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Technologies of Public Culture: Cultural Heritage Encounters with Photography, Television and the Web

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Abstract

The operations through which cultural heritage institutions perform their civic and governmental roles have been identified with a logic of visual apprehension by writers such as Tony Bennett. This article explores how these institutions have ordered and regulated contact with their publics via a negotiation of different visual communication technologies, specifically, photography, television and the Web. Through analysis of individual cases, it is possible to discern the shifting relationship between public heritage institutions and their audiences, as mediated by these technologies. It is argued that this approach develops a distinctive understanding of public culture and demonstrates the ways in which notions of publicness shape and are shaped by visual communication technologies in the cultural heritage context.

Keywords

Public, culture, heritage, communication, technology, digital, photography, television

Introduction

Tony Bennett has established an influential account of the dynamics of public culture in the museum: 'The public rights demand is produced and sustained by the dissonance between, on the one hand, the democratic rhetoric governing the conception of public museums as vehicles for popular education and, on the other, their actual functioning as instruments for the reform of public manners' (Bennett, 1995: 90). Bennett situates his analysis of the museum-public relationship within a broader discussion of the civic and governmental role of public heritage institutions, and how they operate via a logic of culture that has historically privileged visual apprehension (Bennett, 1995; see also Bennett, 2007). As Charlie Gere comments:

> Through Bennett's analysis it is possible to see the museum […] as a technology of vision, operating in a similar manner as such technologies. It is a place of visual consumption that presumes and addresses a particular kind of observer. It is therefore precisely a medium, a system of display through which messages are communicated, and which mediates those messages (2010: 156).

Here, vision is identified as a component of the operations that have characterized the museum's modes of mediation and communication. Yet to think of the museum as 'a technology of vision' also implies a connection to other technologies and modes of visual perception. For example, Jonathan Crary suggests that the art museum has consistently been presented as an alternative to distracted forms of popular visual entertainment such as cinema and television (1992). However, less attention has been devoted to the interplay between technologies and cultural heritage institutions and their joint role in mediating contact with public audiences. This article develops these lines of inquiry, focusing on the history of UK cultural heritage, visual communication technologies and institutional encounters with photography, television and the Web. Through case studies, we aim to show the complex ways in which public culture has been interwoven with conceptions of communication and technology in cultural heritage settings.

Our approach is informed by recent research, which has investigated 'the uses of contemporary media in museum contexts […] to understand the ways museums have taken shape in relation to different media technologies' (Henning, 2015a: xxxvii). Work in this area has often emphasized media-technological installations and how exhibitions borrow or 'quote' from different media formats (Hoskins, 2003; Kidd, 2014). Likewise, much work has been done on the extent to which media technologies facilitate closer or more varied engagement with exhibition themes (Griffiths, 2007; Pierroux and Ludvigsen, 2013).

There is therefore considerable scope to explore how notions of publicness shape and are shaped by communication technologies in cultural heritage institutions. The article highlights technologies that operate primarily through visual mediation, but also have the capacity to extend the museum beyond its physical boundaries. This ability is due to technological reproducibility and the rendering of cultural artefacts as data (as analogue impressions of light on paper, electromagnetic signals, or binary codes). As Haidee Wasson argues, the historical involvement with different kinds of media has led museums to reinvent themselves, no longer to be understood as 'a permanent unmoving, physical structure but as a kind of tentacular hub for a range of things and ways of presenting those things' (2015: 605).

Scholarship in the field of media and heritage similarly stresses the multiple effects resulting from the translation of material culture into reproducible media (see, e.g., Kalay et al., 2008; Cameron and Kenderdine, 2007). With regard to photography, the arguments are well rehearsed; technological reproducibility, which is implicated in the loss of the art object's 'aura', gives rise to an elevation in the status of the original (Benjamin, [1935] 1999). On the other hand, academic writing about television has brought out the transient and ephemeral features of the medium in ways that might contend with the museum's duty to preserve the past (Williams, [1974] 2003). Insofar as they take on this duty, museums have been the mediators of the contemporary fascination with memory and heritage, which is variously referred to as the 'memory boom', the 'memory wave' and the 'heritage industry' (Hewison, 1987; Huyssen, 1995; Kansteiner, 2002). A preoccupation with memory has also been noted in relation to digital media; Wendy Hui Kyong Chun writes, 'the major characteristic of digital media is memory. Its ontology is

defined by memory, from content to purpose […] Memory underlies the emergence of the computer as we now know it' (2008: 154).

These insights underpin our understanding of visual communication technologies and cultural heritage in the article. Our case studies are drawn from the context of UK heritage, wherein national galleries and museums have had a fundamental role in the public administration of culture. Furthermore, ideas of public service are well-established in UK media debates, due to the early consolidation of public service broadcasting (PSB) in the British Broadcasting Corporation (BBC). Such debates, particularly regarding the precedent set by British PSB, have a wider international significance with respect to questions of media and cultural governance, and have been discussed and studied in some detail (see, e.g., Debrett, 2010; van Dijck and Poell, 2015).

The article is organized into three sections – photography, television and the Web – and encompasses a historical range of 1947 up to the present day. Each section concentrates on examples of cultural production and practice that are at the intersection of public heritage and visual communication technologies, and examines the new kinds of knowing they have facilitated and/or resisted.

Photography

In relation to photography, we consider how this technology was used to communicate with the public in ways perceived to be more direct and accessible than previous approaches. The UK National Gallery's 'Exhibition of Cleaned Pictures' (1947-1948) is a paradigmatic example because of its display of photographs on an unprecedented scale, which showed paintings in their different stages of cleaning alongside the devices and procedures used in the conservation process. The Exhibition received good coverage in the national and local press as well as internationally, and offers a rich case-study of the uses of photography by a gallery in the public domain. The controversy over the cleaning of the pictures, which prompted the Exhibition, has been examined elsewhere and will not constitute our focus here (Keck, 1984). Rather, we address how photography's reportedly unbiased language became embedded in the Gallery's democratizing agenda and helped to shape distinctive forms of publicness.

During the interwar period, the mass media grew significantly, with the emergence of the tabloid newspaper in the 1920s, which was parallelled by technological developments in photography and cinema that diversified the visual domain (Warner, 2006). By 1947, the year of the Exhibition, photographs were common currency in newspapers and illustrated weeklies, and the Exhibition capitalized on this phenomenon to bring the Gallery virtually closer to visitors. Despite the contemporaneous association of much press photography with 'sensational journalism', as noted by several scholars (Becker, 2003: 295; Warner, 2006: 241-242), primary evidence suggests that the Exhibition drew on the notion that photographs were self-validating documents which presented a 'quantum of truth' to the viewer, to borrow John Berger's expression (1980: 293). Thus, on the one hand, photography provided a contemporary lens familiar to visitors acquainted with the

medium, and on the other it provided a cultural mode of transmission that seemed both legible and objective.

On this basis, the Exhibition used photography to illustrate the outcomes and processes of cleaning, and invited visitors to judge the visual evidence for themselves, hoping to perform what it called a 'policy of truthful of scholarship' (The National Gallery, 1947: xxiii). Moreover, the Exhibition displayed pictures that were partly cleaned, uncleaned and cleaned, alongside photographs of the paintings in their different phases of cleaning. As a result, the Gallery's catalogue stated that it had put 'as fully as possible before the public facts about certain pictures upon which the public must form its opinion for itself' (The National Gallery, 1947: xxiv).

The Exhibition had a major and largely positive international reception, as revealed by over thirty press cuttings that survive in the National Gallery Archive (National Gallery Archive, NG24/1947/1; NG24/1947/6). A number of reporters claimed that the scientific techniques employed by the Gallery demonstrated an honest and impartial practice of cleaning, and posited the Exhibition's influence on the profession in the UK and abroad. Domestic media outlets such as *The Illustrated London News*, *Country Life*, *Future* and *News Chronicle* proffered similar views and reproduced images of the Gallery's photographs of paintings, and the instruments and devices used during cleaning (National Gallery Archive: NG24/1947/1). As one reporter of the popular paper *Daily Worker* wrote, the ordinary worker could now see his birth-right 'without some pedant at his side to "explain" it for him', and 'our grand visual heritage' was accessible as the great masters meant it to be seen – in 'bright, glowing colours' (Crombeke, 1947). The implication was, not only that the qualities of transparency attributed to the photograph made paintings available for everybody to see, but that the medium of photography was a social leveller enabling members of the public to take ownership of a 'visual heritage' hitherto inaccessible. The democratizing tone of the report assumed the ability of the photograph to present visual information in ways that were immediately apprehensible.

In the first decades of the twentieth century, especially after the two World Wars, museums, among other cultural organizations, made a concerted attempt to develop a more outward-looking orientation and provide greater ease of access for their visitors (Hoberman, 2011). This agenda played a key role in the 'Exhibition of Cleaned Pictures', which was intended to diversify public engagement with the collection and broaden its reach through the use of photographs. As part of the wider project of post-war cultural reconstruction, one objective of the Exhibition was to build 'mutual trust between the museums and galleries on the one hand and their visitors on the other' (The National Gallery, 1967: 48). In the years following the Exhibition, the National Gallery would embark on other similar initiatives, such as the Schools' Scheme (1949-1956), which circulated coloured reproductions of paintings from the collection with explanatory text containing historical information for a small fee (The National Gallery, 1955). Photographs were also used as visual input for radio programmes such as 'Painting of the Month' and 'Talking of Pictures', both BBC productions for the Third Programme.

However, the curatorial techniques employed in the Exhibition also served the purposes of classifying and aestheticizing certain forms of art historical knowledge and museum practice. Photographs were documentary evidence of the Gallery's expertise, and this seemed to endow them with neutrality, a necessary condition for emancipated viewing as many journalists were keen to affirm. Furthermore, it could be argued that photography worked to consolidate the Gallery's authority regarding conservation matters. The photographs detailing the process of cleaning, and the choice to present them alongside the cleaned paintings, provided visual cues in defence of the Gallery's conservation procedures. Significantly, the public forum that the Exhibition had broached was foreclosed insofar as the combination of paintings, cleaning and technology sought to make the superiority of the Gallery's techniques evident beyond questioning. As a result, while the Exhibition did reflect an interest in promoting a democratic public access agenda, it propounded a consensual view about its practice of cleaning. In so doing, the Exhibition realized what Jacques Rancière calls the 'division of the sensible whereby domination imposes the sensible evidence of its legitimacy' (1998: 17).

The democratic intent of the Exhibition sat alongside a score of concerns to reform the public via the re-articulation of its mechanisms of perception. These new forms of perception were fostered through photography, establishing an optical relationship with the work of art that intended to recuperate the 'original' facture of the artist. For instance, the highly diverse and specialist field of scientific photography (including macro-photography, x-ray and infra-red photography) allowed for a focus on mark-making, brushwork, under-drawing, and the 'handmade' qualities of the painting (Henning, 2015b: 588). In the case of Rembrandt's *Woman Bathing* (1654), the Exhibition catalogue stated that a nineteenth-century addition to one of the hands of the painting's subject was an alteration 'made to suit the taste of the private owner or prospective buyer', and that its removal restored the painting to its 'original appearance' (The National Gallery, 1947: x-xi). X-ray photography had revealed this detail, thus showing a direct a relationship between the use of photography and the conceptualization of the 'original' (Henning, 2015b; Latour, 2011; Warner, 2006).

To conclude, the Exhibition's structuring of vision through the medium of photography was threefold: first, it transformed the experience of the Gallery and the art objects in its collection. These were now visually mediated by technologies that formed a continuum with the daily experience of the public, making it a more open institution whose visitors would be able to examine its paintings and cleaning procedures. Second, it circulated such images as tokens of a truthful policy that devolved the power to interpret paintings onto the viewer, drawing from a liberal strand of thought that aimed to produce 'free' and well-informed subjects. Thirdly, values of truthfulness associated with photographic and documentary evidence were brought to bear on the definition of the Gallery's publicness, which conveyed reformist aims to educate visitors about, and enrol them in, certain techniques of observation – a manner of looking at paintings which was deemed not only more accessible, but also more truthful.

This use of photography to shape the public reception of art continued in the years following the Exhibition. For instance, André Malraux's famous book *Museum without*

Walls (1947) included photographic reproductions of artefacts of various kinds, from diverse geographical origins (Malraux, [1951]1954). These were presented sequentially and side by side in the volume, suggesting cross-cultural 'affinities' between different objects, based on their formal equivalences of shape and scale (Henning, 2015b: 591). Edward Steichen's 'Family of Man' (January-May 1955), a MoMA exhibition that toured thirty-seven countries deployed similar photographic techniques to encourage a vision of a 'like-minded and related global humanity' (Staniszewski, 1998: 124). The exhibition featured images of ordinary people from different parts of the world engaged in what were considered to be 'universal human activities' (McClellan, 2008: 39). These examples illustrate the ongoing transactions between publics and museums as mediated through the reproducible and visual medium of photography.

Television

Liveness and transience have often been identified as characteristic features of television, given its uninterrupted and ephemeral mode of transmission (Holdsworth, 2008; Feuer, 1983). Raymond Williams was among the first to critically interrogate the logic of the medium from a historical perspective. Television, he noted, had developed within a wider complex of specializing knowledge practices and forms, so that the 'varying needs of a new kind of society and a new way of life were met by what were seen as specialized means: the press for political and economic information; the photograph for community, family and personal life; the motion picture for curiosity and entertainment […]' ([1974] 2003: 16). Eventually, television became a mass medium whose crowd 'was atomised, dispersed in millions of homes scattered across the country' (Walker, 1993: 20).

The post-World War II period in the UK saw a huge increase in television set production. Between 1950 and the early 1960s, the number of television sets grew from half-a-million to thirteen million. In 1954, the foundation of the Independent Television Authority marked the establishment of the first commercial network (Hendy, 2013). This would both challenge and define the idea of public service, and its institutionalization through the BBC. Although the BBC had its origins in the early 1920s and was initially a consortium of wireless receiver manufacturers, it would go on to become synonymous with public service values because it relied on the licence system of domestic receivers for income, rather than commercial advertising (Williams, [1974] 2003).

From the 1950s, the growth of television enabled greater experimentation with this new medium and cultural heritage institutions began to launch initiatives with the aim of democratizing access to their collections. Such initiatives were taking shape in tandem with the gradual professionalization of museum education departments, which confirmed the expansion of the museum's duties beyond its traditional objectives to collect, display and conserve (Floud, 1952). Television provided a means to reach mass audiences because of its mutable, mobile, and simultaneously oral and visual properties, as well as transforming the ways in which museums generated and disseminated knowledge. As early as 1942, the renowned American museum educationalist Theodore Low argued that in the future 'it is to television that museums must turn as the logical medium for the

dissemination of their material on a grand scale' (see Johnstone, 1954: 271). This statement chimes with Maeve Connolly's view that museums' engagement in television production has historically been 'animated and shaped by questions over the future of the museum as cultural and social institution' (Connolly, 2015:122).

The first significant attempt to televise museums and galleries in the UK was the BBC programme 'Animal Vegetable Mineral?' (AVM?) (1952-1958), followed by the similar 'Buried Treasure' (1954-1959), both of which were largely based on archaeological and art historical collections from the UK. Over the same period, American museums embraced the medium of television more actively, with institutions like the Museum of Fine Arts (Boston) regularly filming in their galleries and hosting several programmes (Whitehill, 1970). However, 'AVM?' stands out as an early example of a television programme that combined the talk show and quiz genres to engage viewers in expert heritage discourses, while also holding popular appeal. This format straddled two approaches which have subsequently become less reconcilable: a 'rational discursive form', alongside a 'celebrity- and lifestyle-oriented culture' (Connolly, 2015: 140).

'AVM?' has been described as one of the BBC's 'big successes' (Attenborough, 2003: 20). Inspired by the American programme 'What in the World?', it presented a panel of three experts with archaeological and ethnographic objects and asked them to identify each one (Daniel, 1986). 'AVM?' invited guest museums and galleries from all over the country (and, in some cases, from abroad) to show a subset of their collections to a jury of experts who – lacking any prior information – had to identify the artefacts according to function, material, period, and location. Most of the programmes were filmed live in the studio, but on occasion they were shot onsite at guest institutions (locations included Cardiff, Aberdeen, the British Museum, York, Copenhagen, Brussels, Turin and Paris) (Daniel, 1986). The selection of objects was dominated by archaeological artefacts, but paintings and natural history specimens were also featured (Daniel, 1986).

For participating institutions, television enabled them to expose their collections to 'a vast new audience, never before acquainted with the Museum' (Schoener, 1952: 241). Television could reach populations outside major metropolitan areas and promote the representation of regional museums nationwide. The popular quiz format of 'AVM?' suggested a reshaping of the relationship between the public and the experts, as the latter – having no prior knowledge of the objects – were in a similar position to the viewers at home, especially when the objects in question fell outside their field of study, as the programme producer Paul Johnstone observed (1954). If anything, viewers seemed to occupy an advantageous position because they possessed information about the objects that was withheld from the experts. This scenario was achieved through the use of simultaneous frames during filming and, in the case of paintings, a new split-screen technology was employed to allow viewers to see both what the experts saw (the detail of a particular painting), and the whole painting, which the panel could not see.

'AVM?' thus sought to provide a platform to translate knowledge about cultural collections in dynamic and non-hierarchical ways, based on the principles of spatial extensibility, simultaneity of experience and the universal accessibility of television

(Hendy, 2013). But the programme did not simply adapt the museum to this medium; rather, it used technical means to extend patterns that had traditionally characterized the museum's relationship with the public. Expertise was retooled as a popular spectacle via the principles of rational deliberation. The initial idea to include a member of the public in the panel of experts was quickly dismissed because it was felt that 'wild guessing' was less entertaining than watching 'the gradual approach of a trained mind to knowledge already held by the audience' (Johnstone, 1954: 271). As press commentary of the show made clear, the panel's expertise held the programme's chief entertainment value. In reviews of a special edition from the National Gallery, reporters extolled the 'astonishing knowledge' (Glasgow Evening Times, 1955) of the panel and their conversation as 'a model of TV talk – civilised, relaxed and urbane' (Brien, 1955). Conversely, several reporters complained that this edition of 'AVM?' had been 'too easy' and 'very tame', with one even claiming the panel of experts had been 'far too smug in their superior learning' (Nottingham Evening Post, 1955; Liverpool Daily Post, 1955; Unknown press source, 1955). Another reporter noted that '[e]avesdropping on professors and academic experts taking cultured digs at each other' could be 'fun for five minutes' but to do so on TV was 'a bore' (Daily Sketch, 1955).

Through broadcasting's system of 'centralised transmission and privatised reception' (Williams, [1974] 2003: 24), 'AVM?' both structured the possibilities under which knowledge could be apprehended and opened up non-coercive spaces of consumption. These conditions correspond with Clive Barnett's observations regarding radio and television broadcasting, that 'the relationship between broadcasters and listeners/viewers is "unforced" because it is "unenforceable"' (1999: 385). That is to say, the 'constitutive "gap"' between broadcasters and their audiences prevents the former from normatively determining the latter's dispositions (Barnett, 1999: 385). However, Barnett also argues that while this mode of communication is not disciplinary, it can be 'regulatory' (1999: 382). In the manner suggested by 'AVM?', the museum and television converged on a notion of public service that extended the museum's traditional role as a legitimator of authority and provided a model for engagement with its collections. Glyn Daniel thus expressed the aim of the programme to 'instruct, inform and entertain' (1986: 251), reflecting the ethos of the BBC and its imbrication in viewers' everyday, domestic lives.

The panel quiz format that 'AVM?' deployed so successfully remained popular over time. In the 1960s, Lorna Pegram produced the BBC art quiz series 'The Art Game' (1966), and in the 1980s HTV produced 'Gallery' (1984-1990) for Channel Four, in which contestants (one expert per panel, celebrities and art students) had to identify paintings based on details and basic information (Walker, 1993). In the words of the presenter, Daniel Farson, the quiz 'intended to make it livelier and avoid the usual pretentiousness of art programmes which are all too Arty' (Farson, 1990: 11). Overall, the use of the quiz game has not endured for the articulation and dissemination of public culture by heritage institutions. Rather, with the onset of commercial television and its consolidation as an entertainment medium, public broadcasting in this area has largely evolved into more specialized strands: first, documentary genres steeped with educational aims, and second, 'lifestyle-oriented culture' programmes that use a language of entertainment and consumption (Connolly, 2015: 140).

The first category includes documentary genres that interpellate viewers as active and rational citizens. As Walker notes, these 'programmes [are] organized around a specific theme, written and presented by a noted scholar or expert' (Walker, 1993: 16). For example, the series 'Civilisation: A Personal View' (1969) has been considered 'a landmark in the history of British television's coverage of the visual arts' that influenced subsequent television productions of this type (Walker, 1993). Presented by Kenneth Clark, its goal was to democratize public access to the history of European culture in an entertaining manner. Here, as in later documentaries that inherited the format, knowledge is delivered as unidirectional, in a singular voice (Clark's), and often delivered as a series of factual statements (Walker, 1993). Programmes that have featured cultural heritage institutions, such as 'A Fortune in Pictures' (1970) about the National Gallery, similarly organize knowledge about their collections in self-contained ways that deflect public debate. With few exceptions, the tendency has been for institutions to participate in television through this 'factual' documentary mode, which ultimately seeks to instruct the public through a 'look and learn' orientation that enforces tutelary regulation (Ouellette, 1999: 65).

In the second category, a closer legacy with 'AVM?' may be established with more recent programmes including 'The Antiques Roadshow' (1979-present) and 'Fake or Fortune' (2011-present) which are less scripted and hierarchical in their style of delivery, and which acknowledge viewers as participants shaping the narrative of each episode. That said, their market-oriented component is quite distinct from the composite format of 'AVM?', a blending of education and entertainment that aimed to annul the knowledge gap between viewers and participants, even if it ultimately did this in prescriptive ways. As such, it can be considered an early artefact of PSB programming that opened up a space between the arenas of education and entertainment, publicness and expertise.

Digital Public Spaces

The shifting nature of public service values in PSB domains and organizations is subject to ongoing debate in international media studies scholarship. In much of this debate, the BBC has been a touchstone for issues pertaining to public space, audience engagement and public value (see, e.g., van Dijck and Poell, 2015). As discussed in the case of television, the BBC's responsibilities to educate and entertain found early form in the programme 'AVM?', and later in the documentary genre, through which cultural heritage institutions gained mass audience exposure to their collections.

The BBC has also been involved in partnerships with institutions throughout the 1990s and 2000s, during which time developments in digital technologies have provided new methods for accessing cultural heritage collections. One of the BBC's most high-profile projects was with the Public Catalogue Foundation (PCF), to digitize all the oil, acrylic, and tempera paintings in UK public collections. The project ran from 2009-2013, and more than 210,000 paintings were digitally photographed and made available on the Your Paintings website. In 2016, the website was relaunched as Art UK. The organization's

Director Andrew Ellis commented of the name change, 'Art UK does what it says on the tin. We are democratising access to the UK's public art collection' (Mills, 2016). 'Democratizing access' is a goal that aligns with both the BBC and the remit of public heritage institutions. Your Paintings brought together collections from across the country in an online platform and reflects aspirations for the democratization of heritage through digitization. Yet the advent of digital technology has also been accompanied by a renewed emphasis on interactivity and participation in public culture. For example, after the Your Paintings website went live, the PCF launched a tagging tool which invited visitors to the website to tag paintings with keywords and subject information (Baca, 2013). This kind of activity had the dual purpose of enhancing identification of the content and involving the public in the project.

Another initiative which directly addresses questions of public participation is the digital public space proposal. The term 'digital public space' was coined by Tony Ageh, former Controller of Archive Development at the BBC. In an interview with the Guardian in 2010, he used the name to describe a new layer of the Internet in which institutions could make publicly owned cultural content available, usable and free for non-commercial purposes (Kiss, 2010). Ageh also spoke in more detail about the idea in a 2015 speech:

> The 'Digital Public Space' is intended as a secure and universally accessible public sphere through which every person, regardless of age or income, ability or disability, can gain access to an ever growing library of permanently available media and data held on behalf of the public by our enduring institutions (Ageh, 2015).

Ageh's direct reference to the public sphere is notable. Likewise, he hints that a digital public space encompasses a wider sphere of influence than the BBC in the allusion to 'enduring institutions'. Digital media, it is implied, would enable the convergence of cultural heritage and broadcasting in a single service.

The proposal has progressed since 2010 through collaborations with the BBC and partners including Arts Council England, the British Film Institute, the British Library and the Open Knowledge Foundation. In November of 2014 a report commissioned by Jisc (formerly the Joint Information Systems Committee) was released, detailing the opportunities and barriers to creating a digital public space in the UK. The rationale for this venture, as defined in the report, is to make links between diverse collections, facilitate discovery and access and promote the digital content of its stakeholders (Strategic Content Alliance, 2014).

While recommendations were made for the initiative to be taken forward, the digital public space is still a contested concept; consultation revealed that there was not extensive support for the project for several reasons, which are connected to the aims of the different partners. One is that it is reinventing the wheel. Many large cultural heritage institutions already have in-house digital content management systems through which they make their cultural collections accessible to audiences, and services such as the Digital Public Library of America (DPLA) and Europeana were mentioned as working

models of digital public spaces. The report found 'there were some respondents who thought […] that while the DPS might be useful the case for investing time and effort into it was not sufficient' (Strategic Content Alliance, 2014: 28).

Some doubts about the need for the project were expressed at the level of the name. The report distinguishes between the bottom up approach to a digital public space as 'an emergent sphere of online activity' and the more formal Digital Public Space, indicative of 'a specific initiative, platform or service' (Strategic Content Alliance, 2014: 6). Part of the case for building a digital public space, then, would rest on securing accessible content and distinguishing it from existing initiatives. The report's description of a 'cultural creation' suggests the way in which it could do that: 'Regardless of what form the digital public space may finally take, it will never be just a technical solution but will itself be a cultural creation, where the process of forming it brings together a wide range of organizations with different interests and perspectives' (Strategic Content Alliance, 2014: 19).

Partners and stakeholders also emphasized the need for features linked to cultural production and Ageh stressed that the ability to chop up, re-use and reinvent cultural content online should be central to the operation of the digital public space (Kiss, 2010). Others have cited the affordances of the open web – for example open source file sharing, text and media editing – as a means by which the initiative could become central to cultural public life; basically as a facilitator of cultural production (Strategic Content Alliance, 2014).

This thinking informed *Pararchive*, a UK Arts and Humanities Research Council-funded project, to produce a community-based digital archiving platform to facilitate storytelling, research and curation. The project team worked with the BBC – and specifically Ageh – to come up with a tool that would allow individuals and communities to utilize digital content from the BBC Archives, alongside their own digitized collections. The resulting platform, named Yarn (yarncommunity.com), was developed based on the principles of co-design as an 'open' digital resource, allowing anyone to search and collect public archival resources and combine them with other media to tell their own stories (Popple and Mutibwa, 2016). This type of digital platform has the capacity to vastly expand the sets of relations and perspectives involved in the curatorial process, creating the prospect of more personal contributions that visualize, narrate and contextualize cultural collections.

In his essay, 'The New Reithians', *Pararchive* project leader Simon Popple describes the potential of such services to change the BBC's relationship with the public and provide people with what they want, rather than what they need. The latter view exemplifies John Reith's directorship of the BBC and its mission to educate that was consolidated during the first years of the corporation (Popple, 2015). The *Pararchive* project is presented as connoting a change from a patrician approach based on passive reception to interactive modes of participation and co-production. He quotes Ageh as saying:

Our primary relationships with licence fee payers have been essentially a one-way transmission of media to a passive recipient, with a relatively limited amount of 'have your say' commenting, which is strictly moderated and framed within often tight parameters and not really taken into account in subsequent commissioning decisions (see Popple, 2015: 136).

Popple and Ageh both make distinctions between audiences via references to the media itself; where broadcasting is characterized by passive reception, web-based services are indicative of active engagement.

The visual dimensions of the digital public space concept begin to reveal themselves in this comparison; the participation in cultures of display is positioned as a means of re-distributing authoritative visualizations of culture and the one-way transmission of institutional public values. These values were built on principles of general human universality, through which approaches to the public developed and have subsequently been found wanting. *Pararchive* and the digital public space proposal attempt to challenge problems of representational inadequacy by democratizing the curation of cultural content, i.e. by making online collections more interactive and usable.

Yet increased interaction feeds into a visual logic that is also more totalizing, not only in terms of the convergence of content but in terms of web infrastructure and privatized point-of-access services that use of the Internet requires. Furthermore, the ability to re-mix and re-use content is threatened by large-scale practices of data mining, designed to collect and exploit the data generated by user actions. The accumulation and retention of data by Internet and mobile companies map and magnify the uniqueness of individuals, and their movements across space and time (de Montjoye et al, 2013). Under these circumstances, forms of engagement become increasingly specialized and begin to take on the character of surveillance.

This danger and possible responses to it have been discussed by a number of commentators. One suggestion is that PSB could become Public Service Media (PSM) and extend beyond radio and television to include the the Internet (Andrejevic, 2013; Moe, 2008). Ageh himself spoke along similar lines in 2015, asserting the need to designate an allocation of bandwidth for public access like the public broadcasting spectrum. He made a case for the digital public space as a service that safeguards the public and offers features that are not currently available in the digital domain: anonymity, unmetered usage and access unmediated by commercial providers. He warned that without those things there are threats to access, personal data and privacy rights:

> We are now in a situation where the commercial sector has complete control. And they are dividing up the spoils often making commercial return the only criteria for developing or maintaining our right to access our public services – including but not limited to the public service broadcasters themselves (Ageh, 2015).

The priorities of the BBC in light of the digital switchover are implicit in Ageh's statement here; in 2016 it introduced the stipulation that the license fee would be a requirement for access to services such as BBC iPlayer, in order to gain a foothold in digital media. Nevertheless, it brings into focus one of the fundamental issues of any publicly-funded online initiative; how can the idea of participation and shared ownership be maintained when the infrastructure is privatized?

Consideration of this issue raises questions about whether the call for public access bandwidth, comparable to the idea of public radio, is timely or untimely. While the proposition registers higher stakes for the public in relation to digital media, it is debatable whether the categories of public and private are adequate to an understanding of the online environment. There is a technical aspect to the problem as Hui Kyong Chun observes:

> New media call into question the separation between publicity and privacy at various levels: from technical protocols to the Internet's emergence as a privately owned public medium, from Google.com's privatization of surveillance to social networking's redefinition of 'friends' [...] Internet users are curiously inside out – they are framed as private subjects exposed in public (2016: 12).

Such examples demonstrate the Internet's challenge to the clear, albeit permeable, boundaries between public and private that have previously given shape to public entities. From this perspective, the notion of PSM unmediated by new media companies seems flawed insofar as these are intimately connected to the user experience of the Internet, which is itself increasingly defined by tracking strategies, IP addresses, logins and cookies. Moreover, while anonymity and unmetered usage are held up as public values, they are, at the same time, inherent to broadcast media and the modes of passive reception critiqued by Ageh and Popple. Their comments are therefore indicative of broadcast media's embeddedness in the institutional identity of the BBC. That is not to say the idea of public service is completely redundant in the context of the Internet. However, a viable formulation would demand critical reflection on the types of publics shaping and shaped by this medium.

Conclusion

In this article, we have explored the relationship between cultural heritage institutions and communication technologies through the lens of public culture, drawing from case studies involving photography, television and the Web. These cases have been underpinned by the demand for public access and/or use, but simultaneously entangled in the organization of the conditions that make such access possible.

The specializing tendencies of institutional knowledge practices were shown to be bound up with a logic of visual communication, facilitated by the application of different technologies. The 'Exhibition of Cleaned Pictures' used photographic strategies, to enlist the public in its promotion of new techniques of conservation. Yet the possibility of a

public forum for debate was foreclosed through the authoritative framing of photography that sought to make the superiority of these techniques evident beyond questioning.

The 'AVM?' television programme, valued for its immediacy and its embeddedness in the familiar environment of spectators, was used to bring the museum and its collections closer to visitors, the implication being that they consequently became more accessible. But this was parallelled by regulatory modes that reattached the televisual medium to a notion of public service, defining the museum's role as an authoritative locus of expertise, even as it was expressed in the form of entertainment.

The digital public spaces discussed in the final part of the article actively minimize visual authority and institutional expertise through focusing on opportunities for audience participation in practices of cultural production. However, this version of public access entails a privatized infrastructure, which has its own visualizing and individualizing effects. The combination of ever smaller private concentrations of power and ever larger, insidious digital data retention means that it is all the more important to find ways of negotiating the ethics of the 'private subject exposed in public' (Hui Kyong Chun, 2016: 12). Whether public service initiatives can provide a constructive site for this negotiation remains to be seen. Recognition of these issues highlights the important role that technical infrastructures play in shaping environments both within and beyond cultural heritage institutions (Bennett, 2007; Barnett 1999). Our analysis here has attempted to demonstrate the potential of research approaches that situate such institutions alongside communication technologies, as part of wider networks of public culture.

References

Ageh T (2015) The BBC, the Licence Fee and the Digital Public Space. *Open Democracy*, 3 March. Available at: https://www.opendemocracy.net/ourbeeb/tony-ageh/bbc-licence-fee-and-digital-public-space (accessed 22 January 2018).

Andrejevic M (2013) Public Service Media Utilities: Rethinking Search Engines and Social Networking as Public Goods. *Media International Australia, Incorporating Culture & Policy* 146: 123-32.

Attenborough D (2002) *Life on Air: Memoirs of a Broadcaster*. London: BBC.

Baca M (2013) The Public Catalogue Foundation's Your Paintings Project. *Visual Resources* 29(3): 151-153.

Barnett C (1999) Culture, Government and Spatiality: Reassessing the 'Foucault Effect' in Cultural-policy Studies. *International Journal of Cultural Studies* 2(3): 369-397.

Benjamin W ([1936] 1999) The Work of Art in the Age of Mechanical Reproduction. In: Arendt H (ed) *Illuminations*. London: Pimlico, pp. 211-244.

Becker K (2003) Photojournalism and the Tabloid Press. In: Well L (ed) *The Photography Reader*. London and New York: Routledge, pp. 291-308.

Bennett T (1995) *The Birth of the Museum: History, Theory, Politics*. London: Routledge.

Bennett T (2007) Exhibition, Difference and the Logic of Culture. In: Karp I et al (eds) *Museum Frictions: Public Cultures/Global Transformations*. Durham, N.C.: Duke University Press, pp. 46-69.

Berger J (1980) Understanding a Photograph. In: Trachtenberg A (ed) *Classic Essays on Photography*. New Haven: Leete's Islands Books, pp. 291-294.

Brien A (1955) New Panel Games. *Observer*, 3 July. London: National Gallery Archive, NG24/1955/11.

Cameron F and Kenderdine S (eds) (2007) *Theorizing Digital Cultural Heritage: A Critical Discourse*. London: MIT Press.

Connolly M (2015) The Museum as TV Producer: Televisual Form in Curating, Commissioning and Public Programming. In: Henning M (ed) *The International Handbooks of Museum Studies: Museum Media, vol. 3*. Chichester: Wiley Blackwell, pp. 121-43.

Crary J (1992) *Techniques of the Observer: On Vision and Modernity in the Nineteenth Century*. London: MIT Press.

Crombeke L (1947) Pictures – Clean or Dirty? *Daily Worker*, 16 October. London: National Gallery Archive, NG24/1947/1.

Daily Sketch (1955) Highbrow Bickers are a TV Bore. *Daily Sketch*, 1 July. London: National Gallery, NG24/1955/11.

Daniel G (1986) *Some Small Harvest*. London: Thames and Hudson.

de Montjoye Y, Hidalgo CA, Verleysen M and Blondel VD (2013) Unique in the Crowd: The Privacy Bounds of Human Mobility. *Scientific Reports* 3(1376). DOI: 10.1038/srep01376.

Debrett M (2010) *Reinventing Public Service Television for the Digital Future*. Chicago: Intellect Publishing.

Farson D (1990) *Gallery: A Personal Guide to British Galleries and their Unexpected Treasures*. London: Bloombsury.

Feuer J (1983) The Concept of Live Television: Ontology as Ideology. In: Kaplan EA (ed) *Regarding Television: Critical Approaches – An Anthology*. Frederick, Md.: University Publications of America, pp. 12-22.

Floud P (1952) Changing Fashions in Museum Teaching. In: Museums Association Conference, Oxford, 24 July. *The Museums Journal* 52(9): 215-224.

Gere C (2010) Slitting Open the Kantian Eye. In: Bailey C and Gardiner H (eds) *Revisualizing Visual Culture*. Farnham: Ashgate, pp. 151-164.

Glasgow Evening Times (1955) *Glasgow Evening Times*, 1 July. London: National Gallery Archive, NG24/1955/11.

Griffiths A (2007) Automatic Cinema and Illustrated Radio: Multimedia in the Museum. In: Acland C (ed) *Residual Media*. Minneapolis, MN: University of Minnesota Press, pp. 69-96.

Hendy D (2013) *Public Service Broadcasting*. Basingstoke: Palgrave Macmillan.

Henning M (2015a) Introduction. In: Henning M (ed) *The International Handbooks of Museum Studies: Museum Media, vol. 3*. Chichester: Wiley Blackwell, pp. xxxv-lx.

Henning M (2015b) With and Without Walls: Photographic Reproduction in the Art Museum. In: Henning M (ed) *The International Handbooks of Museum Studies: Museum Media, vol. 3*. Chichester: Wiley Blackwell, pp. 577-602.

Hewison R (1987) *The Heritage Industry: Britain in a Climate of Decline*. London: Methuen.

Hoberman R (2011) *Museum Trouble: Edwardian Fiction and the Emergence of Modernism*. London: University of Virginia Press.

Holdsworth A (2008) 'Television Resurrections': Television and Memory. *Cinema Journal* 47(3): 137-144.

Hoskins A (2003) Signs of the Holocaust: Exhibiting Memory in a Mediated Age. *Media, Culture and Society* 25(1): 7-22.

Hui Kyong Chun W (2008) The Enduring Ephemeral, or the Future Is a Memory. *Critical Inquiry* 35: 148-171.

Hui Kyong Chun W (2016) *Updating to Remain the Same: Habitual New Media*. Cambridge, MA: MIT Press.

Huyssen A (1995) *Twilight Memories: Marking Time in a Culture of Amnesia*. New York: Routledge.

Johnstone P (1954) Museum and Television, an Account of a BBC Experiment. *Museum* 7(4): 268-273.

Kalay Y, Kvan T and Affleck J (eds) (2008) *New Heritage: New Media and Cultural Heritage*. London: Routledge.

Kansteiner W (2002) Meaning in Memory: A Methodological Critique of Collective Memory Studies. *History and Theory* 41(2): 179-197.

Keck S (1984) Some Picture Cleaning Controversies Past and Present. *Journal of the American Institute for Conservation* 23(2): 73-87.

Kidd J (2014) *Museums in the New Mediascape: Transmedia, Participation, Ethics*. Farnham: Ashgate Publishing.

Kiss J (2010) Tony Ageh on the BBC Archive and how to Remake the Internet. *The Guardian*, 1 November.

Latour B (2011) The Migration of the Aura or How to Explore the Original through its Facsimiles. In: Bartscherer T and Coover R (eds) *Switching Codes: Thinking through Digital Technology in the Humanities and the Arts*. Chicago and London: University of Chicago Press, pp. 275-297.

Liverpool Daily Post (1955) The Cameras Caught Royal Occasion. *Liverpool Daily Post*, 6 July. London: National Gallery Archive, NG24/1955/11.

Malraux A ([1951]1954) I. Museum without Walls. In: Malraux A *The Voices of Silence*, trans. Stuart Gilbert. London: Secker & Warburg, pp. 13-128.

McClellan A (2008) *The Art Museum from Boullée to Bilbao*. Berkeley and Los Angeles: University of California Press.

Mills E (2016) Your Paintings website relaunched as Art UK. *The Museums Journal*, 1 March.

Moe H (2008) Dissemination and Dialogue in the Public Sphere: A Case for Public Service Media Online. *Media Culture & Society* 30: 319-36.

National Gallery Archive [various newspaper articles]. London: National Gallery Archive, NG24/1947/1; NG24/1947/6.

Nottingham Evening Post (1955) Those Panel Games! *Nottingham Evening Post*, 4 July. London: National Gallery Archive, NG24/1955/11.

Ouellette L (1999) TV Viewing as Good Citizenship? Political Rationality, Enlightened Democracy and PBS. *Cultural Studies* 13(1): 62-90.

Pierroux P and Ludvigsen S (2013) Communication Interrupted: Textual Practices and Digital Interactives in Art Museums. In Schrøder K and Drotner K (eds), *The Connected Museum: Social Media and Museum Communication*. London: Routledge, pp. 153-176.

Popple S (2015) The New Reithians: Pararchive and Citizen Animateurs in the BBC Digital Archive. *Convergence: The International Journal of Research into New Media Technologies* 21(1): 132-144.

Popple S and Mutibwa D (2016) Tools You Can Trust? Co-design in Community Heritage Work. In Borowiecki K, Forbes N and Fresa A (eds) *Cultural Heritage in a Changing World*. Springer, Cham. DOI: https://doi.org/10.1007/978-3-319-29544-2_12.

Rancière J (1998) *Aux bords du politique*. Paris: Gallimard.

Schoener A (1952) An Art Museum's Experiment in Television. *Museum* 5(4): 239-244.

Staniszewski MA (1998) *The Power of Display: A History of Exhibition Installations at the Museum of Modern Art*. Cambridge, MA: MIT Press.

Strategic Content Alliance (2014) Towards a UK Digital Public Space. Available at: https://digitisation.jiscinvolve.org/wp/files/2014/12/141208-Towards-a-UK-Digital-Public-Space-A-Blueprint-Report-November-2014-WEB-VERSION.pdf (accessed 22 January 2018).

The National Gallery (1947) *An Exhibition of Cleaned Pictures (1936-1947)*. London: National Gallery.

The National Gallery (1955) *The National Gallery, 1938 – 1954*. London: National Gallery, Balding and Mansell.

The National Gallery (1967) *The National Gallery, January 1965 – December 1966*. London: Publications Department, National Gallery, William Clowes and Sons.

Unknown press source (1955) Jaundiced Eye on Eight Days' Viewing. Unknown press source, 4 July. London: National Gallery Archive, NG24/1955/11.

van Dijck J and Poell T (2015) Making Public Television Social? Public Service Broadcasting and the Challenges of Social Media. *Television & New Media* 16(2): 148-164

Walker J (1993) *Arts TV: A History of Arts Television in Britain*. London: Libbey.

Warner M (2006) *Photography: A Cultural History*. London: Laurence King Publishing.

Wasson H (2015) The Elastic Museum: Cinema within and Beyond. In: Henning M (ed) *The International Handbooks of Museum Studies: Museum Media, vol. 3*. Chichester: Wiley Blackwell, pp. 603-627.

Whitehill WM (1970) *Museum of Fine Arts, Boston: A Centennial History*. London: Distributed by Oxford University Press.

Williams R ([1974] 2003) *Television: Technology and Cultural Form*. London: Routledge.