

## Opening Talk

# Canning Time: Problematizing Time Poverty with Pinhole Cameras

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## ABSTRACT

If visual literacy is a primary concern for university education in twenty-first century society, photomedia is central to tackling that concern. Learning analogue photomedia is a novel activity available only to those who have more time (i.e. temporally rich) or those seeking a challenge of doing ‘proper’ photography (e.g. amateur photographers, photography students). Although digital photomedia provides unfettered access to learning about photography, are those with less time (i.e. time-poor), less likely to question how photographic images are produced? Concerned with subtle distinctions between photomedia, this study looked at students’ experiences of time through a popular exercise of making pinhole cameras from aluminium cans. Between November and December 2019, an eight-day workshop was conducted with five university students from faculties other than art and design. Presenting initial findings from the workshop along with challenges faced, this paper invites discussion of temporality and advocates a temporal literacy in applications of photomedia outside of art and design faculties. An accompanying visual essay sharing documentation and images can be viewed here: <http://www.garymcleod.co.uk/cannedtime>

## 1. INTRODUCTION

Visual literacy (VL) is “a group of vision-competencies a human being can develop by seeing and at the same time having and integrating other sensory experiences” (Fransecky and Debes 1972). Although visual literacy today favours the ‘reading’ of images rather than skills of creating images or even ‘thinking’ visually (Kędra 2018), cameras are central to developing visual literacy worldwide. This is most apparent in Literacy Through Photography (LTP), a teaching methodology co-developed by Wendy Ewald in partnership with the Center for Documentary Studies at Duke University and the Durham Public Schools. Yet even studies that use or follow LTP — a powerful way of supporting visual skills in children and adults — prefer not to recognize differences between cameras; rather, they favour whichever tools are most available to the learner: previously film cameras and now digital cameras (e.g. Ewald, Lord and Hyde, 2012; Costa 2019). To be clear, the act of creating photographic images is widely recognized as valuable, but medium specificity is often subject to how convenient it is. There is a risk that certain photographic mediums, hereby referred to as ‘photomedia’ (McKenzie 2020), are therefore unwittingly overlooked. While the making of photographic images with film cameras and digital cameras do indeed differ drastically in the length of time needed to see results, one should not be misunderstood as to be somehow ‘better’ than the other. Rather, understanding the temporality of each photomedia (Drucker 2010) — a temporal literacy — is arguably needed to appreciate their nuances. And yet time is always ‘short’.

The term ‘time poor’ was introduced as a way of re-defining the poverty status of a household according to work behaviour and number of hours spent working (Vickery 1977) Use of the term here in this paper, however, aligns with how contemporary visual culture is

rich with digital technology but lacking the time needed to appreciate the nuances of such technology<sup>1</sup>). Analogue photomedia promises a ‘slower’ experience of photography but it is often niche and arguably practiced by those who have more time (i.e. temporally rich) or those seeking a challenge of doing ‘proper’ photography (e.g. amateur photographers, photography students). By contrast digital photomedia undeniably is faster, provides unfettered access to learning about photography, and can be said to be ‘creating’ time for other activities. However, such thinking indicates a genuine need for ‘gaining discretionary control or autonomy’ over time already available to users (Wajcman 2015: 164). In other words, are those with less time (i.e. time-poor) less likely to question and examine how photographic images are produced? If so, does that lead to automatic acceptance of a photograph’s message, or does it result in an indifference? To be clear, in trying to address these questions, the intention here is not to reignite a tired debate about differences between analogue and digital technologies; rather the aim is to remind the educational landscape of a need for diversity in photomedia literacy, and in particular for increased recognition and sensitivity toward the temporal nuances in each. The workshop in this study was developed to help understand how students considered their own relationship to time and did so by introducing participants to analogue pinhole photography, a simple and accessible technique made popular by UK photographer Justin Quinnell (2012).

## 2. METHOD

This workshop was conducted with five volunteers (B1–B5) that responded to an advertisement posted to university communication channels. They were all male, enrolled as full-time international students and represented four nationalities. None were attached to the Faculty of Art and Design. While all used digital photomedia on a regular basis (e.g. mobile phone cameras, digital SLRs), only two had used analogue photomedia previously in the form of monochrome 35mm film (B2 and B3), and only one had prior experience of a darkroom (B2). Regarding competency with digital photomedia, B3 described himself as an amateur photographer with knowledge of how to manipulate a camera to get intended results (i.e. aperture, shutter speed, lighting principles); B2 described himself as having some operational knowledge of cameras (film and digital); whereas B1, B4 and B5 stated that they simply enjoyed taking photographs and were keen to learn more. Eight days were allocated; initially intended as consecutive days. However, a busy academic calendar forced changes, eventually settling for eight consecutive Sundays beginning in November and finishing late December. Each day comprised three two-hour sessions (morning, mid-afternoon, late-afternoon) with breaks. Session timings were initially rigid, but started later, were truncated, or extended in order to accommodate fluctuations in participants’ schedules. Each day began with an introduction to activities and ended with individual interviews conducted by a research assistant. On day one, participants were introduced to the history of photography and learned how to make pinhole cameras from aluminium cans. Participants used those skills to make two basic kinds of photographic images during the rest of the workshop: a long exposure where the sunlight ‘burns’ an image into the light-sensitive paper — also known as a ‘solargraph’ — and a short exposure that produces a latent image within the light-sensitive paper<sup>2</sup>). Days one and two were initially reserved for making and reviewing long exposures whereby days three and four were reserved for making and reviewing short exposures, but it became necessary to introduce both together early on to ensure self-confidence. Moreover, creative tasks were given to support the new skills. The first task was to revisit and recreate a photograph of personal significance taken somewhere on campus. Adopting rephotography<sup>3</sup>), the second task was to revisit the first task and to reflect on

temporal differences between each visit. The third task was to work together as a group to complete a set of fourteen instructions that challenged the method taught, for example: photograph something tiny; photograph a photograph being made; photograph someone leaping; and make five photographs simultaneously. The fourth task was a small assignment to make a more refined image that conveyed a personal feeling of being ‘time rich’. Participants were also set challenges as homework, which ranged from making week-long exposures at home to teaching someone else how to make a pinhole camera. Such challenges during and outside the workshop prepared participants for a field trip on day seven to Asakusa, a popular sight-seeing district of Tokyo, where participants were asked to visit seven shrines. Inspired by the ‘seven god, seven shrines’ visits in Japan<sup>4)</sup>, the workshop participants were tasked with making a photograph using a different pinhole camera at each shrine. Comprising a series of at least seven images albeit with a common self-selected theme, the task required them to assess lighting conditions and exposure times as well as composition and a cohesive concept. Alongside the activities, time in the darkroom was scheduled for developing and fixing pictures. Semi-structured interviews were then conducted individually by a research assistant at the end of the day and by this author following completion of the workshop. Questions were arranged into themes that inquired about experiences with photomedia, experiences of time, experiences of looking again and experiences during the fieldtrip. Participants were encouraged to expand on the questions and invited to comment on any concerns on other aspects of the workshop not discussed.

### **3. RESULTS AND DISCUSSION**

The workshop provided an opportunity for participants to observe and reflect critically on temporal distinctions between analogue and digital photomedia. Firstly, it was recognized that analogue photomedia contains a perceivable delay between taking a photograph and seeing the result, whereas digital photomedia (i.e. the use of digital cameras) ensures the user can review the image almost instantly. Secondly, analogue photomedia can induce noticeable hesitations when taking a photograph as users are more aware of the costs of the materials involved, whereas in digital photomedia users are less likely to pause before opening the shutter because costs are embedded in the build of the digital camera and arguably hidden. There were also perceivable temporal distinctions between cameras that have lenses and those that don’t. For instance, the arrangement of optics in lens-based cameras (i.e. any kind of camera with a fixed or changeable lens) appear to give greater control over the light passing through the aperture (i.e. the hole), whereas pinhole cameras (i.e. a box with a varying- sized and often hand-made hole) appear to offer less control. While simpler in operation, the length of time needed to make a correct exposure in a pinhole camera follows the same principles as lens-based cameras, suggesting differences lay in the perceptions of the user and therefore more vulnerable to inexperience, ignorance or bias. Moreover, the temporal difference between exposing for a latent image and a solargraph appeared to affect the possibilities afforded by the pinhole camera. When asked to respond to the creative challenges using the pinhole cameras, participants found it difficult to express their ideas. While pinhole cameras were put in a pond, affixed to bicycles and kicked through the air, short exposures were preferable to long exposures because they satisfied the curiosity of the experiment. Long exposures — precisely because they required much more time — were limited to choosing locations that would return a nice picture of the sun being tracked across the sky. Even though short exposures were necessary in the field trip, it was apparent that the group hadn’t given thought to preparing enough materials to take with them.

## 4. CONCLUSIONS

The workshop saw participants learning and comparing two forms of analogue photomedia using self-made pinhole cameras. From discussions during and after, it was clear that the solargraph type exposure — where the camera produced a cumulative image over a lengthy period of time — was most thought-provoking for three reasons. Firstly, time required to maintain the camera was minimal. Other than needing to set up the camera, it did not take time away from participants' studies and other activities during their week. Secondly, it prompted some discussion about what can be considered a 'long' exposure: at what point does a latent image become a 'burned' image? Although a convincing answer is beyond this study, the asking of the question led to some informal contemplation by participants, which may lend value to follow-up inquiries later on. Thirdly, the solargraph type of pinhole photography could in no way be replicated or simulated by participants' digital cameras due to the properties of the light sensitive paper being more robust than the digital sensor. Despite that, there is arguably a concern that the long exposure was only used to make a particular kind of image, that of the sun being tracked across the sky. Therefore, while it may be interesting to use this particular technique in teaching photomedia literacy, conceptual and creative applications of it would appear limited from the examples created during this workshop.

Regardless of the exposure type of the pinhole camera, there was, however, notable integration between analogue and digital photomedia. This was through documentation (formally by the research assistant and informally by participants), through inverting negative images using a mobile application, and through using mobile phone cameras to 'preview' the composition that might be visible to the pinhole camera. This last point is particularly of interest in terms of visual literacy studies. That digital cameras offer a preview image, or 'protext' is said to increase understanding and engagement with the subject being photographed (see Johannessen and Boeriis 2019). Participants knew from experience in the workshop that the wide view afforded by the pinhole camera (approximately 180 degrees) was considerably wider than their mobile phone cameras could offer but they were content to accept this difference in favour of having a visual sense of the potential result. In other words, they were perceiving the difference when previewing. Using one media to preview another implies a temporality to digital photomedia akin to the process of sketching or diagramming. That, of course, presents more questions: is use of digital photomedia an intermediary step for camera users? If so, a step to what?

In setting out to problematize time-poverty, the workshop suggested photomedia — specifically analogue photomedia in the form of self-made pinhole cameras — as a means to draw attention to and contemplate nuanced temporalities within that and other photomedia. Although all participants saw themselves as time-poor in Vickery's sense, they were certainly able to manage their time according to their own schedules. What was apparent, however, was that participants didn't consider scenarios that might be encountered in the short-term future (e.g. not bringing enough photo-sensitive paper during the field trip). Such oversights are perhaps more contingent with a short-sightedness or 'temporal myopia' (Buonomano 2017) that could be explored further with larger groups of participants.

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## NOTES

- 1) This is attributable to artist Rebecca Salter who on numerous occasions has remarked that contemporary culture is digitally rich yet temporally poor (e.g. <https://www.puglieselevi.com/en/artists/rebecca-salter-ra>).
- 2) Much of photographic history is attributable to either of these two methods, although the latent image is far more common even if under-examined (e.g. Silverman 2015).
- 3) Rephotography is a diverse set of practices that involve revisiting locations in previously made photographs of pictures. See McLeod 2019.
- 4) Otherwise known as 七福神めぐり (Shichifukujin Meguri), the ‘seven gods, seven temples’ pilgrimage is usually undertaken in January whereby participants collect stamps from shrines in one local area that worship each of the seven gods. The one in Asakusa is one of the most well-known.

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