Enjoy the silence: how library services relate to visual culture in the 21st Century

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Introduction

In this essay, I will be looking at the ways in which library services relate to the visual culture of the 21st Century. I will begin by discussing what is meant by visual culture followed by brief reports of the current trends. An account of current library practice will be given, along with a short photo essay depicting the changes in the world of libraries. I will attempt to close this essay with a brief look at how such a view could influence the future of library practice.

Since the possibilities of what could be defined as visual culture of this century is immense, I am limiting my focus to four areas which I have found of interest: (1) holography, (2) augmented reality, (3) machine learning and (4) video games.

Unless otherwise stated, all images used within this essay are taken by the author.

What is visual culture?

In the ground-breaking 1972 television series Ways of Seeing, John Berger, spoke of the silence of Western paintings. This stillness is a far cry from some of the experiences that constitute visual culture of this century. It reminded me of the first time I saw the combined painting Canyon by Robert Rauschenberg (MoMA). Having only previously experienced the work reproduced in books, I was stunned by the vastness of the actual piece and was equally taken aback by the enormousness of the fully spread stuffed eagle that is part of the work.
“Original paintings are silent and still in a sense that Information never is. Even a reproduction hung on a wall is not comparable in this respect for in the original the silence and stillness permeate the actual material... This has the effect of closing the distance in time between the painting of the picture and one’s own act of looking at it.”
(Berger, 1972, p.31)

Later adapted into a book (pictured below), Ways of Seeing was highly influential in a discipline that was termed visual culture (Mirzoeff, 2013, p. xxx). According to Margaret Dikovitskaya (2011, p.69), The term “first appeared on the covers of books whose topics were neither Western art nor in the spirit of their time - art with a capital ‘A’.” The picture to the right shows some of the titles found in the British Library.

Marriner (2011, p.95-96) believes that “visual culture is taken as synonymous with ‘popular culture’ or ‘mass culture’ or ‘non-art culture’”. To Walker and Chaplin (1997, p.1-2), it can be “roughly defined as those material artefacts, buildings and images, plus time-based media and performances, produced by human labour and imagination... and which
address the sense of sight to a significant extent.” We can see how this emphasis on human labour could be problematic in the 21st Century, with the lean towards machine learning.

“The recent developments in digital technology caused the immense cultural changes throughout the world that earned the visual a preeminent place in our everyday life.”
(Dikovitskaya, 2011, p. 78)

With the rise of digital technology, Kelomees (2017, p.335) sees that what is understood as “original media becomes the source material for subsequent transformations and media productions.” Mirzoeff (2013, p.1) describes the changes in the study of the field itself, “from its purported fascination with Barbie, Madonna and Star Trek in the 1990s,” moving on to virtual reality, the internet and later, how everyday life is shaped by Web 2.0 and its “ubiquitous communications.”

Going further than Walker and Chaplin, Dikovitskaya describes W.J.T. Mitchell’s reasoning that the boundaries of visual culture are not set by works of art and neither are they set by images and representations: “Buildings and landscapes, which are neither images nor representations, are nevertheless objects that are looked at in the course of everyday life and are, therefore, legitimate objects of visual culture” (Dikovitskaya, 2011, p.76).

Visual culture could thus be seen as “the study of the cultural construction of visual experience in everyday life, as well as in media, representations and visual art,” encompassing both “the social construction of the visual (visual images, visual experience) and the visual construction of the social” (Dikovitskaya, 2011, p.76).
**Visual Culture**

**Holography:**

“Holography is a record of an interaction of two mutually coherent light beams” (Ahmedien, 2018, p.2). It emerged in the late 1940s and visually, it represents a “combination of the virtual and real properties of the physical form, where the viewers recognize it as a real form, but physically it is untouchable” (ibid., p.2).

A 2015 article in Entertainment Weekly reported “the first ever music video delivered in smartphone hologram format” (Anderson, 2015).

By constructing a very basic viewer out of an old CD jewel case, we could see Dave Gahan performing as a floating hologram over your mobile phone. Eli Stonberg of the production company *Fourclops* said that they would love to make a full body size installation, seeing the technology is easily scalable from mobile to anything bigger (Solomon, 2015).

In a recent article in Metro newspaper, Lucy Hedges (2018, p.31) reports on the “growing number of [music] artists going on tour as a hologram.” Brian Becker of *BASE Hologram*, the live entertainment company behind a Roy Orbison hologram tour, said that “in order for the image to look real and to perform a full-length concert and interact with the orchestra, conductor and audience, an actor is brought in and trained over a 12-week rehearsal period to make sure the images, movement and facial features are correct” (ibid., p.32). He believes that although the technology is currently not capable of creating a 360-degree life-size image, by having live artists and holographic images together, they create an illusion that masks its current shortfalls (ibid., p.32-33).
Augmented Reality:

Augmented Reality (AR) “is commonly defined as a digital layer of information viewed on top of the physical world” (Moritz, 2017, p.341). Increasingly, this understanding “is shifting to a dynamic framework of ‘smart things’, including wearable technology, sensors and [machine learning programs], with the ability to... deliver contextual and meaningful experiences” (ibid., p.341).

In 2018, Miranda Katz reported on a virtual exhibition by a group of artists hijacking the Jackson Pollock displays of the MoMA in New York. By downloading the MoMAR Gallery smartphone application, viewers can experience alternative creations based around paintings on display. Designed to “challenge... the museum curators at large,” the technology “has opened up new possibilities for activists and art enthusiasts eager to have a part in shaping the museum-going experience” (Katz, 2018).

But does anybody own this virtual space, Katz asks, and what are the legal implications of placing a virtual object on private property? (Katz, 2018).

“‘Virtual trespassing” is a new, ill-defined concept, “though... the litigation around Pokémon Go has also brought up the idea that, even if the AR itself doesn’t constitute trespassing, it could prompt users of the app to trespass and cause a nuisance to the unwitting hosts of AR” (Katz, 2018).

This could, in turn, lead artists to “begin negotiating more complex contracts with museums, spelling out what can and cannot be done to augment their works” (Katz, 2018). Whether unauthorized AR furthers a museum’s mission of increasing access, remains to be seen.
Deepfakes:

Creating and altering moving images via machine learning has been around for some time, indeed Grba (2017, p.249) reported that “generative cinema has been one of the emerging fields of digital art in the past twenty years.”

“The potential for machines to accurately and easily ‘read’ and recreate video footage opens up exciting possibilities both for artificial intelligence and video creation.”

(Romano, 2016)

Digital manipulation of video such as ‘deepfakes’ has brought about a rise in the interest of video manipulation (see Foer, 2018). It “superimposes one face onto another, including its facial gestures, speech or eye motion” (Abbany, 2018). The simplicity of it is down to the fact that you can create “a compelling piece of video that 20... years ago was the preserve of expert film editors” (Abbany, 2018).

Romero (2016) reported that a creative computing student created “a unique machine-learned encoding project... [reconstructing the film ‘Blade Runner’] from a pile of disassembled data.” “He wanted to discover what kinds of creations a rudimentary form of AI might be able to generate when it was “taught” to understand real video data.” The result, however, was so convincing, it “led Warner Bros. to file its takedown notice” (ibid.).

Nvidia, the maker of graphics processing units, went a step further, developing “an unsupervised learning method for computers... capable of creating images of people out of thin air” (Greene, 2017). The technology “can change the weather, turn day into night, and... shows the leaps and bounds by which [machine learning] has attained a clear ability to imitate reality to a startling degree” (ibid.).
Video Games:

UK Interactive Entertainment (Ukie) reported that globally, the interactive entertainment sector generated $108.4 billion in 2017. It also quoted market intelligence *Newzoo* that in the UK alone, there were 32.4 million people playing some form of game in 2017 (see Ukie, 2018).

The real world of advertisement and product placements is very evident in some of the more popular video games. This is clearly visible within the image to the left: a screenshot from the mobile game, *Real Racing 3*.

Nonetheless, the influence of game culture is also evident within the real world. The image on the right shows the multifunction display in a *Nissan GT-R*. The display unit is designed by *Polyphony Digital*, the developers of the PlayStation game *Gran Turismo* (Rorrison, 2017).

Adams (2009, p.198) believes “it is important for us to understand that there are parallels evident between game culture and real-life information needs and uses.” Indeed, “the increased sophistication of video games”, wrote Suvajdzic, “provides... an increased ability for players to retain the information communicated during a game” (2016, p.203).

Suvajdzic continues by arguing that “games are the original learning tools” and since the dawn of humanity, we have used games and simulations to pass on knowledge (2016, p.198). Hence, the rise of video games could provide us with a highly efficient mode of learning that could essentially affect “how humanity understands its own past, and thus how it perceives its own present time and future” (ibid., p.198).
Library services

The evolution of library services has shifted steadily away from a “collection-centric model to models focused on engagement” (Kay, 2017, p.25).

“Public as well as academic libraries have introduced collaborative spaces, often weeding or moving collections off-site to accommodate these changes.”

(Opar, 2017, p.22)

The need for engaging spaces also puts into question the needs of a special collection. Sorensen (2017, p.89) argues that librarians need to examine, “just how special is special?” when dealing with collections as the cost of storing, cataloguing and conserving such collections are ever increasing.

“With world wide web image sharing, images of erotic or private enjoyment are so numerous that seeking the art library for such material was unnecessary. Whereas 25 years ago cannibalized books would need periodic replacement, today they are simply not an art library issue” (Sorensen, 2017, p.93).

Makerspaces, with “facilities for making, learning and exploring with technology tools from 3D printers to sewing machines... [have] gained popularity in public libraries” (Opar, 2017, p.22).

Wójcik (2018) has found that “holographic techniques... are often used by cultural institutions in research as a way of non-invasive exploration of historical objects that allow inspection without violation of the object” (ibid., p.21). Also noted is the “holographic reconstruction of historic monuments and holographic visualization of information” at the Dubaï Museum (ibid., p.22).
Though little research has been made in relation to libraries, Wójcik identified four potential applications of holograms:

i. Enrich displays and exhibitions with elements of realistic 3D holograms depicting characters, animals and historical objects;

ii. Free librarians to provide more complex services and in the provision of routine information services;

iii. Documenting events... fully capture the emotion, multi-dimensionality, and scale of an event, and;

iv. Providing new ways of visualizing data and creating models and simulations.

(Wójcik, 2018, p.23-24)

AR applications “represent a profound opportunity for increased access to print and digital library collections,” Hahn (2012, p.429) advises. Its abilities to “overlay graphical data are well suited for in-library engagement as well as off-site real-world interaction with library content” (ibid., 429).

The Miami University Library developed ShelvAR as an example of AR use: The tool allows staff to “analyse shelves, shows what has been mis-shelved and quickly indicates how [they] can put it right” (Oyelude, 2017, p.1).

Further areas where AR is applicable includes:

i. Integration of digital library content into the physical stacks browsing experience (Hahn, 2012, p.431);

ii. Library navigation (Hahn, 2012, p.432);

iii. Optical character recognition... suggesting library resources and research databases that are relevant to a text (Hahn, 2012, p.434);

iv. Overlaying information such as closing times, current computer or even seating availability (Hahn, 2012, p.435);

v. Infographic displays - including posters and animated charts (Massis, 2015, p.797).
Brown and Kasper (2013, p.760) sees a “rich history of gaming in libraries.” This opinion mirrors that of Adams (2009, p.199), who says the “only major difference we are considering here is that the games in question are digital.”

Adams discovered that “much of the information seeking behaviour within game worlds parallels everyday life information seeking models” (2009, p.198).

Of the libraries studied, Brown and Kasper found that “library game programs had four broad goals: increasing literacy, encouraging positive behaviours, fostering the development of new skills, and promoting critical thinking” (2013, p.761).

Some of the benefits of introducing video game technology to the library mentioned includes: promoting reading, especially where patrons checked out a book on related topics as a result (Adams, 2009, p.197-198); supporting social and community activity (Adams, 2009, p.199); allowing the encounter of and practice a variety of new digital skills (Adams, 2009, p.201); encourage critical thinking and taking risks (Brown and Kasper, 2013, p.756) and; developing a wide array of digital and media literacies, including creation of content (such video manipulation) (Adams, 2009, p.198), to name but a few.

The rise in visual literacy could affect the behaviours of future patrons. Michael Wirtz (2017, p.139) believes that the average visual practitioner today has little interest in learning library systems “because most systems rely on a textual or verbal mode of access.” As they often think in the abstract, he reasons that their ideas cannot be easily classified or verbalised. Any solution must cater for what William Hemmings call “their highly individualistic information needs”, the preference for “serendipitous browsing” and favouring “human mediation to search catalogues and indexes” (Wirtz, 2017, p.142-143 by way of Hemmings 2008).
This could lead to the need for embedded librarians for creatives which, according to Wirtz, “rose from the working relationships librarians began to form with medical professionals in the early 1970s” (2017, p.140). There are many different conceptions of embeddedness, he continues, but the basic idea is to bring library service to the patrons’ environment (see Wirtz, 2017, p.140).

So how would these changes affect the design of the library as a whole? Appleton et al. (2017, p.263) has said that by embracing new technology, libraries are shifting from a “largely collection-based spaces to something far more flexible,” a space which encourages interaction and connections between the patrons and library staff. There is no longer a need to prioritise for the storage and display of library materials. Neither is there a need for large issue and service desk. Instead, library space is more inclined towards the needs of the patrons. Latimer has said that “the creation of exciting and attractive library spaces has been shown to bring people into the physical library to use virtual resources” (Appleton et al., 2017, p.263 by way of Latimer 2011).

In the early part of the 21st century, Appleton et al. (2017, p.264) discovered, “discussion on library spaces focused on the need for information technology and service-rich spaces.” Later, the debate moved on to specially designated spaces, especially learning spaces. We are now seeing academic libraries “providing spaces for outreach activities... to increase their contribution to the local community” (ibid., p.264).

The final part of this chapter is a photo essay, much in the style of John Berger’s Ways of Seeing noted earlier. The images show different types of libraries from across the globe that reflect some of the evolutionary changes addressed in this chapter. A description of each of the images will be provided in the reference section.
Conclusion

“The twenty-first century library is a laboratory of experimentation and prototyping.”
(Hahn, 2012, 437)

I have yet to find a study that relates the current interest in machine-learning visual manipulations with that of library services, though a simple answer could lie within the realms of fact-checking and critical visual literacy. The ensuing discussions, however, could easily fill a whole new essay.

What we have discovered in relating visual culture of the 21st Century with library services is our need to “rethink our role in supporting information skills that will be important in the future (Adams, 2009, p.199). This could include “multiple ways of searching for and evaluating information,” creating spaces for people to participate within the visual cultural field and “producing knowledge and content creation” (Adams, 2009, p.199).

It feels appropriate to conclude this essay by paraphrasing the advice of Hahn to say that “in order to meet the challenge of the digital era in which access to both print and digital is of ongoing importance... libraries [need to] to experiment with [our developing visual culture], applying their [informational characteristics] to [better serve our patrons]” (Hahn, 2012, 436).

The examples of visual culture described in this essay are points of departure for our evolving library services. A service that reflects the information needs of future library users.
Visual references
(in order of appearance, left to right)


McQueen, G.E. (2018). Real Racing 3 Hong Kong Circuit [photograph], (Author’s own private collection).

Muji Tra (2007). GT-R Multifunction display [photograph]. Available at: https://commons.wikimedia.org/wiki/File:GT-R_Multifunction_Display.jpg CC BY 4.0 [10 May 2018]

McQueen, G.E. (2017). Tripiṭaka tablets at Kuthodaw Pagoda, Mandalay, Myanmar [photograph], (Author’s own private collection).

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McQueen, G.E. (2017). Tripiṭaka tablet, Mandalay, Myanmar [photograph], (Author’s own private collection).

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Textual References


Ukie, Game Industry Fact Sheet. Available at: http://ukie.org.uk/research#fact_sheets [10 May 2018]

