alphaville
JOURNAL OF FILM AND SCREEN MEDIA

Cinematography and Filmmaking Research: Reflections on a Practice-led Doctoral Process

Alexander Nevill

Abstract: This paper offers an overview of a recent practice-led doctoral enquiry which examined lighting techniques used by cinematographers and more widely amongst practitioners working with moving imagery. This research was completed in the Digital Cultures Research Centre at UWE Bristol and funded by the AHRC 3d3 Centre for Doctoral Training. The paper specifically reflects on three strands of enquiry which existed in dialogue with one another, showing how the mutual interaction and reinforcement between scholarly activity, collaborative film production and independent creative experimentation were fundamental to the approach and direction of the research. Amongst a wider contribution, this doctoral research can be seen as methodologically innovative, providing a more detailed first-hand investigation into lighting processes than is currently available by using autoethnographic methods to capture practical knowledge that is deployed in situ during moving image production. The paper discusses this novel use of autoethnography within practice-research and also explains how the resulting evidence was incorporated in the thesis through a layered approach to writing.

Lighting, in a traditional filmmaking context, is the principal responsibility of a cinematographer. Working with the director, art department and more than ever today, the visual effects team, a cinematographer utilises a variety of tools to achieve a cohesive visual narrative for a film within which light can play an integral role, making a creative contribution to the production.

On one level, light is fundamental to the way that we perceive and interact with the screen—it affords the exposure and recording of images through camera and lens equipment that is designed to take advantage of flaws in our visual apparatus to evoke an illusion of movement. On another level, light can also be controlled in front of the camera through the use of specially designed lamps, filters and modifiers to enhance the way an audience experiences aspects of a film. Lighting is a fundamentally technological practice, then, and it is through the use of such tools that a cinematographer can add depth to a film, making its locations feel more three-dimensional despite appearing on a flat surface, creating boundless visual storytelling possibilities.

If the orchestration of illumination can have such a powerful impact on the way audiences experience a film, then it is perhaps surprising that in industry and academia alike there has been little attempt at articulating how new digital technologies or environments might impact lighting processes. As will be discussed in this paper, exploring changing lighting paradigms and addressing the apparent lack of consideration around emerging lighting techniques was the primary goal of my doctoral enquiry, completed in the Digital Cultures Research Centre at UWE Bristol between 2014–2018 with a scholarship through the AHRC 3d3 Centre for Doctoral Research.

I was drawn to peruse this academic research after completing a Master of Fine Arts (MFA) degree at the Scotland Screen Academy. Building on this film school experience, my practice as a cinematographer developed further in conjunction with work on independent film projects and low-budget commercials. During a short period of freelancing, I noticed a disjunction or disparity between the lighting practices that I was encountering in a production context and the ways these processes were articulated in academic discourse.

Striving to improve my lighting skills, I turned to accounts from practising cinematographers for guidance but quickly grew frustrated with the small, unsystematic and often undertheorised nature of writing about lighting in moving-image production. It was ultimately this dissatisfaction with the academic subfield of lighting in cinematography as well as the perceived disparity between this writing about the subject and my personal experiences working as a cinematographer that drove my research enquiry.

This paper focuses on methodologies to provide a brief overview of my doctoral process and to highlight a few central challenges that arose when entering academic research from a practically focused background. As such, I hope the paper will help to open up a discussion around the opportunities for filmmaking practice-research in areas that are conventionally considered "below-the-line" or "craft" disciplines, such as cinematography.

Evolving Practice

As indicated, at the outset of the doctoral enquiry my practice was mostly collaborative, rooted firmly in the conventions of narrative cinematography and primarily independent filmmaking. I initially intended to continue this work and investigate lighting through my experiences working across different film production environments—creating visual stories destined for theatrical exhibition. I quickly realised the need to develop alternative approaches to practice in order to adequately address my research questions and to offer a more comprehensive investigation into lighting. Working exclusively as a cinematographer, I relied on being hired or approached for suitable productions and found, as I continued shooting with both familiar and new directors, that it was not always possible to impose my research agenda on these collaborative projects.

While there were many virtues of the collaborative work, production pressures such as the limited timeframe and often script-based nature of films restricted my ability to explore lighting as freely as I would have liked. Instead, I found myself caught up in the midst of production—prioritising the demands of the first assistant director, the changeable weather, our temperamental equipment—or navigating other forms of problem-solving inherent in filmmaking processes rather than leading with research questions. Similarly, some of the projects I worked on involved rights issues, extended production periods or lighting styles that were more functional than expressive, making them unsuitable for consideration.

Animated by these problems of authorship, logistics and the creative scope of my proposed research, I began to branch away from collaborative fiction films and experiment with individual projects that could be more research-driven in their engagement with lighting. More specifically,

following a provocation from my supervisory team, I started filming an ad-hoc collection of moving imagery using my iPhone throughout daily activities which focused on rare or illustrative instances of ambient light.
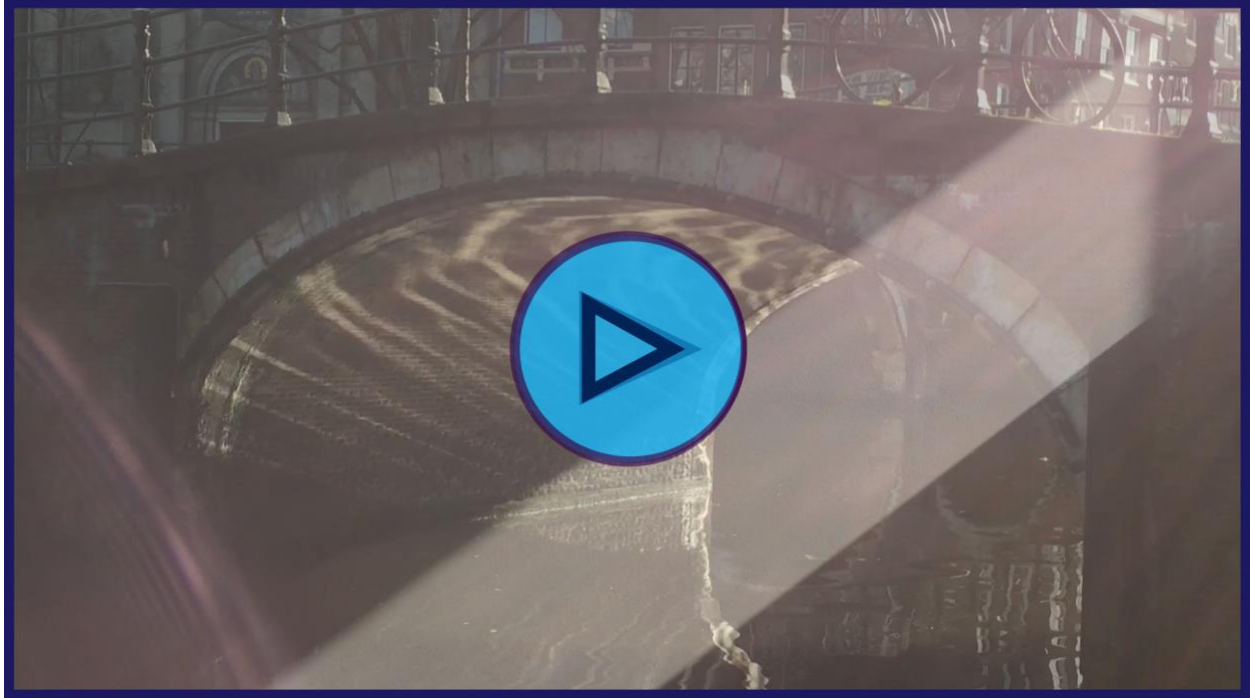

Figure 1: Alexander Nevill, *iPhone Collage*. **Screenshot with link to video.**

This new practical activity was partially conceived as a point of inspiration for my continued collaborative work and still serves as one today. The different qualities of light captured in this diaristic approach functions as an aesthetic record or repertoire that I can consider and draw upon when lighting different types of scene in a narrative and occasionally commercial context. The process of noticing and documenting these instances also honed my eye, drawing attention to the subtleties of light and developing a tacit understanding of its physical behaviours. My gradual discovery of the different qualities and characteristics of light emphasised the idea of light as an active force, implicated in the creative process of moving image practice, rather than as a natural medium of visibility.

This realisation eventually led me to a relational, new-materialist understanding of cinematography. Inspired by the work of Karan Barad, Barbara Bolt and others, I suggest that performative materiality can help to understand this practical relationship between cinematographer and light. While Barad and Bolt arrive at their position through very different arguments, they both outline a "performative" understanding of matter. For Barad, this concept recognises that "knowing does not come from standing at a distance and representing but rather from *a direct material engagement with the world*" (49; emphasis in original); however, for Bolt, a "productive materiality of performativity" means that "*matter is transformed in the exchange between objects, bodies and images*" (150; emphasis in original). In their view, matter itself is generative rather than having forms (or representations) imposed on it from a separate subject. As

argued in my doctoral thesis, applying this conceptual framework ultimately serves to situate the cinematographer as someone thinking through material, implicated in the formation of moving imagery through its light-based realisation rather than standing removed or separate to these capture-and-display processes.

Research-Driven Experimentation

Toward the end of my first year of research, I resolved to develop my experimental practice further and create work that would not only function as inspiration but also as a testing ground for new ideas related to moving-image lighting through research-driven investigations. The new practical work that resulted from this allowed me to test light across analogue and digital media in an almost comparative fashion, thereby addressing one of my core research questions.

With these projects, I was seeking to achieve "inter-operations" where film and digital collide to create work that exists through juxtaposition, imposition or alternation. In so doing, the different qualities of light—or variations in the way that each medium process light—are revealed through the projection of the two formats. Working with installation in this "expanded cinema" fashion enabled me to maintain the medium specificity of each format where my collaborative projects would always result in a digital file for theatrical projection, regardless of the capture method.

The experimental projects, then, were a series of targeted learning enquiries, which enabled me to address the identified research problems specifically through first-hand investigations and took inspiration, during their development, from contextual academic writing as well as my prior collaborative cinematographic practice. In turn, the continuation of my collaborative practice necessarily found inspiration in the aforementioned experimental work as my understanding of lighting changed, developed and was informed by each project.

This intersection of methods demonstrates Henk Borgdorff's suggestion that practitioner research should be considered as imminent rather than fixed—that the process is one of "exploration" (57) as opposed to following a rigid path due to the often-unpredictable actions inherent in creative practices. Ultimately, there was a mutual interaction and reinforcement between these different strands of enquiry of scholarly activity, collaborative film production and individual creative experimentation, that was fundamental to the approach and direction of my enquiry.

In totality, I presented five installations and three short films in a final exhibition that acted as a culminating event of the doctoral enquiry. These were documented in an accompanying exhibition catalogue, containing detailed written descriptions, working sketches and production material to form my practical portfolio submission. I felt it was important to submit all of the experimental projects to show the practical journey I had undertaken. The short films I submitted were taken from a larger body of work across the three years, chosen based on their creative use of lighting techniques as well as the level of documentation I was able to achieve during each period of production.

Figure 2: Video documentation, Alex Nevill, *In Light of Moving Images*, Centrespace Gallery, Bristol, 4–6 November 2017. Screenshot with link to video.

Relating Theory & Practice

To paraphrase Tim Ingold, this was not a study *of* cinematography technology to learn *about* it but instead a study *with* cinematography technology to learn *from* it (12). Ingold suggests that viewing the world as a confluence of materials with the potential to be worked can bridge a gap between image and object that is inherent in hylomorphic models of inquiry (25). Ingold's interest lies in understanding the process of "making" (108) across cultures, but his discussion is also indicative of another challenge which is fundamental to practice-research—namely, the relationship between theoretical assertation and practical activity in both the working methodology and final presentation of research.

For my doctoral enquiry, the solution to this challenge was two-fold, firstly involving the collection of autoethnographic notation as a principal evidence-gathering method and, laterally, a layered approach to my written thesis which interspersed autoethnographic narrative passages alongside critical discourse. The "evidence" for my research findings primarily took the form of voice recordings made at regular intervals during the production of numerous narrative film and experimental installation projects. These recordings attempted to capture practical insight and creative challenges that I experienced when working with light during each project, drawing upon an anthropological mode of analysis known as "thick description" (6), as popularised by Clifford Geertz.

I took a narrative approach to the subsequent interpretation of this description, using the audio recordings, behind-the-scenes imagery and production documentation to develop a written account of each project told through first-person narration. This strand of autoethnography, as

outlined by Caroline Ellis, suggests the meaning of events in autoethnography only becomes evident in their narrative expression and emphasises the importance of constructing the story as close to the personal experience as can be remembered (126).

As I argue in the thesis, relations between a practitioner's conceptual lighting intentions and the resulting physically lit set or location, can be thought of as processes of correspondence which involves personal or "tacit knowledge" (9) in Michael Polanyi's terms. This narrative approach to the presentation of my autoethnographic evidence was beneficial, not only because lighting to the cinematographer is often rooted in a larger storytelling endeavour, but also because this first-person mode of address is well suited to discussing creative processes.

Layered Writing

Within the final thesis itself, I used these narrative passages to illustrate and further the theoretical argumentation put forward in each chapter in an attempt to incorporate embodied forms of understanding into the written component and bestow it with some of the creativity present in practice. Mika Hannula et al. defend the importance of this endeavour, stating that "Writing is simultaneously thing and doing, both observing the world and creating it […] Writing as a way of thinking, doing research and reporting it has to find a way of treating language in the pluralist manner so that the uniqueness of artistic experience is not lost" (37).
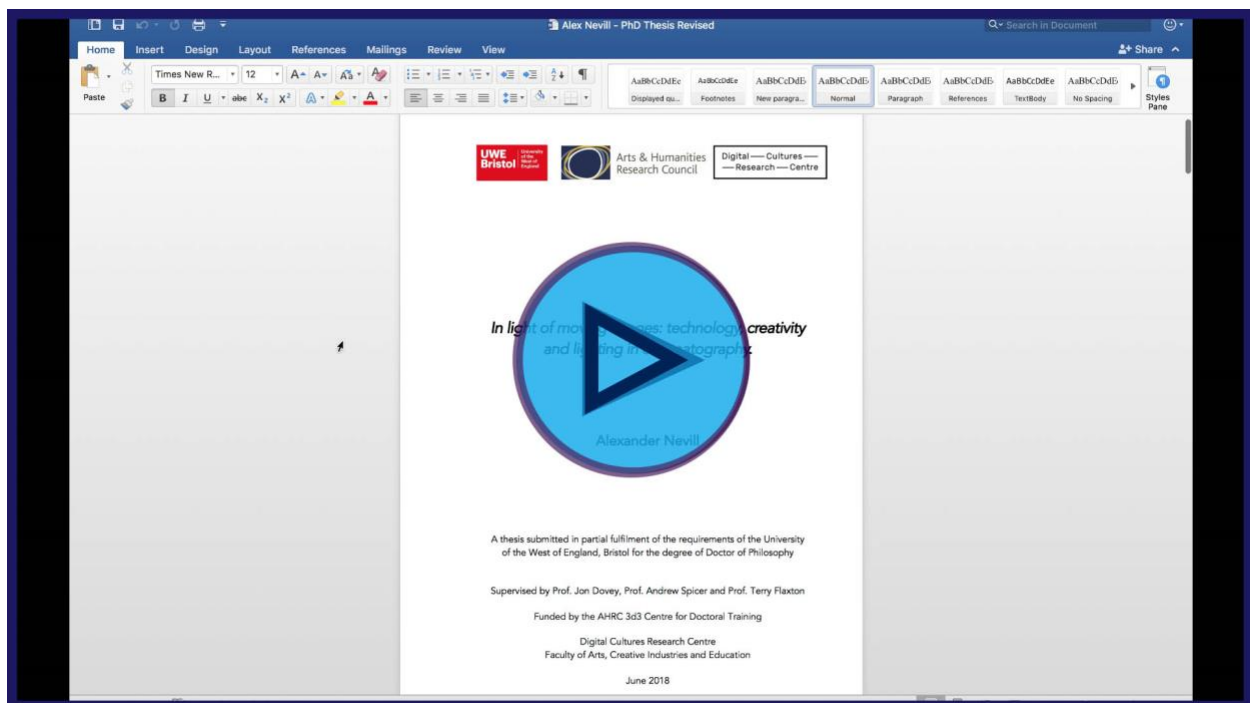

Figure 3: Thesis Screen Capture. Screenshot with link to video.

When planning the written thesis, I was primarily inspired by the ethnographic technique of a "layered account" and drew upon Carol Rambo Ronai's deeply personal work which uses

introspective reflection to break free of conventional academic forms of writing. Ronai argues that the descriptive flexibility and personal perspective embraced in layered accounts can make different "ways of knowing" (399) available to the reader, therefore making this an effective way of capturing or bridging the distinct practical and theoretical understandings implicit in this research enquiry.

The approach also enabled my writing to capture and represent a sense of the journey and the multiple strands of enquiry that are required during practice-research. For example, an associated method that I borrowed directly from Ronai is the use of the triple asterisk to denote a change of register between the different forms of writing in the thesis. Clear signposting in this way affords creative potential in my arrangement of the writing while ensuring the reader remains oriented. Providing this short pause or acknowledgement between each section enables the reader to understand and absorb the various perspectives on offer which, through their shifting back and forth, mimic the process of practice-research. The imposition of different forms of writing between one another in my thesis reflects the division of my time during the research enquiry, which was split between practical engagement in film production and lighting processes just as much as searching through, reading and analysing texts.

Summary

By way of conclusion, the contribution offered through my combined portfolio of practice and written thesis is ultimately a reimagining of the role of the cinematographer in which the consideration of light as material expands the discipline across a nexus of technologies and production arenas.

The combined portfolio of practice and written thesis achieves this in three main areas. Firstly, by demonstrating the importance of creative and poetic aspects of lighting in moving-image production, understood through a relational, new-materialist notion of the flow and energy of light as a generative force. Secondly, by providing a more detailed first-hand investigation into lighting processes than is currently available, capturing some of the practical knowledge implicit in moving image production through autoethnographic methods and layered writing within the thesis. Thirdly, by applying the actor-network theory framework to moving image technologies and, in so doing, offering a new approach to the relationship between cinematographers and their equipment.

Overall, as I have outlined in this paper, the opportunity to conduct practice-led research allowed me to scrutinise my lighting processes as a cinematographer and investigate how I work through rigorous introspective investigation. Shifting my practice away from a controlled arrangement of artificial sources in the context of collaborative cinematography to this more meditative, responsive and open-ended approach to depicting light on screen in my experimental projects drove me to adopt a new conceptual framework and reconsider the role of the cinematographer.

My hope is that the research will be taken up by scholars studying the production of moving imagery as well as practitioners across interdisciplinary backgrounds who are actively exploring

illumination themselves, thereby helping to further creative uses of light within and beyond the discipline of cinematography.

References

Barad, Karan. *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning.* Duke UP, 2007, DOI: https://doi.org/10.1215/9780822388128.

Bolt, Barbara. *Art Beyond Representation: The Performative Power of the Image.* I.B. Tauris, 2010.

Borgdorff, Henk. "The Production of Knowledge in Artistic Research". *The Routledge Companion to Research in the Arts,* edited by Michael Biggs and Henrik Karlsson, Routledge, 2010, pp. 44–63.

Ellis, Carolyn. *The Ethnographic I: A Methodological Novel about Autoethnography.* Rowman Altamira, 2004.

Geertz, Clifford. *The Interpretation of Cultures: Selected Essays.* 3rd ed., Basic Books, 2017.

Hannula, Mika, et al. *Artistic Research: Theories, Methods and Practices.* Helsinki Academy of Fine Arts, 2005.

Ingold, Tim. *Making: Anthropology, Archaeology, Art and Architecture.* Routledge, 2013, DOI: https://doi.org/10.4324/9780203559055.

Polanyi, Michael. *The Tacit Dimension.* U of Chicago P, 2009.

Ronai, Carol R. "Multiple Reflections of Childhood Sex Abuse: An Argument for a Layered Account". *Journal of Contemporary Ethnography*, vol. 23, no. 4, 1995, pp. 396–426, DOI: https://doi.org/10.1177/089124195023004001.

Suggested Citation

Alexander Nevill is a cinematographer, filmmaker and Assistant Professor in the School of Cinema at San Francisco State University. Working in the UK and internationally he has photographed several independent feature films as well as award-winning short films. He is an associate editor of *Screenworks*, a peer-reviewed online publication of practice-research in screen media. Alex received first class honours for his undergraduate degree at the University of Gloucestershire and holds a Master of Fine Arts degree from the Scotland Screen Academy. He recently earned a practice-led PhD in the Digital Cultures Research Centre at UWE Bristol with a scholarship through the AHRC 3d3 Centre for Doctoral Training.