## HEA/JISC Open Educational Resources case study: pedagogical development from OER practice

Film and audio-visual media OER: the case of SP-ARK, the Sally Potter film archive Dr Sarah Atkinson University of Brighton and SCORE, The Open University

-----





## Introduction

SP-ARK<sup>1</sup> is an interactive online project based on the multi-media archive of filmmaker Sally Potter. Potters work features across the curriculum and syllabus of many university courses both in the UK and abroad within the film, media and literature subject areas. Potter herself is a key figure of study within these disciplines (see Appendix 1 for a list of her films; see also Mayer (2008, 2009) and Fowler (2009)).

This case study frames SP-ARK and the materials that it encompasses as Open Educational Resources (OER), even though it was not conceived under traditional OER frameworks and it did not originate from within a higher education institution. It is an open and freely accessible resource and the creators; Sally Potter's own production company Adventure Pictures (AP) have actively engaged with the higher education community since the projects conception in 2007 through to its later release.

This report presents a consolidation of the materials, research and narratives that have documented the development and use of SP-ARK since its conception. These materials have been generated through numerous sources. These include AP and the many academics, researchers and higher education institutions that have utilised SP-ARK. Much of this documentation is dispersed across locations, both physical and digital, online and offline, and also across media – printed, digital and video (see Appendix 2 for a list of contextual videos about SP-ARK available online). This case study provides an appropriate vehicle for the cohesive presentation of this work. The case study then goes on to extend the work of SP-ARK, its documentation and research under the topic of OER and teaching quality.

The case study aims to test and report upon the educational potential of SP-ARK within the fields of media, film theory and practice in higher education. As well as compiling and consolidating the previously generated findings of user experimentations from participating higher education institutions, the case study has also enabled the opportunity to work alongside students and staff at five universities. This exploration and evaluation of the potential of the archive as a teaching, learning and assessment device has also facilitated the collaborative generation, development and sharing of Open Educational Resources around the archive (see Appendix 3, which details the video OER that have been produced as a result of this project).

To summarise, the work of this case study project has been four-fold:

- to explore the pedagogic potential of SP-ARK as an Open Educational Resource within film and media curriculum;
- to stimulate pedagogic activity and OER generation around SP-ARK;
- to evaluate the impact upon teaching, learning and assessment practices within these disciplines;
- to expand upon and inform the future development of SP-ARK as an Open Educational Resource.

### Context

### 2.1 Audio-visual media archives as OER

Traditionally, the primary sources generated through the creative process of feature filmmaking are housed within specific physical locations that are not easily accessible and not always open to the public. In the UK, the national film repository is the British Film Institute (BFI), some of the materials are available to view online, but only those that are not restricted by copyright issues. The BFI are currently working on their latest BETA version of a searchable archive<sup>2</sup>. There are also a growing number of both subscription-based and open-access national broadcast archives online. These include Box Of Broadcasts (BOB)<sup>3</sup> a subscription-based off-air recording and video archive service delivered by the British Universities Film & Video Council (BUFVC)<sup>4</sup> in the UK, and EU Screen<sup>5</sup> and Europeana<sup>6</sup> in Europe. There are also the 12 public sector regional film archives across the UK. These house audio-visual assets such as newsreels, reports, documentary footage from television broadcasts alongside amateur footage of historical value. The equivalent archives within the fictional and dramatic realm of cinema are extremely limited, yet could be invaluable tools in the maintenance and preservation of cinematic and cultural heritage. As Gerhardt and Kaufman have noted "this disconnect – perhaps we call it an 'A/V gap' – is largely a function of attitudes and behaviours within teaching, production, and publishing. It is also an outcome of the paucity of quality audio-visual work now available for educators. As we note in our 2010 Film & Sound Think Tank film, *Knowledge Is...,*<sup>7</sup> despite the leading investments of JISC and others worldwide, only 5% of our audio-visual history is digitized and available to educators and the public online'' (2011, p. 3).

The recent film review undertaken by the Department of Media, Culture and Sport in the UK also supports this view. It concludes: "The percentage of material readily accessible by the public in National and Regional Archives remains very small in proportion to the size of the collections. Most of the film material held in archives around the UK is owned by rights-holders who understandably will only make their material available in a way that is consistent with their commercial interests" (Smith, 2012, p. 75). In addition to those archives listed above (BFI, BOB, EU Screen, Europeana, regional film archives), there are a very limited number of repositories that house the culturally rich resources of fictional filmmaking and cinema across the globe. In the UK, the only known openly accessible online version of such an archive is SP-ARK. Internationally, in Japan the entire archive of prolific Director Akira Kurosawa has been uploaded and is freely available to view, access and download online, but is only currently available in the Japanese language<sup>8</sup>. These exemplars are invaluable and enriching resources within film and cinema education, since in their exposure of all the materials related to a film production; photographs, video assist footage, casting recordings, scripts, storyboards and developmental paperwork, they reveal the often hidden creative practices of fictional filmmaking.

As Mayer contends in relation to SP-ARK; "It reflects the dailiness of labour involved in filmmaking as opposed to the heroic narrative portrayed in mainstream films" (2008, p. 201). Within educational contexts, the access to such primary resources facilitates the close textual analysis and in-depth examination of films; learning practices that could not be achieved without such access. Such resources also have the potential to provide unique and unprecedented sites for communication, collaboration and the establishment of both online and physical networks. As the DCMS report highlighted, it is the key issue of licensing that appears to be foreclosing the development of open access to film and cinema resources. Although this continues to be a problem, fortunately it is not so for the case of SP-ARK, since the copyright to all of the materials belongs to Sally Potter/AP, and they have chosen to allow access and use of the materials via a Creative Commons licensing model (more specifically the materials are made available through a BY-NC-ND<sup>9</sup> licence).

### 2.2 History of SP-ARK

Sally Potter was one of the first film directors to utilise the opportunities offered by blogging and online communication through message boards throughout the making of her film Yes (2004). Potter posted video poems and responses to events throughout the film's production, and at the time, was only one of a few film directors utilising this technology. The message boards enabled fans to communicate and to respond to Potter online. This approach exemplifies Potter's interest in nascent technologies to inform her filmmaking practices. This interest, coupled with the nature of AP (a small, independent production company) that could not respond to the many requests that they received for behind-the-scenes access to materials, provided the necessary impetus and motivation for the establishment of SP-ARK. At this time Potter's work was also being used more and more in academic circles so students were all joining the call to access Potter's extensive archive of storyboards, photos, casting videos, contracts, to name but a few of the materials. AP perceived the traditional archive model as rather old fashioned in regards to accessibility. It was clear from the online response to Yes that fans of Potter's work were also enthusiastic about the open and public exchange of ideas.

- <sup>3</sup> http://bobnational.net/
- <sup>4</sup> http://bufvc.ac.uk/
- <sup>5</sup> http://www.euscreen.eu/
- <sup>6</sup> http://www.europeana.eu/portal/
- <sup>7</sup>The film can be viewed here: http://www.youtube.com/watch?v=qMLf5mpifNc.
- <sup>8</sup> http://www.afc.ryukoku.ac.jp/Komon/kurosawa/index.html
- <sup>9</sup>This licence means that assets must be attributed, cannot be used for commercial purposes and cannot be altered, transformed or built upon: http://creativecommons.org/licenses/by-nc-nd/2.0/

<sup>&</sup>lt;sup>2</sup> http://www.wired.co.uk/news/archive/2011-10/14/bfi-search-film-archives

The concept of SP-ARK was publicly launched in July 2007 at the 'Society for Cinema and Media Studies' (SCMS) conference in Chicago. In August 2007 the SP-ARK team ran a usability workshop in conjunction with The Screen School at Goldsmiths College. Using six different versions of the first page of Sally Potter's *Orlando* script from various stages of her adaptation process, students trialed an offline, paper version of the 'Pathway'<sup>10</sup> concept (see Appendix 2 for details of the workshop video). Also in August 2007 SP-ARK was presented at the Open Space session, part of Open Knowledge I.0 the first in a series to be hosted by the Open Knowledge Foundation. It was here that the main impetus of SP-ARK as an open learning tool was established, rather than it being used as a vehicle to redistribute assets for secondary creative use. It was envisioned that all user content would be made available through Creative Commons (CC) or equivalent licences. The first iteration of SP-ARK was developed in November 2007 in collaboration with Goldsmiths College. On the virtual side, Professor Michael Casey and database expert Adrian Evans advised on the digital management of the 'assets' and Martins Skujins a London-based web designer created the user specifications to develop SP-ARK a unique interactive experience. Plans were made to trial the pilot in a number of undergraduate and graduate-level courses within the Media and Communications department at Goldsmiths, starting with a demo on 26th November 2007 for students and faculty members.

In December 2009 The British Film Institute presented a major retrospective of the films of Sally Potter, featuring screenings of her complete works plus exhibitions, performances and multi-media seminars. This included an online event, in which an audience at their Southbank cinema complex, together with a global audience online, collaborated in a (conference) workshop focusing on the film *Orlando*.

acaup Tollious - report	122 Isunaana process 37 ARX etablectionan Google Dess WAX ARTS-OLD Textm Nati CAL MAX 424 DESS 11 Texte Texas				
		(Tantus)	Rome - Chief - Henrid - Fog - contec		
ARCHEVE TO P TUPE II'	All Call The Board of the Second Seco	multi-media archive of	WTRODUCTOWY WORKS		
EEXMATTING Janah movel has natash taxahakintan satas. pad satas disa datas yasala data - ngawatasan yasala data - ngawatasan yasala data yasala data yasala data wadawitan data wa	A displayer and it area in a set of the set of the state of the state of the set of the	ve will be made available, , mask: and theatre. terms. If you would like to development of this			
57 juentings MC Mark back processing SOUCTION SO	The SP. 400 share at least leasting gives as given up of the Astron tester, brand of March 1996 and 19	hald patways of correctors			
TION					
ll ohanta Ny teolograpisa reporta tara negativa reporta terting schedule pinotography	TOP TABS				
the connection for connection used to use the second second formation of the second formation of the s					

Figure 1: The initial SP-ARK prototype (2007)

The prototype pictured in Figure 1 included access to 600 archival items from the film *Orlando*. The site was built and hosted in WordPress and facilitated the navigation of the archive via the pioneering 'pathways' feature, which meshed the principles and practices of blogging with archival browsing. This built on the idea of adding value and provenance to the materials by using social networking to enable users to talk to one another about what they discovered. Users were able to build their own unique 'pathway' through the archive's content as they explored a particular theme or process; they were able to save items that they have viewed. This type of archival browsing embedded into the infrastructure of the site is not achievable through the boxed (and un-signposted) presentation of materials within a traditional physical archive. This intuitive browsing is extended and supported by the fact that users are able to annotate each individual item in their pathway, with their own comments, observations and streams of thought, as well as to describe and save the pathway are displayed – see Figure 3) and to link to them, which offers a further level of user-led archival exploration. Users are also able to directly communicate with one another using the messaging tool. In previous research, Dr Charles Drazin from Queen Mary, University of London (QMUL) noted that "from a teacher's perspective what was great about the site was to be able easily to visit students' pathways and to see their thoughts take shape. It facilitated the provision of on-going feedback as students worked on their assignment in a way that is not feasible in traditional coursework".<sup>11</sup>

In March 2010, SP-ARK entered into a six-month Knowledge Transfer Project (KTP) with the Universities of Essex and Surrey supported by a Government grant awarded by the Technology Strategy Board. The KTP saw the University of Essex's Department of Literature, Film and Theatre Studies and the University of Surrey's Centre for Vision, Speech and

Signal Processing working together to develop a revolutionary image browsing interface incorporated within SP-ARK, this allows users to visually analyse the film's original rushes, from single frames to complete shots, and incorporate these in their pathways. This has never before been possible with a film archive. The technical details of the visual browser are detailed in section 2.3 below.

In February 2012, after an extended period of development and the archiving of further materials from the film *Orlando*, the latest version of SP-ARK was released to include the visual browser, social network integration (Facebook, Twitter, etc.) the pathways tool and access to over 4,000 assets.

### 2.3 SP-ARK technology

The current iteration of SP-ARK has deployed standard web development and is built in PHP. It is a bespoke development (as is it is not based on any other technology) and uses MySQL database. The descriptive information (texts, tags, asset descriptions) is all held in the MySQL database and the assets are handled as 'flat files'. User information (name, institution, email address – which are generated when a user requests a login to the site), and user pathways are also stored in the database. The site supports multiple levels of browsing and searching, which are all accessible without a login to the site. (The login enables users to create pathways and to message other users.)

<ul> <li>Development</li> </ul>
Pre Production
Production
Shooting Script
Continuity
Call Sheets
Daily Progress Report
Picture Negative Report
Sound
Production Stills
Set Photography
Behind the Scenes Photography
Rushes
Video Assist
Reel Breakdown
Location
Post Production
The Finished Film
> Distribution

Figure 2: Navigation by production process taxonomy

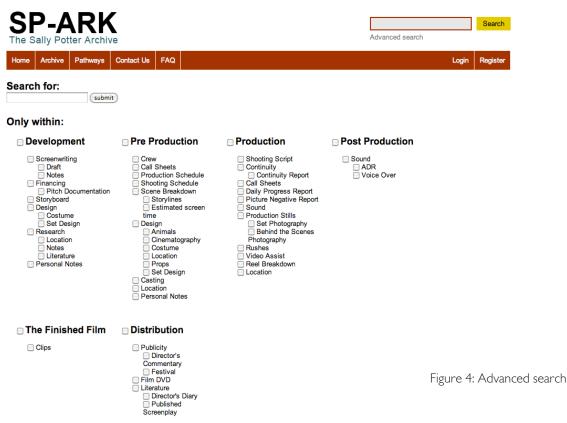
Users are able to access materials through a taxonomy-led approach of the film process (see Figure 2), through advanced text search fields, through tags and related material links (see Figure 3), through the pathways and through the visual browser. Guidance on how to access these features are described in the OER videos listed in Appendix 3.

The Sally Potter Archiv	/e		Advanced	search	
lome Archive Pathways	Contact Us FAQ			Login	Register
Development	<< Previous	This asset is part of a series Next >>		1 x colour slide in trans	
Pre Production Production		The start	Description	plastic hanging sheet, Film Stills - Scene 3 - Elizabeth I (Quentin Co film	Queen
Shooting Script			Asset ID	SPA0000417	
Continuity		D . 20 5 1 1	Date	1992	
Call Sheets Daily Progress Report Picture Negative Report			Tags	FILMING SHOOTING STILLS	
Sound Production Stills			Scene Number	2	
Set Photography	100 B	and the			
Behind the Scenes Photography		11 1	Related Item		
Rushes	Used in pathy	ways:			
Video Assist Reel Breakdown	•	- Carolina Gonzalez ,	F 💌 🖂 🖶	<b>+</b>	
Location		ality by Rachel Mathias,			
Post Production	Orlando by Hanna				
The Finished Film	let's see what happer				
Distribution	The Living Archive T see behind the facad documents. For this immediacy, they help	by Charles Drazin, he great joy of archives is the way that they allow you to to bring alive the thinking that resulted in the reason, I find notes such as this irresistible. In their you get into the mind of the artist more than the work inting, book or film is as much a process of hiding as	5	0	ple levels of brows

itself. The finished painting, book of tilm is as much a process of hiding as revealing. But if you come across notes such as these in an archive, then you begin to get that wonderful sense of being able to see all. Orlando the novel to Orlando the film: Intertextuality and gender by Briony Stas, Student

by Briony Stas, Student Thoughts on how Sally Potter used the visual medium of film to translate Virginia Wolf's literary exploration of gender, which is given to us largely through Orlando's internalised thought, into the screen.

Gender and Androgyny within Orlando by Anna De Guia-Eriksson, Student Figure 3: Multiple levels of browsing the archive: from left to right the production process taxonomy, used in pathways links, search field, tags and related items/videos



The new visual browser feature comprises of two modules: an image-clustering engine, that derives the underlying structure of the database, and a hierarchical interactive interface depicted in the Figure 6. Full technical explications can be read in Ren, Sarvas and Ćalić (2010). The choice of the similarity metric (in the case of SP-ARK, it is colour values) is invariant to the type of clustering engine and/or the interface design, enabling generic application of this system to comparing other similarity metrics. Within SP-ARK's visual browser, a chi-square distance between three-dimensional RGB colour histograms was utilised as the similarity measure. The shots were represented by a set of key-frames efficiently extracted using a method for video summarisation introduced by Ćalić *et al.* (2007). In order to evaluate the usability of the SP-ARK web interface a focus group session, user interviews and a questionnaire. The possibility to browse visual content in an intuitive way as well as the pathway functionality were the strongest aspects highlighted by this user group. These are some representative subjective feedback responses: i) "Very easy to navigate and understand. Colour effectively used to highlight different aspects of the site", ii) "It was very accessible and easy to use. It is also very bright and inviting", iii) "The layout and design made the website/archive extremely simple to use" (Atkinson and Ćalić, 2012).

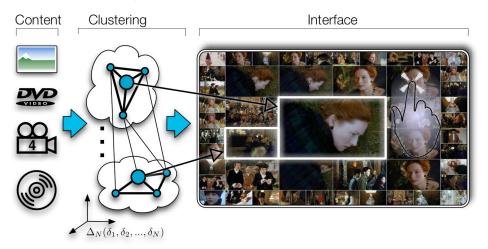
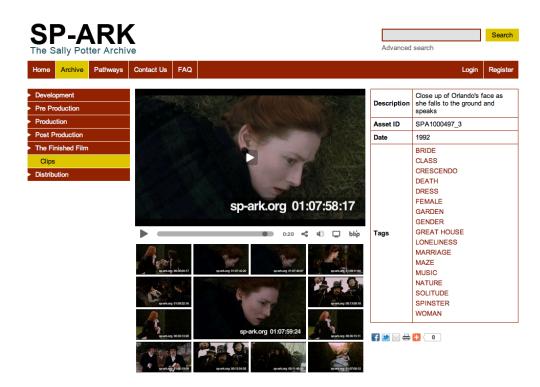


Figure 5: Block scheme of the interactive image browsing system



Figure 6: The visual browser (2009): Visual browser representing semantically coherent content from the SP-ARK archive





# Investigation

### 3.1 Methodology

In order to undertake the case study I worked with the AP team on site at their production office from January 2012. The SP-ARK team currently consists of myself, Clare Holden (SP-ARK project manager since 2008) and Roz Attwood, a second-year QMUL film undergraduate student on an internship. This enabled a close working relationship to be built with the AP team and enabled me to develop in-depth understandings and insights of their working practices. AP was also in the midst of production for Sally's latest film *Bomb*, which I was able to observe and also to advise upon the forward planning for the archival strategy for the film (this will be detailed in section 4.1).

Our initial work involved conducting an audit of all the institutions that included Sally Potter in the curriculum (some were already registered on the SP-ARK user database). In total 12 UK universities were identified, but where modules/ units spanned the year and were pre-designed, SP-ARK could not be integrated and explored for the purposes of this case study. The subsequent work focused upon the collaboration with academic colleagues across five institutions as they formally integrated SP-ARK and *Orlando* into the curriculum. We consulted, liaised and advised them (through online and face-to-face visits), ensuring that users were provided with an individual account and support was provided where necessary. The universities, their respective courses and units of study were:

Queen Mary, University of London BA Film Studies [Module/Unit: Film, Literature and Adaptation]

Bucknell University BA Film Studies [Module/Unit: Film in the Digital Age] University of Southern California BA Multimedia Scholarship [Module/Unit: Digital Media Tools and Tactics]

Columbia University MA Film Studies [Module/Unit: Film Finding: Cinephilia]

New York University MA Cinema Studies [Module/Unit: Film History/Historiography]

To further support their work and to attempt to stimulate further activity around the archive, Roz and myself produced two OER video tutorials (see Appendix 3).

The use of the pathway tool as a class-based activity and assessment device was focused upon; in two of the cases the pathway tool as the basis for an assessment activity (see Appendix 4 for the assignment briefs).

In order to measure SP-ARK's impact and use, usability statistics of the site were captured during the main project period; an online questionnaire was completed by the academics teaching the above courses, and two focus groups were conducted, one at the University of Southern California (conducted via Skype) and one at Bucknell University (where the students and professor are based at a study centre in London).

### 3.2 Evaluation

### Statistics

Since the beginning of this year 169 users have been added to the SP-ARK database taking the current total to 363 users. This equates to 46% of SP-ARK's entire user base being added in the last three to four months, which is a clear indicator of the impact of our interventions.

	Total visits	Pages/visit	Avg. visit duration	New visits	Visits UK	Visits US
22 March - 22 April 2010	979	8	7mins	40%	595	140
22 March - 22 April 2011	733	8	7mins	52%	397	124
22 March - 22 April 2012	709	24	l I mins	51%	480	85

### Figure 7: http://www.sp-ark.org user statistics

Although the overall number of visits has remained consistent, the significant figures in this table are the number of new visits. Moreover, the significant increase in the number of pages that are viewed during a visit (from eight to 24) implies a far more in-depth and prolonged engagement with the archive. Indeed this is reflected in the average duration of each visit, which has increased from seven to 11 minutes. During this time, 131 new pathways have been created. The average number of items per pathway is 9.6.

### Academic questionnaire feedback

Academics identified from the initial 12 institutions were asked to complete a short online questionnaire using Survey Monkey. They were asked to compare SP-ARK to other archives that they used in their teaching practices. The other archives that were identified were BFI Special Collection; Margaret Herrick Library, Los Angeles; United Artists Archive; University of Wisconsin; Internet archive; YouTube; Vimeo; UbuWeb; Open Culture and various free sound archives. The comparative comments included:

Not as expansive obviously, but interesting and useful as get insight into production process for artist.

SP-ARK is free, personal and detailed, empowering for users.

The unique feature of SP-ARK is the digital nature access. The other archives contain the original paper-based documents.

Asked to identify SP-ARK's key strengths and weaknesses, the responses included:

Strengths: originality, inclusiveness, personal engagement, depth Weaknesses: one film.

Key strengths - access to a wide range of material covering all stages of a film's production; and the ability to offer online commentary. Key weaknesses - so far only one film. So it is a very limited resource if you are interested more generally in the work of Sally Potter.

It is clear from these responses that academic staff were eager to access more content, beyond the film *Orlando* via the SP-ARK platform. In addition to increasing the content, some responses suggested a desire for more opportunities to work with the materials. When asked how they would want to see the platform developed:

Remix option – can obviously do screen capture, but maybe have files downloadable. and more materials ... Also, would love to have more of Potter's work here as then you could do interesting examination of her career.

More films. Perhaps more of a sense of a living presence on the part of SP-ARK.

This idea of a living presence is one that AP have actively pursued (throughout the production of Yes), and one that they continue to investigate as they produce further films, and in turn, more potential archival content.

### Focus group feedback

#### University of Southern California

This focus group was undertaken using Skype. The discussions centred around the accessibility of the video assets as this was a key area of interest for this particular group who were undertaking a module on Digital Media Tools and Tactics. As previous adopters of the earlier version of SP-ARK, they focused their in-class exploration on working with video and the visual browser. The essence of this focus group is captured in the following comment:

One of the things I was frustrated with, with going to the clips, is that I would have to know, you know the clips are very short, and I would have to go through all of those clips to find something ... of course you can't tag all of that, but some of it might be tagged and unless you knew the precise minute, where you were in the film, it's just all laid out end-to-end, so you're not able, even to know, this is the first half hour, the first you know, I 0 minutes, or whatever, ... even if you could just have a breakdown by time, rather than just all those discrete 30 second to one minute clips.

Both staff and students agreed that there needed to be more efficient ways of effectively searching, mining and working with the video content.

### **Bucknell University**

The focus group was conducted with the class who were undertaking the assignment specified in Appendix 4 (the results of which can be viewed on the courses blog<sup>12</sup>). The focus group transcript was coded into five key themes that emerged throughout the open discussion. Students were asked to highlight and discuss the positive and negative aspects of SP-ARK that they encountered while undertaking their assignments, which involved exploring the nature of the archive within the context of the Film and Digital Age. The key themes identified were:

- the digital archive model;
- interpretation;
- openness
- accessibility;
- social learning.

### The digital archive model

Students immediately began to discuss issues around the navigation of the archive as they had the task of finding one particular asset that inspired them:

We started going through personal notes and going through the written part of it, and that got really interesting because you started seeing it in a different way, rather than just watching it visually. I don't know, it just brought it to a different level.

The students clearly expressed a passion for being able to explore the film of Orlando in this way:

In comparison to like a physical archive, was the amount of ways that everything was organized, I feel like in a physical archive, things can maybe be organized two ways, like alphabetical and then by like category in the alphabet, but this, it was organized by like where it fell in the production process but then also by what was in it, or what characters were in it, and I just like that you found overlap a lot easier, whereas if you're looking at things physically, it would take a lot of effort to actually find how everything overlapped.

This observation regarding the organisational structure of the archive illustrates SP-ARK's intentions as detailed in section 2.3 of this report:

When I was searching we have clips up of the scenes that I was looking at and then I was able to go through and try and find any information on this scene and I felt if I was in a physical archive, I wouldn't be able to keep referring back to what the final product looked like.

Students had previously attended a seminar led by the BFI, and so had a clear understanding of the nature and limitations of access within physical film archives.

Now becoming involved with the visual information, it's no longer just going onto JStor and reading an article, but we're actually really seeing the clip from the film, from an out-take.

Students also clearly appreciated the ability to refer back to the source material as they correlated and contrasted the different sources.

### Interpretation

The students reflected on their very first encounter with the archive:

I think we just got really excited actually ... because we were like, look at this, did you know that this was supposed to be in there, and all of a sudden we had all these new understandings of the film and we were kind of interpreting the film on our own, it was cool.

This appreciation and the empowering nature of the archive for students to make their own discoveries are also reflected in an earlier comment made by an academic in the questionnaire.

### Openness

The open nature of the archive was also a key point of discussion as students had not experienced anything similar before:

To actually see these primary materials, it's such a unique experience, because I've never had a chance to actually see a director's notes on their first ideas of a film.

### Accessibility

The negative points raised in the discussion were mostly based on difficulties in accessing and searching for items:

I'm not a film major so going into it I didn't really know what to look for, and I think what might have been helpful to me would have just been a list of all the tags for me to look at, and figure out what actually is up here.

I kept trying to search within the script or within notes that you can only search like title there aren't many tags there, so I had to go through and like read through the pages, it just got really tedious, so I don't know if its possible for you to like search for words within the script.

This comment highlights the known issue of the limitations of the searchability of the analogue source materials. *Orlando* was produced in 1992, in a period where documents had been typewritten. Where documents had been digitally produced, only the paper-based versions remained, and so were scanned in as image (and therefore not text searchable) files.

What would have been really helpful for me if you had like the scene you're looking at, that maybe surrounded by all the papers, the script for that scene, the call sheet for that scene, so like you could put right next to each other the clip and then all the physical papers.

This comment actually pinpoints the original intentions of SP-ARK to have this capability built within the interface as was demonstrated in the prototype that was shown at the Media Festival Arts in 2010 (see Appendix 2).

If the visuals could be bigger and more of a focal point, I think it would allow them to be more accessible to a student ... I think of when I go into iTunes, and I can see a huge album cover, or the cover of a DVD and the pictures the first thing I see and if I want more information on it the text comes afterwards.

I didn't know the specific tag to begin with, so when I was typing in dress or just things like, I was thinking about like Google, or costume or wardrobe, I think the proper tag is costumes, but because I left the 's' off, it didn't come up for me.

These insights demonstrate the high expectations that the students had of the search functionality in its ability and to present information visually as a result of the students' prior experiences with commercial examples such as Google and iTunes. When I asked the class to indicate whether the search box was the first method of searching that they applied, they all raised their hands. No one had used the taxonomy function to look for an item.

### Social learning

The students explored issues around being able to tag the items themselves as a result of the difficulties that they faced in finding materials within the archive:

I kind of think that a lot of the powers are the crowd sourcing power, I think if pathways really demonstrated its strongest point, this idea of letting anyone go in, pick out the smallest details and connect the dots, and I kind of think the idea of allowing user tags would almost open up like Wikipedia in a sense ... to allow users to go in there and play with it and allow users to jump off each other that's when your going to get the multiplication factor where you have this rapidly expanding base of knowledge.

This highlights the level of digital literacy that the students were working to, as does the following comment that expresses a desire for further malleability of the archive:

In terms of the pathway itself, it was really great, that you can move it around, so its not just a linear pathway, because there were times when I had multiple examples, and it would have been nice to do a centre bubble, branching off with the multiple examples, and then something branching off there, and it would have been interesting to experiment with different structures of the pathway.

# Learning from OER

### 4.1 Advice for future development

The key benefits of SP-ARK as an OER gleaned from this study are:

- the openness of the resource allowed a valued access to previously unseen and inaccessible materials;
- both staff and students embraced the opportunity to work visually and intuitively with these materials;
- SP-ARK facilitated a sense of empowerment, a deeper engagement and understanding of the archival materials and the surrounding subject area through being able to cross-reference and directly compare source materials with archival materials;
- a social learning model was facilitated through the pathway's infrastructure, which stimulated the open sharing of ideas and practices.

The key areas that have been highlighted for development are:

- more content to be made available to be able to access more of Sally's work and to expand beyond a single author platform;
- the searching and tagging needs to be made more efficient and effective, the ability for users to tag assets needs to be considered;
- further links to other assets needs to be provided (which could be through user-generated methods);
- the facility to search and 'mine' the video content more efficiently and effectively;
- to be able to work with the video content more creatively and fluidly, to be able to remix and adapt content.

The general lessons that can be learnt by others within the field using film and media primary resources are the benefits of digital preservation, presentation and access. Both staff and students highlighted the value of a digital archival model to facilitate the ability to simultaneously view source materials with archival materials. This proved to be extremely beneficial and empowering to the learning process. The only other known example of this model is EVE (Everyone's Virtual Exhibition) hosted by The Bill Douglas Centre Online Catalogue for the History of Cinema and Popular Culture at the University of Exeter<sup>13</sup>, upon which similar beneficial conclusions were drawn. Within the online interface, users are able to convene their own online exhibition through the curation, annotation and presentation of artefacts, which can be published in the same way as a SP-ARK pathway, to be made publicly visible to other users (see Prosser, 2005).

Another lesson is the key to involving students in the process of generating and enhancing OER. This was envisaged by the OER impact study suggesting "validating the sharing of online resources discovered by students" (White and Manton, 2011, p. 25). This is highlighted within this case study through student-generated OER pathways. As the focus group feedback suggested, the student demographic are increasingly digitally and technologically literate and are able to contribute invaluable insights to this area.

The development in this thematic area could be taken forward through an in-depth exploration into the technologies that facilitate the intuitive retrieval and mining of audio-visual archival materials. These could include HTML5 video; further advice and support could be gleaned from user group communities around technologies such as Reel Surfer<sup>14</sup> and Mozilla's Popcorn.<sup>15</sup> The BBC is currently developing an API within their Redux<sup>16</sup> initiative in order to facilitate the accessibility and search ability of their extensive archives, as are the BFI (see page 3 of this report).

Further extension of SP-ARK's content is now being explored through a collaborative project between myself at the University of Brighton and AP. 'The anatomy of a film production: Understanding the people, the roles, the processes and the careers on set of *Bomb* extends the reach of the archive into vocational and professionally based education. Potter's latest film *Bomb* has just completed production, and during the process, key members of the production crew were furnished with portable flip cameras to record their daily activities on set. The materials will create an interactive audio-visual ecology of the film production process, capturing all of the individual crew members' contributions to the creation of the film through personal testimony. The project exposes all the roles on set from runners and caterers to camera, sound, costume, make-up, continuity, set builders, sparks, extras to heads of all the departments. This project will extend beyond the production phase into the post-production, marketing and distribution of the film. This will extend SP-ARK as an invaluable and innovative open resource for young people and students seeking careers in the film industry, and to educators and academics teaching film production and processes.

## Conclusions

The overall purpose of this case study was to contribute to the project theme of OER and teaching quality through the following aims: to explore the pedagogic potential of SP-ARK as an OER; to stimulate pedagogic activity and OER generation; to evaluate the impact upon teaching, learning and assessment practices; and to expand upon and inform the future development of SP-ARK.

The pedagogic potential of SP-ARK has been clearly demonstrated through its integration into a number of curriculums (all academic respondents to the questionnaire indicated that they would definitely be using it in future courses) and the positive user feedback that has been gathered.

Pedagogic activity and impact has been evidenced in the form of site statistics, assignment briefs, newly created pathways and in the generation of OER as a direct result of this project.

The future development of SP-ARK will be undertaken in the short-term by addressing the technical issues highlighted in this report, in the long-term through the ongoing 'Anatomy of a film production' project.

The benefits that such a resource can bring to higher education academics and students are invaluable. The pathways tool lends itself to the critical and analytical study of primary materials as intrinsic to both undergraduate and postgraduate study within numerous disciplines. The resource has the potential to enhance and enrich teaching and learning practices within film and media disciplines and beyond as well as to encourage other high-profile filmmakers and organisations to allow online access to their work in the future. The SP-ARK resource exemplifies the successful combination of an archive and an educational resource, providing an invaluable model for social and participatory learning.

### References

Atkinson, S. and Ćalić, J. (2012) Audiovisual Media Open Educational Resources: The case of SP-ARK: The Sally Potter Film Archive. Paper presented at ECLAP conference, Florence, 7-9 May.

Ćalić, J., Gibson, D. and Campbell, N. (2007) Efficient Layout of Comic-Like Video Summaries. *IEEE Transactions on Circuits and Systems for Video Technology*. 17 (7), pp. 931-936.

Fowler, C. (2009) Sally Potter. Urbana: University of Illinois Press.

Gerhardt, P. and Kaufman, P.B. (2011) *Film and Sound in Higher and Further Education: A Progress Report with Ten Strategic Recommendations*. HEFCE/JISC. Available from: http://www.jisc.ac.uk/media/5/6/4/%7B564236F6-5E29-42C0-AE58-401E966147A2%7Dfstt\_summary\_final.pdf [30 April 2012].

JISC (2010) Feature Film: SP-ARK, A Living Archive. *Film & Sound Think Tank Supplement*. Available from: http://www.jisc. ac.uk/media/documents/publications/programme/2010/dcq3\_interactive\_fstt.pdf [30 April 2012].

Mayer, S. (2008) Expanding the frame: Sally Potter's digital histories and archival futures. Screen. 49 (2), pp. 194-202.

Mayer, S. (2009) The Cinema of Sally Potter: A Politics of Love. London: Wallflower.

Prosser, D. (2005) Reflections on the use of EVE in Higher Education. Available from: http://billdouglas.ex.ac.uk/eve/eve\_ped\_use.pdf [30 April 2012].

Ren, K., Sarvas, R. and Ćalić, J. (2010) Interactive search and browsing interface for large-scale visual repositories. *Multimedia Tools and Applications*. 49 (3), pp.513-528.

Smith, C. (2012) A Future For British Film. It begins with the audience... A UK film policy review. London: Department for Culture, Media and Sport.

White, D. and Manton, M. (2011) *Open Educational Resources: The value of reuse in higher education.* Available from: http://www.jisc.ac.uk/media/documents/programmes/elearning/oer/OERTheValueOfReuseInHigherEducation.pdf [30 April 2012].

# Appendices

### Appendix I: Sally Potter's films

Further information can be found at: http://sallypotter.com/

Bomb (post-production) 2013 Rage 2009 Yes 2004 The Man Who Cried 2000 The Tango Lesson 1997 Orlando 1992 I Am an Ox, I Am a Horse, I Am a Man, I Am a Woman (documentary) 1988 Tears, Laughter, Fear and Rage: Rage (TV documentary) 1987 Tears, Laughter, Fear and Rage: Tears (TV documentary) 1987 The London Story (short) 1986 The Gold Diggers 1983 Thriller (short) 1979 Hors d'oeuvres (short) 1971 Play (short) 1970 Jerk (short) 1969

### Appendix 2: List of SP-ARK video documentation

### An Introduction to SP-ARK (2010)

Features an overview of the original SP-ARK WordPress site, in addition to clips from her films and documentary footage of working online with Yes. Produced by: Adventure Pictures Duration: 6'53'' http://www.mefeedia.com/watch/47266737

### SP-ARK: A Workshop at Goldsmith's College (2007)

The SP-ARK team worked with students at Goldsmith's College to show how the pathway concept of SP-ARK will work. Produced by: Adventure Pictures Duration: 2'04'' http://blip.tv/sallypottercom/sp-ark-a-workshop-at-goldsmith-s-college-351099

### SP-ARK Discussion (2009)

This film documents a seminar group led by Dr Charles Drazin (Film Studies, QMUL) and Lucy Bolton (Lecturer, Film Studies, QMUL) about SP-ARK. Produced by: Mile End Films Duration: 3'46'' http://www.youtube.com/watch?v=Y6bKwoC7\_P8

### SP-ARK, Building the world's first interactive multimedia archive (2010)

Presentation by Christopher Sheppard at the Media Festival Arts, London, 10 September 2010. Produced by: Adventure Pictures Duration: 13'38''

http://www.mefeedia.com/watch/47266733

### Appendix 3: SP-ARK video OER

15

### SP-ARK - Tour of New Features (OER) (2012)

This video tutorial introduces the new features of the SP-ARK archive, including the visual browser and the pathways tool. It provides in-depth instruction on how to navigate and search the archive effectively, as well as demonstrating how to create and develop your own pathways. Produced by: Dr Sarah Atkinson Duration: 10'25'' http://blip.tv/sallypottercom/sp-ark-tour-of-new-features-6019795

### SP-ARK - An example of a student creating a pathway (OER) (2012)

Roz Attwood, a second-year Film Studies student from QMUL demonstrates her use of SP-ARK to build a pathway for her assignment, April 2012. Duration: 6'21'' http://blip.tv/sallypottercom/sp-ark-an-example-of-a-student-creating-a-pathway-6109736

### Appendix 4: Asssignment brief examples

### QMUL, BA Film Studies:

### Film, Literature and Adaptation Assignment

Creating your own online 'pathway', use SP-ARK to reflect upon and illustrate the intertextual nature of *Orlando* (1928 and 1992). Assessment of this exercise will be based upon a written account of your pathway to be submitted in hard copy and on Blackboard.

#### Bucknell University, BA Film Studies:

#### Film in the Digital Age

Use SP-ARK to demonstrate how an online, digital archive can re-imagine scholarship in the digital age. Find any single asset, reference, tag or object that provides a new way of thinking about *Orlando*. Build a pathway that explores your discovery. Any discussion of 'adaptation' is forbidden.

### Appendix 5: Research dissemination

Atkinson, S. and Follows, C. (2012) *Open educational social media content groups and networks within the arts, design & media education.* Paper presented at OER12 and OpenCourseWare Consortium (OCWC) Conference, Cambridge, 16-18 April.

Atkinson, S. and Ćalić, J. (2012), Audiovisual Media Open Educational Resources: The case of SP-ARK: The Sally Potter Film Archive. Paper presented at ECLAP conference, Florence, 7-9 May.

Atkinson, S. and Follows, C. (2012) *Exploring OER rich media reuse through social media content communities.* Paper presented at Higher Education Annual Conference, Manchester, 3-4 July.

## Acknowledgements

The author would like to thank Sally Potter, Christopher Sheppard, Clare Holden and the team at Adventure Pictures for pioneering and sharing such an inspirational and groundbreaking resource; the University of Brighton; the University of Essex: Department of Literature, Film and Theatre Studies; Janko Ćalić, University of Surrey Centre for Vision, Speech and Signal Processing; Charles Drazin and Lucy Bolton, QMUL; Eric Faden, Bucknell University; Christine Gledhill, New York University; Vicki Callahan, University of Southern California; Roz Attwood, student intern from QMUL; The Open University's Support Centre for Open Resources in Education (SCORE) and HEA/JISC for funding the SP-ARK case study.



This work is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 2.0 UK: England & Wales Licence.

### Contact us

The Higher Education Academy Innovation Way York Science Park Heslington York YO10 5BR

+44 (0)1904 717500 enquiries@heacademy.ac.uk

ISBN 978-1-907207-43-3

© The Higher Education Academy, 2012

The Higher Education Academy (HEA) is a national body for learning and teaching in higher education.We work with universities and other higher education providers to help bring about change in learning and teaching.We do this to improve the experience that students have while they are studying, and to support and develop those who teach them. Our activities focus on rewarding and recognising excellence in teaching, bringing together people and resources to research and share best practice, and by helping to influence, shape and implement policy - locally, nationally, and internationally.

www.heacademy.ac.uk

No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or any storage and retrieval system without the written permission of the Editor. Such permission will normally be granted for educational purposes provided that due acknowledgement is given.

To request copies of this report in large print or in a different format, please contact the communications office at the Higher Education Academy: 01904 717500 or pressoffice@heacademy.ac.uk