

# Exploring the Promises and Potentials of Visual Archive Interfaces

Ko-le Chen<sup>1</sup>, Marian Dörk<sup>2</sup> and Martyn Dade-Robertson<sup>3</sup>

<sup>1</sup> Culture Lab, Newcastle University

<sup>2</sup> University of Applied Sciences Potsdam

<sup>3</sup> School of Architecture Planning & Landscape, Newcastle University

## Abstract

A photo archive contains diverse narratives that only get partially exposed in digital interfaces. In this paper we explore a potential framework for archivists and designers to create photo archive interfaces that are sensitive to the ethos and social context of its content. We outline our approach to engaging with archival projects and present the results of a pilot workshop, which raised a range of complex questions about the design of visual interfaces. Our aim is to practically and conceptually expand how a visual interface would let a visitor access, explore, and interpret the contents of an archive. To do this we are interested in the different associations that people weave between the artefacts of an archive.

**Keywords:** cultural institutions, critical design, photo archives, information visualization, narrative

**Citation:** Chen, K., Dörk, M., & Dade-Robertson, M. (2014). Exploring the Promises and Potentials of Visual Archive Interfaces. In *iConference 2014 Proceedings* (p. 735–741). doi:10.9776/14348

**Copyright:** Copyright is held by the authors.

**Acknowledgements:** We thank the participants of the workshop for their time and effort and ideas. This work has been funded by the RCUK Digital Economy programme's PATINA project, grant no. EP/H042806/1.

**Contact:** k.l.chen2@newcastle.ac.uk, doerk@fh-potsdam.de, martyn.dade-robertson@newcastle.ac.uk

## 1 Introduction

The history of archives is closely tied with the formation of the modern state (Featherstone 2006). Early photo archives provided a new kind of evidence for criminology (Sekula 1986). Besides its role as an instrument for social rule and repression, archives have also been seen as a “repository of memories: individual and collective, [...] legitimating and subversive” (Bradley 1999). These diverging notions of the archive “promise the recovery of lost time, the possibility of being reunited with the lost past” (Freshwater 2003). However, this allure of the archive has recently been contrasted with a growing recognition of “the impossibility of recovering the lost voices of the past in their original meaning” (Bradley 1999). Instead we should give up the illusion of recovery and acknowledge that they can merely support the re-creation of the past as something new.

In light of the digitization efforts underway in the cultural sector, we are interested in exploring how critical and creative engagements with archives could be supported. There has been already some research on the visualization of photo sets and cultural collections (e.g., Bederson 2001 and Whitelaw 2009). However, there is little critical discourse around the power and promises of archival interfaces. In this paper, we outline an approach to archive interfaces that is sensitive to the politics of a collection and supports new forms of interpretative engagements. We practically explore this approach in a pilot workshop, which raised questions related to the design of visual interfaces for the photo collection of a specific archive project.

## 2 From Promises to Potentialities

When thinking about the representation of an archive, careful consideration needs to be devoted to its ordering structures. A given classification may open up certain pathways, but it can also close others. For example, the classification systems used in 18-century archives demonstrated a clear “preference for binary divisions and branching tree structures” (Featherstone 2006), possibly impeding more lateral explorations. However, in the digital sphere new systems of ordering become possible. There have been some efforts in

visualizing collections in zoomable interfaces (Bederson 2001) and arranging photos based on their temporal, spatial, visual, or topical similarity (Girgensohn et al. 2010). Seeing a collection as a “rich set of data” (Whitelaw 2009) speaks to the hope that visualization can support new forms of archival engagement. Counter to the ‘stinginess’ of conventional search, Whitelaw (2012) makes a plea for more generosity in archival collection interfaces. Instead of hiding the richness of an archive behind the inhospitable face of a search box, the abundance of a collection should be made accessible to an information flaneur (Dörk 2011). Novel visual interfaces promise to bring about unconventional qualities of cultural collections. However, to some degree existing collection interfaces and visualizations tend to perpetuate the seductive allure of the archive. While this allure has been challenged from different angles over the last 15 years, we still lack a critical discourse around issues of representation and interpretation in the context of archive interfaces and visualizations. How can we include the concerns about the promises of archives in the design of novel archive interfaces? Drucker (2013) suggests that we should treat interfaces as artefacts that require and enable our critical attention. Can we open up archive interfaces to interpretation, but also treat them as interpretative devices?

The rapid growth of early photo collections of criminals triggered inventive, if ethically dubious, approaches to classification in order to ensure efficient retrieval (Sekula 1986). Similarly, today’s digitization efforts are primarily seen as a means to enable efficient retrieval, which is often associated with a reduction of pleasure and a distancing of the researcher (Dorney 2010). We believe that digital interfaces have great potential to provide new perspectives through visual and interactive representations. Instead of focusing exclusively on the literal characteristics of an artefact, we are interested in a close and profound engagement with the archive as both thing and theory. Acknowledging the role of both archive creators and visitors, the challenge is to encourage a dialogue between author and audience among equals (Feinberg 2012). As the digital sphere offers new ways of seeing the world “through different tropes derived from flows, non-linearity and singularities” (Featherstone 2006), we hope to develop an approach to designing new types of visual interfaces that negotiate the promises and potentials of digital archives.

### 3 Amber Collective

To learn about a specific archive, we initiated collaboration with Amber, an independent film and photography collective that was founded 1969 in the North East of England to collect documents of working class culture. In contrast to the mandate of a national archive keeping a representative record, Amber has been explicitly dedicated to the stories of working class and marginalized communities. In 2011, the cultural significance of the interlinked narrative represented by 22 Amber films and Sirkka-Liisa Konttinen’s photography was recognised by UNESCO and inscribed in the Memory of the World register. Amber’s archive represents many hundreds of collections and many thousands of photographic images in addition to film and texts. Each collection (whether from work produced by members of the collective, commissioned or collected by them) can be seen as part of a rich and complex whole. To retain the archive’s identity means making apparent implicit relationships between materials, which go beyond simple associations of author, place, or date. Amber have started to explore their archive as a whole and expose otherwise hidden material to the world: allowing for new readings, interpretations, and the potential remixing of content while retaining the integrity of the collection. It is our joint goal to investigate the potential of digital interfaces for archival collections, while paying close attention to their ethos.

### 4 Workshop

We organized a three-hour pilot workshop titled “Finding new Pathways in Rich Archives” to practically and conceptually engage participants in thinking about how an archive interface might look and what it could offer to archive users. Inspired by the framework of the workshop ‘Desktop Psychogeographies’ organized by Pitsillides and Maragiannis (2013), our event was divided into four stages:

- Stage 1. At the beginning the 10 participants introduced themselves to each other. The group consisted of visual artists, filmmakers, photographers, a project manager, and researchers from various disciplines including architecture, literature, and computing. Three participants were members of the Amber collective, five were associated or had some familiarity with the Amber collection, and two were new to the material.
- Stage 2. We introduced notions such as the information flaneur (Dörk 2011) and generous interfaces (Whitelaw 2012) and demonstrated existing archive interfaces. A member of the Amber collective gave a brief account on some of the archive images specifically relating to urban development that were presented on the table to participants.
- Stage 3. Using diverse collaging materials (Figure 1), participants were invited to remix images as collages to explore associations and narratives, though not explicitly designing an interface. We asked participants to think about semantic relations and affinities between things that may not ordinarily be revealed through common taxonomies of categories.
- Stage 4. At the end participants were asked to share their collages on a wall (Figure 2) to allow for a round of collective interpretations. The respective creator of a collage was asked to remain silent at first, while other participants considered and responded to what they saw, after which the creator added their intention to the discussion.

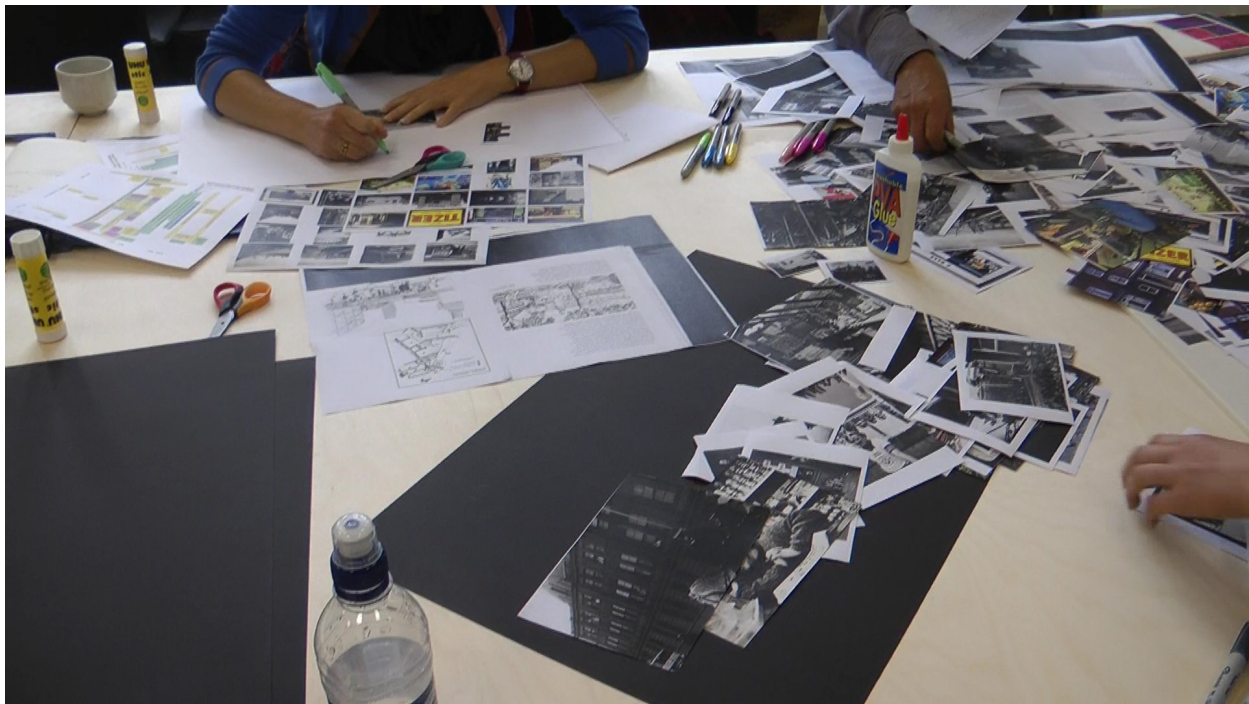


Figure 1: Participants created collages with images from the Amber archive.

The workshop produced a rich array of discussions that related to the specifics of this archive but also to more general questions about archival collections. Through preliminary analysis we extracted several themes, which often interacted with each other in the conversations during the workshop. Here we present three themes and reflect on some limitations of the workshop.

#### 4.1 Meaningful engagement and audience's creative license

When attention was drawn to a single photograph, participants frequently asked each other what a particular image was about and why it was chosen as part of the collage. The way participants collectively engaged in exploring a photograph with an understanding of the ethos behind it, especially with its original

author also being amongst the participants, created a unique channel. The participants who were less familiar with the Amber archive were able to tease out new narratives from within the archive by creating collages that prompted the original authors to search their memories and make sense of the seemingly random associations presented on the canvas. The collages acted as an elicitation tool that encouraged the archive members to see the old content with a new lens – thus making familiar subjects once again unfamiliar. Likewise, participants unfamiliar with the archive were also able to visualize associations using archival images that were most inspiring to them. For instance, one participant created a collage that focused on the human body. The participant explained:

“It was kind of about bodies, emotions, feelings, and lived experience, of being in this environment that I think is in that collection. If I were the viewer, that is the thing I would look at and follow up, I wouldn’t look at architecture...”

However, from the point of view of the authors, there were concerns about letting people create their own narratives using archival images. These concerns related to a sense of responsibility and trust they have established since working with people whose lives they documented. One participant stated:

“You couldn't make all the connections, but you can take certain themes, and explore that. Just to show people what the possibilities are (...) But if everybody can just pile in and do things, there's a risk of losing the story you're trying to open up.”

Engaging participants in collaging and storytelling may serve to unlock hidden themes in a collection by creating new linkages. However, introducing new linkages also highlighted a tension between seeing an archive through new and old lenses. As interface designer we are posed with the question: ‘how much creative license should a viewer have when exploring and juxtaposing content online?’ The group interpretation not only allowed archivist and designers to confront the limits of an archive interface, but also supported us to gauge the extents a user may manipulate visual content of an archive.



Figure 2: Collages were pinned up on the wall for the group interpretation.

## 4.2 Re-presenting the archive

The Amber photo archive is still largely on prints and during the workshop we explored those images on printed copies. Participants talked about the qualities of some photographs looking older than others even though they were all print copies. In some cases a colour image tends to appear more contemporary than black and white. Scale (See Figure 3) also had an impact on how people viewed images on the collage. For instance, when looking at a larger clustering of photos one participant said:

“And that’s [referring to a bigger cluster] stronger than that [pointing at a smaller cluster], if people have the same sort of partial attention span I have, they’ll go straight to that [big cluster] and they may potentially miss that [small cluster] or at least think that’s [small cluster] much lower down the scale of importance.”

Using paper collages we created low-fidelity prototypes of interfaces. These paper prototypes in turn highlighted a set of visual qualities (colour, layout, size and shape), which had direct impact on the ways participants chose to navigate through information. On one hand those qualities functioned as visual aids which focuses one’s gaze on a canvas and helped create a centre of interest for the group discussion. However, there were also other visual qualities, which were deliberately distracting and offsetting. For example, one participant used punk-ish<sup>1</sup> trope to illustrate that the collage has an underlying message that was not exclusive to the photographic content but in the way they were cut out and arranged. Again, using visual aids to portray ambiguity or certainty may be conflicting in terms of archival interface design. However, it is a reminder that we need to take into account how socially-engaged content like the Amber archive may create unconventional requirements in terms of user interface design.



Figure 3: Some participants used different image sizes to suggest hierarchy amongst images<sup>2</sup>.

<sup>1</sup> By “punk-ish” we are referring to images that were torn off from a page or cut out irregularly.

<sup>2</sup> Due to copyright of the archival images we are not able to show close-up of each individual collages



### 4.3 Storytelling and ethics

As we discussed above, in some collages there were elements of storytelling deployed by participants to establish a coherent network of photographs within the collage. This indirectly creates a certain amount of misrepresentation of subjects' identities in the photo collection. In a way this is an inevitable aspect when making creative use of a historical account on past lives. Participants created several different pathways on the collages using narrative structures such as history, politics, gender and personhood. Depending on how images were juxtaposed, participants also observed parallel narratives weaving through the same collage. In many ways these are 'standard practice' when one engages in making collages, however, we also noticed that employing human subjects on the collage could become particularly sensitive. Especially when we learned that many people depicted in the photos have established a certain understanding and trust with the photographers who promised that they would maintain their images in an appropriate context, or perhaps out of the public domain. For instance, when asked to comment on how they feel when seeing their own photos being used in creative ways, one of the participants explained,

"Depends on the purpose, really, I guess...not at all offensive seeing it here in this context. But are you asking [if] those images were free to be used by anybody in the world, in their chosen context whether I'd feel comfortable? I probably wouldn't. Because some [people] are extremely private regarding their whereabouts".

Offering tools to construct complex narratives on an interface could help enrich and deepen an audience's understanding of the archival project. However it was also clear from the paper prototypes that we can easily overlook the biographies of each individual image. The workshop exercise was not able to address such problem and would need further research to establish a framework to address the ethical boundary of user interaction.

## 5 Conclusion

Overall, participants' response to the collages was very diverse. We think this illustrated that participants were able to engage with complex narratives using the relatively simple technique of collage making. Our preliminary analysis of the video recordings showed that people approached the collages by looking for sets of meanings that were encoded by their authors. While most participants assigned meanings and associations onto the collages by looking at how individual photographs were laid out, perhaps unsurprisingly, members of the Amber collective were most active in uncovering hidden narratives based on their knowledge of the photographs. Many motifs in the collages adopted by participants were in line with Amber's aim to document the impact of urban re-development on local communities. As participants took the workshop as an opportunity to engage with over 60 documentary photographs, rich insights and stories about these photographs and its social context gradually unfolded throughout the workshop as we walked through each collage trying to unpick its underlying meaning. Nonetheless, these collages also challenged and elicited concerns regarding the future development of the Amber archive. In a sense, the workshop engaged its participants in a meaning-making exercise. Some participants made collages as lens to gain insight to a complex collection of stories represented by photographs, whereas the archivists challenged their own understandings of the collection. As part of an interface design inquiry, we see the workshop process as crucial step to understand how a new audience may interact with archival project, especially when its content represents strong political identities. The multidisciplinary interests amongst the participants prompted a multi-faceted discussion on a unique archive, its richness in terms of the represented struggles and stories, and its future in the digital realm.

## 6 References

- Bederson, B. B. Photomesa: a zoomable image browser using quantum treemaps and bubblemaps. In *UIST 2001: Symposium on User Interface Software and Technology*, pages 71–80. ACM, 2001.
- Bradley, H. The seductions of the archive: voices lost and found. *History of the human sciences*, 12(2):107–122, 1999.
- Dörk, M., Carpendale, S., and Williamson, C. The information flaneur: A fresh look at information seeking. In *CHI '11: Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*, pages 1215–1224. ACM, 2011.
- Dorney, K. The ordering of things: Allure, access, and archives. *Shakespeare Bulletin*, 28(1):19–36, 2010.
- Drucker, J. Performative materiality and theoretical approaches to interface. *digital humanities quarterly*, 7(1), 2013.
- Featherstone, M. Archive. *Theory, Culture & Society*, 23(2-3):591–596, 2006.
- Feinberg, M. Writing the experience of information retrieval: digital collection design as a form of dialogue. In *CHI '12: Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*, pages 357–366. ACM, 2012.
- Freshwater, H. The allure of the archive. *Poetics Today*, 24(4):729–758, 2003.
- Girgensohn, A., Shipman, F., Turner, T., and Wilcox, L. Flexible access to photo libraries via time, place, tags, and visual features. In *JCDL '10: Proceedings of the Joint Conference on Digital Libraries*, pages 187–196. ACM/IEEE, 2010.
- Osborne, T. The ordinariness of the archive. *History of the Human Sciences*, 12(2):51–64, 1999.
- Pitsillides, S. and Maragiannis, A. Desktop Psychogeographies, Workshop at 19th International Symposium on Electronic Art, Sydney, 2013
- Sekula, A. The body and the archive. *October*, 39:3–64, 1986.
- Whitelaw, M. Visualising archival collections: The visible archive project. *Archives and Manuscripts*, 37(2):22–40, 2009.
- Whitelaw, M. Towards generous interfaces for archival collections. In *Proceedings of International Council on Archives Congress*, 2012.

## 7 Table of Figures

Figure 1: Participants created collages with images from the Amber archive.....	737
Figure 2: Collages were pinned up on the wall for the group interpretation.....	738
Figure 3: Some participants used different image sizes to suggest hierarchy amongst images.....	739