CANALS, CITIES, MUSEUMS, LIBRARIES & PHOTOGRAPHY: A RECONNAISSANCE STUDY OF REGENT'S CANAL, LONDON

Graham Diprose grahamdiprose@gmail.com

Christina Hemsley Photographer, Author & Lecturer Digital Consultant & Photographer christina@hemslev.de

James Hemslev Birkbeck College irhemslev6@gmail.com

Abstract - City waterways are a valuable part of our cultural heritage. Over the years the usage has changed from business to pleasure. Regent's Canal, cutting across north central London since 1820, has a rich social and industrial history. Much of this history has been and is being captured via photographs. Many of these are being lost due to limited museum resources and disparate collections. This paper reports on phase one of a fifteen-month exploratory research project. The research aims to explore ways of aiding image capture, selection, storage and retrieval. We hope to link with researchers elsewhere, especially in Italy.

REGENT'S CANAL & CAMDEN BOROUGH CONTEXT

Canals came relatively late to central London. Canals, for irrigation and water supply, first emerged some 6,000 years ago in present day Iraq (Mesopotamia). Subsequently, canals were built by many others, notably by the Romans. China was also a relatively early mover, including the Grand Canal of China and early development of a lock system in AD 983. Venice is justly famous for its iconic canal-centered build (and there is even a 'Little Venice' at the western end of Regent's Canal). Milan developed its system in the 12th century with Leonardo da Vinci revolutionizing lock technology two centuries later [1] which is widely used today-still more than 400 years before Regent's Canal would be built. The Canal du Midi, built from 1666 to 1681 under Colbert, minister to Louis XIV, connects Toulouse with the Mediterranean and stretches 240 km with almost a hundred locks; this is now a World Heritage site. Today, the country of canals, the Netherlands is especially suited to their use due to being small and flat and having a substantial population, industry and commerce.

Regent's Canal was the final link between Midlands industry and London, then the world's largest port: an extension of the Grand Union Canal running from Paddington Basin to the Thames at Limehouse Basin. It was termed 'a road without ruts', since the corresponding road systems were lamentably poor; moreover, the existing water route via Oxford was much longer. When the Regent's Canal was constructed 90% of its route to the Thames was across agricultural land. Its hinterland now comprises five central London boroughs: Westminster; Camden; Islington; Hackney and Tower Hamlets with a joint population over one million. Building the canal began in 1812 at the tail-end of the Napoleonic Wars; arduous planning, negotiations and financial capital-raising extended into the construction period which lasted until 1820. A notable milestone was reached in 1816 when it was opened to Camden Lock. Important personalities and organizations were involved such as the leading architect, John Nash, responsible for Regent's Park; the Prince Regent [later King George IV]; the Houses of Parliament (Special Acts were necessary); local authorities and numerous other stakeholders. The work included the creation of all the necessary infrastructure such as bridges, tunnels, towpaths for the horses and donkeys, water-pumping stations; locks and even lock-keeper cottages. London's Canal Museum at King's Cross provides an historical picture '-- about the lives of the workers, the cargoes, horses and how canals work. Conveniently close to the canal for an informative and enjoyable detour, it is a 'former ice warehouse built in about 1862-3 for Carlo Gatti, the famous ice cream maker, and features the history of the ice trade and ice cream as well as the canal's. [2]

The great Canal Era proved to be somewhat short-lived in London. The first commercial Steam Engines had already appeared in mines and other industrial applications well before the Regent's Canal construction work began. The canal system was quickly outperformed in speed, engineering and economics. At the beginning of Queen Victoria's long reign in 1837 the canals were already in relative decline although still increasing in tonnage carried. The Railway Era had arrived but canals still played a strong supporting role in London until well into the 20th Century.

The Borough of Camden is extremely heterogeneous; it stretches from Bloomsbury's graceful green squares and part of Covent Garden in the south to Hampstead Village high up in the northern end; from 'posh' Primrose Hill in the west to mixed but gentrifying parts such as Kentish Town in the east adjoining the neighbouring borough of Islington. In the centre lies not only lively Camden Town but also one of the most deprived parts of Europe: Somers Town bifurcated by Euston Station. Camden borough's diverse population of just over 300,000 is multiplied by the floods of commuters, tourists and visitors, the latter especially on weekends and holidays.

The Regent's Canal with its immediate hinterland curves like a ribbon through Camden Borough. From the London Zoo (shared with Westminster borough) in the west to King's Cross in the east is only about a mile, but it – and its immediate geographical context - contains the vibrant centre: Camden Market (Lock), the largest street market in London [3]. Camden Market is now the main pull factor, especially for tourists and visitors from abroad and the UK, but there are numerous other cultural and historical places to visit. The northern side includes the new University of the Arts (UAL) Central St Martin's campus, the Roundhouse Theatre, the new King's Place Concert & Arts Centre and the London Canal Museum, the latter just over the borough border in Islington. The southern part of the ribbon embraces the British Library, three mainline railway termini (Euston, King's Cross and St. Pancras) and the splendidly revitalised Victorian St Pancras Hotel. On both banks there are art murals and striking graffiti on the walls, greenery, stark industrial heritage buildings, modern apartment and office blocks with enormous towering cranes. In the next phase our research will extend its geographical context westwards to embrace the Borough of Westminster.

FORTY YEARS AGO: CANAL BOAT & PHOTOGRAPHY EXPERIENCES AND THE NEED FOR PRESERVATION

The personal recollections of Graham Diprose describe his early experiences as a photographer working on canal boats and succinctly provide a compelling case for the preservation of photos of the canals:

'My own interest in canals dates from over forty years ago, when as an unemployed college leaver with a qualification in photography, I became a volunteer assistant coal merchant on the Town Class Large Woolwich Narrow Boat 'Alton'. This was being restored by the Narrow Boat Trust [4], of which at some point or another, I ended up as chairman for a year or two. Almost inevitably, these two strands combined, particularly when I became an assistant photographer in a studio over Belsize Park Underground Station, just north of Camden Town and the Regents Canal. Apart from taking some pictures of my own, I also became involved in copying and restoring old Black and White photographs of London's Waterways and those of South East England for two books by Martyn Denney [5], a friend from childhood. Sometimes I was copying tiny prints, while on other occasions we were offered a series of glass negatives that had never been printed. As word went out among the canal community that we were looking for new and unpublished images, soggy shoe boxes would arrive, rescued from some dead relative's decaying garden shed. Many were beyond saving. Some were well fixed or sepia toned for

longevity, while others would already be fading to a pale yellow, bronzed with a metallic silver surface, or green with mould.

When we visited local council and waterways orientated museums, curators would often tell similar stories of random boxes of prints arriving, sometimes left on the doorstep after hours. Some would become among the most iconic and well recognised and republished images of London's canals, while the fate of others often rested on whether unskilled volunteers could document and do any rudimentary preservation on these images to ensure their survival to the present day. What had survived, or been lost forever, was totally by chance and random in nature. Perhaps this particular example could be repeated in many thousands of different historical subjects and topics, but as waterways provided a particularly interesting and well covered subject for early Victorian photographers onwards, it provides a particularly thought-provoking case in study.

Probably millions of photos of the canals have been taken over the years. Many of the photos have been lost or are not available for public access, which is as true for old prints as it is for modern digital images. Although there is substantial interest in the canals, which is being documented, much is being lost. How is even a specialised museum curator to decide which photos is are more in need of "saving" when there are so many?

Images in the form of digital data are already proving to be far more fragile than either Victorian Black and White prints or the Colour Dye Images of the 1950's to 2000's. Canal and Waterways small museums/archives are particularly vulnerable, due to very limited funding and in many cases, poor IT skills. Voluntary assistant curators are often in their retirement years. "Born Digital" images are at greater danger of losses than digitised silver- based images; in the latter case, the original can still survive and be digitised again.

Waterways Museums tend to be poorly funded and staffed by unskilled voluntary labour, which means that any donation of historic canal pictures on film (transparency or negative) risks being hidden away in a box and later discarded to make more space. There is considerable pressure to apply for Lottery and similar Heritage Grants in order to digitise both Black and White prints and Colour images. This is most laudable from the point of view of sharing their collection online to a wider audience, although it can raise issues over lost revenue, where print sales would previously have produced a revenue stream. However, there remains among many curators and the public the belief that canal image digitisation 'preserves' the images for longer.

One can liken many of today's museum curators who store their digital collection on CD, Hard Drive or RAID (redundant array of independent disks) storage, to those Museums that carefully archived the wonderful early silent movies of the early part of the last Century in thousands of tin film cans; when opened the Acetate Film inside had either disintegrated to dust or was otherwise useless. When we consider archiving digital images over the next 50 years or longer far more consideration needs to be taken of "Bit Rot". This could be due to non-migratable file formats, data simply disappearing while being stored or even during repeated migration to file formats and hardware beyond our present comprehension.

The historic images presently in archive in our waterways museums are survivors. There have been massive random losses of the photographic records of not only industrial and transport systems but also of the people and communities that initially fired much of the Victorian Industrial Revolution. Digital images are an even more fragile form of image storage, much of which is unlikely to survive the next 50-100 years even in well-funded and highly skilled museum environments let alone in small archives and institutions. There is a need for a structure and guidelines in relation to preservation, including education on the "dangers" of digital preservation. Such guidance should be used by funding bodies as well as museums.

PRESERVING PHOTOS FOR MANY GENERATIONS

Diprose and Seaborne [6] propose archiving vital images and documents as hard copy inkjet prints, not in place of digital storage and migration, but rather as an insurance, using established conservation methods and acid free paper and pigments. This would, in effect, be a means of sending our most significant artworks, digital photographs and documents forward into the 23rd century. The images could then be recovered from the print-out with minimal loss using whatever capture or scanning technology may be available in the future. There have been some initial attempts at such an insurance policy; below we present three previous long-term photograph preservation case studies and one new one. Born digital photographic imaging does present an interesting opportunity. We already know from previous research [7] that certain combinations of pigment inks in a few digital printers, combined with particular acid free, non-baryte unwhitened rag papers can produce digital prints with an expected life of 350 years plus.

Case 1: Thames - London's Changing Riverscape. In 1997, Mike Seaborne, Charles Craig and Graham Diprose made a continuous photographic panorama of both banks of the Thames from London Bridge five miles downstream to Greenwich: a remake of a panorama first photographed in black and white in 1937 for the Port of London Authority (PLA). Concerned that the newly created digital TIFF files would not outlast the 1937 Silver Gelatine original, even entrusted to the Museum of London's considerable expertise, they convinced the PLA that the safest way to ensure that the new digital panorama would survive for their bi-centenary in 2109 was to make an ink jet printout to match that from 1937 with the same lengths of sections and locations. This allows any river location to be viewed simultaneously with the 1937 and 2008 versions placed side-by- side.

Case 2: River Thames Revisited. In a further project by Diprose and Robins: '...in the footsteps of Henry Taunt' sponsored by English Heritage, the photographers digitally revisited the hundred or so 'tripod spots' of the first Victorian photographer to document the entire length of the River Thames. Their new digital images went into the Archive in Swindon, alongside Taunt's Silver Gelatine Prints from 1860-1920, but again, to avoid the possibility of photographs from 130 years ago outliving their new digital images, the whole project English Heritage National Monuments Record (NMR) was archived as A3 digital ink jet prints as well as Tiff files.

Case 3: John Cass East End Archive. This historic and contemporary photography and arts archive was originally planned as a digital only collection. Diprose and Seaborne used the opportunity to explore further aspects of 'sending collections into the future' such as ease of access using multi-image pages on A2 sheets and the risks of losing colour management information during repeated future migrations.

The corresponding EVA 2014 Florence paper [6] provides the three case details; it attracted lively discussion.

Case 4: A New Case Study at Oxford: The archives of University College, Oxford University hold precious documents and images going back to the Renaissance and before. This case will be presented at EVA London 2018 [8] by Graham Diprose, Michael George and university archivist Robin Darwell-Smith.

These four case studies indicate that the very long-term preservation problem is attracting increasing attention. We hope for much more debate on the concept, scope and details but emphasize that this approach is 'an insurance policy' for solely digital methods, i.e. in addition to whatever new innovations will appear, not as a substitute. Moreover, it is proposed for just a small selected sub-set of the images of a museum or collection; this brings up the 'selection dilemma'.

This paper reports the first steps of a potential fifth case study, or at least a 'thought experiment', which opens the possibility of extending the scope of such techniques to the tributaries of museum archives: that is to the personal collections of current and future photographers which – if they are of potential historic or artistic importance – may sooner or later feed into museum holdings as 'trusted repositories' for access. What we hope to produce, inter alia, by mid-2019, from this case study of Regent's Canal is a policy for documenting, recording and then preserving a small number of selected images and their contexts for access and use hundreds of years into the future. There are numerous approaches to short and medium-term preservation of photos and other artworks. We shall explore some of these later in the project.

FIRST STEPS

Creating a Thesaurus

The Camden section of Regents Canal has a long and proud history, its use changing over its two centuries from business to pleasure. It has provided a home for waterfowl, fish and humans. Along the towpaths, and in the water, there are many plants. Every day many people walk or cycle along the canal or spend their breaks on one of the many benches. There are many possible professional users of Regent's Canal photos, e.g. journalists, marketing agents, museum curators and librarians, as well as the general public.

How can all this diversity be captured and made available for retrieval? How can a record of the life on and surrounding a canal be created? One method used by museums to deal with the complexity involved is to create a thesaurus. The Collections Trust, a UK internationally-oriented organisation which aids museums to create documentation standards employing specialised thesauri as appropriate, defines the term as follows [9]:

'A thesaurus is a structured wordlist that is used to standardise terminology. It provides the user with a single preferred term from a hierarchy that is cross-referenced to other groups of terms which may be relevant to the subject. Using standardised terminology like a thesaurus to catalogue objects in your museum collections enables you to keep consistent records which give reliable answers when searched.'

The main purpose of a thesaurus is to aid indexing, structuring and retrieval of specific objects in a collection (or information about these). In order to achieve this the structure of the 'wordlist' is key. In creating a thesaurus to eventually serve as a guide for creation, selection, sorting and retrieval of Regents Canal images, key measurements of success are Ease of Use and Usefulness of Results. If it is not easy to use or (as intuitive as possible a Mac designer might say), or if the search results are not useful then it will not be adopted. A search result is not useful if it either delivers too many results or too few. A too restrictive hierarchy for example would mean that not enough suitable results are delivered, for example an image researcher wanting to find all photos of Kings Cross Basin but only seeing those from the year 2015 - correct classification and filtering would have avoided this error. Creating a suitable structure needs to be tailored to the subject matter at hand, for example, a structure for photos of the life on a canal needs to be different than a structure for photos capturing the life of an indigenous tribe. It is likely that a search for photos of a specific subject will be limited by dates, area or desired perspective. Ideally all this information will be saved with the image for example in the form of keywords, so that retrieval is as easy as possible.

For the hierarchical structure of a thesaurus in this case a categorization via Content is assumed to be the most suitable. For example what do we consider to be the content of life on the Camden section of Regents Canal? Is it the wildlife, such as the ducks, fish and swans? Or the humans making use of these water lanes? Or

the 'infrastructure,' such as locks, tow paths and bridges, which also determine what use can be gained from the water? And what other factors play a role? A tentative first selection of categories can be made as follows (see Figures 1-7 for examples)

- Nature e.g. Flora and Fauna, Weather, Water
- Canal Infrastructure e.g. Locks, Moorings
- · Humanity & closely related objects and activities, e.g. Narrow boats, Canoes, Graffiti, Walkers

Some examples of key search related questions still to be tackled are "How to choose a category if a photo includes elements of various categories (e.g. Ducks swimming in front of a narrow boat just approaching a lock)? How can relevant preservation information best be included? Envisaged next steps include comparing the initial thesaurus with museum thesauri on similar subjects as well as the types of structures used by historical photo libraries and commercial stock agencies (briefly discussed below). After the first iterations, which will probably include more substantial changes, the thesaurus will be enriched with suitable definitions of the terms used and the desired scope of the categories.

Current Photo-library and Microstock Agency Practice.

We made an initial trial search of one photo library and one microstock agency. Founded in 1964, the Mary Evans Picture Library [10], a specialist historical photo library (partnered with Alinari), currently have 'only' half a million images online, adding about 100 daily, with categories and tagging. The term 'Regent's Canal' had 44 hits, all but one being black & white as to be expected from an historical archive. In contrast, Alamy, a large agency based in Oxfordshire with a reported 127 million 'images, vectors and films', the majority in colour, increasing by 100,000 per diem, was founded in 1999 [11]. They also use a category and tagging system for classification and retrieval. The search term 'Regent's Canal' returned the high figure of 7,529 stock photos and images. Drilling down from top-level categories is required and we shall consider leading current practice for photo libraries in the next phase of our research. However, this first comparison shows the much greater current image resources available from microstock agencies, but they do not have (yet) the historical resonances of, for example, a photo of a narrowboat from a century ago.

We close by referring to an aim regarding evolving from 'multi-disciplinarity' to 'interdisciplinarity'. For our work we define Interdisciplinary Research as: 'Bringing together different perspectives, experiences and backgrounds to enable a more holistic approach'. 'Multi-disciplinary' may be regarded just as a set of different disciplines. The evolution from one to the other will be observed as the project advances further. We will also consider other perspectives: walkers, boat dwellers and office workers, such as this office-based journalist admirer of the Canal:

'For the past two summers, from windows in the Guardian office in London adjoining Regent's Canal, I have watched a pair of swans raise two flotillas of cygnets. She broods, he patrols, and the young ones go from fluffy cuties to scruffy teenagers who stay in line far less during family outings on the dark water between the moored barges. It's a rather peace-inducing flash of nature in the relentless, hardedged crush of this great city.' [12]

References

[All web sites were last checked on 25 March, 2018]

- [1] www.italiannotebook.com/places/leonardo-canal-gate & Image/video on: http://www.leonardodavincisinventions.com/civil-engineering-inventions/leonardo-da-vincis-canal-lock/
- [2] http://www.canalmuseum.org.uk/history/ukcanals.htm. See also the Museum of London Docklands, an outpost of the main Museum of London, www.museumoflondon.org.uk/museum-london-docklands.
- [3] Bolton, Tom. Camden Town: Dreams of another London. British Library, 2017.
- [4] http://www.narrowboattrust.org.uk/append-photo 2011Gall.htm Narrowboats as beautiful art objects.
- [5] Denney, Martyn. *Historic Waterways Scenes: London & South-East England* Moorland Publishing, Derbyshire, UK. 1980. Previous book: Denney, Martyn: *London's Waterways*, 1977. Harper Collins.
- [6] Diprose, G. and Seaborne, M. Conserving Digital Images Into The 23rd Century A New Case Study. In EVA 2014 Florence Proceedings, Florence University Press.
- [7] Ibid. References 7-9.
- [8] www.eva-london.org/eva-london-2018/. The programme should be on the site by May 2018
- [9] https://collectionstrust.org.uk/terminologies/
- [10] http://www.maryevans.com/
- [11] http://www.alamy.com/
- [12] Chadwick, Paul, *The Guardian Journal*, page 4, Monday 19 February, 2018; opinion piece on Design

Figures 1-7. Examples of Nature, Infrastructure and Humanity on the Regent's Canal



Figure 1. A Hungry Visitor



Figure 3. Winter Arrives



Figure 5. Lock and Building in Progress

Figure 7. Fun on the Canal





Figure 2. Gulls, Ice and Industrial Architecture



Figure 4. The Ice Retreats



Figure 6. Camera Happy Tourists

Photographs by Christina Hemsley (Copyright, 2018)