became impaired after a period in their life when they were able to see fairly well

Practical steps

- provide the individual or group with advance information about the venue, its facilities and the screening prior to the event
- in preparing group viewings, select material carefully on the basis of user needs and preferences (see *Audience recommendations* below)
- provide full contextual introductions to each film - spoken, captioned/signed as necessary
- allow for the same film to be shown more than once, so that appreciation can be built up. This will be achieved through different interpretative and technical interventions
- describe specialist interventions (e.g. audio description) to the audience as these may not be familiar techniques

Audience recommendations

User preferences from visually impaired audience members:

- black and white film is easier to access than colour film
- silent films benefit from audio description
- where a film contains spoken commentary, this should be shown in its original (un-modified) format before a version with interventions e.g. audio described
- audio description can facilitate access in place of the original soundtrack

For hearing impaired audiences a range of approaches can be adopted to meet particular communication needs.

User preferences from hearing-aid users:

- induction loop systems should be checked by hearing-aid users for proper calibration and to detect any interference
- *in-vision* captions should be a literal transcript of any spoken commentary and appear in a sans serif type, white on a dark background with spoken dialogue in a different colour or italicised

User preferences from sign language users:

- a signer may be video-recorded in advance and this image added *in-vision*, preferably in an oval or circular frame positioned about halfway up the side of the screen
- if a signer is not available, *in-vision* captions should be abridged rather than literal if the audience is primarily made up of sign language users

In all cases:

- signing and captioning should tell 'the same story'. These should be introduced in layered stages through multiple screenings - if used all at once this can cause information overload

So that consultation with the pilot group was carried through to completion, the new audiences' responses were presented back to the pilot group so that they could see where their original views were shared, where there were differences in opinion and where new ideas had been added.

4.11 Feedback to the pilot group

As a user-led project, and a fully consultative one, it was essential to feed back the outcomes of the testing with new audiences to the pilot group members.

This was done at a final session where examples of material prepared for each audience were screened, and reports made on the main issues raised and the key lessons learned. The refined list of options was presented for consideration by the group. The group was encouraged by having their views supported via secondary testing and through discussion acknowledged that, due to differences in people's communication needs, not all individual preferences would be shared.

Far from being a farewell meeting, the NWFA emphasised its commitment to continue to develop inclusive access opportunities with disabled people, and extended an invitation (accepted by all pilot group members) to carry their active involvement through into the next phase of the Archive's work.

Section 5 NEXT STEPS

The North West Film Archive is committed to building on the success of its ground-breaking research to identify the criteria which people with sensory impairments believe are important when accessing moving images.

It is important that action research now extends to engage with wider audiences, giving groups and individuals across the region the chance to explore new possibilities with us. With a good initial understanding of user requirements and how these can be married to technological capabilities, the NWFA is ready to develop the next phase of this exciting and rewarding work.

This subsequent development phase will undertake action research with a focus group of disabled people in order to:

- find new audiences of visually and/or hearing impaired people in the North West
- test and refine applications for accessing the collection, meeting user needs and preferences effectively

Opportunities to be explored include:

- individuals and groups enjoying the collection at the Archive's premises
- developing access materials which people can use in their own home
- collaborating with other local venues to provide screenings

Techniques to aid accessibility will include audio-description, the addition of captions to screened moving images and the use of a signer both 'live' and filmed for appearance in-vision. The NWFA will use the outcomes of the action research to design and deliver relevant, meaningful access services so that all members of the region's public can enjoy and learn from this collection.

The NWFA intends to incorporate the resultant new services within its mainstream provision and core access programme. The Archive will then be in a position to raise awareness of NWFA facilities and services with the aim of increasing public access to the collection by individuals from the north west.

APPENDIX I EQUIPMENT USED

Technological capabilities

In response to demand, the NWFA largely provides access to its collection via videotape. The Archive has in-house transfer and copying facilities enabling it to produce high quality videotape copies of films in its care, up to and including broadcast standard digital Beta SP. Thanks to the Heritage Lottery Fund, and with advice from professional audio visual suppliers, the Archive was able to use the latest technology available at the time during this research project (*see table*).

The NWFA's experience has demonstrated that considerable scope exists for public film archive colleagues to enable improved access to moving images. It is hoped that others will investigate options within their own priorities and resources - from low-tech, practical and attitudinal considerations up to sophisticated, state-of-the-art interventions - and that new understanding will be shared within the public film archive community. The NWFA is committed to the research and development of access opportunities and will continue to learn as new technological advances are made e.g. digital versatile disc.

Name and Make	Function	Application	Outcome
Sony DVW A500 Digital Betacam player/recorder video recorder (x2)	To edit/record and playback video signals digitally.	To capture multi-generational matting or windows for additional sources in addition to the film image, such as 'signer in vision'. <i>See Magic Dave below.</i>	For the visual aspect of this project it has been essential to have a system of minimal or no losses at the various copying stages involved. This digital video medium provides a system of no-losses and is therefore ideal.
Snell & Wilcox NRS50 Analogue to Digital converter (x2)	To convert all popular formats of film and analogue videotape signals to uncompressed digital video for recording on the Digital Betacam (above).	To enable all NWFA moving image sources to become available for recording.	Instrumental in creation of a lossless video system and the bridge between analogue and digital.
Snell & Wilcox Transphix	To enable computer graphics to be converted to a digital video signal.	To transfer text for captions from Apple Macintosh G3.	This represents a significant breakthrough in computer to video interfacing.
Snell & Wilcox <i>Magic Dave</i> vision mixer	Digital Switcher and Mixer which has four digital video inputs. Has the ability to perform outstanding special effects.	To create mattes and mixes of picture sources supplied in uncompressed digital video from the Snell & Wilcox NRS50 and the Transphix. For multi-generational dubbing of overlays of signer, captions and picture.	Once in the digital domain if the video signal remains uncompressed then multiple (and different) generations of the original can be created without loss in quality. 10 Bit (instead of 8) SDI input/output capability is essential for this.
Snell & Wilcox KUDOS IQBADC analogue and digital converter for sound	To enable analogue sources such as film and video sound and human voice to be recorded digitally.	To convert various soundtracks and sound overlays/inserts via audio description to standard sound interface for Digital Betacam recording.	Analogue copying would be detrimental to presentation of any kind eg PA, loop system etc. Therefore analogue to digital conversion in any video system is a basic requirement if copying is to be undertaken.

Name and Make	Function	Application	Outcome
Sony KPS41S3 television monitor	Display of large (41") video and film images using rear projection.	For visually impaired users who need a larger image.	Far superior models have arrived on the market since the start of this project.
Panasonic PT-L595E video projector	Data and video projector.	For all users to view high quality images from video and computer sources.	Technologically, this area of the market has never stood still. Resolution increases and the projectors still shrink in size.
Snell & Wilcox Supervisor	Converts video signals to data signal for video projection. Drastically reduces the pixellation effect which is shown up through conventional video projection.	Used with the video projector mentioned above – gives the appearance of increased resolution and provides a very stable moving image.	Can perform many other tasks which have not been used so far in this project, such as image size selective enlargement.
Panasonic MX12 AV mixer	A basic video mixer featuring switching, mixing, keying and audio mixing capabilities.	Used primarily for switching between video/film sources. Also used to enhance contrast and increase colour rendition superficially.	When used with a very high quality sourced videotape this basic mixer is good enough for small room displays i.e. non-cinematic. It has proven to be fairly transparent.
Newtech International Sound and Loop System Series 200 amplifier and accessories	Provides RF (radio frequency) audio signal for loop system users converted from film, video and microphone inputs.	Used during sessions for Hearing Aid T-switching or with portable headset/handheld units.	Effective when used in a single viewing area - can pick up interference from additional system if active in the same building.
Sherwood R925 A/V surround sound receiver	Amplifies audio signals for film and video presentation.	Delivers its signal through five channels, at the end of which are five carefully placed and phased loudspeaker units. These are set into wooden wall panels.	Although designed for surround sound in home cinema use, the five channels of sound have other potential uses (i.e. the availability of alternate switchable sound tracks).
Sony MDS-JE510 minidisc recording deck	Plays and records digitally, use of compression/algorithm to create high quality sound in small package on maximum of two and a half hours recording space per disc.	For recording of session proceedings and of audio description sound tracks.	Highly flexible and versatile as AV recording tool. Low cost.

APPENDIX II FILM INFORMATION

STOCKPORT MARKET 1910

Film no: 17
b/w silent
Master format: 35mm
Producer: Unknown
Running time: 1m 56sc

Everyday scenes in Stockport market, showing the busy stalls and thoroughfare. Ends with a brief speeded up and reversed sequence.

ANYTOWN 1936

Film no: 265
b/w sound
Master format: 35mm
Producer: LMS/ British Transport Films
Running time: 17m 36sc

A promotional film extolling the virtues of the transport system. Anytown (actually Rochdale) depends upon transport for food trade and other supplies - scenes of production, market, movement of goods etc; for business and leisure travel - Anytown goes on holiday to the coast.

SCHOOL LIFE IN WARTIME 1942

Film no: 911
b/w & colour silent
Master format: 16mm
Producer: Arthur Hulme, Headmaster, Elworth School
Running time: 7m 38sc

This amateur film was made over a period of several months by the talented Headmaster of Elworth School in South Cheshire, to illustrate school life during the Second World War. It shows the children donning gas masks and improving their skill in reaching the air-raid shelters in record time and disciplined order; knitting blanket squares; "digging for victory" in the school garden; practising first-aid; collecting waste paper and books; "saving for victory" by counting their National Saving Stamps.

THE VOICE OF A REGION 1970-72

Film no: 2606
colour sound
Master format: 16mm
Producer: Costain Film Unit
Running time: 14m 9sc

Film about the Manchester Evening News, which had recently located to a new building on Deansgate. The film highlights Manchester's international and historical importance - featuring shots of the John Rylands Library, Trafford Park, the Manchester Ship Canal, Manchester Airport, Jodrell Bank and Manchester University.

APPEAL BY THE MAYOR OF BOLTON 1942

Film no: 16
b/w sound
Master format: 35mm
Producer: Unknown
Running time: 1m 42sc

Alderman Alfred Booth appeals on behalf of Russia; shots of Russia, soldiers in battle, tanks etc. Finishes with a shot of the Mayor telling the people of Bolton what they can do to help.

THE LAUNCHING OF FORMBY LIFEBOAT 1916

Film no: 58
b/w silent
Master format: 35mm
Producer: Unknown
Running time: 1m 42sc

The lifeboat, the John and Henrietta, is towed out across the beach to the water's edge by a horse-drawn carriage. Shots as it is launched and the crew start to row it out to sea.

THE CHANGING FACE OF SALFORD PART 1, LIFE IN THE SLUMS 1968/69

Film no: 430
colour sound
Master format: 16mm
Producer: Mike Goodger, University of Salford
Running time: 32m

Shots of the streets, factories, houses, amenities, and people of Ordsall around the time of redevelopment. Daily chores; children playing; yards, alleys and dogs; a fair; awful housing conditions (interiors); bathtime in front of the gas fire for four children; night time; a bonfire and the fire brigade; a pub and chip shop.

LANCASHIRE COAST 1955

Film no: 164
colour sound
Master format: 16mm
Producer: British Transport Films
Running time: 14m 40sc

A promotional film showing the delights of holidaying on the Lancashire coast. Various towns are featured and activities in each - Blackpool and Southport beaches, and a bathing beauty contest at the swimming pool at Morecambe; Southport Flower Show and an equestrian event; a quiet beach at Grange over Sands contrasted with Blackpool's busy one; turf cutting at Pilling Marshes; Arthur Askey playing golf and posters advertising entertainments and Blackpool Tower Circus; Blackpool's Golden Mile, the Tower, dancing etc.; fishing near Lancaster and trawlers leaving Fleetwood; an amphibious vehicle on the beach at Southport; sand yachting at Lytham St. Annes; and finally Blackpool Pleasure Beach and illuminations.

HEART OF BRITAIN 1940

Film no: 60
b/w sound
Master format: 35mm
Producer: GPO Crown Film Unit
Running time: 8m 48sc

A British propaganda film to show how Britain is keeping going despite the war. Sequences show the Sheffield steel works, Lancashire mills, ARP work, the Halle Orchestra, bomb damage in Coventry, the work of the WVS, the Huddersfield Choir and aircraft building.

